

Lesson 12 - The Global Economy

Acknowledgement: Ed Sexton, Kerry Webb, and Rick Hirschi were the primary authors of the material contained in this lesson.

Section 1: Specialization and Trade

Adam Smith taught the importance of specialization and trade when he taught: “It is the maxim of every prudent master of a family, never to attempt to make at home what will cost him more to make than to buy. The taylor does not attempt to make his own shoes, but buys them of the shoemaker.”

Absolute Advantage

An individual or country has an **absolute advantage** in the production of a good when she can produce the good using fewer resources than another. For example, assume on one acre of land Cain can produce 100 lbs of potatoes or 2 lambs (or some linear combination of the two products), and Abel can produce 50 lbs of potatoes or 4 lambs (or some linear combination of the two products). Cain would have an absolute advantage in potatoes and Abel in lambs. In this case, Adam Smith would argue there is a basis for trade that would make them both better off. Let's say without trade the brothers use their land to produce half of each product, i.e. Cain produces 50 lbs of potatoes

and 1 lamb; Abel produces 25 lbs of potatoes and 2 lambs. If they specialize then Cain would produce potatoes (100 lbs) and Abel would produce lambs (4). They could then trade say 25 lbs of potatoes for 1 lamb and both would be better off (Cain would then have 75 lbs of potatoes and 1 lamb and Abel would have 25 lbs of potatoes and 3 lambs) - both are better off! But what if an individual or country has an absolute advantage in many things, would there still be benefit to specializing and trading?

Two-Person Economy

To see if there are advantages to trade, even if one individual has an absolute advantage, let's use the example of a deserted island with only two individuals: Robinson Crusoe and Friday.

Assume that their diet will consist of fish and coconuts and that Robinson can catch 20 fish or gather 10 coconuts per eight-hour day, while Friday can catch 4 fish or gather 16 coconuts per eight-hour day. Robinson has the absolute advantage in catching fish, and Friday has the absolute advantage in gathering coconuts.

Robinson is currently consuming 10 fish and 5 coconuts per day, while Friday is currently consuming 2 fish and 8 coconuts per day. Together they are producing and consuming 12 fish and 13 coconuts. Would there be an advantage in them specializing and trading?

Production Possibilities Table

The table below shows consumption without trade, marginal opportunity costs, absolute advantage, and comparative advantage. If Robinson spent all day fishing he could get 20 fish, or if he spent all day gathering coconuts he can gather 10 coconuts. If Friday spent all day fishing he could get 4 fish, or if he spent all day gathering coconuts he can gather 16 coconuts.

	Current Consumption		Marginal Opportunity Cost (MOC)		Absolute Advantage		Comparative Advantage	
	Fish	Coconuts	Fish	Coconuts	Fish	Coconuts	Fish	Coconuts
Robinson	10	5	0.5 C	2 F	X		X	
Friday	2	8	4 C	0.25 F		X		X

Coded by David Barrus.

If Robinson spent all day fishing instead of gathering coconuts, he would have to give up 10 coconuts to get 20 fish, so his marginal opportunity cost per additional fish is (10 divided by 20) or 0.5 coconuts per fish. If instead he spent all day gathering coconuts, he would give up 20 fish and gain 10 coconuts. Robinson's marginal opportunity cost per coconut would be 2 fish (20 divided by 10). Friday's marginal opportunity cost of spending all day fishing instead of gathering coconuts would be 16 coconuts for 4 fish or 4 coconuts per fish. His marginal opportunity cost per additional fish would be 4 fish divided by 16 coconuts or 0.25 fish per coconut.

The formula to find the marginal opportunity cost is:

$$\text{marginal opportunity cost} = \frac{\text{what is sacrificed}}{\text{what is gained}}$$

To see if there are advantages to specializing and trading, we now look at the marginal opportunity cost of each. We find that the marginal opportunity cost per additional fish is less for Robinson compared to Friday. Robinson gives up only 0.5 of a coconut per additional fish compared to Friday's 4 coconuts per additional fish. Since Robinson has a lower marginal opportunity cost for fishing, he is said to have a comparative advantage in fishing. In comparing the marginal opportunity cost for gathering coconuts, we find that Robinson's is 2 fish per coconut while Friday's is only 0.25 of a fish per coconut. Thus, Friday is said to have a comparative advantage in coconut gathering while Robin-

son has a comparative advantage in fishing.

Comparative Advantage

When Adam Smith spoke of the benefits from trade, he was referring to individuals specializing in the production of a good or service for which they had an comparative advantage. An individual is said to have a **comparative advantage** if they have relatively lower marginal opportunity costs than another individual. Recall from earlier that marginal opportunity cost is sacrifice divided by gain. Just as individuals have a comparative advantage, countries have comparative advantages based on what resources they possess. Can comparative advantage (having lower opportunity costs) form the basis for mutually beneficial trade? Yes! When specialization takes place according to comparative advantage, the trading individuals (or countries) will both be better off. The concept of comparative advantage was taught by English economist David Ricardo (1772 – 1823) who pointed out that it is comparative advantage that will allow both countries to gain from trade. (Reference: <http://eh.net/encyclopedia/article/stead.ricardo>)

Terms of Trade

And it came to pass that the Lamanites did also go whithersoever they would, whether it were among the Lamanites or among the Nephies; and thus they did have free intercourse one with another, to buy and to sell, and to get gain, according to their desire. And it came to pass that they became exceedingly rich, both the Lamanites and the Nephites....

The Book of Mormon: Another Testament of Jesus Christ, Helaman 6:8-9

For trade to take place, each individual must benefit. An individual would not be willing to trade for a good that would cost him more than he or she could make by themselves. Highest and lowest rates at which the goods would trade for are determined by each individual's marginal opportunity cost. In our example, Robinson is specializing in fish production and Friday in gathering coconuts. Since they each want some of both, the **terms of trade** would have to be acceptable to both. The terms of trade would include the rate at which one good would trade for another. In looking at the marginal opportunity costs, we see that the terms of trade for coconuts range from 0.25 to 2. Friday must receive at least 0.25 of a fish for each coconut he gives up, and Robinson would not be willing to pay more than 2 fish for each coconut he receives. Somewhere between this range, both individuals would benefit.

As Adam Smith points out: "What is prudence in the conduct of every private family, can scarce be folly in that of a great kingdom. If a foreign country can supply us with a commodity cheaper than we can make it, better buy it of them with some part of the produce of our own industry, employed in a way in which we have some advantage."

Since the resources of each country vary, there is a benefit to **specializing** in a good in which we have a comparative advantage. Although we may have the resources to grow bananas in Idaho, we do not have a comparative advantage in banana production. Thus we specialize in potatoes and other goods and services for which we have a comparative advantage and trade for bananas and other tropical fruits from countries that have a comparative advantage in producing those goods.

Trade can improve the economic well being of the individuals and often the political relations among the different countries. We see examples of this in the scriptures, especially in the Book of Mormon (see the scripture above).

Specialization and Trading

Is it advantageous for Robinson Crusoe to specialize in fishing and Friday in gathering coconuts? Robinson is currently consuming 10 fish and 5 coconuts, and Friday is consuming 2 fish and 8 coconuts. If they specialize and trade exactly half of what they produce can they consume more?

If Robinson spends the same amount of time but now specializes in fishing, he will catch 20 fish (10 for himself and 10 for Friday). Friday would specialize in gathering coconuts and gather a total of 16 coconuts (8 for himself and 8 for Robinson). With specialization and trade, Robinson can consume three more coconuts than before, and Friday can consume eight more fish than before. Total consumption of both fish and coconuts has risen from 25 to 36. This

is an increase of 11 units (8 fish and 3 coconuts). Both are better off by specializing in the production of the good where they have a comparative advantage.

We can represent Robinson Crusoe's and Friday's production abilities using PPCs (look at the graph below). Note that because we are assuming that they can switch from fish to coconuts at a constant rate that the PPCs will be linear rather than bowed outward as we saw earlier (i.e. rather than increasing opportunity costs as we saw in the PPCs before, they have constant opportunity costs).

Production Possibilities Curve: Specialization and Gains from Trade

Move the sliders to see different production and consumption points of Robinson and Friday.

Robinson—(dotted blue line)
More Coconuts.....More Fish

Robinson = 10 fish 5 coconuts
MOC of 1 more coconut = 2 fish
MOC of 1 more fish = $\frac{1}{2}$ coconut

Friday—(solid orange line)
More Coconuts.....More Fish

Friday = 2 fish 8 coconuts
MOC of 1 more coconut = $\frac{1}{4}$ fish
MOC of 1 more fish = 4 coconuts

Consumption
Assume Robinson and Friday will give up 1/2 of what they produce when they specialize and trade. Move the sliders to indicate this specialization.

	Consumption w/o Trade		Consumption w/Trade		Gains from Trade	
	Fish	Coconuts	Fish	Coconuts	Fish	Coconuts
Robinson	10	5	6.	6.5	-4.	1.5
Friday	2	8	6.	6.5	4.	-1.5

Click to see consumption point

Original source code for graph above from Javier Puertolas. Modified by David Barrus.

Friday's output per day is shown by the orange and solid PPC. He can gather 4 fish per day or 16 coconuts per day. Robinson's output per day is shown by the blue and dotted PPC. He can gather 20 fish per day or 10 coconuts per day. Their current consumption points are represented on the graph. By checking the box "Click to see consumption point" we can see where their consumption point is with trade before and after specialization.

Specialization allows consumption to be greater than what the individual can produce. Before trade, they produce and consume on their PPC. When they specialize they are still producing on their PPC, but they now consume at a point beyond the PPC. Specialization and trade has made both Robinson and Friday better off.

Section 2: International Trade and Protectionism

And it came to pass that the Lamanites did also go whithersoever they would, whether it were among the Lamanites or among the Nephites; and thus they did have free intercourse one with another, to buy and to sell, and to get gain, according to their desire.

And it came to pass that they became exceedingly rich, both the Lamanites and the Nephites ...

Helaman 6:8–9; emphasis added

Free and Open Trade

As Adam Smith points out, “What is prudence in the conduct of every private family, can scarce be folly in that of a great kingdom. If a foreign country can supply us with a commodity cheaper than we can make it, better buy it of them with some part of the produce of our own industry, employed in a way in which we have some advantage.”

Since the resources of each country vary, there is a benefit to specializing in a good in which we have a comparative advantage. Although we may have the resources to grow bananas in Idaho, we do not have a comparative advantage in banana production. Thus, we specialize in potatoes and other goods and services in which we have a comparative advantage, and trade for bananas and other tropical fruits from countries that have a comparative advantage in producing those goods.

In the section above, a theoretical, economic argument was made for free and open trade. Often however, national interests of various countries often prevent open and free trading conditions. For example, the principle of comparative advantage does not determine how gains from trade are distributed among the nations or traders involved—that is, the theory only proves that gains in general will be made.

You should understand the **three general determinants of the gains from trade** are: **1)** the more competition among traders, the less the trader gets. In this case more of the gains will go to the citizens in the two nations, rather than the traders themselves; **2)** smaller nations tend to get a larger proportion of the gain than larger nations because more opportunities (i.e., larger markets) are opened up for smaller nations than for larger nations, and the more opportunities, the larger the relative gains; and **3)** nations producing with economies of scale get a larger gain from trade. Assuming that trade increases production, if there are economies of scale the increase in production can lower the average cost of producing and lowers the product's price both in the foreign country, as well as at home.

Given these conditions, the U.S., for example, may limit the amount of free trade between itself and Foreign Country A, while at the same time expand the trade between itself and Foreign Country B. Some of the reasons for this seemingly inconsistent behavior center on:

Reasons to Limit Free Trade

1. **National security concerns;** (i.e., given our concern with Iran's and North Korea's development of nuclear weapons, the U.S. has imposed trade sanctions in the hopes of stopping the development of such arms.)
2. **Protection of domestic jobs;** (i.e., should we protect American workers' jobs even if foreign-made products are cheaper or of better quality. For example, should we limit the number or place a special tax on the importation of Toyota's and Honda's as a way to incentives Americans to buy Chevy's or Fords?)
3. **Environmental, health and safety standards;** (i.e., we may be concerned that foreign companies do not abide by the same health standards that are imposed on U.S.-made products.)
4. **Protection of infant industries** (those just getting started); (i.e., we may deem it advisable to protect new inventions and/or technology from foreign competition until the "first-mover advantages" are exploited by the domestic innovator.)
5. **Anti-dumping actions** (i.e., **dumping** is an unfair trade practice where the price of the good is lower in the United States than the cost of making the good in the foreign country).

Trade Barriers

Trade barriers are government policies undertaken to limit the amount of trade with certain countries. The barriers

can take many forms, but generally include:

1. **tariffs** (taxes on imports brought into the U.S.);
2. **quotas** (quantity limits on how much of a good can be imported into the U.S.); and
3. **voluntary export restraints (VER)** where an exporting country agrees to limit the amount of a product that it exports usually based upon some promise by the U.S. to compensate the country in some other way.

Trade restrictions have long been a source of contention between countries. In 1930, in the midst of a severe recession, the U.S. government passed the **Smoot-Hawley Act of 1930** to protect domestic producers from foreign imports. However, the policy failed to help domestic producers, since other countries retaliated by placing tariffs on U.S. goods. While imports fell, exports fell even more sharply, pushing the United States deeper into depression.

As a result of the Smoot-Hawley Act,

1. Average tariffs increased to 53% on dutiable imports.
2. US imports from Europe declined from a 1929 high of \$1,334 million to just \$390 million in 1932 (decline of \$944 million).
3. US exports to Europe fell from \$2,341 million in 1929 to \$784 million in 1932 (decline of \$1,557 million).
4. Overall, world trade declined by some 66% between 1929 and 1934.
5. All of these results of the Act contributed to the Great Depression.[1]

Free Trade Agreements

These are all forms of protectionism, and serve to make the price of the product in the United States higher than it would be without the trade barriers being imposed. As a result, U.S. consumers have the incentive to purchase domestically-produced goods. However in order to reduce such practices, some countries have formed **free trade agreements** reducing or eliminating trade barriers. Examples are **NAFTA** (the North American Free Trade Agreement) between the U.S., Canada and Mexico, and **GATT** (General Agreement on Tariffs and Trade) which is an international agreement involving the U.S. and 22 other countries to promote free trade.

When trade disputes do arise, then they are generally brought to the **World Trade Organization (WTO)** for resolution. The WTO is the only international body dealing with the rules of trade between nations. Members of the WTO agree to be bound by its standards and accept its decisions in resolving trade disputes. (In the U.S., congressional approval is required in order to join such international organizations.) Obviously, binding a country to an international body is controversial in itself, and the WTO and its decisions are often very controversial. You might want to check out the following information shown on its website: http://www.wto.org/english/thewto_e/whatis_e/whatis_e.htm .

Regardless of your personal feelings regarding U.S. involvement in world trade or in the WTO, there is one fact that you should keep in mind: in general, the U.S. has never been more prosperous and, in general, the U.S. has never been more open in its approach to trade. It is very clear that much of our prosperity is because of our trade openness.

Section 3: Exchange Rates

Exchange Rates

When goods and services are said to be traded between two countries, say China and the U.S., they are actually purchased by individuals, companies, or governments of the respective countries. For example, if a company in China wants to purchase a computer system that is made by IBM, it must acquire U.S. dollars in order to pay for the system. And, if U.S. retailers want to import and sell clothing manufactured in China (because they are made cheaper there than any place else), the retailers will have to obtain some Chinese currency (i.e., Yuan's) to purchase the clothing.

As a result, the supply of and demand for U.S. dollars come not only from U.S. citizens in the U.S., but also from

people abroad who want to purchase U.S. goods or services, and who are willing to trade their currency for dollars. Consequently a market develops in which U.S. dollars are traded in exchange for the currencies of other countries. The same type of market development occurs between all currencies in the world.

The price of the dollar, or the rate at which the dollar will trade for another currency, is known as the **exchange rate**, and is expressed in terms of the ratio of one currency to another. Table below shows U.S. dollar exchange rates for several days in January, 2011. How are these exchange rates determined? The first concept to keep in mind is that when comparing the currencies between two countries, the demand for one currency must equal the supply of the other currency. That is, to demand one currency, you must supply another currency in exchange.

Foreign Exchange Rates

The table below is a list of exchange rates during January 2011. Rates in currency units per U.S. dollar except as noted.

*Rates in U.S. dollars per currency unit.

(1)European Monetary Union

Source: Federal Reserve System – H.10 Weekly, January 2011.

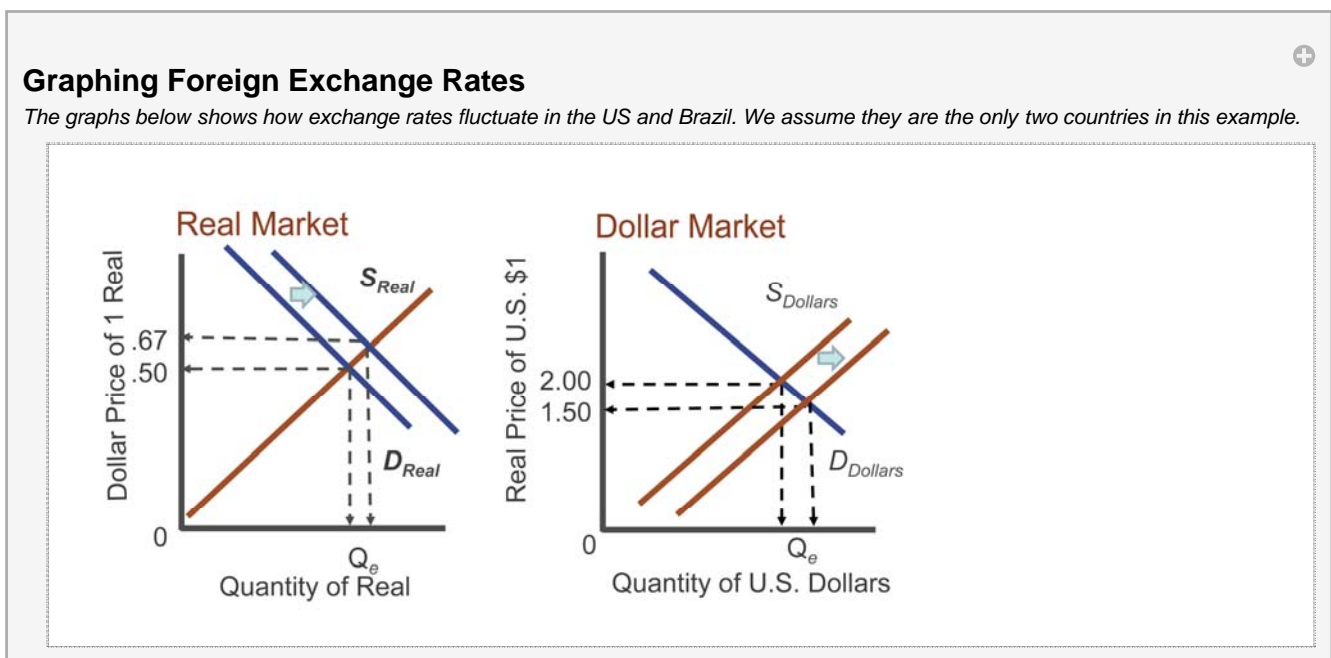
COUNTRY	CURRENCY	Jan. 17	Jan. 18	Jan. 19	Jan. 20
*AUSTRALIA	DOLLAR	1.0395	1.0395	1.0417	1.0471
BRAZIL	REAL	1.7778	1.7688	1.7593	1.7629
CANADA	DOLLAR	1.0130	1.0138	1.0094	1.0142
CHINA, P.R.	YUAN	6.3136	6.3109	6.3162	6.3330
*EMU MEMBERS ¹	EURO	1.2740	1.2825	1.2937	1.2948
HONG KONG	DOLLAR	7.7652	7.7608	7.7596	7.7608
INDIA	RUPEE	50.6900	50.4000	50.3000	50.2200
JAPAN	YEN	76.8000	76.8100	77.2300	76.9700
MEXICO	PESO	13.4614	13.3284	13.2269	13.2276
*NEW ZEALAND	DOLLAR	0.8005	0.8059	0.8021	0.8059
SINGAPORE	DOLLAR	1.2839	1.2785	1.2733	1.2728
SOUTH AFRICA	RAND	8.0253	7.9932	7.9000	7.9370
SOUTH KOREA	WON	1142.8500	1139.0000	1133.6000	1133.0000
SWEDEN	KRONA	6.9227	6.8644	6.7623	6.7785
SWITZERLAND	FRANC	0.9492	0.9427	0.9335	0.9327
TAIWAN	DOLLAR	29.9500	29.9600	29.9500	29.9500
*UNITED KINGDOM	POUND	1.5356	1.5410	1.5484	1.5540
VENEZUELA	BOLIVAR	4.2893	4.2893	4.2893	4.2893

Graphing Exchange Rates

Although we trade extensively with other countries, we don't trade a good for a good. Rather, we purchase the goods that we want by paying them with their currency. Other countries, in turn, purchase our goods with our currency. To

purchase goods from Brazil, we would have to have the Brazilian currency, the Real. The market for the trading of currencies is the **foreign exchange market (FOREX)**. The exchange rate, or rate at which one currency will trade for another, is based on the supply and demand of the currencies in that market.

If we simplified the world and looked only at trade between the United States and Brazil, we see that Brazil would demand Dollars to purchase US goods, and as they demand Dollars they are offering Reais in exchange. The United States, wanting Brazilian goods, demands Reais and is offering Dollars in exchange. Notice the graphs in figure below, which show the demand and supply of Brazilian Reais in terms of U.S. dollars, and the demand and supply of U.S. dollars (\$) in terms of Brazilian Reais (R\$). Note that in this model, Brazilians would demand U.S. dollars to purchase U.S. goods, and as they demand dollars they are offering Reais in exchange. U.S. citizens, who want Brazilian goods, demand Reais and offer dollars in exchange. In this example, the exchange rate initially settles at $\$1 = 2$ Reais, meaning the price of 1 Real = $\$0.50$ (compare the graphs at 0.50 and 2.00). Now suppose there is a massive spring freeze in the U.S. and much of the U.S. orange crop is destroyed, so that people in the U.S. want more Brazilian oranges. Suddenly, Sunkist Corporation would demand more Reais to pay for the oranges it wants to import, and can only obtain the Reais by exchanging (i.e., supplying) U.S. dollars for the Reals.



The increased demand for Reais and the increased supply of dollars (shown by the shift of the demand and supply curves) would change the equilibrium exchange rate. The new equilibrium exchange rate would now be $\$1 = 1.5$ Reais, or 1 Real = $\$0.67$. In this situation, the dollar has **depreciated**, or weakened, since one dollar no longer buys as many Reais as before, while the Real has **appreciated**, or strengthened against the dollar, because it no longer takes as many Reais to buy one dollar as before.

The graphic below illustrates how that when the dollar appreciates and the Real depreciates and vice versa. Thus, the two markets are mirror images of each other.

Real and Dollar Foreign Exchange Rates

The graphs below shows actual exchange rates during 2011. Note the fluctuations in the dollar (on top) and Real (on bottom). The graphs are mirror images of each other. When the dollar appreciates the Real depreciates and vice versa.



Flexible Exchange Rates

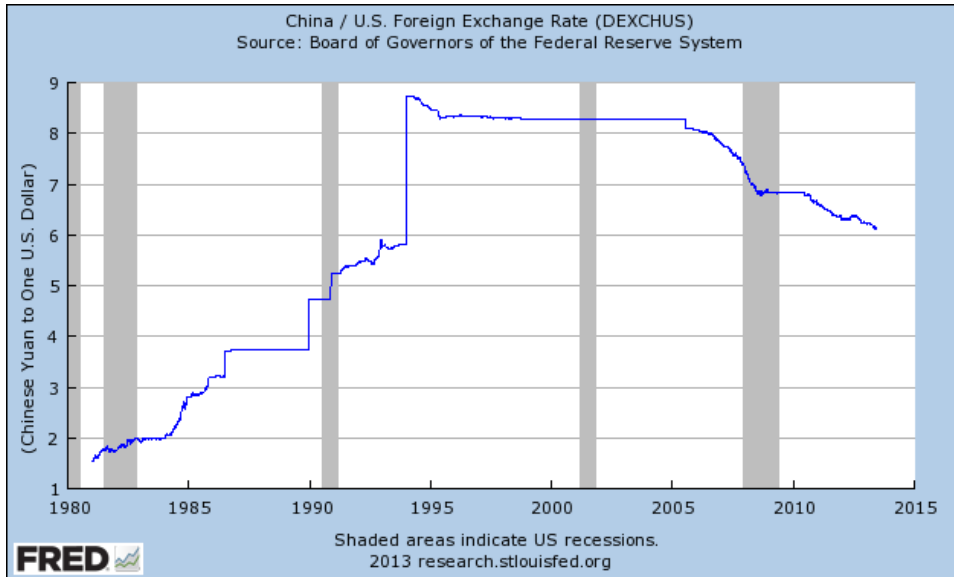
For many countries, exchange rates are determined by unrestricted supply and demand market conditions. These are known as **floating** or **flexible exchange rates**. If the exchange rate of the U.S. dollar rises (i.e., it requires more of other currencies to equal \$1), the dollar is said to strengthen or appreciate; if the exchange rate of the dollar falls (i.e., it requires less of other currencies to equal \$1) the dollar is said to weaken or depreciate. Exchange rates that are determined by the market are known as floating or flexible exchange rates. They fluctuate according to the supply and demand of the currencies. The currencies in the graphic above are flexible or floating exchange rates.

Fixed Exchange Rates

Some countries may also engage in setting their exchange rates at pre-determined levels. **Fixed exchange rates** are when a country will specify an exchange rate for the currencies rather than allow the currencies to fluctuate. Such fixed exchange rates are set in order to achieve specific purposes for a country's own benefit. For example from about 1995 through 2005, China fixed its exchange rate between the dollar and the Yuan at the rate of about 8.5 Yuan's per dollar (see graphic below). Relative to the currencies of other countries, the dollar was particularly strong against the Yuan. As a result, the dollar could buy more products from Chinese producers than from producers in other countries. This one Chinese policy has, in a major way, led to the current U.S. trade deficit, and explains much of why companies like Wal-Mart purchase so much of its goods from China. In order to fix an exchange rate, a country must actively engage in buying and selling its own currency in order to keep it exchanging at the desired level.

China/US Foreign Exchange Rate

From 1995 to 2005, China fixed the exchange rate for the Yuan at 8.5 Yuan for every dollar. Meaning that \$1 could purchase 8.5 Yuans. Thus, Chinese goods were relatively cheap and firms purchased a lot of their goods from China during this time period. Since 2005 the Yuan has strengthened against the dollar. Now \$1 can only purchase around 6 Yuan.



What Will It Cost?

The cost of a foreign good or service can be determined once the exchange rate is known. If the exchange rate between the Brazilian Real and the US Dollar is 2 Reais per Dollar, then a trip up the Amazon that costs 600 Reais would cost 300 Dollars.

Exchange Rate Determinants

In essence, anything that makes people want or need more of a particular currency will strengthen that currency. For example if the general level of prices in the U.S. is less than the general price level in England, people in other countries would want to obtain more U.S. dollars to purchase the cheaper products found here. This in turn would raise the demand for U.S. dollars and the dollar would appreciate against the British pound. The general factors that are at work in determining exchange rates include:

Price Level: *Changes in a country's price level relative to price levels in other countries.* If U.S. prices are higher than in other countries, foreign goods will be relatively cheap. U.S. demand for foreign currencies will rise, while foreign demand for U.S. dollars will fall. Consequently, U.S. inflation will shift the dollar demand curve to the left, while the dollar supply curve will move to the right.

Income Level: *Changes in a country's income level.* Suppose Canada enters into a recession. Income levels there will drop and the demand for U.S. goods will also fall. Consequently, Canada's demand for U.S. dollars will fall, while the supply of Canadian dollars will also fall.

Interest Rates: *Changes in a country's interest rate levels.* People choose to invest in those areas offering the highest returns. Thus a rise in U.S. interest rates (other things equal) will increase the demand for U.S. financial assets. This means the demand for dollars will rise, while at the same time the supply of dollars will fall as fewer Americans sell their dollars to invest in foreign assets.

Trade Policy: *Changes in a country's trade policy.* Suppose the U.S. imposes a new tariff on imported goods. This increases the price of the goods, and reduces the quantity of the imports demanded. This means that the demand

for foreign currencies to purchase the goods will fall.

Tastes: *Changes in tastes of a countries goods.* For example, if U.S. products become more popular in the rest of the world, the demand for the dollar will rise.

Speculation: *Investors may purchase more of a countries currency to hedge their risk.*

Note that an **expansionary monetary policy**, which reduces interest rates, tends to lower the value of the dollar and stimulate U.S. exports, adding a further stimulus to the economy. An **expansionary fiscal policy** however, such as a tax cut, will tend to raise interest rates and strengthen the dollar. In this case, exports will fall and at least partially offset the impact of the tax cut.

A Strong Dollar

A **high exchange rate** (i.e., a strong dollar) means it is relatively cheap to import goods, which in turn helps keep domestic prices and inflation low due to the competitive pressure of foreign imports. At the same time however, high exchange rates discourage foreigners from buying our exports (i.e., a strong dollar makes our exports relatively more expensive than foreign domestic products). Thus in a **strong dollar environment**, imports will go up while exports will go down causing a trade deficit. In a **weak dollar environment**, the opposite is true: imports will go down while exports will go up resulting in a trade surplus.

There are times when the U.S. dollar strengthens and weakens against other currencies. You should understand that a strong dollar benefits U.S. consumers because Americans are able to purchase foreign goods more cheaply and travel abroad at a lower cost. As a result, Americans may enjoy a lower cost of living because the dollar buys more. On the other hand, the cost of U.S. goods for foreigners is relatively more expensive, and foreigners will purchase fewer U.S. exports. Thus, a stronger dollar actually weakens the U.S. export base and incentives Americans to buy abroad.

The opposite however, is true for a weaker dollar. In this case, the dollar doesn't go as far in purchasing foreign goods or when traveling abroad. Instead, Americans will stay at home and are further incentives to purchase domestically-produced goods. At the same time the dollar weakens, foreign currencies will strengthen and incentives foreigners to purchase more American-made products and to travel in the United States.

Section 4: Other Topics in Trade

Balance of Payments

Exports are the goods and services produced in one nation and sold to another. **Imports** are the goods and services purchased by a nation that were produced by another country. If the value of the imports is greater than the exports, the country is said to have a **trade deficit**. A **trade surplus**, on the other hand, is when the value of the exports exceeds that of the imports. Although the U.S. has maintained a trade surplus in services—which would include banking, tourism, transportation, education, and entertainment—we have purchased far more foreign goods, leading to a negative trade balance or in other words we have a trade deficit in goods and services.

The **balance of payments** measures the value of goods and services exchanged between two countries. The main categories are the current account and the capital account. The **current account** measures the value of goods and services exported and imported along the other international transfers of income, including foreign aid, interest, and dividends received from and paid to foreign countries. The **capital account** measures the long-term income flows, such as the purchase or sale of assets and securities between the countries.

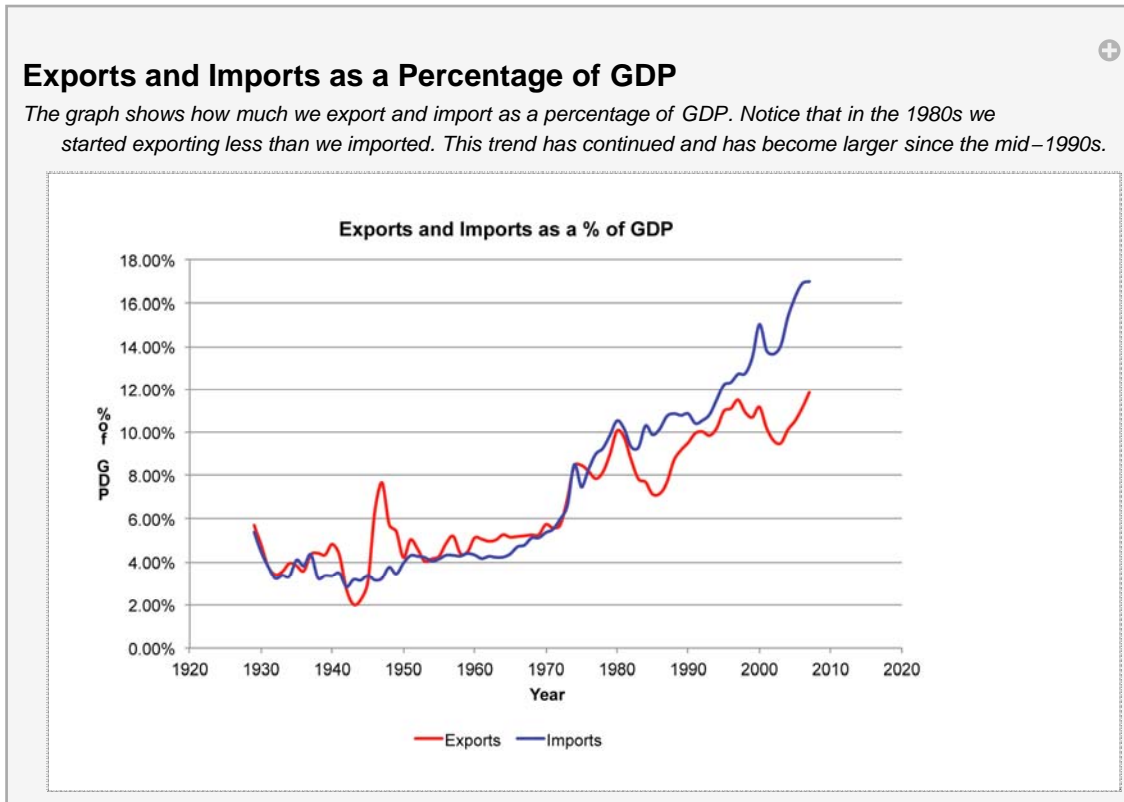
Importing and Exporting Services

Unlike a good that can be produced and then shipped from one country to the next, services are often consumed at the point of production. Exported and imported services could include banking or financial services, air travel,

tourism, or entertainment. If a Japanese citizen came to the United States and flew using an American airline, then went to see a play on Broadway, the US would be exporting services. Similarly, when Americans travel abroad on foreign-owned airlines and go sightseeing, we are importing services.

United States Trade

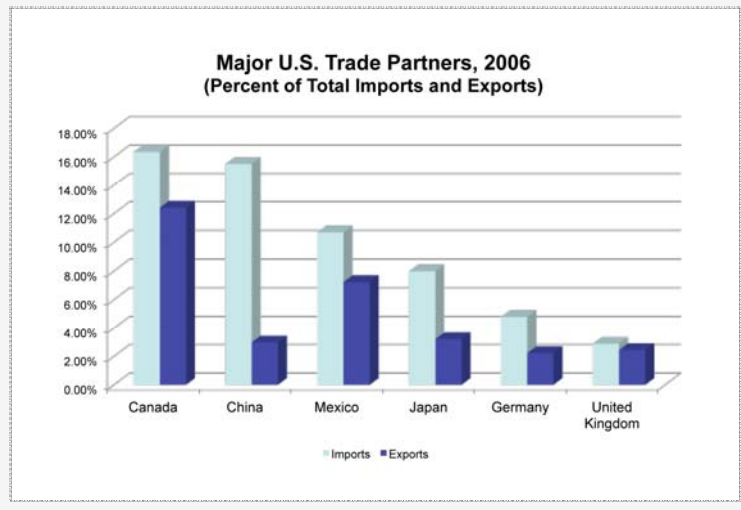
The United States economy is closely tied to global markets, with imports equivalent to 17 percent of our GDP and exports almost 12 percent of our GDP. With such close ties, it has been said that when the US economy sneezes, the world catches a cold.[2]



Major trading partners with the United States include Canada, China, Mexico, Japan, Germany, and the United Kingdom. Over one-fourth of U.S. imports are from Canada and Mexico, partners with the U.S. in NAFTA. China continues to be a significant trade partner, particularly for imports. Japan and Germany, once arch-rivals in World War II, are now key trade partners with the United States.[3]

Major U.S. Trading Partners (2006)

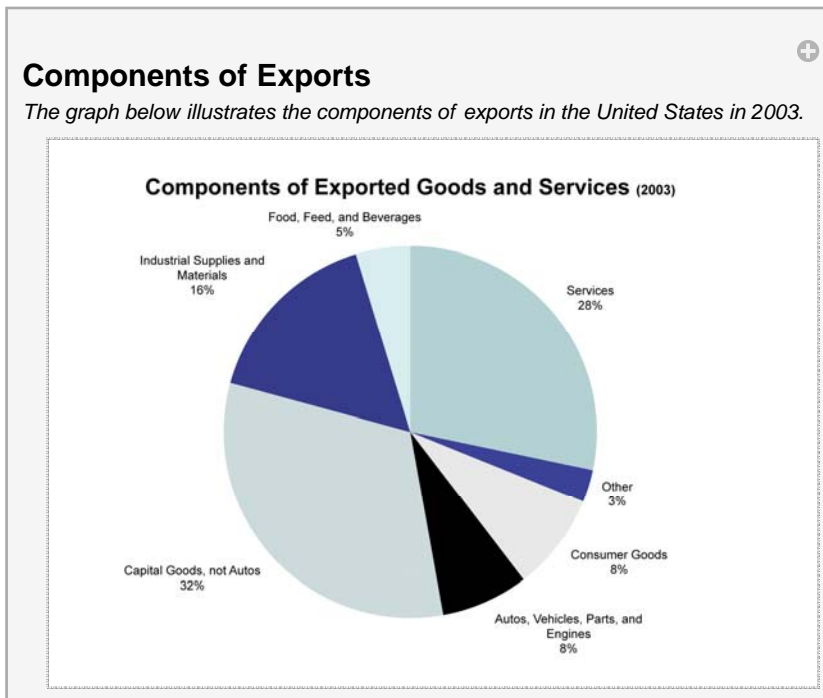
The graph illustrates the major U.S. trading partners in 2006.



The following pie chart shows the components of the goods and services exported by the United States [4]:

Components of Exports

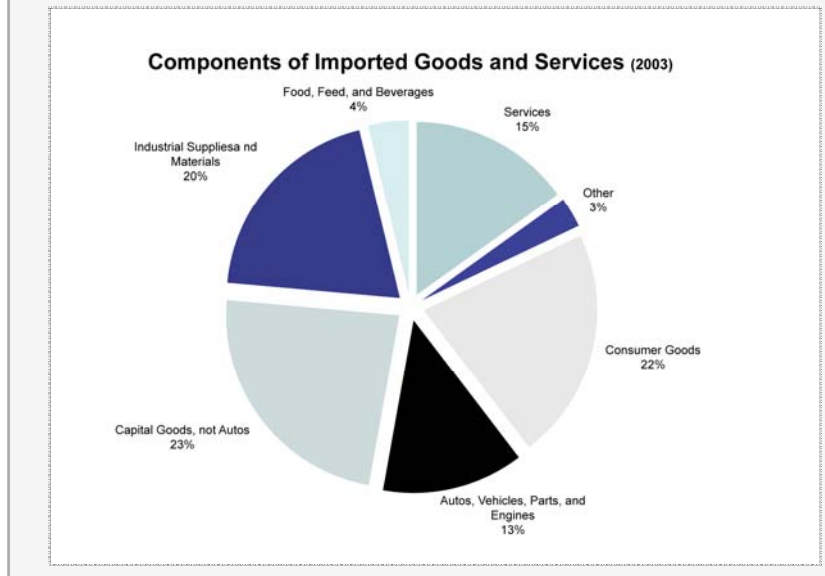
The graph below illustrates the components of exports in the United States in 2003.



Here is the breakdown of the goods and services imported by the United States [4]:

Components of Imports

The graph below illustrates the components of imports in the United States in 2003.



Summary

Key Terms

Absolute Advantage
 Anti-Dumping Actions
 Appreciated
 Balance of Payments
 Capital Account
 Comparative Advantage
 Current Account
 Depreciated
 Dumping
 Environmental, Health, and Safety Standards
 Exchange Rate
 Exchange Rate Determinants
 Expansionary Fiscal Policy
 Expansionary Monetary Policy
 Exports
 Fixed Exchange Rates
 Flexible Exchange Rates
 Floating Exchange Rates
 Foreign Exchange Market
 FOREX
 Formula for Marginal Opportunity Cost
 Free Trade Agreements
 GATT
 High Exchange Rate

Imports
Income Level
Interest Rates
NAFTA
National Security Concerns
Price Level
Protection of Domestic Jobs
Protection of Infant Industries
Quotas
Reasons to Limit Free Trade
Smoot-Hawley Act of 1930
Specialization and Trade
Specializing
Speculation
Strong Dollar Environment
Tariffs
Tastes
Terms of Trade
Three General Determinants of the Gain From Trade
Trade Barriers
Trade Deficit
Trade Policy
Trade Surplus
United States Trade
Voluntary Export Restraints (VER)
Weak Dollar Environment
World Trade Organizations (WTO)

Notes

1. For more information on the Smoot-Hawley Act of 1934, see www.state.gov/r/pa/ho/time/id/17606.htm; also historytogo.utah.gov/utah_chapters/from_war_to_war/reeds-smoot-and-the-smoot-hawley-tariff-1930.html
2. Chart from Federal Reserve: <http://research.stlouisfed.org/fred2/categories/18>
3. Chart from Office of Trade and Industry Information (OTII), Manufacturing and Services, International Trade Administration, US Department of Commerce: <http://tse.export.gov>
4. Chart from National Council on Economic Education: <http://www.econedlink.org/lessons/EM538/docs/EM538.pdf>