

# Trade and the Balance of Payments

- I. Significance of Trade
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# Growth in World Trade



Trade in Goods (% of GDP)		
	1990	2004
US	15.8	20.0
Japan	17.1	22.1
France	37.1	44.7
Canada	43.7	61.0
Germany	46.0	59.4
United Kingdom	41.2	38.1
Netherlands	87.6	117.0
South Korea	53.4	70.4
Poland	43.9	67.7
Mexico	32.1	58.5
India	13.1	25.0
Nigeria	67.5	48.2
<b>WORLD</b>	<b>32.5</b>	<b>44.9</b>

Source: World Bank, 2006 Development Indicators

# Productivity and Factors of Production

## ● PRODUCTIVITY

- Literally: Ratio of inputs to outputs
- Generally: How much of something you can produce with a given amount of resources

## ● Basic inputs or FACTORS OF PRODUCTION

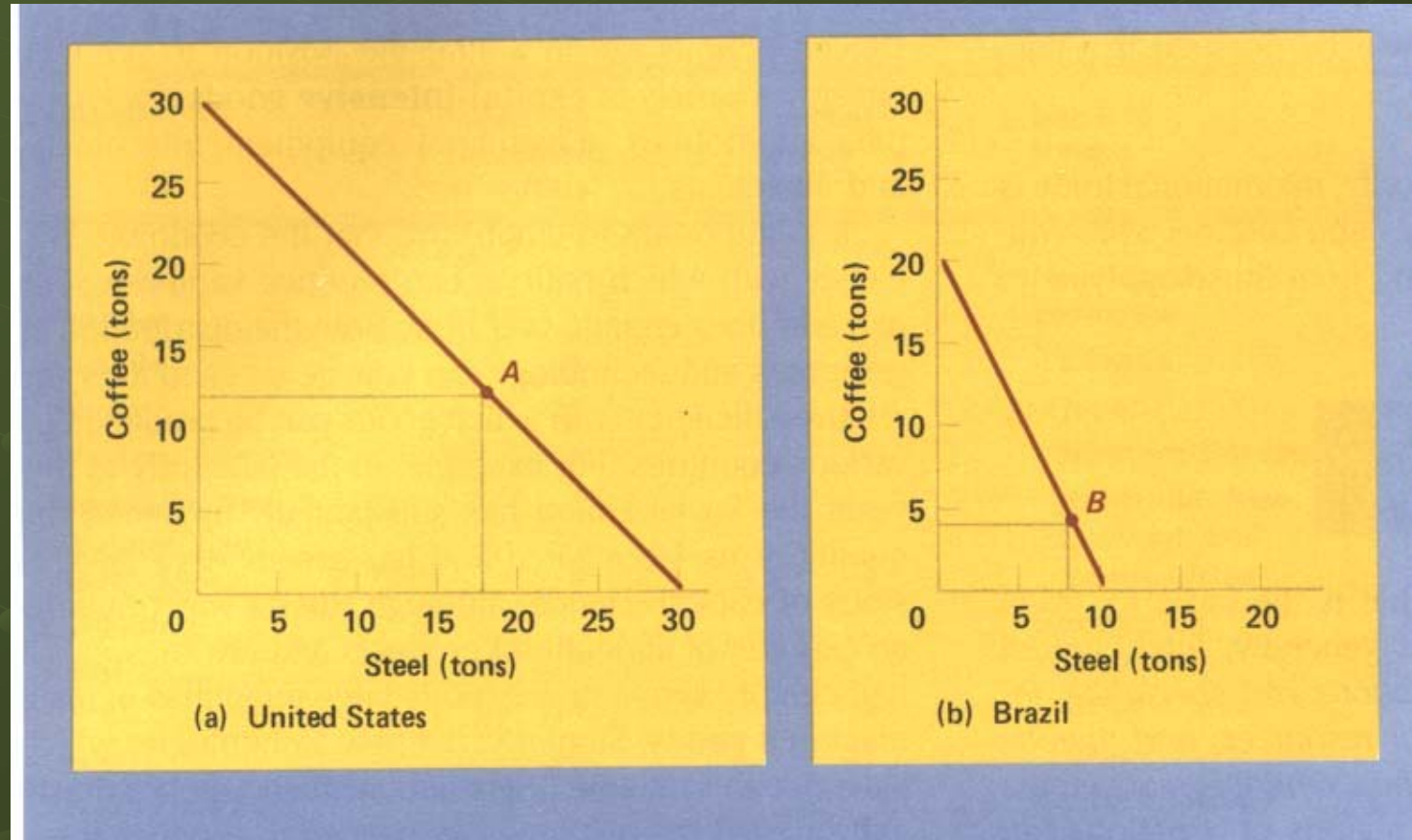
- Land
- Labor
- Capital [Machinery and Materials]

# Absolute v. Comparative Advantage

- **Absolute Advantage:** Having higher productivity in the production of a product than any other country.
- **Comparative Advantage:** The ability of one economic actor to produce some particular good or service at a lower *opportunity costs* than other economic actors can

# Hypothetical Example

- TWO COUNTRIES: Brazil and US
- TWO PRODUCTS: Steel and Coffee



# Comparative Productivity and Opportunity Costs

OUTPUT PER WORKER (1000 Each Country)	Steel	Coffee
United States	0.03	0.03
Brazil	0.01	0.02

Opportunity Cost Ratios:

US                    1 steel = 1 coffee

Brazil                1 steel = 2 coffee

A country has a comparative advantage in producing the product with the *lowest opportunity cost*.

# Gains from Trade

**Table 41-5 International specialization according to comparative advantage and the gains from trade (hypothetical data; in tons)**

Country	(1) Outputs before special- ization	(2) Outputs after special- ization	(3) Amounts exported (-) and imported (+)	(4) Outputs available after trade	(5) = (4) - (1) Gains from special- ization and trade
<b>United States</b>	18 steel 12 coffee	30 steel 0 coffee	-10 steel +15 coffee	20 steel 15 coffee	2 steel 3 coffee
<b>Brazil</b>	8 steel 4 coffee	0 steel 20 coffee	+10 steel -15 coffee	10 steel 5 coffee	2 steel 1 coffee

# Hecksher-Ohlin Theory

*Q: How do you know in what products you country will have a comparative advantage?*

## Factor Intensities:

Simple Manufacturing → Labor

High-Tech Manufacturing → Capital

## Country Factor Endowments:

Brazil → Labor

US → Capital

# Heckscher-Ohlin (cont.)

H-O Theory: *“Each nation has a comparative advantage in the production of those goods that use intensively those factors that they possess in relative abundance.”*

- Brazil → Labor → Simple Manufacturing

EX: Shoes

- US → Capital → High-Tech Manufacturing

EX: Computers

So Brazil should produce shoes to trade for American computers (and vice versa)

# Stolper-Samuelson Theory

Q: *Which groups in a society gain from free trade (and vice versa)?*      *Cui bono?*

Free trade benefits the owners of (relatively) abundant factors of production.

Free trade harms the owners of (relatively) scarce factors of production

# Stolper-Samuelson (cont.)

## ● EXAMPLE: United States

- Land → Abundant
- Labor → Scarce (relative to other countries)
- Capital → Abundant

*Q: Which groups in the US should favor/ oppose free trade?*

- Capital intensive (e.g., computers) and land intensive (e.g., agriculture) should favor free trade.
- Labor intensive (e.g., textiles) should oppose free trade.

# Changing World Trading System

- Repeal of the British Corn Laws (1846) and growth of world trade
- WW I and collapse of trade (Smoot-Hawley Tariff - 1930)
- Bretton Woods Conference (1944)
- World Trade Organization (WTO)
  - International Trade Organization (ITO) – FAILED
  - General Agreement on Tariffs and Trade (GATT)
- Four Principles of GATT:
  - Liberalization (Free Trade)
  - Non-Discrimination ('Most-Favored-Nation', now 'Normal Trade Relations – NTR')
  - Reciprocity
  - National Safeguards

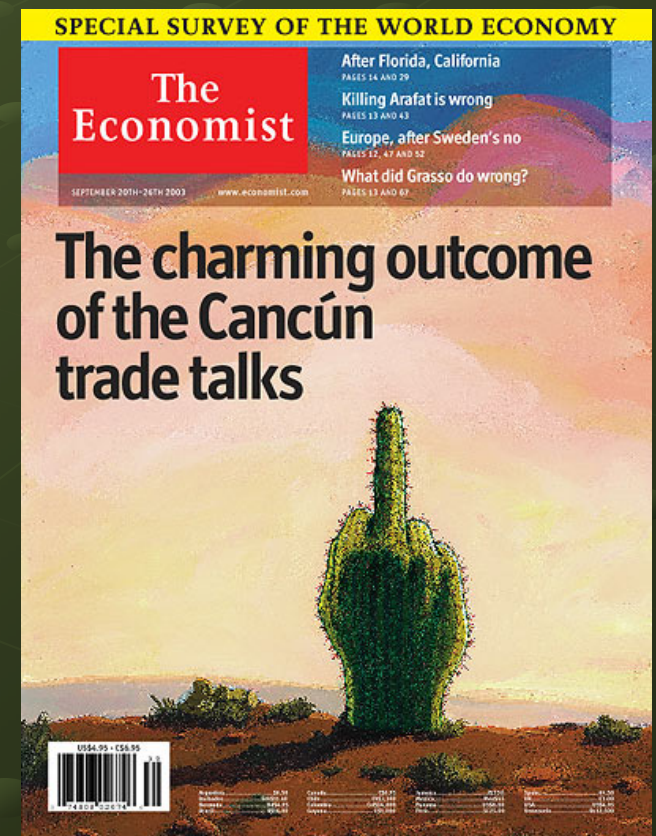
# Current World Trading System

## ● World Trade Organization

- Dispute resolution mechanism
- Seattle 1999 – RIOTS!
- Doha, Qatar November 2001 (“Development Round”)

## ● Regional Trading Blocs

- EU, NAFTA, APEC, Mercosur, Etc.



# Types of Regional Trade Regimes

- Free Trade Area: No internal tariffs (NAFTA)
- Common Market: No internal tariff; common external tariff (EU pre-1992)
- Single Market: Same as common market plus common coordinated economic regulation (EU post-1992)
- Monetary Union: Common currency (EU post-1999)

# Balance of Payments: Current Account

## Current Account (Goods & Services)

- Merchandise Trade
- Service Trade
- Investment Income (interest, NOT capital principal)
- Government Transfers and Sales

Exports = CREDIT

Imports = DEBIT

# Balance of Payments: Capital Account

## Capital Account (Investment)

- Exports (investment sent abroad)
- Imports (investment from abroad)
- Foreign Currency Reserves (in Central Bank)
- Statistical Discrepancy (because of inexact measurement or illegal transactions)

# Imbalances in Components

- Each component can either be in *surplus*, *deficit*, or *equilibrium*
- Current Account Surplus = Net Exporter
- Current Account Deficit = Net Importer
- Capital Account Surplus = Net borrower
- Capital Account Deficit = Net lender

# Balance of Payments

- Components may be in surplus or deficit, but TOTAL always sums to ZERO
- Balance of payments always in balance
- Deficit in one component must ALWAYS be offset by a surplus in another component
- ***EVERYTHING MUST BE PAID FOR!!***

# US Balance of Payments, 2006

(\$ Million)

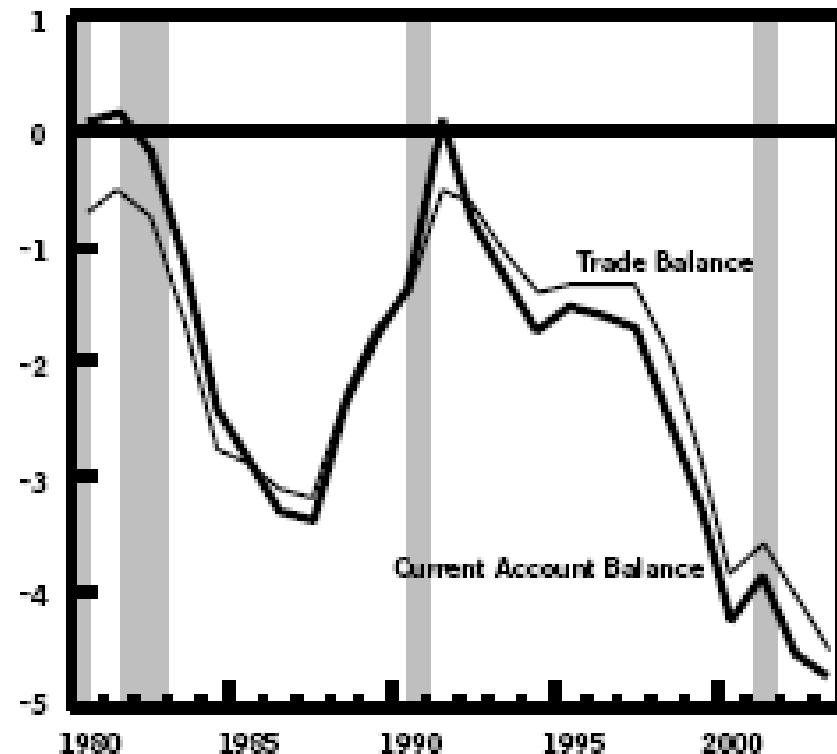
● Merchandise Trade	-\$838,271
● Service Trade	+\$79,749
● Investment Income	+\$36,640
● Government Transfers and Sales	-\$89,595
● <b>CURRENT ACCOUNT BALANCE</b>	<b>-\$811,477</b>
● Capital Exports	-\$1,055,176
● Capital Imports	+\$1,859,597
● Foreign Currency Reserves	+\$2,374
● Statistical Discrepancy	-\$17,794
● <b>CAPITAL ACCOUNT BALANCE</b>	<b>+789,001</b>

# Current Account and GDP

**Figure 1.**

## The U.S. Current-Account Balance and Its Main Component, the Trade Balance

(Percentage of gross domestic product)



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

Note: The vertical bars indicate periods of recession as defined by the National Bureau of Economic Research.