

CHAPTER 9

Comparative Advantage, Exchange Rates, and Globalization

Chapter Goals

- Explain the principle of comparative advantage.
- Explain why economists' and laypeople's views of trade differ.
- Summarize the sources of U.S. comparative advantage and discuss some concerns about the future in the U.S. economy.
- Discuss how exchange rates are determined and what their role is in equalizing trade flow.

The Principle of Comparative Advantage

Opportunity cost is what must be given up in one good in order to get another good.

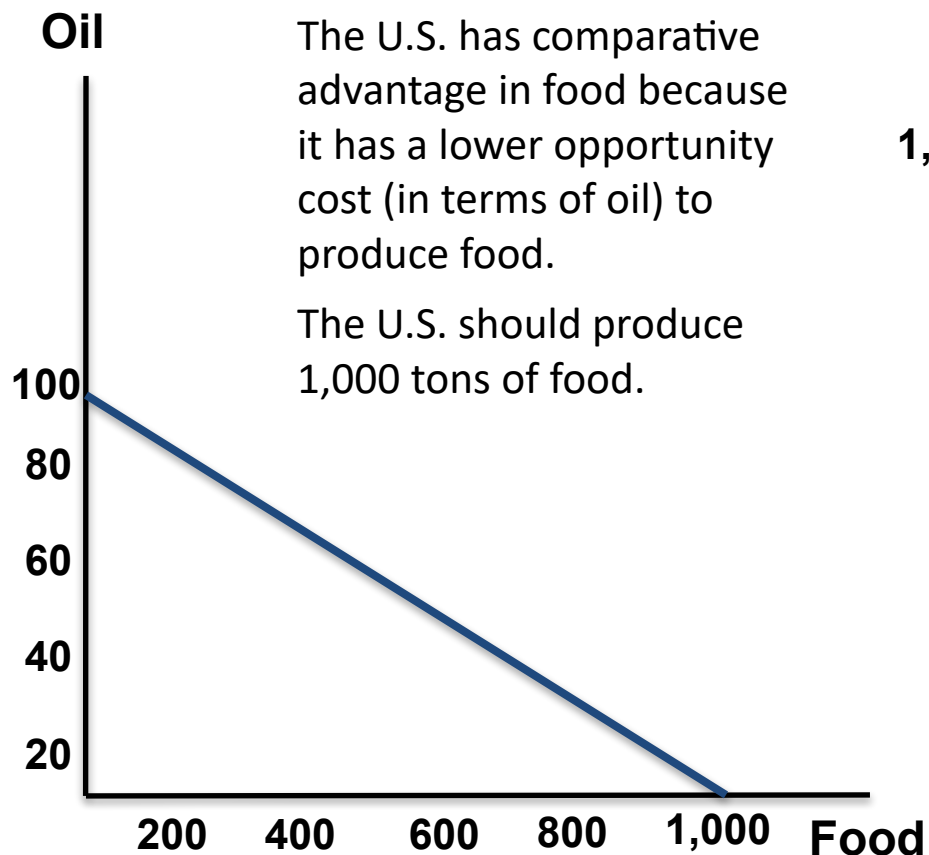
The principle of **comparative advantage** is that as long as the relative opportunity costs of producing goods differ among countries, then there are potential gains from trade

Who Has Comparative Advantage in Production of Oil? Food?

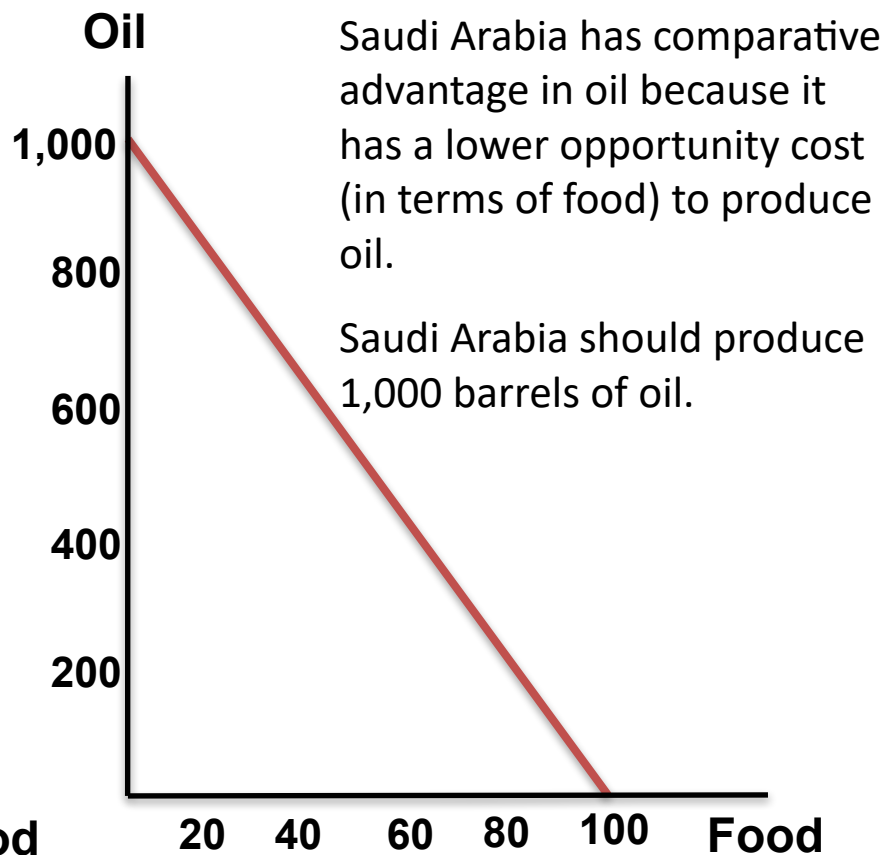
United States			Saudi Arabia		
% of resources devoted to oil	Oil produced (barrels)	Food produced (tons)	% of resources devoted to oil	Oil produced (barrels)	Food produced (tons)
100	100	0	100	1,000	0
80	80	200	80	800	20
60	60	400	60	600	40
40	40	600	40	400	60
20	20	800	20	200	80
0	0	1,000	0	0	100

Application: Comparative Advantage

PPF : United States



PPF: Saudi Arabia



Application: The Gains from Trade

	Production		Consumption		
	U.S.	Saudi Arabia	U.S.	Saudi Arabia	I.T.
Oil (barrels)	0	1,000	120	500	380
Food (tons)	1,000	0	500	120	380

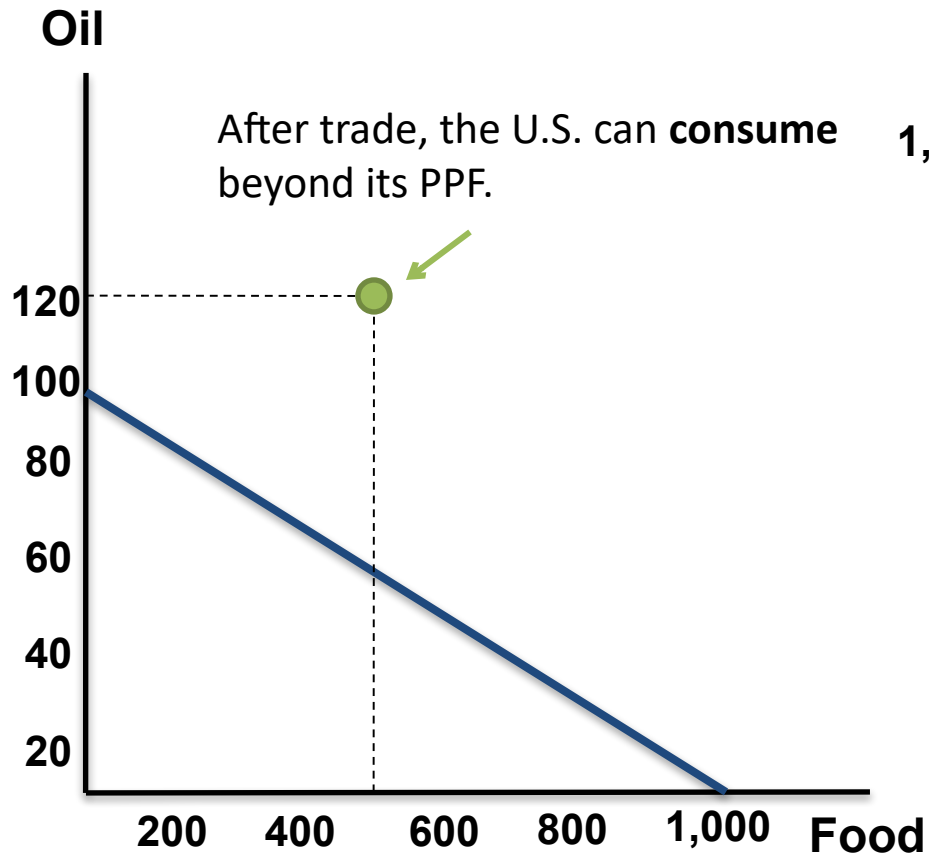
A trader, I.T., arranges for Saudi Arabia to trade 500 barrels of oil to the U.S. for 120 tons of food.

The U.S. will trade 500 tons of food to Saudi Arabia for 120 barrels of oil.

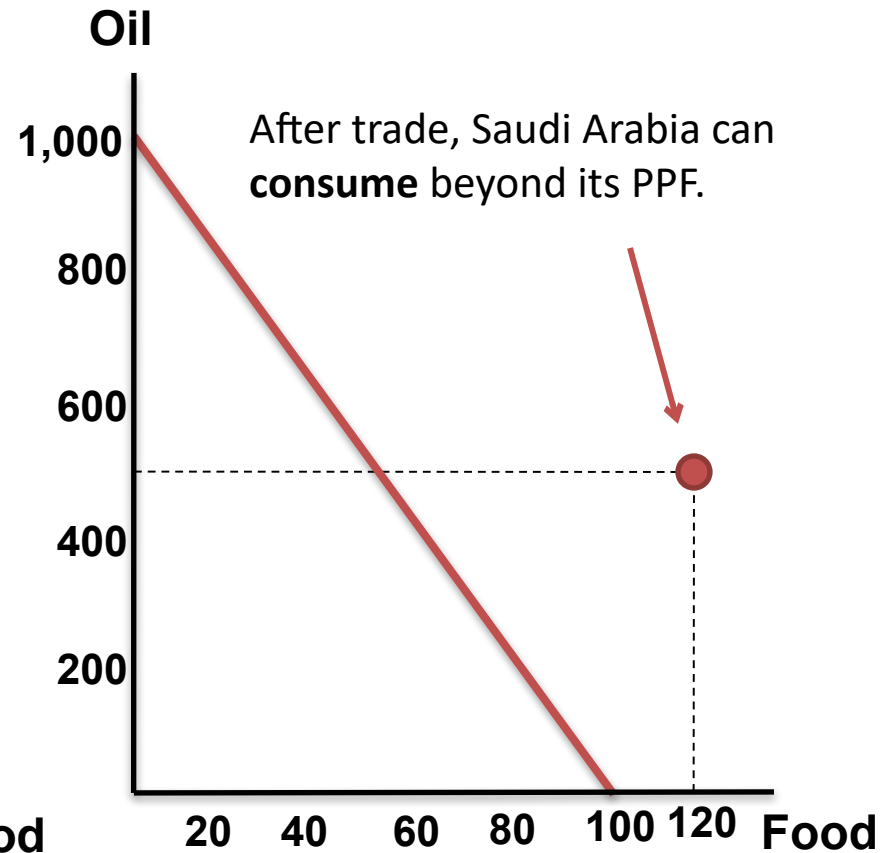
I.T. keeps 380 barrels of oil and 380 tons of food.

Application: The Gains from Trade

PPF: United States



PPF: Saudi Arabia



Dividing Up the Gains from Trade

Three determinants of the terms of trade are:

1. The more competition that exists among traders, the less likely it is that the trader gets big gains of trade
2. Smaller countries tend to get a larger percentage of the gains of trade than do larger countries
3. Gains from trade go to the countries producing goods that exhibit economies of scale

Why Economists and Laypeople Differ in Their Views of Trade

If trade is good, why do so many people oppose it?

- The gains of trade (lower prices) are harder to see than the cost (lost jobs).
- The public believes that lower wages in other countries give them the comparative advantage in everything, so we will lose all jobs.
- Laypeople often think of trade as trade only in manufactured goods.
- Laypeople are extremely concerned about the impact of trade on the distribution of income.

Sources of U.S. Comparative Advantage

1. Skills of the U.S. labor force
2. U.S. governmental institutions
3. U.S. physical and technological infrastructure
4. English as the international language of business
5. Wealth from past production

Sources of U.S. Comparative Advantage

- 6. U.S. natural resources
- 6. Cachet
- 6. Inertia
- 6. U.S. intellectual property rights
- 6. A relatively open immunization policy

Some Concerns about the Future: Inherent and Transferable Comparative Advantage

Transferable comparative advantages are based on factors that can change relatively easily, such as capital, technology, and types of labor.

Inherent comparative advantages are based on factors that are relatively unchangeable, such as resources and climate.

Whether a country can maintain a much higher standard of living in the long run depends in part on whether its comparative advantage is inherent or transferable.

Some Concerns about the Future: The Law of One Price

If factor prices aren't equal, firms can reduce costs by redirecting production to countries with lower factor prices.

The law of one price means that in a competitive market, there will be pressure for equal factors to be priced equally.

Some Concerns about the Future: Methods of Equalizing Trade Balances

Wages rise in the surplus countries, making their goods more expensive.

Adjustments eventually occur to make surplus countries less competitive and deficit countries more competitive.

The exchange rate of the deficit country falls and makes its goods less expensive.

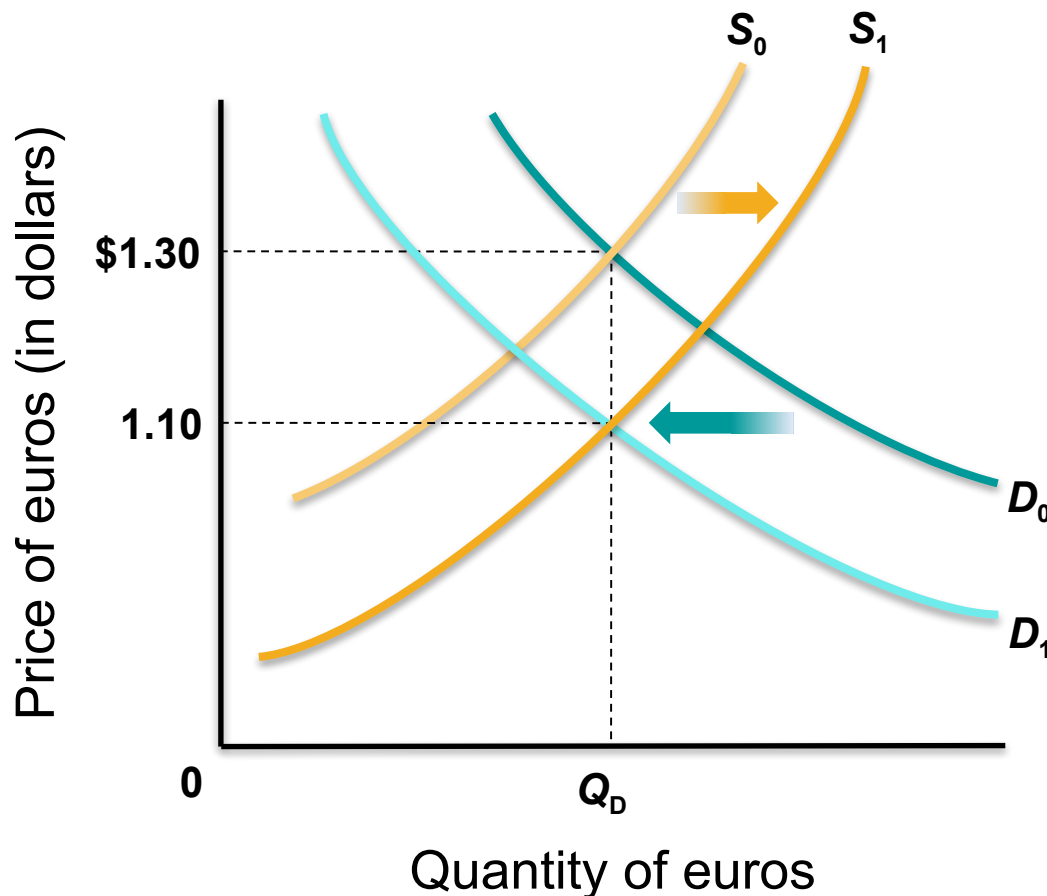
Determination of Exchange Rates and Trade: Supply and Demand in Currency Markets

- The **exchange rate** is the rate at which one country's currency can be traded for another's.
- People exchange currencies to buy goods or assets in other countries.
- To demand one currency, you must supply another.
- The supply curve of euros is upward-sloping.
- The demand curve for euros is downward-sloping.
- The market for euros is in equilibrium when quantity supplied equals quantity demanded.

Determination of Exchange Rates and Trade: Currency Depreciation and Appreciation

- If forces shift the supply and demand for a currency, the exchange-rate price will change.
- A **currency depreciation** is a change in the exchange rate so that one currency buys *fewer* units of a foreign currency.
- A **currency appreciation** is a change in the exchange rate so that one currency buys *more* units of a foreign currency.

The Supply of and Demand for Euros



In this figure, the supply of euros is equivalent to the demand for dollars, and equilibrium occurs at a dollar price of \$1.30 for one euro.

If the supply of euros rises, and the demand for euros falls, the price decreases to \$1.10, the new equilibrium.

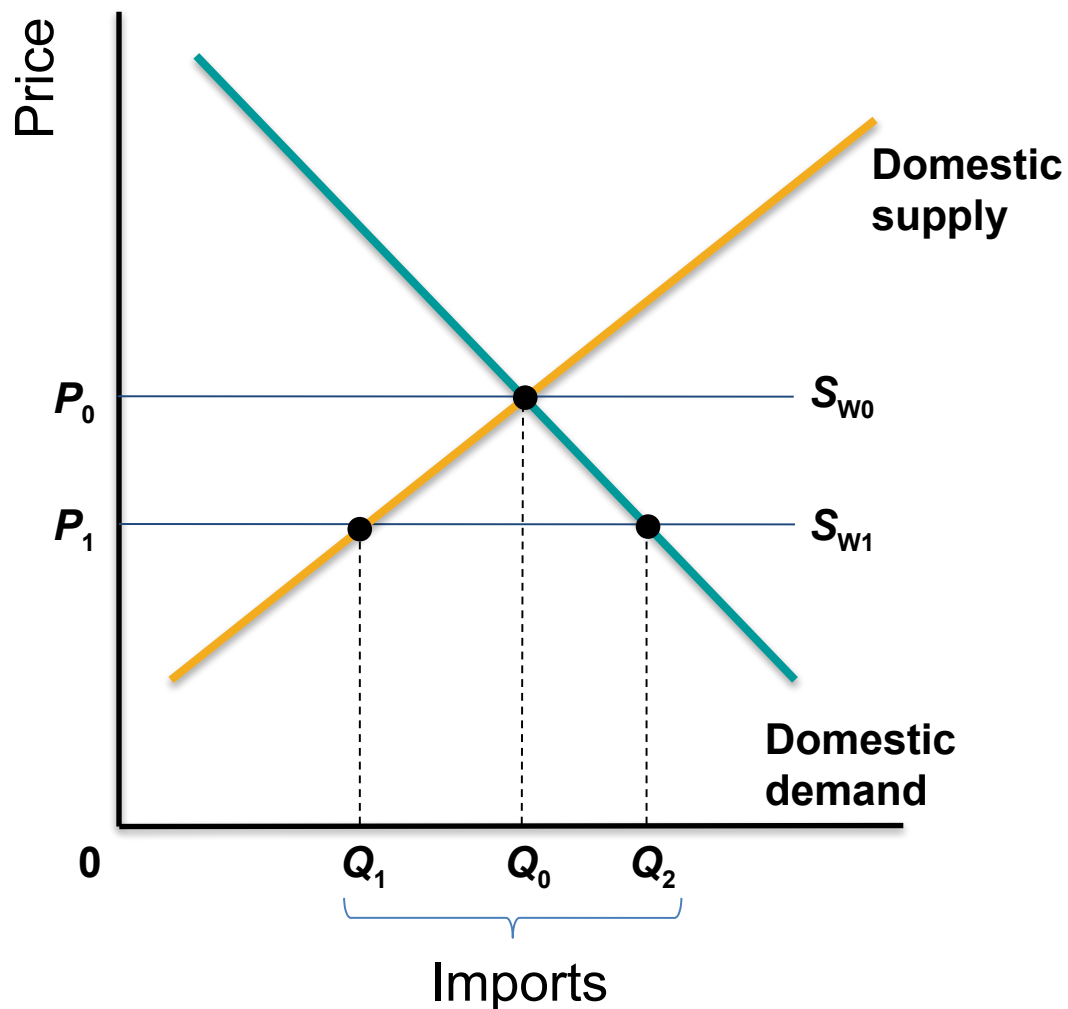
Exchange Rates and Trade

- Depreciation of a domestic country's currency will shift the world supply curve up.
- An appreciation will shift the world supply curve down.
- Trade for an economy that faces global competition needs to take into account world supply

Exchange Rates and Trade

- The exchange rate plays an important role in the demand for a country's domestic goods
- As the quantity supplied of tradable goods rises, suppliers have to charge higher prices
- Exchange rate adjustments can bring comparative advantages into alignment, eliminating trade imbalances

Exchange Rates and Trade



If the world price level is P_1 , domestic producers will sell Q_1 and domestic consumers will demand Q_2 . The difference is made up by imports shown by the difference between Q_2 and Q_1 . A country will have a zero trade balance when the world price level equals the domestic price level, P_0 .

Some Complications in Exchange Rates

Trade imbalances arise due to:

The fact that demand for a country's currency also reflects a demand for its assets.

The presence of the **resource curse**: The paradox that countries with an abundance of resources tend to have lower economic growth and more unemployment than countries with fewer natural resources.

Chapter Summary (1 of 3)

According to the principle of comparative advantage, as long as the relative opportunity costs of producing goods differ among countries, there are potential gains from trade.

The more competition exists in international trade, the less the trader gets and the more the involved countries get.

Once competition prevails, smaller countries tend to get a larger percentage of the gains from trade than do larger countries.

Gains from trade go to countries that produce goods that exhibit economies of scale.

Chapter Summary (2 of 3)

Economists and laypeople differ in their views on trade.

The gains from trade are not easily recognized, while the costs in jobs lost tend to be readily identifiable.

The U.S. has comparative advantages based on its skilled workforce, its institutions, and its language, among other things.

The prices of currencies—foreign exchange rates—can be analyzed with the supply and demand model.

Chapter Summary (3 of 3)

Inherent comparative advantages are based on factors that are relatively unchangeable. They are not subject to the law of one price.

Transferable comparative advantages are based on factors that can change relatively easily. The law of one price can eliminate these comparative advantages.

The resource curse leads to trade imbalances.