Micro

McEachern **ECON** 2010-2011

CHAPTER 20

International Finance

Designed by
Amy McGuire, B-books, Ltd.

Balance of Payments

- International economic transactions
  - Flow of transactions – period of time
  - May not involve cash payments
- Double-entry bookkeeping
  - Credits
    - Inflow of receipts from the rest of the world
  - Debits
    - Outflows of payments to the rest of the world
- Individual accounts

LO1

Balance of Payments

- Merchandise trade balance: Trade in goods
- Value of merchandise exports minus the value of merchandise imports
- Credits: Value of U.S. merchandise exports
- Debits: Value of U.S. merchandise imports
- Surplus: exports exceed imports
- Deficit: imports exceed exports

LO1

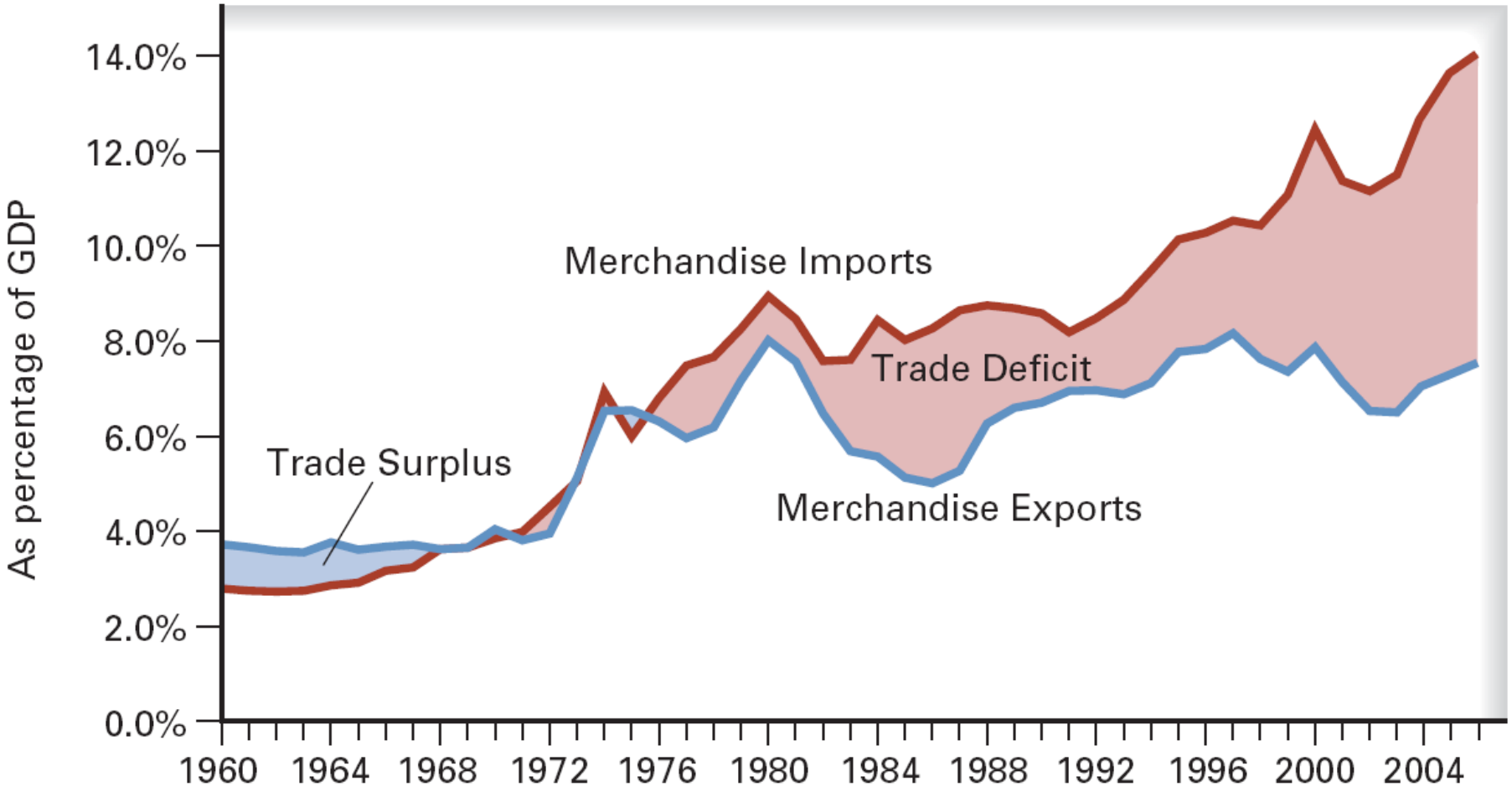
Merchandise Trade Balance

- Reported monthly
- Influences
  - Foreign exchange markets
  - The stock market
  - Financial markets
- Depends on
  - Economy's relative strength
  - Economy's competitiveness
  - Relative value of domestic currency

LO1

Exhibit 1

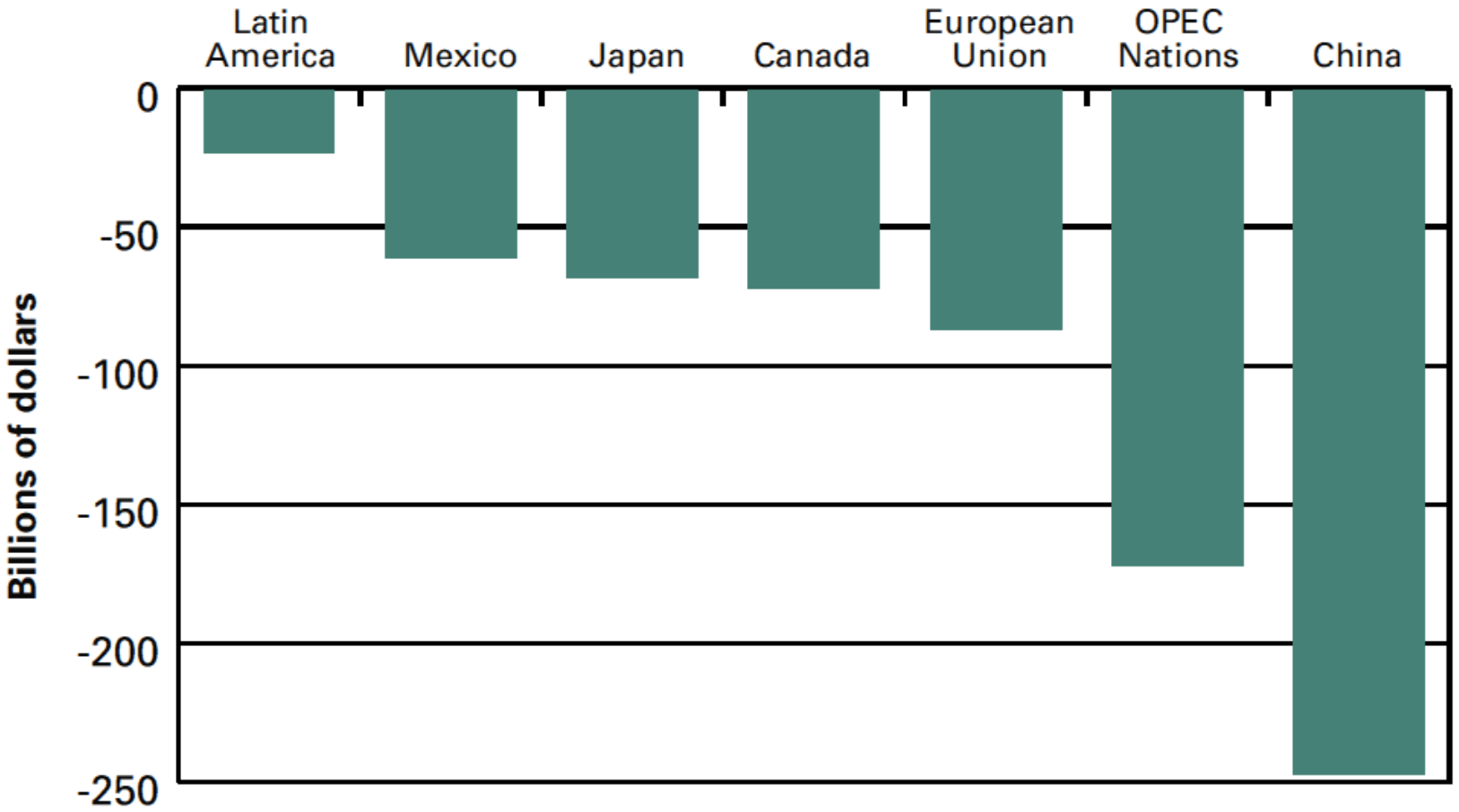
U.S. Imports Have Exceeded Exports Since 1976, and the Trade Deficit Has Widened



LO1

Exhibit 2

U.S. Merchandise Trade Deficits in 2008 by Country or Grouping



U.S. imports more goods from each of the world's major economies than it exports to them. The largest U.S. trade deficit is with China, which exported five times more to the United States in 2008 than it imported from the United States.

Balance of Payments

- Balance on goods and services
  - U.S. service exports
    - Credit in U.S. balance of payments
  - U.S. service imports
    - Debit in U.S. balance of payments
  - Surplus services: exports exceed imports
  - Balance on goods and services
    - Net exports = exports minus imports

LO1

Balance of Payments

- Net investment income
  - U.S. residents
    - Earn investment income
      - On assets owned abroad
    - Credit in balance of payments
  - Foreigners
    - Earn investment income
      - On assets owned in U.S.
    - Debit in balance of payments
- Net investment income from abroad

LO[1]

Balance of Payments

- Unilateral transfers
  - Money sent abroad
    - Government transfers to foreign residents
    - Foreign aid
    - Money sent to families abroad
    - Personal gifts sent abroad
    - Charitable donations
    - Debit in the balance of payments
- Net unilateral transfers abroad

LO1

Balance of Payments

- Balance on current account
  - Net unilateral transfers
  - Net exports of goods and services
  - Net income from assets owned abroad
- Financial account
  - International purchases of assets
    - Financial assets
    - Real assets
  - 2006, surplus in the financial account

LO[1]

Deficits and Surpluses

- Credits on balance of payments (+)
  - Transactions requiring payments from foreigners to U.S. residents
- Debits on balance of payments (-)
  - Transactions requiring payments to foreigners from U.S. residents
- Statistical discrepancy
  - "Fudge factor"

LO1

Deficits and Surpluses

- Foreign exchange
  - Currency of another country
- Current account deficit
  - Foreign exchange paid exceeds foreign exchange received
    - Needs net inflow in the financial account
- Current account surplus
  - Foreign exchange received exceeds foreign exchange paid
    - Net outflow in the financial account

LO1

LO[1]

Exhibit 3

Current Accounts	
1. Merchandise exports	+1,148.5
2. Merchandise imports	−1,967.9
3. Merchandise trade balance (1 + 2)	−819.4
4. Service exports	+497.2
5. Service imports	−378.1
6. Goods and services balance (3 + 4 + 5)	−700.3
7. Net investment income from abroad	+81.7
8. Net unilateral transfers	−112.7
9. Current account balance (6 + 7 + 8)	−731.3
Financial Accounts	
10. Change in U.S.-owned assets abroad	−1,289.9
11. Change in foreign-owned assets in U.S.	+2,057.7
12. Financial account balance (10 + 11)	+767.8
13. Statistical discrepancy	−36.5
TOTAL (9 + 12 + 13)	**0.0**

U.S. Balance of Payments for 2007 (billions of dollars)

Foreign Exchange Rates and Markets

- Foreign exchange
  - Foreign money
  - To carry out international transactions
- Exchange rate
  - Price (measured in one country's currency) of buying one unit of another country's currency
  - Determined on foreign exchange market

LO2

Foreign Exchange Rates and Markets

- Foreign exchange market
  - Buy and sell foreign exchange
- Exchange rate of euro
  - Number of dollars – to purchase one euro
  - Dollar depreciation; weakening
    - Increase in number of dollars for one euro
  - Dollar appreciation; strengthening
    - Decrease in number of dollars for one euro
  - Determined by demand and supply

LO2

Demand for Foreign Exchange

- Demand curve
  - Inverse relationship
    - Dollar price of euro
    - Quantity of euros demanded
- Assumed constant
  - Income; preferences (U.S. consumers)
  - Expected inflation (U.S. and euro area)
  - Price of goods (euro area)
  - Interest rates (U.S. and euro area)

LO2

Supply of Foreign Exchange

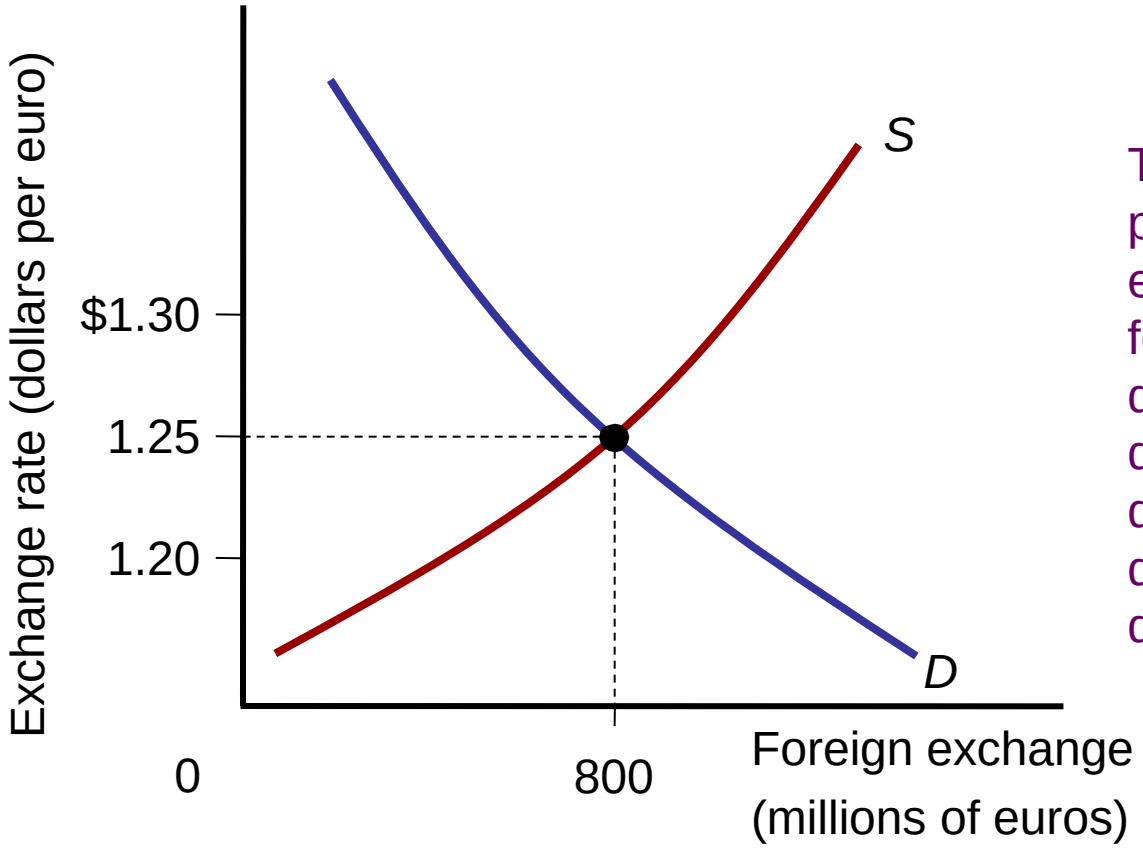
- Supply curve
  - Positive relationship
    - Dollar price of euro
    - Quantity of euros supplied
- Assumed constant
  - Income, taxes (euro area)
  - Expected inflation (euro area and U.S.)
  - Interest rates (euro area and U.S.)

LO2

LO2

Exhibit 4

The Foreign Exchange Market



The fewer dollars needed to purchase 1 unit of foreign exchange, the lower the price of foreign goods, the greater the quantity of foreign goods demanded, and the greater the quantity of foreign exchange demanded. The *D* curve slopes downward.

An increase in in the exchange rate makes US products cheaper for foreigners. The increases demand for US goods implies an increase in the quantity of foreign exchange supplied. The *S* curve slopes upward.

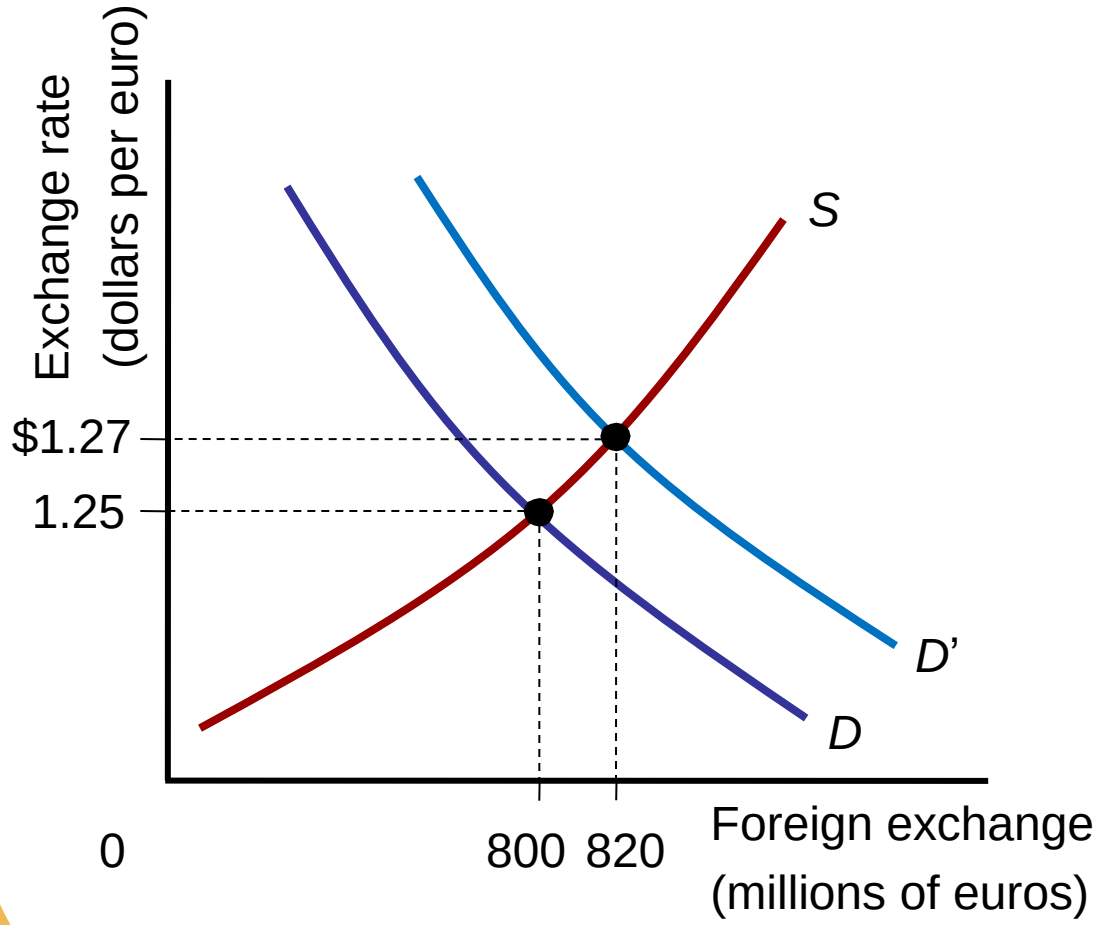
Determining the Exchange Rate

- Equilibrium exchange rate
  - Demand intersects the supply
- Floating exchange rate
  - Adjust freely
- Increase in demand for foreign exchange
  - Increase of equilibrium exchange rate
  - Euro increases in value (appreciates)
  - Dollar falls value (depreciates)

LO2

Exhibit 5

Effect on the Foreign Exchange Market of an Increased Demand for Euros



The intersection of the demand curve for foreign exchange, *D*, and the supply curve for foreign exchange, *S*, determines the exchange rate. At an exchange rate of $1.25 per euro, the quantity demanded of euros equals the quantity supplied.

An increase in the demand for euros from *D* to *D*' increases the exchange rate from $1.25 to $1.27 per euro.

Arbitrageurs and Speculators

- Arbitrageurs
  - Dealers
    - Simultaneously: buy low and sell high
  - Little risk
  - Ensure equality of exchange rates on different markets
- Speculators
  - Buy low; sell high later
  - Riskier

LO2

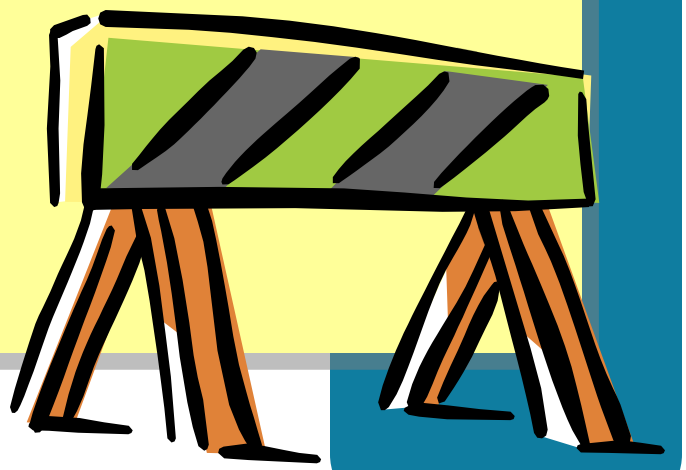
Purchasing Power Parity

- Purchasing power parity PPP theory
  - For unrestricted trade
    - Trading goods
  - Exchange rate between two currencies
    - Adjust in long run to reflect price differences between the two currency regions
  - Given basket of goods
    - Same price around the world

LO2

Purchasing Power Parity

- PPP theory
  - Does not explain exchange rates at a particular point in time
    - Trade barriers
    - Central bank intervention
    - Products not traded
    - Product differentiation



LO2

LO2

The Big Mac Index

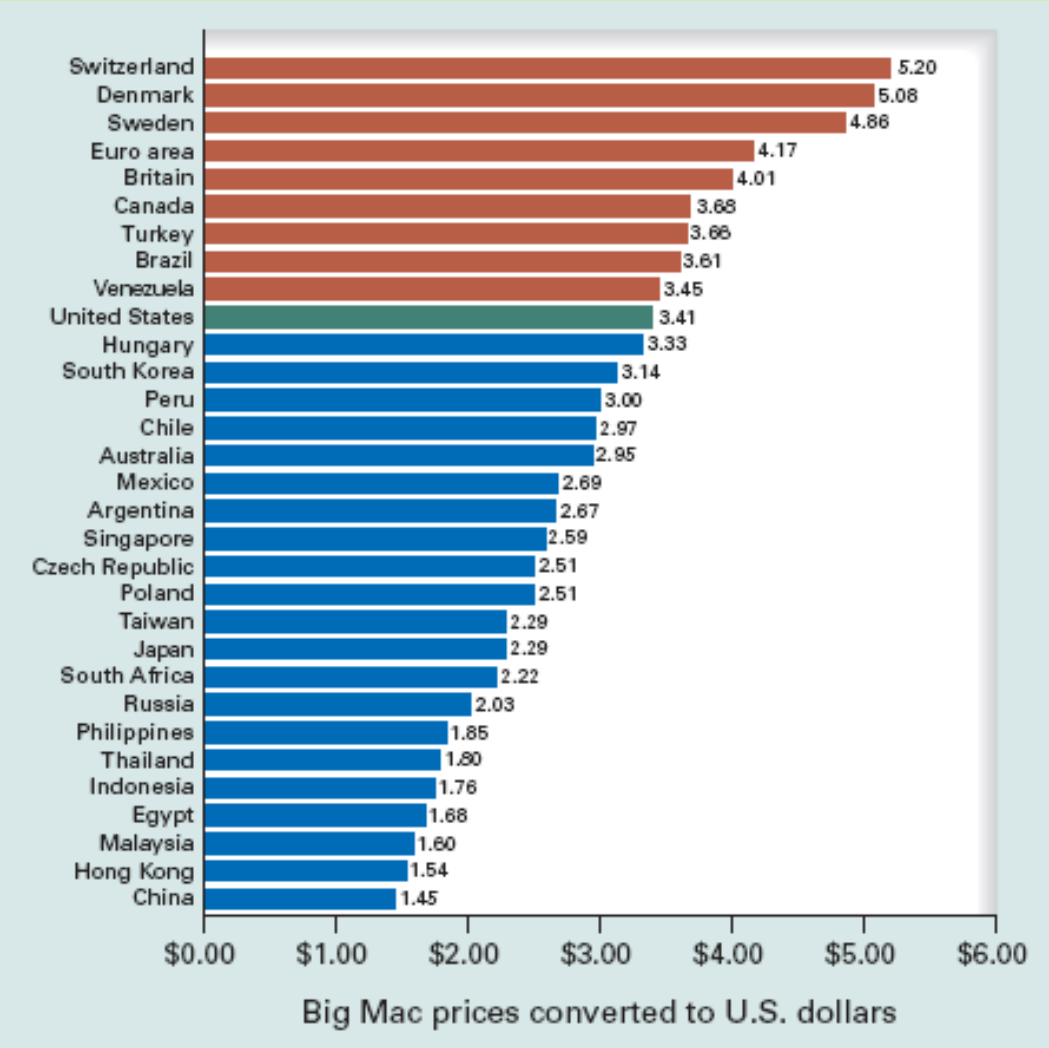
Case Study

- **Market basket: one McDonald's Big Mac**
- **Price in local currency**
  - **$ (exchange rate)**
  - **Overvalued currencies: Euro: 22%**
  - **Undervalued currencies: Yuan: 57%**
- **Differences**
  - **Rent**
  - **Taxes, trade barriers**
  - **Wages**

LO2

The Big Mac Index

Case Study



In Late June 2007, a Big Mac Cost More in the U.S. Than in Most Other Countries

Source: Based on a survey in "The Big Mac Index: Sizzling," *Economist*, 7 July 2007. Local prices are converted into U.S. dollars using the prevailing exchange rate.

Flexible Exchange Rates

- Floating exchange rates
- Determined by demand and supply
- Balance of payment accounts
  - Current or financial accounts
    - Debit entries
      - Increase D for foreign exchange
        - $ depreciation
    - Credit entries
      - Increase S of foreign exchange
        - $ appreciation

LO3

Fixed Exchange Rates

- Pegged exchange rates
  - Government intervention; Central Bank
    - Sell euros, buy dollars – keep euro's value down
    - Sell dollars, buy euros – keep euro's value up
    - Increase pegged exchange rate: devaluation
    - Decrease pegged exchange rate: revaluation
  - Restriction on imports
  - Policies to slow the economy
  - Foreign exchange control

LO3

International Monetary System

- 1879-1914: Gold Standard
  - Currencies convert into gold at fixed rate
  - Collapsed during WWI
- 1944: Bretton Woods Agreement
  - Exchange rates – fixed in terms of dollars
  - Dollar standard
  - Fixed rate
    - Dollars exchanged for gold
  - International Monetary Fund (IMF)

LO4

International Monetary System

- Late 1960s: U.S. Inflation
  - Overvalued dollar
- 1971
  - U.S. merchandise imports exceeded merchandise exports
  - Gold outflow
  - Washington meeting: $ devalued 8%
- 1972
  - U.S. trade deficit: tripled

LO4

International Monetary System

- 1973
  - $ devalued 10%
  - Dollars exchanged for German marks
  - Bretton Woods system collapsed
- Current system
  - Managed float
    - Freely floating exchange rate
    - Sporadic intervention by central banks

LO4

LO4

What about China?

Case Study

- U.S. trade deficit with China:
  - $233 billion in 2006; 20% annual increase
- China: devaluated Yuan; boosted U.S. $
  - Chinese products – Cheaper abroad
    - Stimulate exports
    - Tax rebates, subsidies
  - Foreign products – More expensive in China
    - Discourages imports
    - Quotas, tariffs
  - Increased Chinese production; job creation