Ch. 2 International Monetary System

Topics

- Motives for International Financial Markets
- History of FX Market
- Exchange Rate Systems
- Euro
- Eurocurrency Market

Motives for Int'l 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 Int'l 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.
- 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.
- 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 international monetary system: Structure within which foreign exchange rates are determined, international trade and capital flows are accommodated and balance of payments adjustments made.
  - The increased volatility of exchange rates is one of the main economic developments of the past 40 years.
  - Although volatile exchange rates increase risk, they also create profit opportunities for firms and investors.

Currency Terminology

- Spot exchange rate: Quoted price for the foreign exchange to be delivered at once, or in two days for interbank transactions.
  - Example: ¥114/$ is quote for 114 yen to buy one US dollar for immediate delivery.
- Weakening, deteriorating, or depreciation of a currency: Refers to a drop in foreign exchange value a floating currency.
- Strengthening or appreciating: Refers to a gain in the exchange value of a floating currency.
  - Soft or weak describes a currency that we expect to devalue or depreciate relative to major currencies; hard or strong is the opposite.

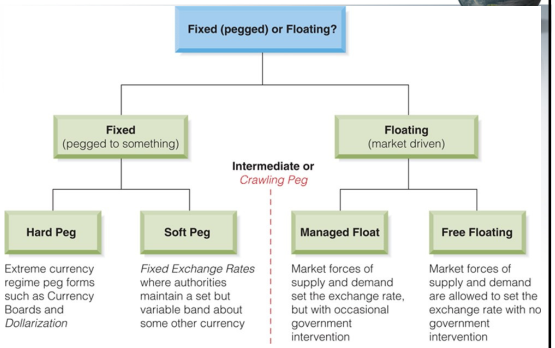
Foreign Exchange Market

- The system for establishing exchange rates has evolved over time.

Exchange Rate Era	The Gold Standard	The Inter-War Years	The Bretton Woods Era	The Floating Era	The Emerging Era
Cross-Border Political Economy	Growing openness in trade, with growing, but limited, capital mobility	Protectionism and isolationism	Growing belief in the benefits of open economies	Industrialized (primary) nations open; emerging states (secondary) restrict capital flows to maintain economic control	More and more emerging nations open their markets to capital at the expense of reduced economic independence
Implication	Trade dominates capital in total influence on exchange rates	Rising barriers to the movement of both trade and capital	Trade increasingly dominated by capital; era ends as capital flows	Capital flows dominate trade; emerging nations suffer devaluations	Capital flows increasingly drive economic growth and health
	1860–1914	1914–1945	1945–1971	1971–1997	1997–Present

The last 150 years has seen periods of increasing and decreasing political and economic openness between countries. Beginning with the Bretton Woods Era, global markets have moved toward increasing open exchange of goods and capital, making it increasingly difficult to maintain fixed or even stable rates of exchange between currencies. The most recent era, characterized by the growth and development of emerging economies is likely to be even more challenging.

Taxonomy of Exchange Rate Regimes



Fixed versus Flexible Exchange Rates

- A nation's choice as to which currency regime to follow reflects national priorities about all facets of the economy, including:
  - inflation,
  - unemployment,
  - interest rate levels,
  - trade balances, and
  - economic growth.
- The choice between fixed and flexible rates may change over time as priorities change.

IMF Exchange Rate Regime Classifications

- **Exchange Arrangements with No Separate Legal Tender:** Currency of another country circulates as sole legal tender or member belongs to a monetary or currency union in which same legal tender is shared by members of the union.
- **Currency Board Arrangements:** Monetary regime based on implicit national commitment to exchange domestic currency for a specified foreign currency at a fixed exchange rate.
- **Other Conventional Fixed Peg Arrangements:** Country pegs its currency (formal or de facto) at a fixed rate to a major currency or a basket of currencies where exchange rate fluctuates within a narrow margin or at most ± 1% around central rate.
- **Pegged Exchange Rates w/in Horizontal Bands:** Value of the currency is maintained within margins of fluctuation around a formal or de facto fixed peg that are wider than ± 1% around central rate.

IMF Exchange Rate Regime Classifications

- **Crawling Peg:** Currency is adjusted periodically in small amounts at a fixed, preannounced rate in response to changes in certain quantitative measures.
- **Exchange Rates w/in Crawling Peg:** Currency is maintained within certain fluctuation margins around a central rate that is adjusted periodically.
- **Managed Floating w/ No Preannounced Path for Exchange Rate:** Monetary authority influences the movements of the exchange rate through active intervention in foreign exchange markets without specifying a pre-announced path for the exchange rate.
- **Independent Floating:** Exchange rate is market determined, with any foreign exchange intervention aimed at moderating the rate of change and preventing undue fluctuations in the exchange rate, rather than at establishing a level for it.

Exchange Rate Systems

- Exchange rate systems can be classified according to the degree to which the rates are controlled by the government.
  - Fixed
  - Freely floating
  - Managed float
  - Pegged

Fixed Exchange Rate System

- Fixed exchange rate system: Exchange rates are either held constant or allowed to fluctuate only within very narrow bands.
- Pros:
  - Managing foreign exchange risk becomes easier for the MNEs.
- Cons:
  - Governments may revalue their currencies. In fact, the dollar was devalued more than once after the U.S. experienced balance of trade deficits.
  - Each country may become more vulnerable to the economic conditions in other countries.

Freely Floating Exchange Rate System

- Freely floating exchange rate system: Exchange rates are determined solely by market forces.
- Pros:
  - Each country may become more insulated against the economic problems in other countries.
  - Governments are not restricted by exchange rate boundaries when setting new policies.
  - Less capital flow restrictions are needed, thus enhancing the efficiency of the financial market.
- Cons:
  - MNEs may need to devote substantial resources to managing their exposure to exchange rate fluctuations.
  - The country that initially experienced economic problems (such as high inflation, increasing unemployment rate) may have its problems compounded.

Managed Float Exchange Rate System

- Managed (or "dirty") float exchange rate system: Exchange rates are allowed to move freely on a daily basis and no official boundaries exist. However, significant government intervention manages the exchange rate by manipulating the currency's supply and demand.
- Pros:
  - Governments may intervene to prevent the rates from moving too much in a certain direction.
- Cons:
  - A government may manipulate its exchange rates such that its own country benefits at the expense of others.

Pegged Exchange Rate System

- Pegged exchange rate system: Home currency's value is pegged to a foreign currency or to some unit of account, and moves in line with that currency or unit against other currencies.
- A currency that is pegged to another currency will have to move in tandem with that currency against all other currencies.
- So, the value of a pegged currency does not necessarily reflect the demand and supply conditions in the foreign exchange market, and may result in uneven trade or capital flows.

Pegged Exchange Rate System

- Currency Board: System for maintaining the value of the local currency with respect to some other specified currency.
  - Currency boards exist when a country's central bank commits to back its monetary base, money supply, entirely with foreign reserves at all times.
  - This means that a unit of the domestic currency cannot be introduced into the economy without an additional unit of foreign exchange reserves being obtained first.

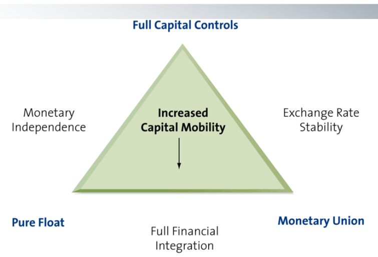
Dollarization

- Dollarization: Replacement of a local currency with U.S. dollars. Dollarization goes beyond a currency board, as the country no longer has a local currency.
- Pros
  - Country removes possibility of currency volatility.
  - Theoretically eliminate possibility of future currency crises.
  - Greater economic integration with the US and other dollar based markets.
- Cons
  - Loss of sovereignty over monetary policy.
  - Loss of power of seignorage, the ability to profit from its ability to print its own money.
  - The central bank of the country no longer can serve as lender of last resort.
- Examples: Panama (1907) and Ecuador (2000).

Attributes of the "Ideal" Currency

- Exchange rate stability: The value of the currency would be fixed in relationship to other currencies so traders and investors could be relatively certain of the foreign exchange value of each currency in the present and near future.
- Full financial integration: Complete freedom of monetary flows would be allowed, so traders and investors could willingly and easily move funds from one country to another in response to perceived economic opportunities or risk.
- Monetary independence: Domestic monetary and interest rate policies would be set by each individual country to pursue desired national economic policies, especially as they might relate to limiting inflation, combating recessions and fostering prosperity and full employment.

The Impossible Trinity



Economic and financial theory clearly states that a country cannot be on all three sides of the triangle at once. It must give up one of the three "attributes" if it is to achieve one of the states described by the corners of the triangle.

Source: Adapted from Lars Oxelheim, *International Financial Integration*, Springer-Verlag, 1990, p. 10.

The Impossible Trinity

All countries must implicitly decide which of the Trinity Elements they wish to pursue, and therefore which element they must give up (you can't have all three).

Trinity Element: The Ultimate Objective	Must Give Up Either:
Exchange Rate Stability (a managed or fixed exchange rate)	An independent monetary policy, or allowing the free movement of capital in and out of its country
Monetary Independence (an independent monetary policy)	A stable exchange rate, or allowing the free movement of capital in and out of its country
Full Financial Integration (the free movement of capital)	A stable exchange rate, or an independent monetary policy

In recent years, with the increasing deregulation of capital markets and capital controls around the globe, more countries are opting to pursue *Full Financial Integration*. The results are as theory would predict: more currency volatility and less independence in the conduct of monetary policy.

Government Intervention

- Central banks manage exchange rates
  - to smooth exchange rate movements,
  - to establish implicit exchange rate boundaries, and/or
  - to respond to temporary disturbances.
- Often, intervention is overwhelmed by market forces. However, currency movements may be even more volatile in the absence of intervention.

Government Intervention

- Direct intervention: Exchange of currencies that the central bank holds as reserves for other currencies in the foreign exchange market.
  - Direct intervention is usually most effective when there is a coordinated effort among central banks.
  - Nonsterilized intervention: A central bank intervenes in the foreign exchange market without adjusting for the change in money supply.
  - Sterilized intervention: Treasury securities are purchased or sold at the same time to offset impact on the money supply.

Government Intervention

- Indirect intervention: Central banks influences the factors that determine the value of a currency.
  - For example, the Fed may attempt to increase interest rates (and hence boost the dollar's value) by reducing the U.S. money supply. (Note: High interest rates adversely affects local borrowers.)
  - Governments may also use foreign exchange controls (such as restrictions on currency exchange) as a form of indirect intervention.

Intervention as a Policy Tool

- Like tax laws and money supply, the exchange rate is a tool which a government can use to achieve its desired economic objectives.
- A weak home currency can stimulate foreign demand for products, and hence local jobs. However, it may also lead to higher inflation.
- A strong currency may cure high inflation, since the intensified foreign competition should cause domestic producers to refrain from increasing prices. However, it may also lead to higher unemployment.

Euro: A Single European Currency

- In 1991, the Maastricht treaty called for a single European currency. On Jan 1, 1999, the euro was adopted by Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Portugal, and Spain. Greece joined in 2001.
- By 2002, the national currencies of the 12 participating countries were withdrawn and completely replaced with the euro.
- Within the euro-zone, cross-border trade and capital flows occur without the need to convert to another currency.
- European monetary policy is also consolidated because of the single money supply. The Frankfurt-based European Central Bank (ECB) is responsible for setting the common monetary policy.

Pros and Cons of Euro

Pros

- Lower interest rates for countries such as Italy
- Europe is better able to absorb shocks such as 9/11
- Eliminates exchange rate risk within the euro zone
- Helps create deeper capital markets making bigger deals possible
- The euro is becoming a popular reserve currency

Cons

- Strong euro is deadly for exporters who face competition in China
- Average folks still don't like it; the euro feeds resentment toward the EU
- Risk that a financial crisis in one nation will infect the whole zone
- The unified monetary policy is a straightjacket for slow-growth countries and spurs inflation in high-growth ones

Source: "Squeezed by the Euro," *BusinessWeek*, June 6, 2006, p. 53.

Eurocurrencies and LIBOR

- Eurocurrencies
  - **Eurocurrencies** are domestic currencies of one country on deposit in a second country. (e.g. Eurodollars: U.S. dollar deposits placed in banks in Europe and other continents.)
  - Do not confuse this term with the European euro.
  - The Eurocurrency market is made up of several large banks called Eurobanks that accept deposits and provide loans in various currencies.
  - Eurocurrency markets serve two valuable purposes:
    - These deposits are an efficient and convenient money market device for holding excess corporate liquidity.
    - This market is a major source of short-term bank loans to finance corporate working capital needs.

Eurocurrencies and LIBOR

- Eurocurrency Interest Rates: **LIBOR**
  - In the eurocurrency market, the reference rate of interest is LIBOR- The London Interbank Offered Rate.
  - LIBOR is now the most widely accepted rate of interest used in standardized quotations, loan agreements or financial derivatives valuations.
  - LIBOR is officially defined by the British Bankers Association
  - For example, the U.S. dollar LIBOR is the mean of 16 multinational banks inter bank offered rates as sampled at 11 a.m. London time in London.
  - Yen LIBOR, EURO LIBOR and all other LIBOR rates are calculated the same way.

Eurocurrency Market

- Asian dollar market: The Eurocurrency market in Asia.
- 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.