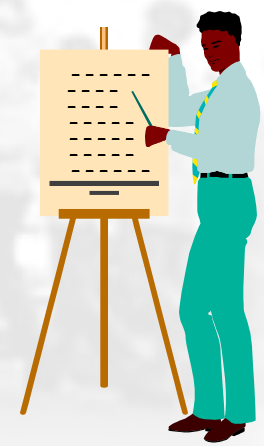
International Fund Flows

Chapter Objectives

- To explain the key components of the balance of payments; and
- To explain how the international flow of funds is influenced by economic factors and other factors.



Balance of Payments

- The balance of payments is a summary of transactions between domestic and foreign residents for a specific country over a specified period of time.
- Inflows of funds generate credits for the country's balance, while outflows of funds generate debits.

Current Account

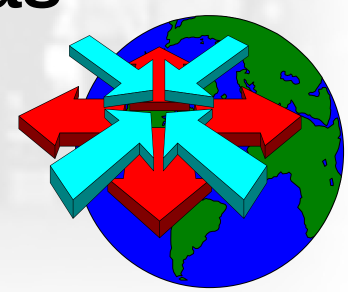
- The current account summarizes the flow of funds between one specified country and all other countries due to purchases of goods or services, or the provision of income on financial assets.
- Key components of the current account include the balance of trade, factor income, and transfer payments.

Capital Account

- The capital account summarizes the flow of funds resulting from the sale of assets between one specified country and all other countries.
- The key components of the capital account are direct foreign investment, portfolio investment, and other capital investment.

International Trade Flows

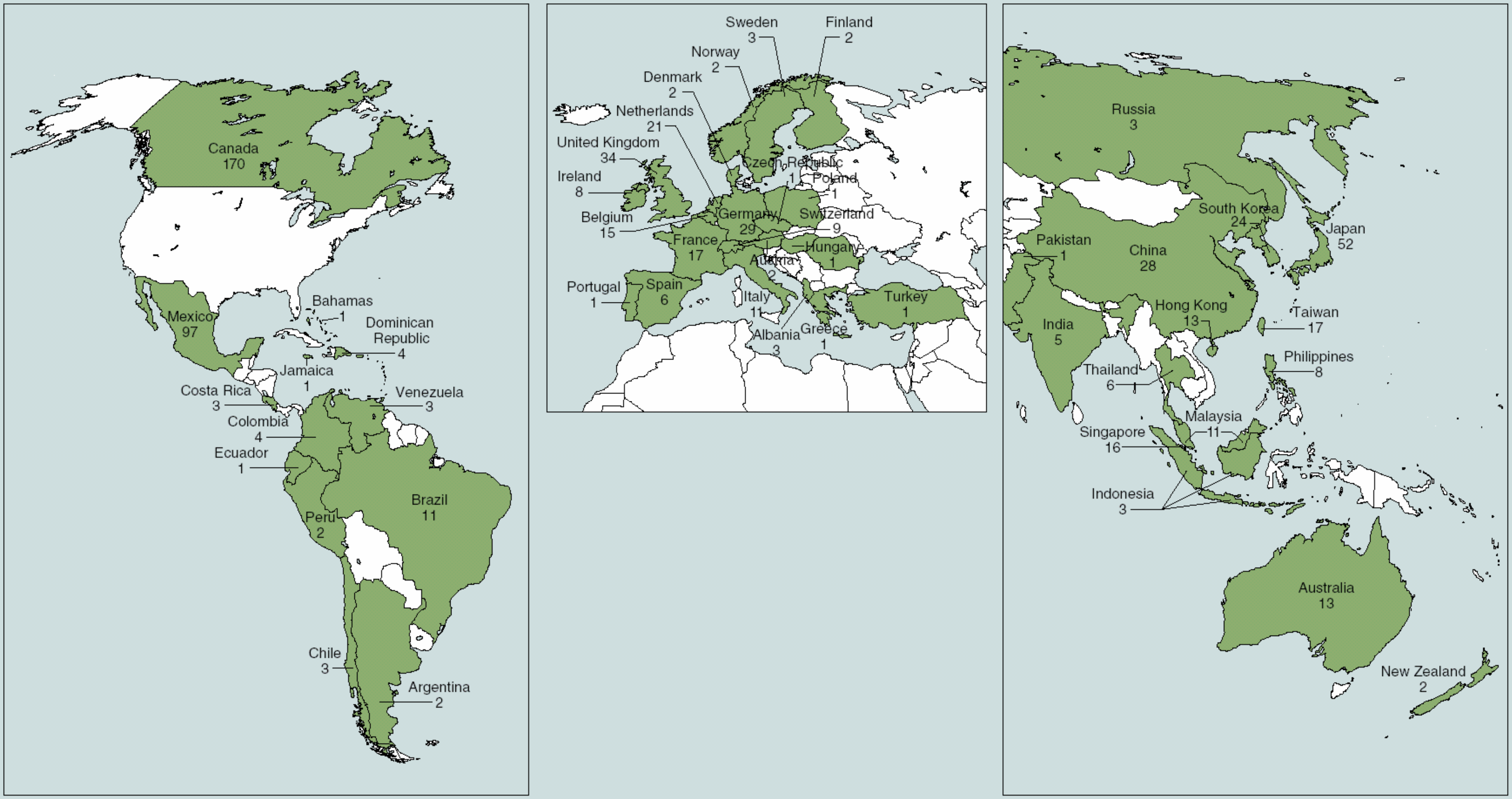
- **Some countries are more dependent on trade than others.**
  - The trade volume of a European country is typically between 30 – 40% of its GDP, while the trade volume of U.S. (and Japan) is typically between 10 – 20% of its GDP.
- **Nevertheless, the volume of trade has grown over time for most countries.**



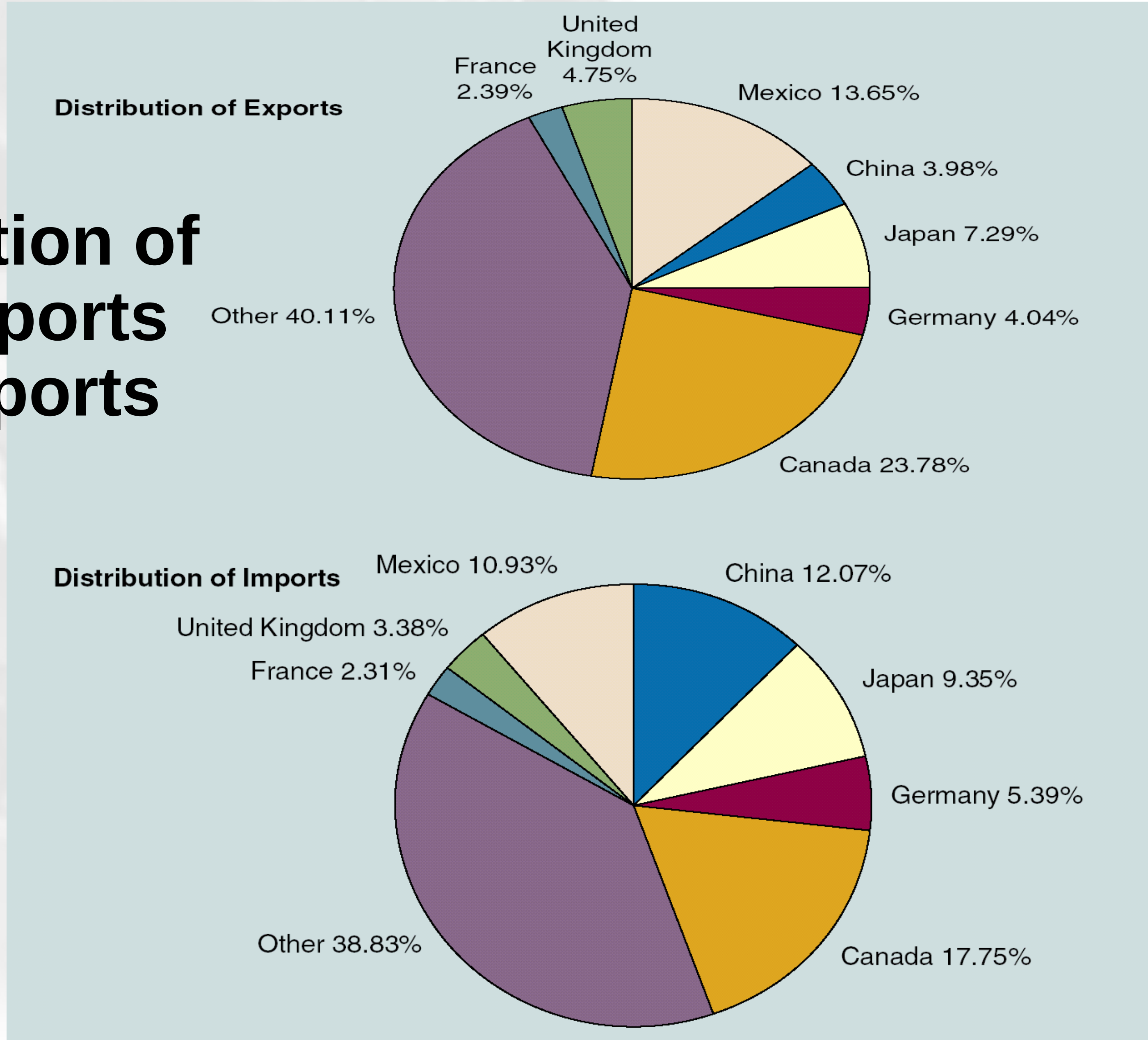
UNIVERSITAS ATMA JAYA YOGYAKARTA

Distribution of U.S. Exports across Countries

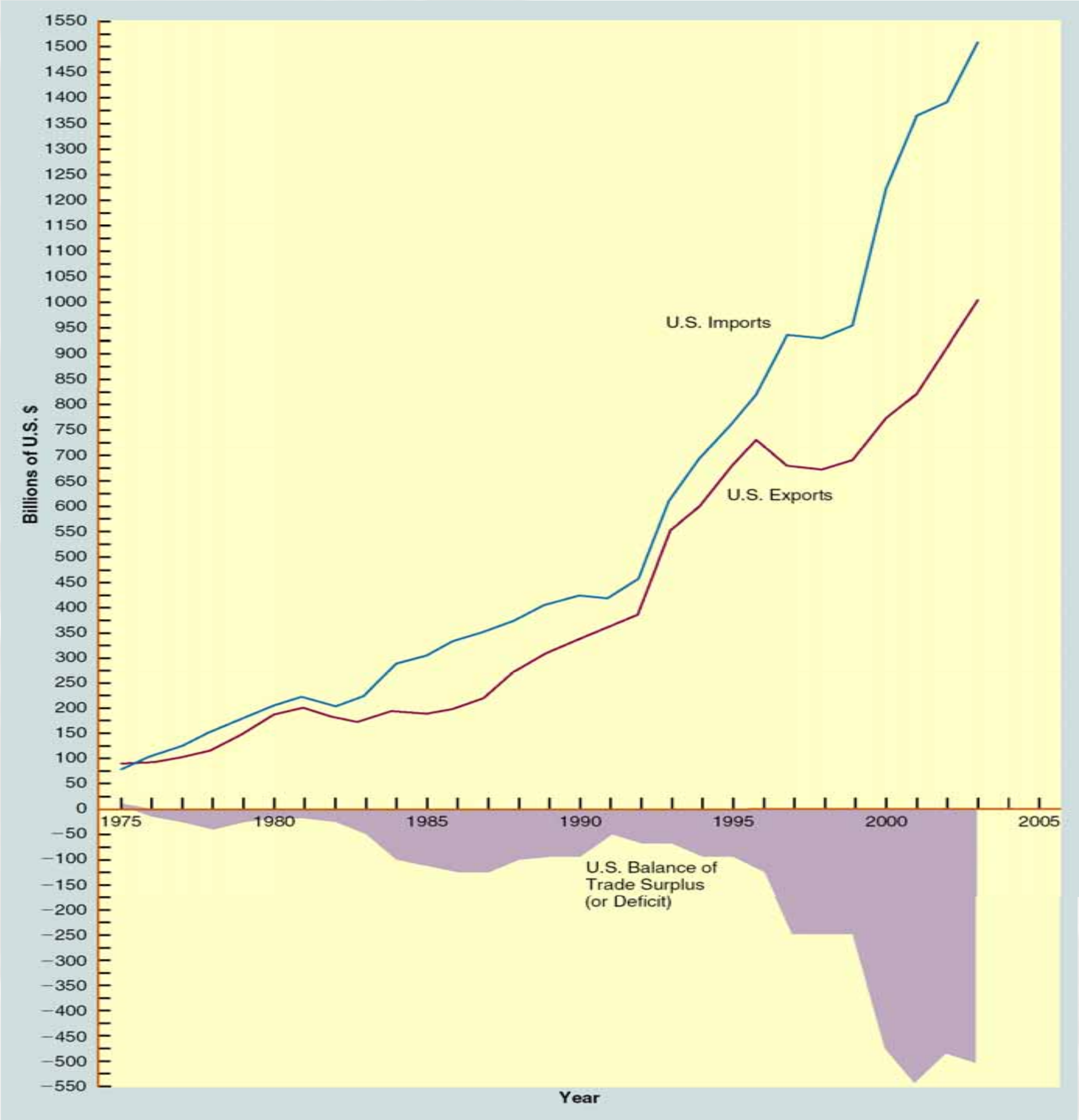
(in billions of $)



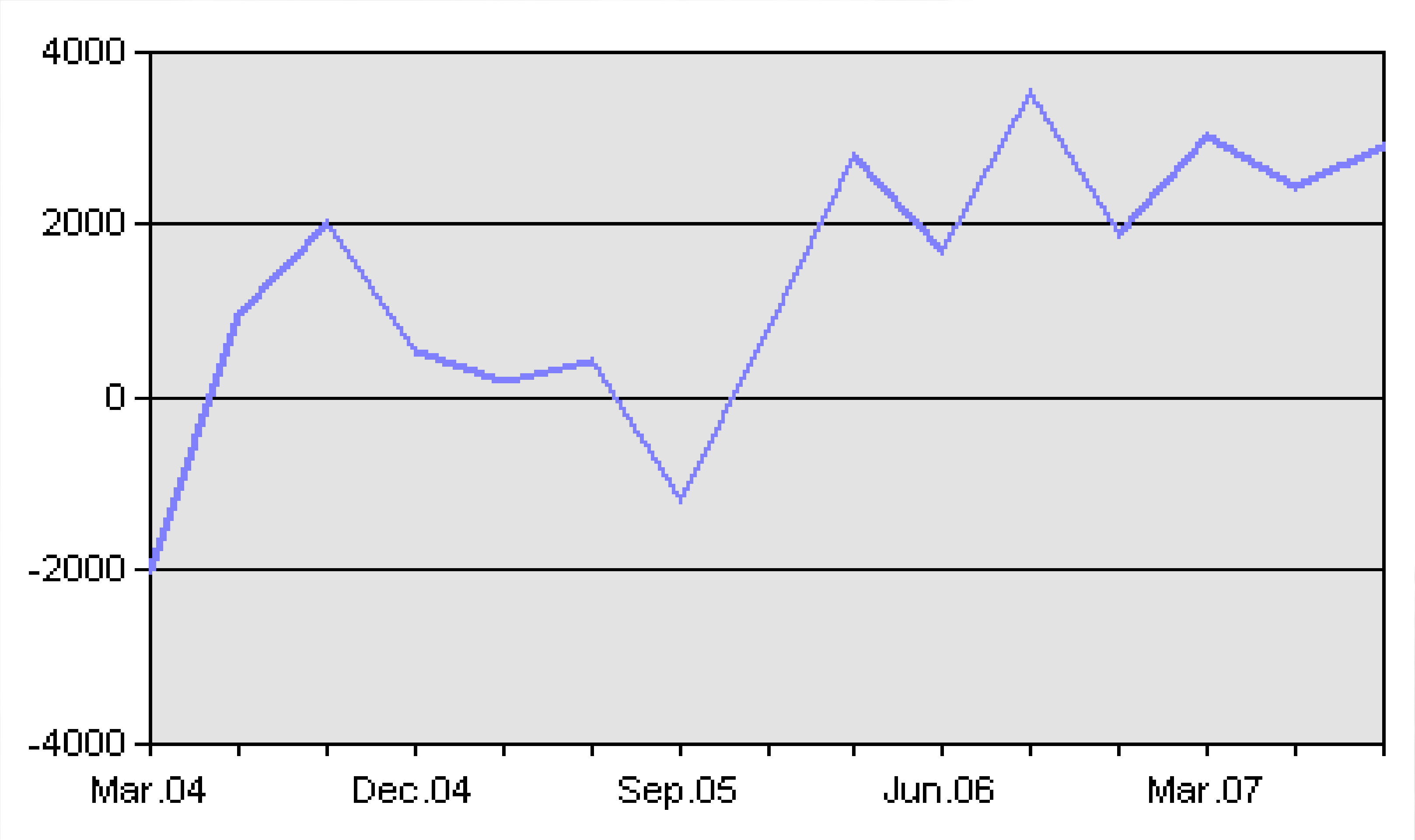
Distribution of U.S. Exports and Imports



U.S. Balance of Trade Over Time



Indonesia Current Account



Source: Bank Indonesia

Trade Agreements

- **Many agreements have been made to reduce trade restrictions:**
  - ¤ 1988 U.S. and Canada free trade pact
  - ¤ North American Free Trade Agreement (NAFTA)
  - ¤ General Agreement on Tariffs and Trade (GATT)
  - ¤ Single European Act and the European Union

Trade Disagreements

- **However, even without tariffs and quotas, governments seem always able to find strategies that can give their local firms an edge in exporting:**
  - different environmental, labor laws
  - bribes, government subsidies (dumping)
  - tax breaks for specific industries
  - exchange rate manipulations

Trade Disagreements

- **Other trade-related issues include:**
  - ¤ the outsourcing of services
  - ¤ the use of trade policies for political reasons
  - ¤ disagreements within the European Union

International Trade Flow Factors

- **Impact of Inflation**
  - A relative increase in a country's inflation rate will decrease its current account, as imports increase and exports decrease.
- **Impact of National Income**
  - A relative increase in a country's income level will decrease its current account, as imports increase.

International Trade Flow Factors

- **Impact of Government Restrictions**
  - ¤ A government may reduce its country's imports by imposing a tariff on imported goods, or by enforcing a quota.
  - ¤ Some trade restrictions may be imposed on certain products for health and safety reasons.

International Trade Flow Factors

- **Impact of Exchange Rates**
  - ¤ If a country's currency begins to rise in value, its current account balance will decrease as imports increase and exports decrease.

The factors interact, such that their simultaneous influence on the balance of trade is complex.

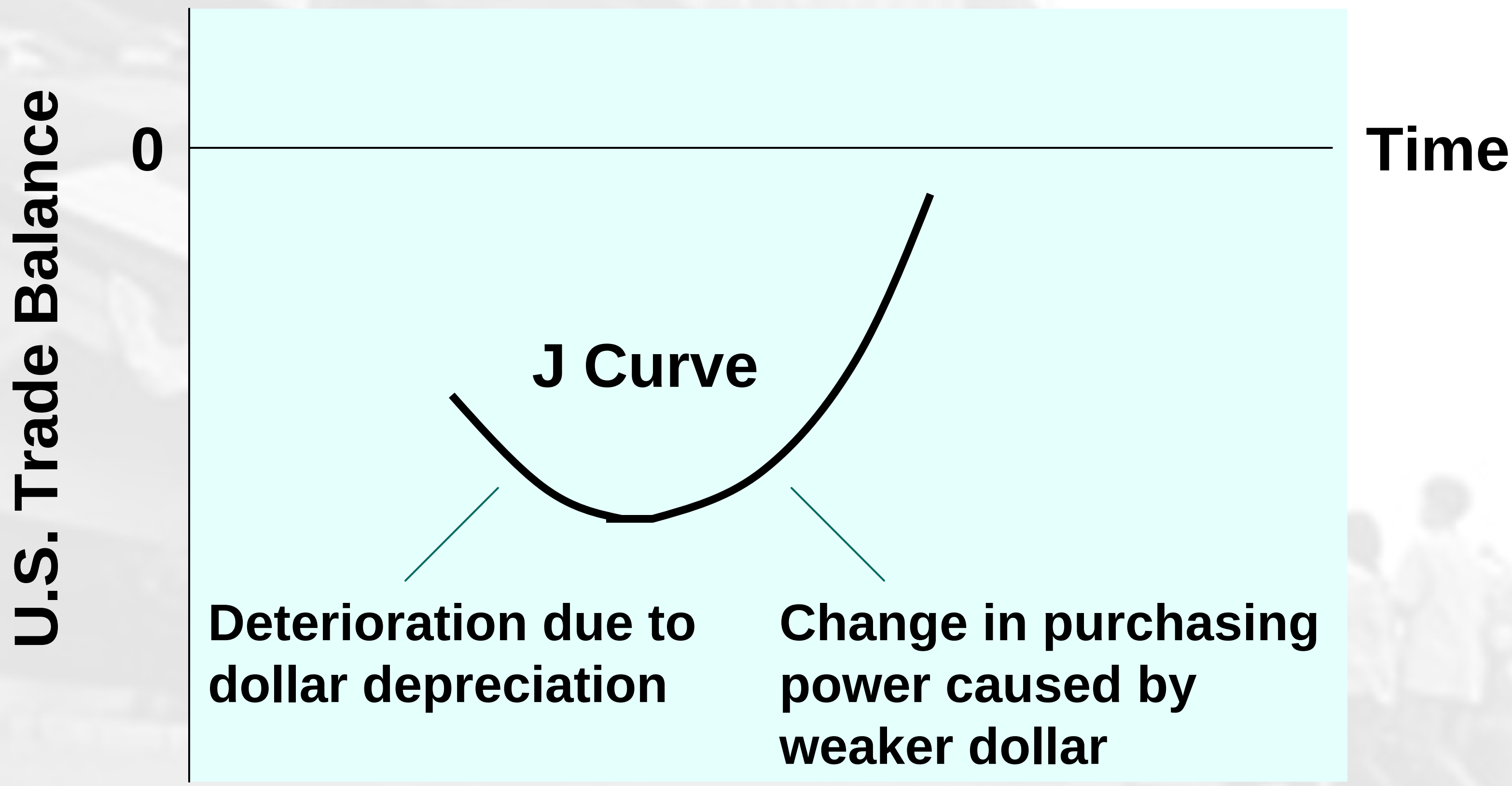
Correcting Trade Deficit Balances

- By reconsidering the factors that affect the balance of trade, some common correction methods can be developed.
- A floating exchange rate system may correct a trade imbalance automatically since the trade imbalance will affect the demand and supply of the currencies involved.

Why a Weak Home Currency Is Not a Perfect Solution

- **Counterpricing by competitors**
- **Impact of other weak currencies**
- **Stability of intracompany trade**
  - Many firms purchase products that are produced by their subsidiaries.
- **Prearranged international transactions**
  - The lag time between a weaker U.S.$ and increased foreign demand has been estimated to be 18 months or longer.

The J-Curve Effect



UNIVERSITAS ATMA JAYA YOGYAKARTA

International Capital Flows

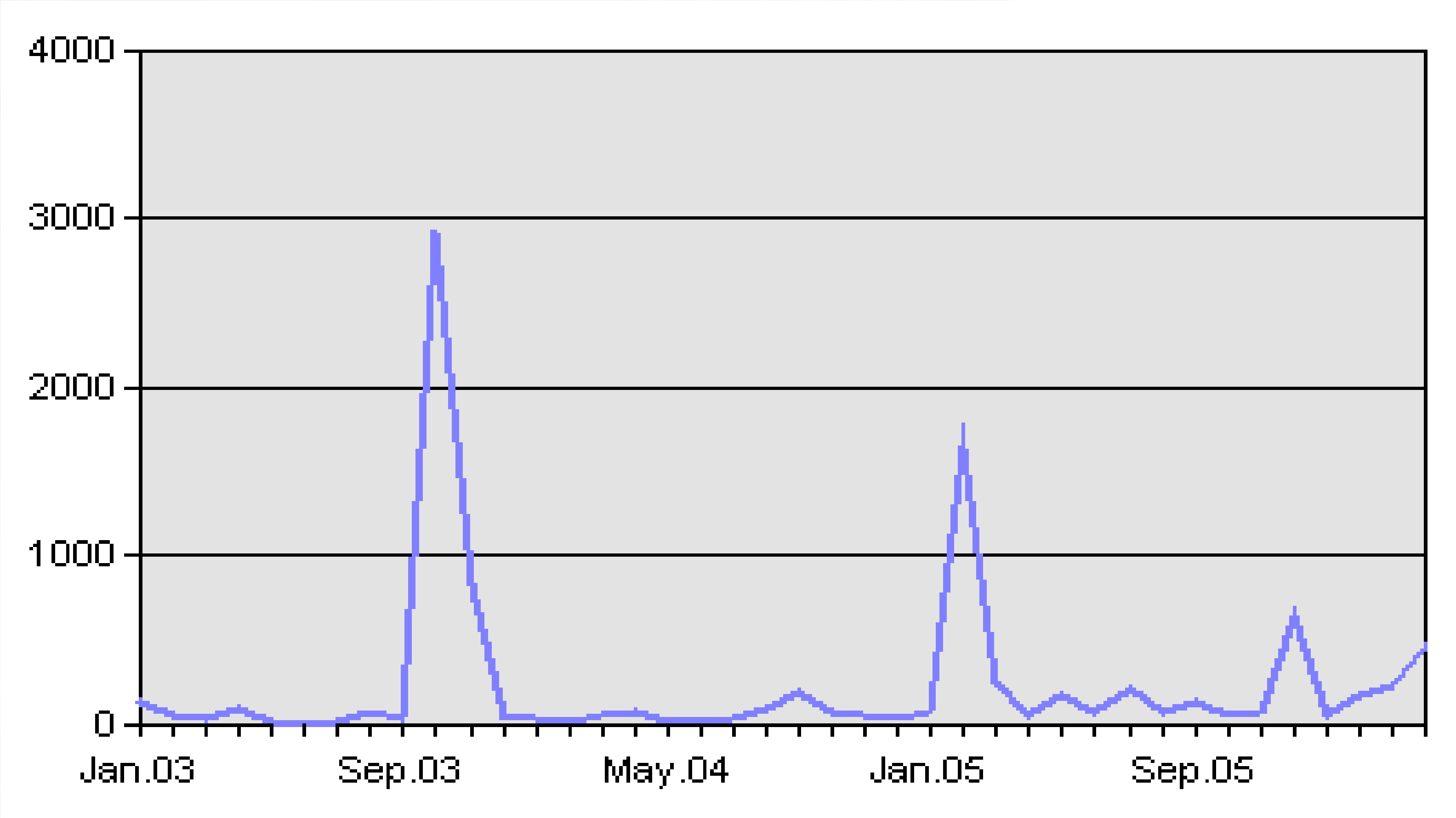
Distribution of DFI

For 2003, in millions of dollars

	U.S. DFI		DFI in the U.S.	
All countries	**151,884**	**100.0%**	**29,772**	**100.0%**
America	**26,997**	**17.8%**	**12,641**	**42.5%**
Canada	13,826	9.1%	9,116	30.6%
Mexico	5,667	3.7%	1,944	6.5%
Europe	**99,191**	**65.3%**	**6,572**	**22.1%**
Germany	8,676	5.7%	407	1.4%
Netherlands	14,968	9.9%	-614	-2.1%
Switzerland	14,444	9.5%	-6,993	-23.5%
United Kingdom	39,548	26.0%	-2,288	-7.7%
Africa	**2,211**	**1.5%**	**-50**	**-0.2%**
Middle East	**2,093**	**1.4%**	**522**	**1.8%**
Asia & Pacific	**21,392**	**14.1%**	**10,086**	**33.9%**
Japan	5,800	3.8%	6,495	21.8%

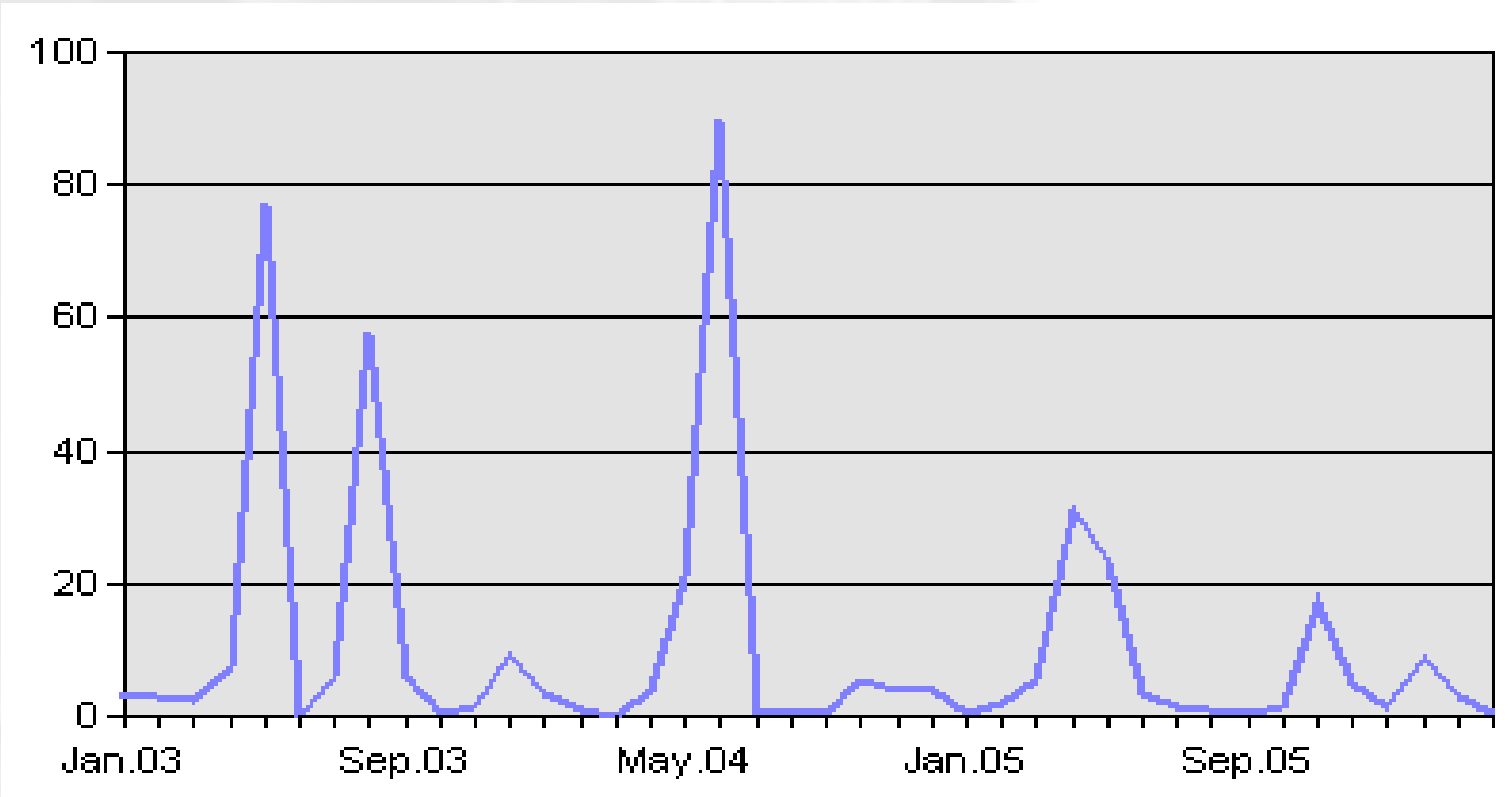
Source: U.S. Bureau of Economic Analysis

Total FDI in Indonesia



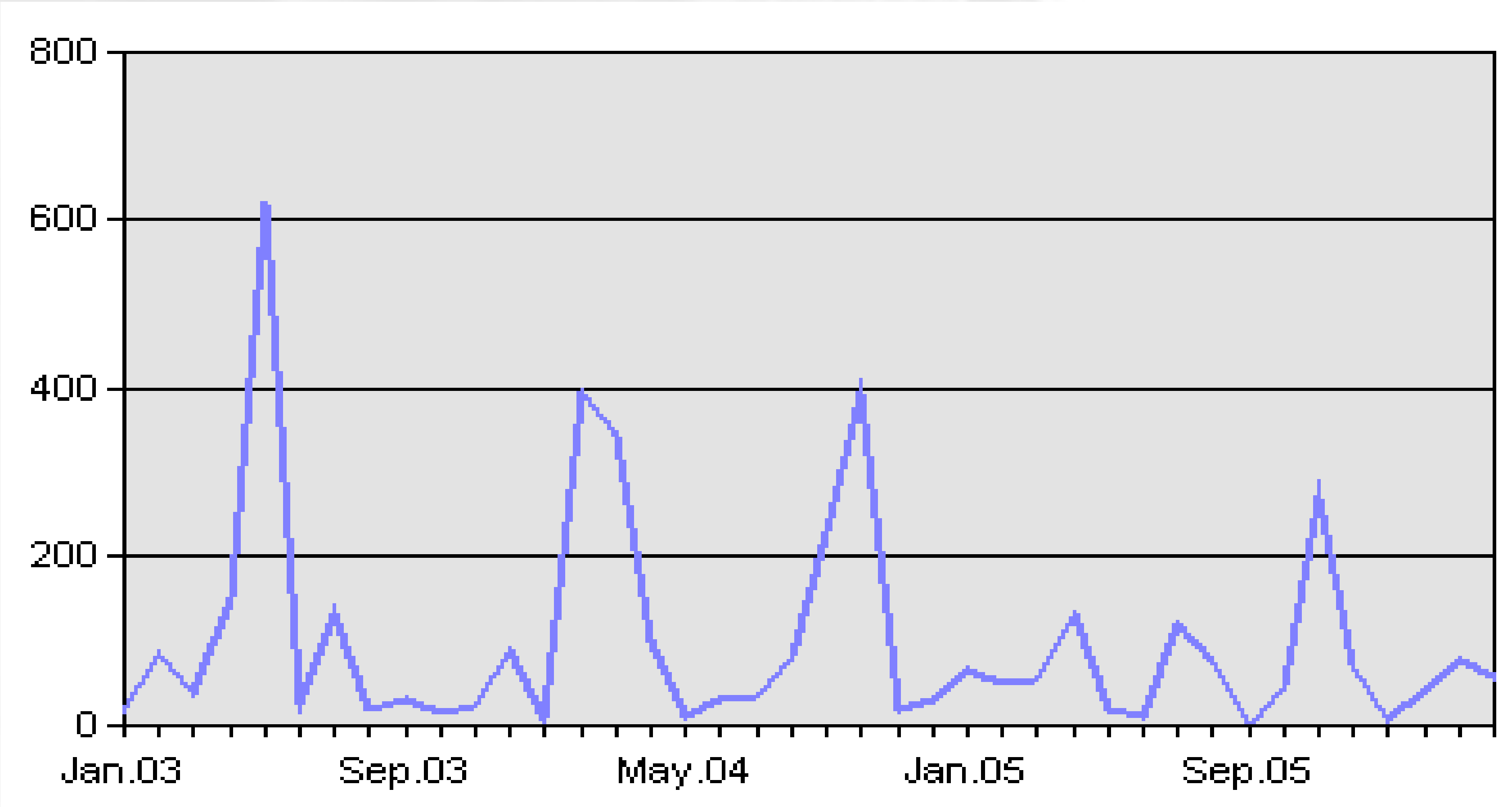
Source: Bank Indonesia

FDI from USA in Indonesia



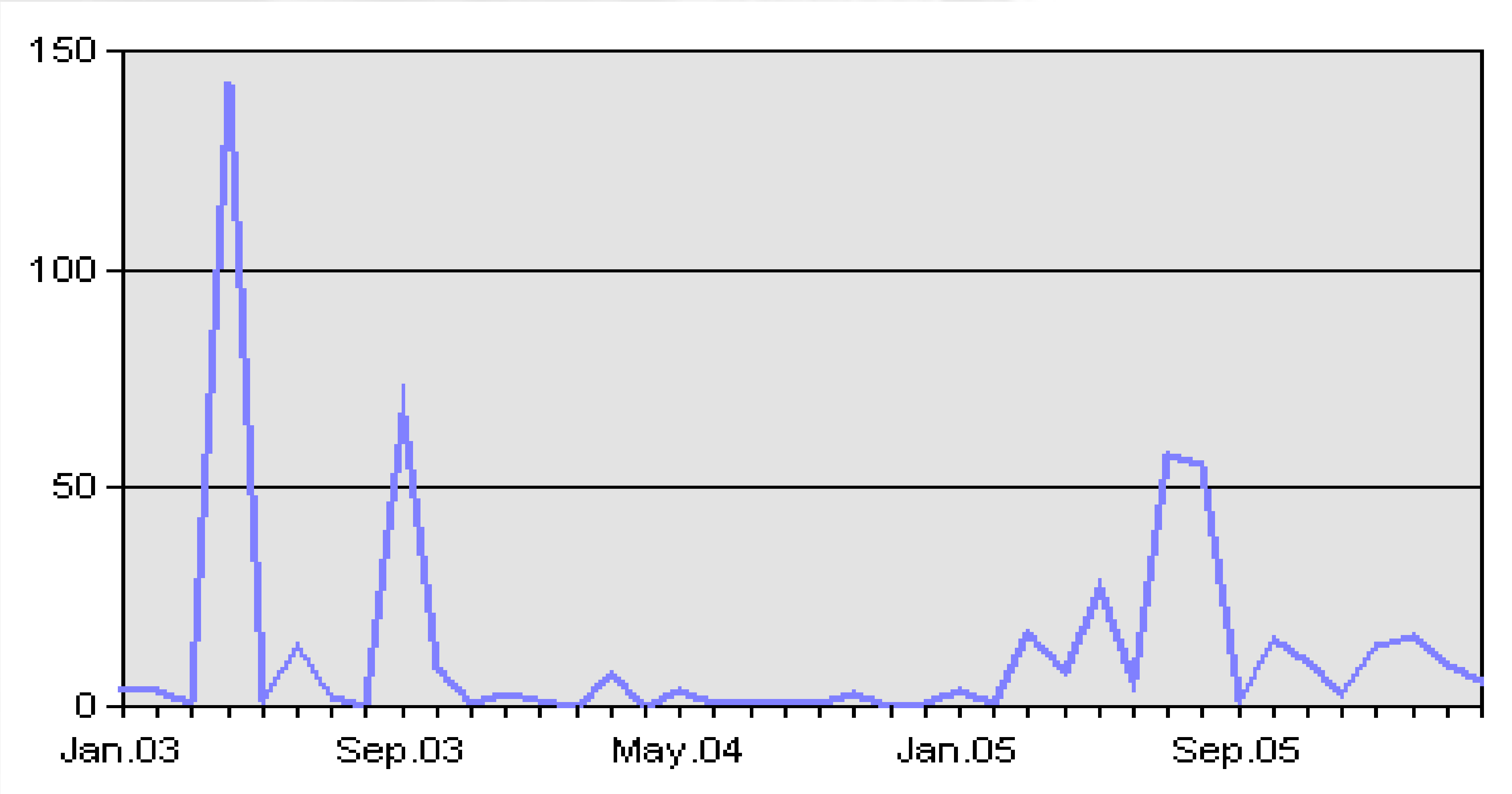
Source: Bank Indonesia

FDI from Japan in Indonesia



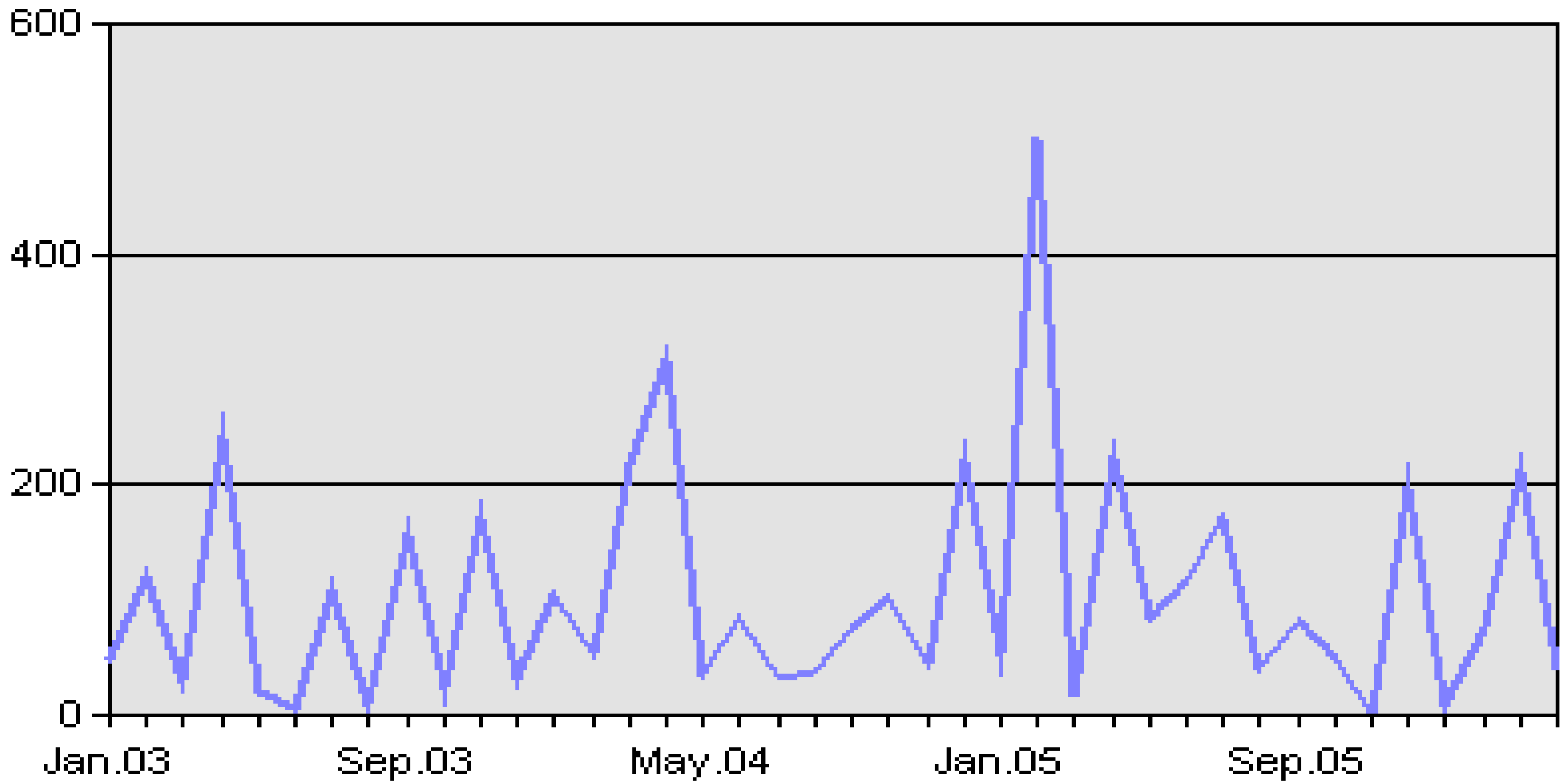
Source: Bank Indonesia

FDI from China in Indonesia



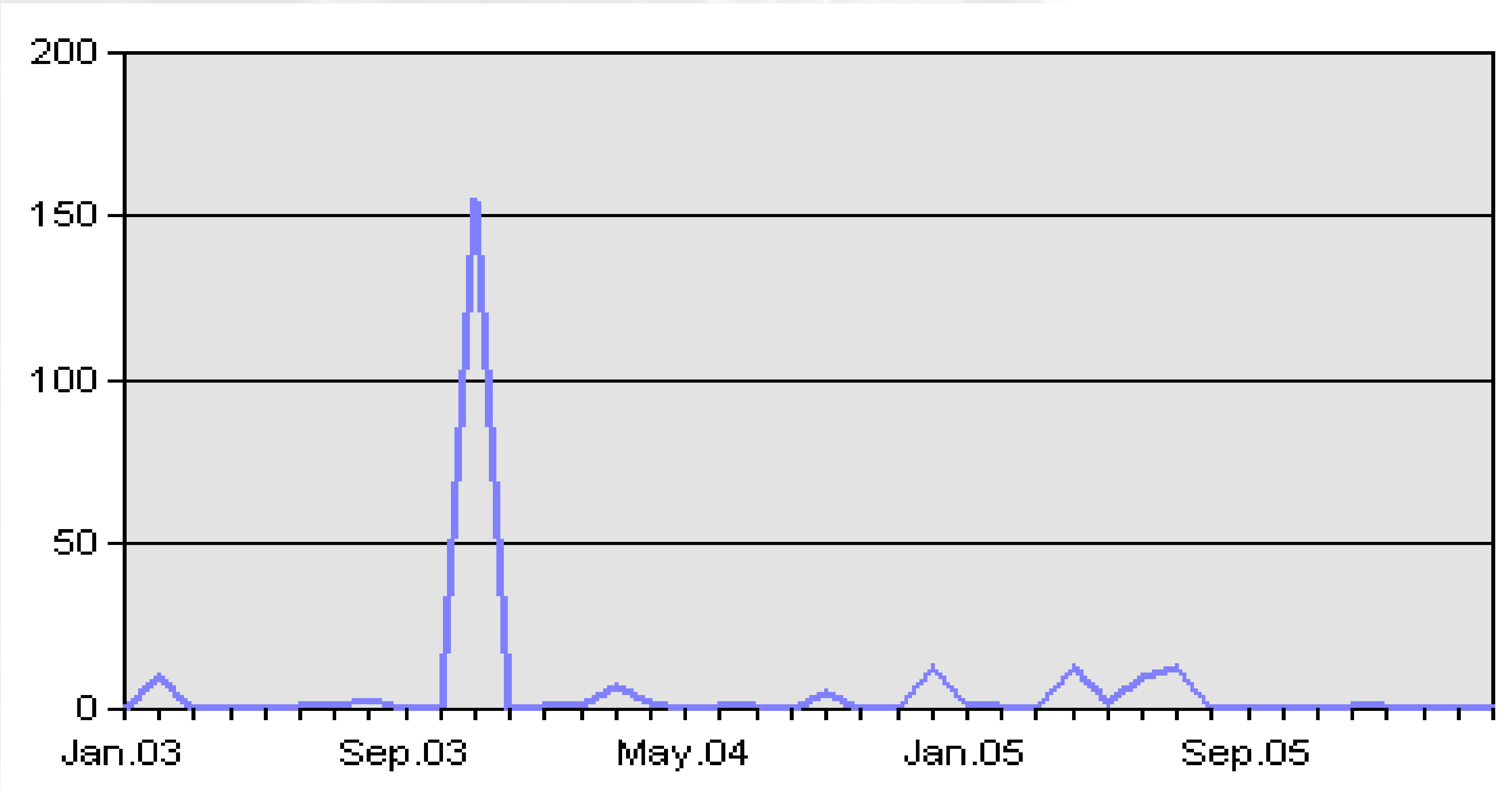
Source: Bank Indonesia

FDI from England in Indonesia



Source: Bank Indonesia

FDI from Germany in Indonesia



Source: Bank Indonesia

Factors Affecting DFI

- **Changes in Restrictions**
  - ¤ New opportunities may arise from the removal of government barriers.
- **Privatization**
  - ¤ DFI has also been stimulated by the selling of government operations.
- **Potential Economic Growth**
  - ¤ Countries that have higher potential for economic growth are more attractive.

Factors Affecting DFI

- **Tax Rates**
  - ¤ Countries that impose relatively low tax rates on corporate earnings are more likely to attract DFI.
- **Exchange Rates**
  - ¤ Firms typically prefer to invest in countries where the local currency is expected to strengthen against their own.

Factors Affecting International Portfolio Investment

- **Tax Rates on Interest or Dividends**
  - ¤ Investors will normally prefer countries where the tax rates are relatively low.
- **Interest Rates**
  - ¤ Money tends to flow to countries with high interest rates.
- **Exchange Rates**
  - ¤ Foreign investors may be attracted if the local currency is expected to strengthen.

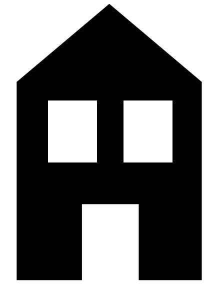
International Flow Agencies

- **International Monetary Fund (IMF)**
  - ¤ The IMF encourages internationalization of businesses through surveillance, and financial and technical assistance.
  - ¤ Its compensatory financing facility attempts to reduce the impact of export instability on country economies.
  - ¤ The IMF adopts a quota system, and its financing is measured in special drawing rights (SDRs).

International Flow Agencies

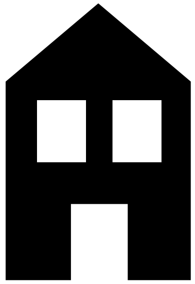
- **World Bank**
  - This International Bank for Reconstruction and Development makes loans to countries to enhance their economic development.
  - In particular, its Structural Adjustment Loans (SALs) are intended to enhance a country's long-term economic growth.
  - Funds are spread through cofinancing agreements with official aid agencies, export credit agencies, and commercial banks.

International Flow Agencies



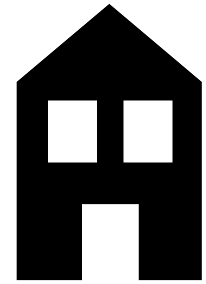
- **Multilateral Investment Guarantee Agency**
  - Established by the World Bank, the MIGA helps develop international trade and investment by offering various forms of political risk insurance.
- **International Development Association**
  - The IDA extends loans at low interest rates to poor nations that cannot qualify for loans from the World Bank.

International Flow Agencies



- **World Trade Organization**
  - The WTO was established to provide a forum for multilateral trade negotiations and to settle trade disputes related to the GATT accord.
- **International Financial Corporation**
  - The IFC promotes private enterprise within countries through loan provisions and stock purchases.

International Flow Agencies



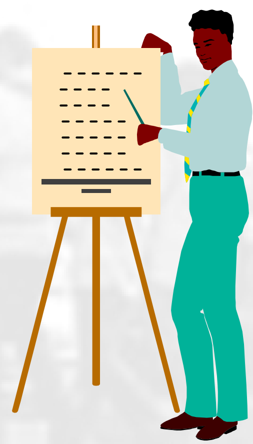
- **Bank for International Settlements**
  - The BIS is the “central banks’ central bank” and “lender of last resort.”
- **Regional development agencies**
  - Inter-American Development Bank
  - Asian Development Bank
  - African Development Bank
  - European Bank for Reconstruction and Development.

UNIVERSITAS ATMA JAYA YOGYAKARTA

International Financial Markets

Chapter Objectives

- **To describe the background and corporate use of the following international financial markets:**
  - foreign exchange market,
  - international money market,
  - international credit market,
  - international bond market, and
  - international stock markets.

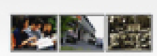


Motives for Using International Financial Markets

- The markets for real or financial assets are prevented from full integration by barriers like tax differentials, tariffs, quotas, labor immobility, communication costs, cultural and financial reporting differences.
- Yet, such market imperfections also create unique opportunities for specific geographic markets, helping these markets attract foreign creditors and 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 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 **foreign exchange market** allows currencies to be exchanged in order to facilitate international trade or financial transactions.
- The system for exchanging foreign currencies has evolved from the **gold standard**, to agreements on **fixed exchange rates**, to a **floating rate system**.

Foreign Exchange Transactions

- The market for immediate exchange is known as the **spot market**.
- Trading between banks occurs in the **interbank market**. Within this market, brokers sometimes act as intermediaries.

Foreign Exchange Transactions

- 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.
- Customers in need of foreign exchange are concerned with quote competitiveness, special banking relationship, speed of execution, advice about current market conditions, and forecasting advice.

Foreign Exchange Transactions

- Banks provide foreign exchange services for a fee: a bank's **bid** (buy) quote for a foreign currency will be less than its **ask** (sell) quote.

bid/ask spread $= \dfrac{\text{ask rate} - \text{bid rate}}{\text{ask rate}}$

Example Suppose bid price for £ = \$1.52, ask price = \$1.60.

$$\text{Spread} = \frac{(1.60 - 1.52)}{1.60} = .05\text{, or } 5\%$$

Foreign Exchange Transactions

- **The spread on currency quotations is positively influenced by order costs, inventory costs, and currency risk, and negatively influenced by competition, and volume.**
- **The markets for heavily traded currencies like the €, £, and ¥ are very liquid.**

Interpreting Foreign Exchange Quotations

- The exchange rate quotations published in newspapers normally reflect the ask prices for large transactions.
- 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.
- $$\text{Indirect quotation} = \frac{1}{\text{Direct quotation}}$$

Interpreting Foreign Exchange Quotations

- A cross exchange rate reflects the amount of one foreign currency per unit of another foreign currency.

Example   Direct quote: $1.50/£, $.009/¥

Indirect quote: .67£/$, 111.11¥/$

$$\text{Value of £ in ¥} = \frac{\text{value of £ in \$}}{\text{value of ¥ in \$}}$$

$$= \frac{\$1.50/£}{\$.009/¥}$$

$$= 166.67¥/£$$

Currency Futures and Options Market

- **Currency futures contracts** specify a standard volume of a particular currency to be exchanged on a specific settlement date. They are sold on exchanges, unlike forward contracts.
- **Currency call (put) options** give the right to buy (sell) a specific currency at a specific price (called the **strike** or **exercise** price) within a specific period of time.

International Money Market

- Financial institutions in this market serve MNCs by accepting deposits and offering loans in a variety of currencies.

International Money Market

- **Both the European and Asian money markets originated as markets involving mostly dollar-denominated deposits.**
- **The Eurocurrency market (market for Eurodollars) developed during the 1960s and 1970s, stimulated by regulatory changes in the U.S. and the growing importance of OPEC.**

International Money Market

- **The growing standardization of global banking regulations has contributed towards the globalization of the industry.**
  - The Single European Act opened up the European banking industry and increased its efficiency.
  - The Basel Accord outlined risk-weighted capital adequacy requirements for banks.
  - The proposed Basel II Accord attempts to account for operational risk.

International Credit Market

- MNCs sometimes obtain medium-term funds through banks located in foreign markets.
- Eurocredit loans refer to loans of one year or longer extended by banks in Europe to foreign MNCs or government agencies.
- Floating rate loans, such as those based on the LIBOR, are common, since bank asset and liability maturities may not match.

International Credit Market

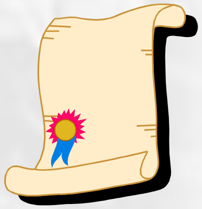
- Sometimes a single bank is unwilling or unable to lend the amount needed by a particular MNC or government agency.
- A lead bank may then organize a syndicate of banks to underwrite the loan.
- Borrowers that receive a syndicated loan typically incur front-end management and commitment fees, in addition to the interest on the loan.

International Bond Market

There are two types of international bonds:

❶ 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**.

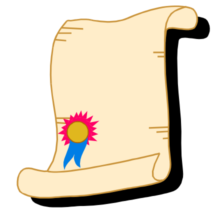
❷ Bonds that are sold in countries other than the country of the currency denominating the bonds are called **Eurobonds**.



International Bond Market

- The emergence of the Eurobond market was partly due to the 1963 U.S. Interest Equalization Tax (IET). They have become very popular, perhaps in part because they circumvent registration requirements.
- Usually, Eurobonds are issued in bearer form, pay annual coupons, and have call provisions. Some also carry convertibility clauses, or have variable rate provisions.

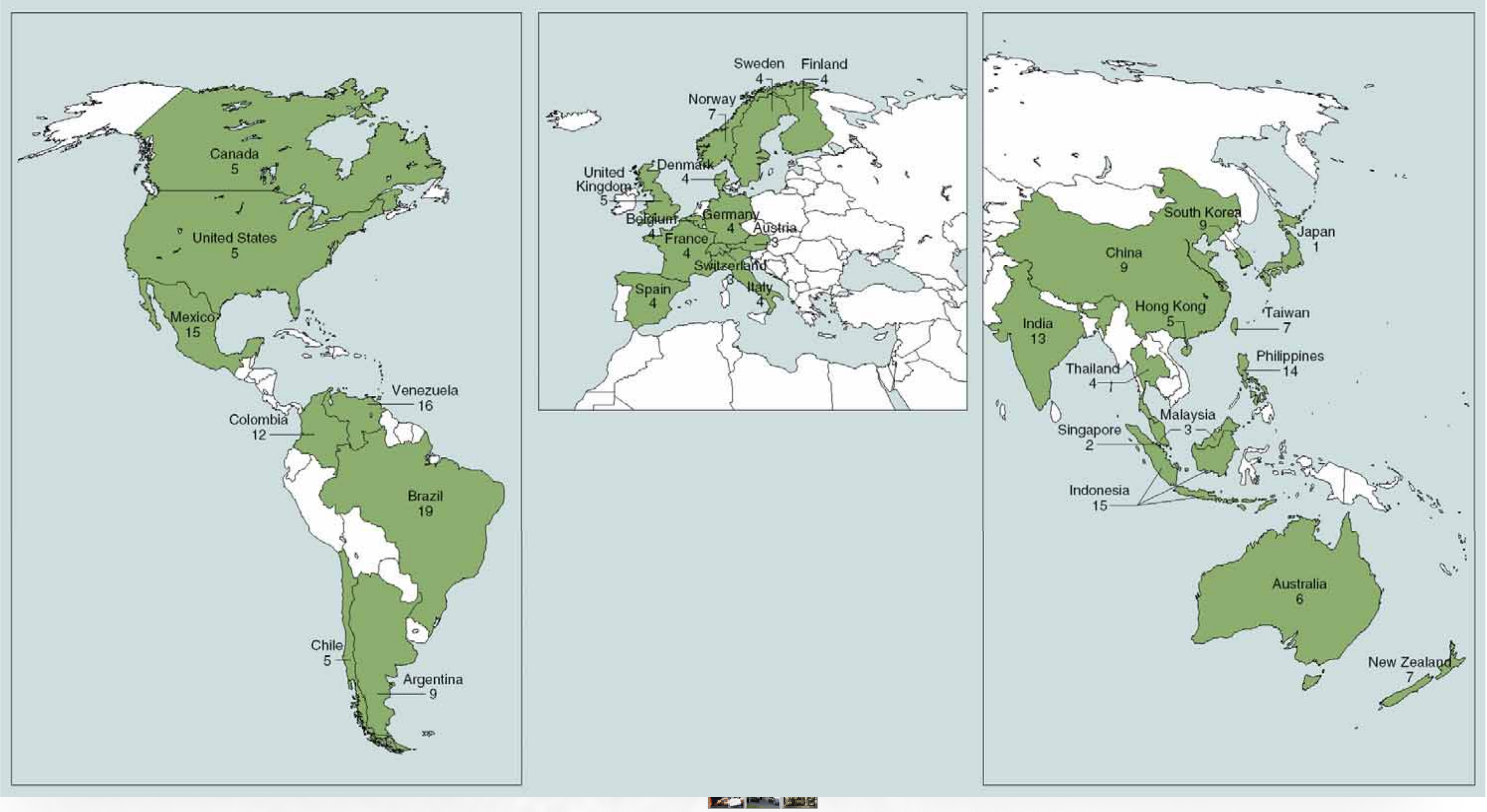
International Bond Market



- 70 to 75 percent of Eurobonds are denominated in the U.S. dollar.
- Eurobonds are underwritten by a multi-national syndicate of investment banks and simultaneously placed in many countries.
- In the secondary market, the market makers are often the same underwriters who sell the primary issues.

Comparing Interest Rates Among Currencies

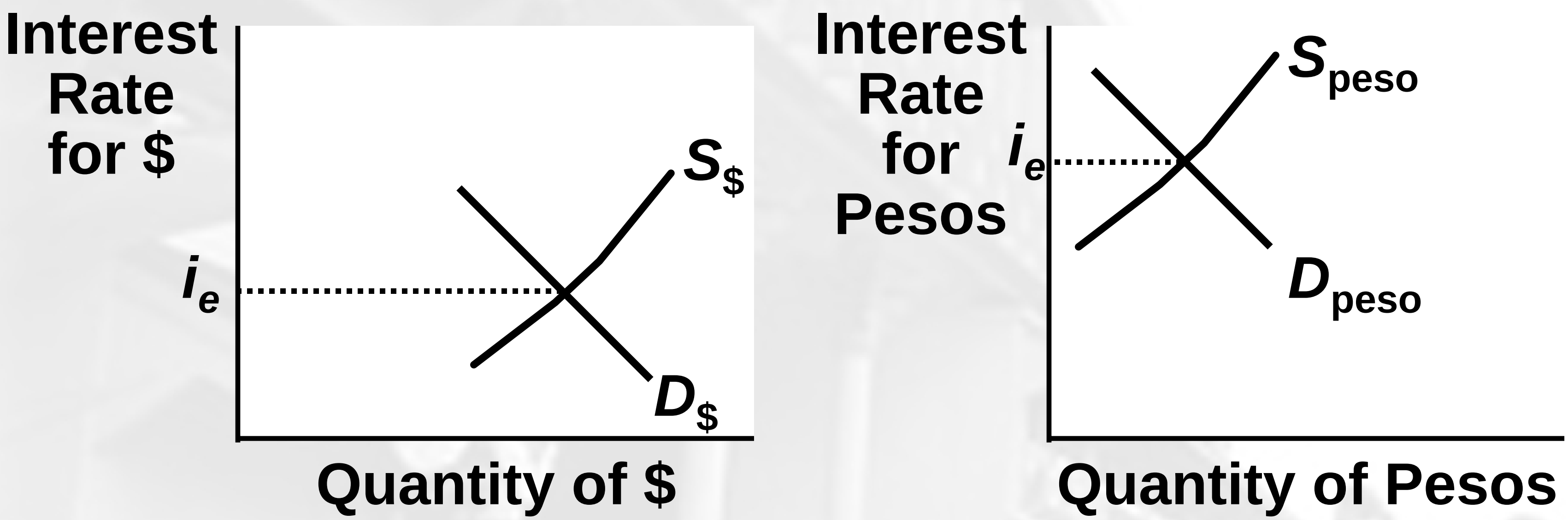
Annualized Short-Term Interest Rates among Countries in 2001



Comparing Interest Rates Among Currencies

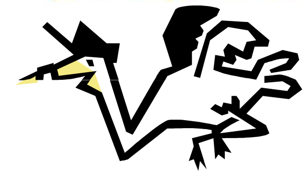
- Interest rates are crucial because they affect the MNC's cost of financing.
- The interest rate for a specific currency is determined by the demand for and supply of funds in that currency.
- As the demand and supply schedules for a specific currency change over time, the equilibrium interest rate will also change.

Why U.S. Dollar Interest Rates Differ from Mexican Peso Interest Rates



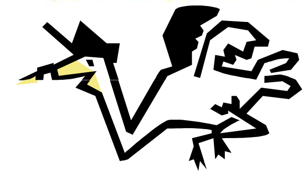
- The curves are further to the right for the dollar because the U.S. economy is larger.
- The curves are higher for the Mexican peso because of the higher inflation in Mexico.

International Stock Markets

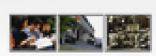


- In addition to issuing stock locally, MNCs can also obtain funds by issuing stock in international markets.
- This will enhance the firms' image and name recognition, and diversify their shareholder base.
- A stock offering may also be more easily digested when it is issued in several markets.

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.



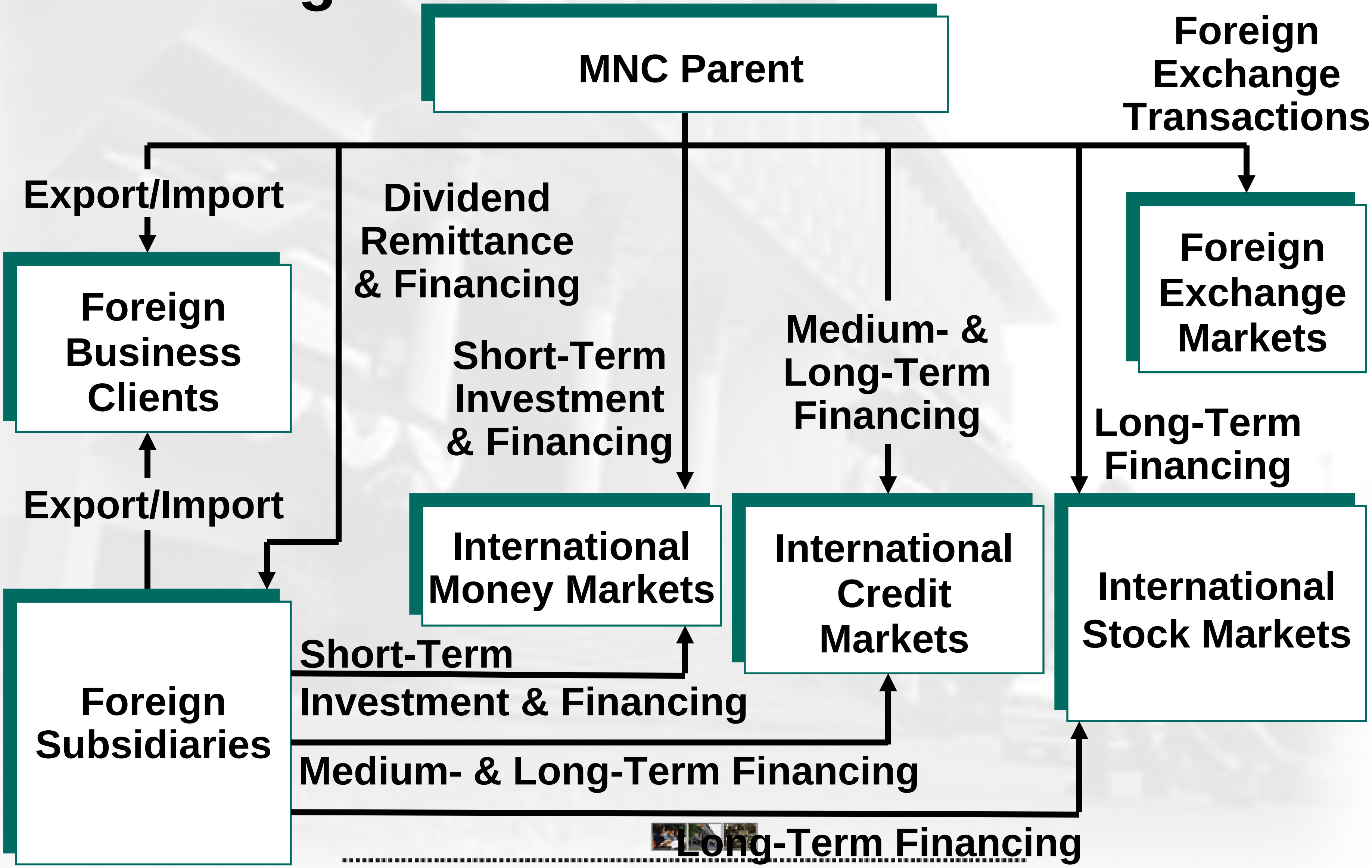
International Stock Markets

- The locations of an MNC's operations can influence the decision about where to place its 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, and proportion of individual versus institutional share ownership.

Comparison of International Financial Markets

- **The foreign cash flow movements of a typical MNC can be classified into:**
  - ❶ Foreign trade – exports and imports
  - ❷ Direct foreign investment (DFI) – acquisition of foreign real assets
  - ❸ Short-term investment or financing in foreign securities
  - ❹ Longer-term financing in the international bond or stock markets

Foreign Cash Flow Chart of an MNC



How Financial Markets Affect an MNC's Value

- Since interest rates commonly vary among countries, an MNC may use the international financial markets to reduce its cost of capital, thereby achieving a higher valuation.