

Objectives for Classes 29 and 30: The Foreign Exchange Market

At the end of Classes 29 and 30, you will be able to:

1. Define "**foreign exchange market**"? Define "**exchange rate**"?
2. Explain is the relation between the demand for foreign exchange and the supply of dollars?
3. Name and explain are the factors that affect the **demand for foreign exchange**? (Review the factors that affect the demand for any product)
4. Define the terms "**export**" and "**import**".
5. Define "**portfolio investment**" and "**foreign direct investment**"?
6. Name and explain the factors that affect the **supply of foreign exchange**?
7. Define "**appreciation**" and "**depreciation**" of a currency?
8. Explain the effects of appreciation (or depreciation) of the American dollar on American exports and imports?
9. Explain what will result in the foreign exchange market if interest rates rise in the United States more than they rise abroad. Use this analysis to explain the causes of the dollar appreciation from 1980-1985.
10. Explain what will result in the foreign exchange market if inflation rates are higher in the United States than in the countries with whom we trade.
11. Explain what will result in the foreign exchange market if income rises faster in the United States than in Japan.
12. Describe the "**Bretton Woods System**" and the way it operated. Why did it end?
13. What is a "**devaluation**" and a "**revaluation**"?
14. What is the **International Monetary Fund (IMF)**?
15. What were the advantages and disadvantages of the Bretton Woods System?
16. What is meant by "**globalization**"?
17. What are the manifestations of "globalization"?
18. What is meant by "**openness**"? How is it measured?
19. What is a "**managed float**"?
20. Describe the **Plaza Accord** of 1985 and the **Louvre Accord** of 1987.
21. What are the arguments that globalization is good for the countries involved?
22. What are the arguments that globalization is bad for some of the countries involved?

Classes 29 and 30 The Foreign Exchange Market

A market is a place where buyers come to buy and where sellers come to sell. *The foreign exchange market is a place where buyers come to buy and sellers come to sell foreign monies*, such as Mexican Pesos, Japanese Yen, British Pounds, German Marks, Canadian Dollars, and so forth. In the foreign exchange market, buying and selling takes place through the interaction of large banks all over the world. These banks, acting on behalf of their customers, interact through computer communication. On the other hand, much buying and selling in the stock market is done by brokers in a specific place, such as the New York Stock Exchange on Wall Street in New York City. Both of these markets are extremely important in the American economy.

Demand for Foreign Exchange

Why would anyone buy foreign exchange (the money of a foreign country)? If you have traveled in a foreign country, you have probably bought the money of that country. This means that you have exchanged your dollars for the money of that country. Otherwise, you most likely have not participated in a foreign exchange market. But a large number of businesses and individuals do participate in this market. There are basically four reasons they do so.

(A) The main reason to buy foreign exchange is to be able to buy foreign goods and services (called *importing*). Suppose you wish to buy your BMW. You buy it from a dealer in the United States. The dealer buys it from an importer. The importer buys it from the BMW Corporation located in Munich, Germany. The BMW Corporation wished to be paid in German Marks (DM), the money of Germany. But now the company would wish to be paid in Euros. So the importer will have to buy the Euros to pay for the BMW automobiles. Let's say the importer needs 100,000 Euros to buy your BMW automobile. The importer goes into the foreign exchange market by going to an American bank, such as Bank of America. Bank of America communicates with a German bank (such as Deutches Bank) to help the American importer obtain the Euros it needs. The importer will give \$100,000 that it already owns to Bank of America and will get the 100,000 Euros in return. Bank of America gets the 100,000 Euros by sending the \$100,000 to Deutches Bank. Deutches Bank gets the 250,000 Euros from one of its customers, Mr. Schmidt. Mr. Schmidt gives the 100,000 Euros that he owns to Deutches Bank because Mr. Schmidt desires to have the \$100,000. With the two banks as intermediaries, the importer has given up the \$100,000 that it owned and received in return 100,000 Euros that it will use to buy your BMW automobile. Mr. Schmidt has given up the 100,000 Euros that he owned and received in return \$100,000 that he will use to buy some new computers for his business from IBM.

We buy foreign exchange in order to buy foreign-made goods and services. (Travel is considered as buying a service.) So why then do we wish to buy foreign-made goods and services? To answer this question, let us go back to our list of the factors that affect the demand for any product. **First we will buy foreign-made goods and services if they are relatively cheaper than American-made goods and services.** This involves comparing the prices of the American-made goods and services to the prices of the foreign-made goods and services, their substitutes. **(1) If the prices of American-made goods and services increase, the demand for**

foreign-made (imported) goods and services will increase. This will increase the demand for foreign exchange. Conversely, if the prices of American-made goods and services decrease, the demand for foreign-made (imported) goods and services will decrease. This will decrease the demand for foreign exchange. (2) On the other hand, if the prices of foreign-made (imported) goods and services increase, the demand for foreign-made (imported) goods and services will decrease. This will decrease the demand for foreign exchange. Conversely, if the prices of foreign-made (imported) goods and services decrease, the demand for foreign-made (imported) goods and services will increase. This will decrease the demand for foreign exchange.

People may also buy foreign-made goods and services because they like them (tastes and preferences). Either they believe that the foreign-made goods are of higher quality or they like the idea that they are foreign. (3) **If people like foreign-made products more, the demand for foreign-made (imported) goods and services will increase. This will increase the demand for foreign exchange. Conversely, if people like American-made products more, the demand for foreign-made (imported) goods and services will decrease. This will decrease the demand for foreign exchange.**

Finally, when incomes of buyers rise, they will buy more of all kinds of goods and services. This means that they will also buy more foreign-made goods and services. Therefore, (4) **an increase in incomes will increase the demand for foreign-made (imported) goods and services. This will increase the demand for foreign exchange. Conversely, a decrease in incomes will decrease the demand for foreign-made (imported) goods and services. This will decrease the demand for foreign exchange.**

(B) **A second major reason people buy foreign exchange is called portfolio investment. *Portfolio investment means lending money to someone in another country.*** One would lend money to someone in another country by opening a checking or savings account in a bank in another country, by buying a bond of a company in another country, by buying a bond of a government of another country, and so forth. Why would anyone open an account in a foreign bank, lend money to a foreign company, or lend money to a foreign government? (Buying a bond is a form of lending money.) One major answer is that, when they borrow from you, the foreign banks, businesses, or governments will pay you a higher rate of interest. Suppose you have \$10,000 that you wish to keep in a savings account. The bank in the United States will pay you interest of 5% per year. A bank in Canada will pay you interest of 15%. What do you do? Assuming the risks are about the same, you will open the savings account in the bank in Canada. Of course, to do so, you will have to convert your American dollars into Canadian dollars. **So, when interest rates rise in foreign countries, Americans are more likely to lend money in the foreign countries (in order to be able to get the higher interest). Therefore, the demand for foreign exchange increases. Conversely, when interest rates fall in foreign countries, Americans are less likely to lend money in the foreign countries. Therefore, the demand for foreign exchange decreases. On the other hand, when interest rates rise in the United States, Americans are less likely to lend money in foreign countries (and more likely to lend money at home). Therefore, the demand for foreign exchange decreases. Conversely, when interest rates fall in the United States, Americans are more likely to lend money in foreign**

countries (and less likely to lend money at home). Therefore, the demand for foreign exchange increases.

(C) A third major reason people buy foreign exchange is called **foreign direct investment**. *Foreign Direct Investment involves owning and controlling a company in another country*. Technically, one controls a company if one owns at least 10% of the shares of stock. General Motors of Britain, Germany, or Mexico are examples of foreign direct investment by an American-owned company. Honda of Ohio and Nissan of Tennessee are examples of foreign direct investment in the United States by Japanese-owned companies. **If General Motors wishes to build a company in Mexico, it will have to pay for it with Mexican pesos. Therefore, the demand for foreign exchange (Mexican pesos) rises. If Honda wishes to build another automobile factory in the United States, it will have to pay for it with American dollars. Therefore, the Japanese demand for foreign exchange (American dollars) rises.**

(D) There is one more important reason to buy foreign exchange --- **expectations**. The foreign exchange market is one for which expectations are very important. If one knew about changes in foreign exchange rates before anyone else knew, one could make a considerable fortune. **So, if you as an American expect that Mexican pesos will go up in price in the near future, your demand for them now will increase. Conversely, if you expect that Mexican pesos will go down in price in the near future, your demand for them now will decrease.**

Let us summarize. The demand by Americans for foreign exchange will increase if:

- 1. the prices of American-made goods and services rise*
- 2. the prices of foreign-made goods and services fall*
- 3. people like the foreign-made goods and services better*
- 4. Americans have higher incomes*
- 5. interest rates rise in foreign countries or fall in the United States*
- 6. American companies have a greater desire to build or buy companies in foreign countries*
- 7. Americans expect that the price of a foreign money will rise in the near future*

The opposite changes will cause the demand by Americans for foreign exchange to fall.

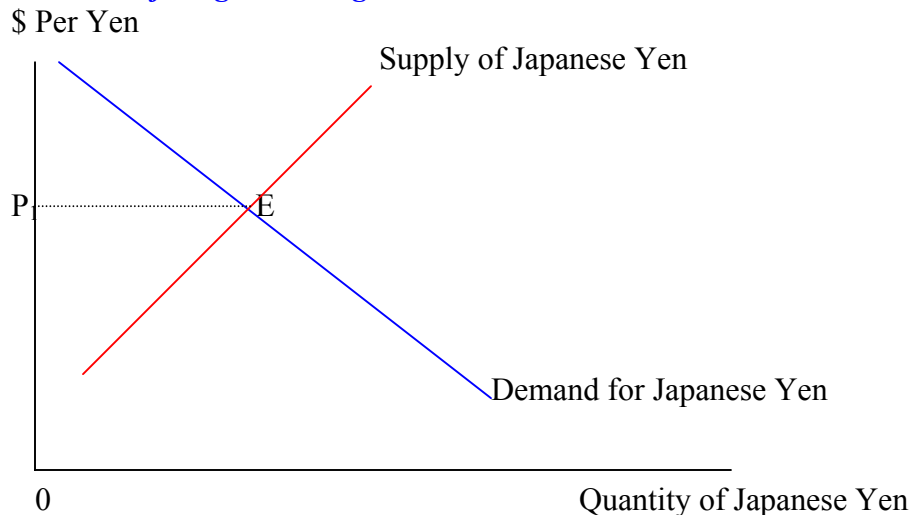
Supply of Foreign Exchange

Once we understand all of the factors that determine the demand for foreign exchange, it is easy to discuss the supply of foreign exchange. Who is selling foreign exchange on the foreign exchange market? The answer, of course, is foreign people. Why would they sell their money to you? The answer is that they want something from you --- your dollars. In the foreign exchange market, everyone is both a buyer and a seller. You buy Mexican pesos by selling your dollars to someone from Mexico. Someone in Japan sells their yen to you in order to get your dollars. ***The supply of foreign exchange is the same as the demand for dollars.*** Since they are selling their money in order to obtain your dollars, the question becomes “why do they want your dollars?” **The answer is that they want your dollars for the same reasons you want their money. They want your dollars because they want to buy American-made goods and services (because the prices of their own goods and services have risen, because the prices of**

American-made goods and services have fallen, because they like the American-made goods and services better, or because their incomes have risen). They want your dollars because interest rates rose in the United States or because interest rates fell in their own country. They want your dollars because they wish to build or buy companies in the United States. And finally, they want your dollars because they expect that the price of the dollar in the foreign exchange market will rise in the near future.

Equilibrium

As in any market, the price of foreign exchange is determined by the demand for it and the supply of it. This is shown in the graph below. **Remember that the demand for foreign exchange reflects the behavior of Americans in the foreign exchange market. And the supply of foreign exchange reflects the behavior of foreigners in the foreign exchange market.** In this graph, the foreign money is Japanese yen. Americans are the ones who buy them. Japanese are the ones who sell them. The price of foreign exchange is given a distinct name: *the foreign exchange rate*.



Test Your Understanding

In each of the following cases, state whether the demand for foreign exchange and the supply of foreign exchange will (1) increase (shift right), (2) decrease (shift left), or (3) remained unchanged.

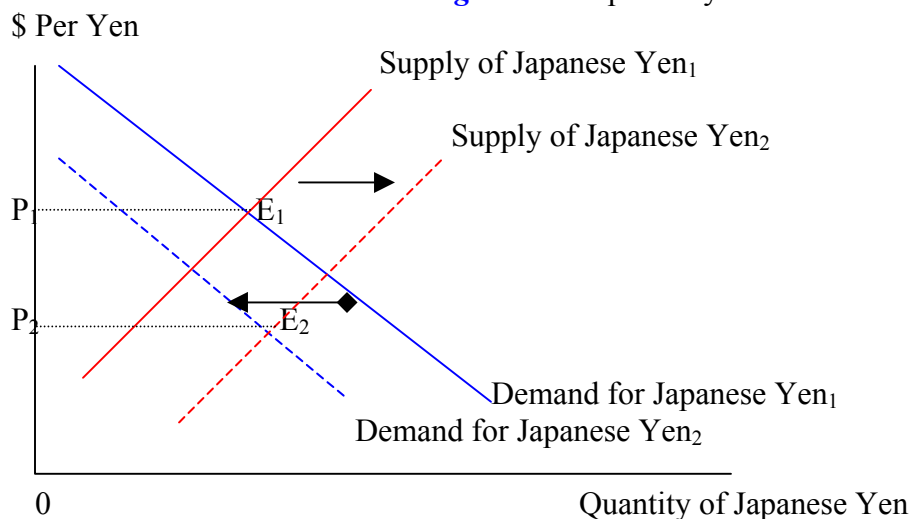
Demand Will: Supply Will:

1. Interest Rates Rise in the United States
2. Prices of Goods and Services Rise in the United States
3. Incomes Rise in the United States
4. The Quality of American-Made Goods Improves
5. Japanese Banks Decide to Buy American Banks
6. Americans Expect the Price of the Mexican Peso to Fall

Case: An Increase in Interest Rates in the United States

In 1980, interest rates began to rise greatly in the United States. They continued to be very high for several years. At that time, one would pay over 17% per year interest for 30 years to borrow money to buy a new home (called the *mortgage interest rate*). Businesses would pay an interest rate of over 20% to borrow money. Lending money to the United States government would generate interest of over 14% per year. The reasons for these very high interest rates largely involved high budget deficits in the United States (forcing the United States government to borrow considerably) and a reduction in the supply of money (so that there was less money to borrow). We shall discuss these events in great detail later in the course. At the same time, interest rates in Japan were quite low by American standards. At that time, a Japanese saver had basically two saving options. One would pay an interest rate of 4% while the other paid an interest rate of 4½%.

The graph below shows the demand for and supply of Japanese yen. In 1980, the equilibrium price (exchange rate) was approximately 125 Japanese yen for \$1 (P_1) or \$0.008 for one Japanese yen. What are the results of the rise in interest rates in the United States? Let us examine the Americans first. Given these interest rate changes, would Americans be more likely or less likely to lend money in Japan? Obviously, the answer is less likely. Why would an American lend money in Japan to get an interest rate of 4% when she could lend it in the United States and get an interest rate several times that? **Therefore, the demand for Japanese yen by Americans fell.** This is shown as a shift to the left to Demand₂. Now, let us examine the behavior of the Japanese? Where do they wish to lend their money? Obviously, they would wish to lend much more money in the United States because they can receive much higher interest. To do so, they would have to buy dollars. When they buy dollars, they are selling the yen they own in the foreign exchange market. **So the supply of Japanese yen offered in the foreign exchange market increases.** This is shown as a shift in supply to the right to Supply₂. When the demand for Japanese yen decreases (shifts left) and the supply of Japanese yen increases, (shifts right), what happens to the price of Japanese yen? From looking at the graph, the answer is that it falls. In fact, by 1985, the price reached approximately 250 Japanese yen for \$1 or \$0.004 for one Japanese yen. The Japanese yen had fallen in price to close to half of its value five years earlier. In technical language, we say that the American dollar *appreciated* (gone up in value) in relation to the Japanese yen. Conversely, we say that the Japanese yen *depreciated* (gone down in value) in relation to the American dollar. Using language from the 18th century, some people would say that the American dollar was *strong* and the Japanese yen was *weak*.

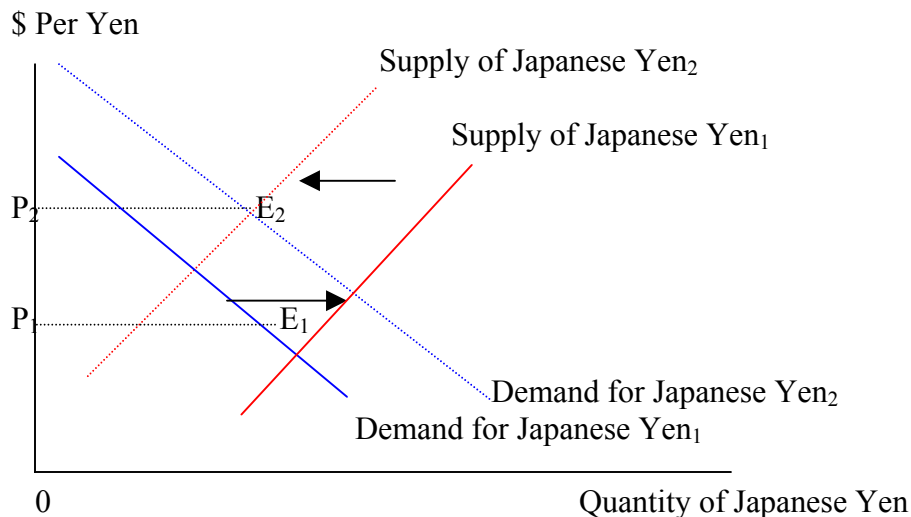


This story was a very important one for the United States. When the dollar appreciates, what happens to American exports? The answer is that they decrease. A product that sold in the United States for \$1 in 1980 would have cost a Japanese person 125 yen. By 1985, the Japanese person would have to pay 250 yen for the same good. The price to them doubled. At twice the price, they will buy fewer American products. When the dollar appreciates, what happens to American imports? The answer is that they increase. A product that sold in Japan for 250 Japanese yen would have cost an American \$2.00 in 1980. By 1985, the same product would have cost the American only \$1.00. At half price, Americans will want to buy more Japanese-made products.

Until the early 1980s, Americans had exported more goods and services than they had imported. But, for the reasons noted above, in the early 1980s, exports decreased while imports increased. By 1982, exports became less than imports for the first time in 70 years. This is called a *trade deficit*. Even though the interest rate situation has changed, the United States has had trade deficits ever since. There are two important results of these trade deficits. **First, notice that they are accompanied by borrowing from foreigners.** (Actually, it was the borrowing that caused the trade deficits, not the other way around.) Much of this borrowing from foreigners was done by the American government. This means that the government incurred a debt that will have to be paid back. **Second, the American industries that depended on exports or the ones that competed with Japanese imports had been the industries that had created good jobs for people with no more than a high school education.** Until the early 1980s, people could finish high school, go to work in companies, and work their way up to middle management. By their late 20s or early 30s, they would be earning enough for a middle class lifestyle. Since the early 1980s, it has been harder and harder to find these kinds of jobs. A college education has become much more important to one's financial success.

Case: Inflation in the United States

In the period of the late 1960s and early 1970s, prices of goods and services rose faster in the United States than they did in the countries with whom the United States trades. As a result of this, what would happen in the foreign exchange market? First, let us examine the behavior of Americans. If prices of goods and services are rising faster in the United States than in Japan, Americans will want to buy more goods and services from Japan. The goods and services made in Japan are now relatively cheaper. Since Americans need yen in order to buy the Japanese goods and services, **the demand for yen will rise (shift to the right)**. Now let us examine the behavior of the Japanese. If prices of goods and services are rising faster in the United States, Japanese will want to buy fewer American-made goods and services. American-made goods and services are now relatively more expensive for them. Since Japanese desire fewer American goods and services, they will also desire fewer American dollars. To get dollars, they must sell their own money in the foreign exchange market. If they desire fewer dollars, they will sell less of their own money. **The supply of yen will fall (shift left)**. This is shown in the graph below.



In this case, what happens to the exchange rate. You can see that the price of the Japanese yen has risen from P_1 to P_2 . The American dollar has *depreciated* in relation to the Japanese yen. And the Japanese yen has *appreciated* in relation to the American dollar. As noted in the previous case, the exchange rate was \$1 equals approximately 125 Japanese yen in 1980. In 1972, the exchange rate was \$1 equals 360 Japanese yen. The dollar had depreciated to nearly 1/3 of its 1972 value as a result of the high inflation experienced by the United States.

Because the American dollar depreciated, the effects on international trade were opposite of the previous case. American exports increased as American goods and services became relatively cheaper for foreigners to buy. (A good selling in the United States for \$1 would cost a Japanese person 360 yen in 1972 and 125 yen in 1980.) American imports decreased as Japanese goods and services became relatively more expensive for Americans to buy. (A good selling in Japan for 360 yen would cost an American \$1 in 1972 and nearly \$3 in 1980.)

Test Your Understanding

The previous two cases have analyzed the effects on foreign exchange markets of an increase in interest rates in the United States and of an increase in inflation in the United States. Do the same analysis for each of the following cases:

1. Incomes rise in the United States and fall in Japan
2. Both Americans and Japanese believe that American goods are of higher quality than before
3. Both Americans and Japanese believe that the Japanese yen will depreciate in the near future
4. Laws change in Japan making it easier for Americans to buy or build companies in Japan
5. Interest rates fall in the United States while they rise in Japan

The International Financial System After World War II

In 1944, a conference was held in the small resort town of Bretton Woods New Hampshire to create an international financial system for the postwar period. The new system took its name from this town and came to be called the **Bretton Woods System**. It lasted from the late 1940s until 1973. In this chapter, we will describe the Bretton Woods system and explain why it ended. A later chapter will examine the international financial system that has existed since 1973.

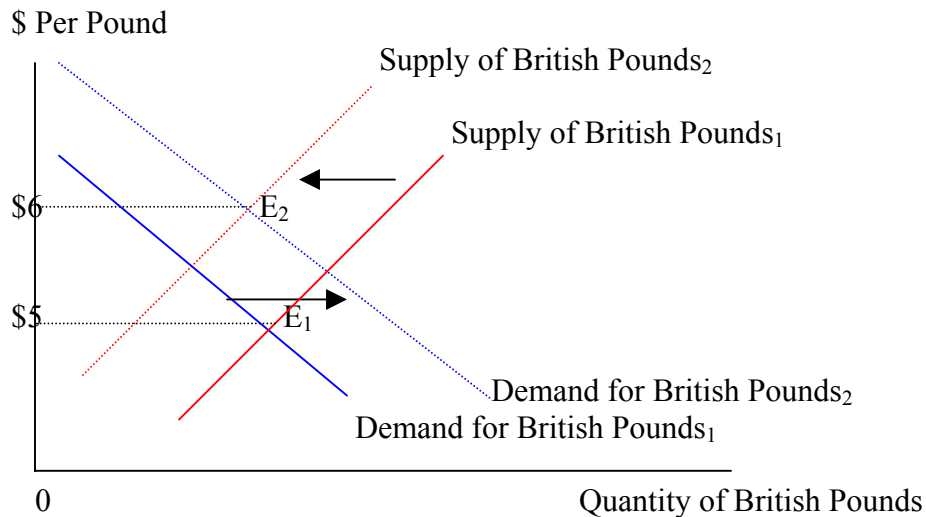
How the Bretton Woods System Operated

The Bretton Woods system attempted to maintain two of the main advantages of the Gold Standard that had existed until the 1930s. **First, the Gold Standard imposed monetary discipline on the countries involved.** Any country experiencing inflation would lose gold and therefore would have a decrease in the amount of money available to spend. This decrease in the amount of money would act to reduce the inflationary pressure. **Second, the Gold Standard maintained fixed exchange rates.** Fixed exchange rates were seen as desirable because they reduced the risk of trading with other countries. **However, a full return to the Gold Standard was not feasible.** There was not enough gold available to allow people to buy all the new goods and services that could be produced. And the gold that was available was mainly located in the Soviet Union, a Cold War enemy of the United States and Western Europe, and in South Africa, whose policy of apartheid was strongly condemned by the United States and the Western European countries.

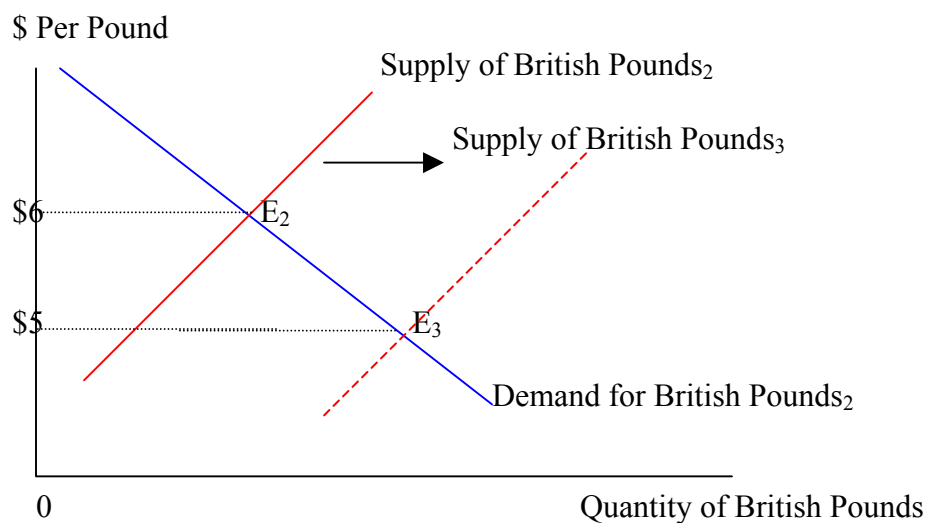
The United States had emerged from World War II as the strongest economy in the world. Unlike Europe and Japan, the United States had experienced very little destruction on its own land. Because of the strength of the American economy, **the American dollar came to be the fundamental money in the international financial system.** It took over the role that gold had played under the Gold Standard, and was called a **“reserve currency”**. But to provide faith in the American dollar, it was linked to gold at the rate of \$35 per ounce of gold. Foreign governments and central banks could exchange dollars for gold at this rate. All other countries' monies were pegged to the American dollar at a fixed exchange rate (plus or minus 1%). So for example, the British pound was set at \$4.86 equals one pound. The Japanese yen was set at 360 Japanese yen equal \$1. And the German mark was set at 4 marks equals \$1. **Countries agreed to intervene in their foreign exchange markets (that is to buy or sell foreign money) in order to preserve these fixed exchange rates.** In order to provide some flexibility, countries were allowed to change the rates up to 10%. This would be allowed only if there was what was called a **“fundamental disequilibrium”**. It was envisioned that these changes in exchange rates

would be quite rare. A decrease in the value of the country's money was called a **“devaluation”** while an increase in the value of the country's money was called a **“revaluation”**. As an illustration of how rare these changes were, Great Britain devalued the pound only twice in the period of the Bretton Woods system --- first to \$2.80 to the British pound in 1949 and then to \$2.40 to the British pound in 1967.

To see how this system operated, let us use two countries only: Great Britain and the United States. Assume that the exchange rate is to be \$5.00 to the British pound. Now let us assume there is inflation in the United States but not in Great Britain. As prices rise in the United States, Americans want to buy more British goods and services. To pay for them, Americans have to buy British pounds. So the demand for British pounds rises (demand for pounds shifts to the right). As prices rise in the United States, British people want to buy fewer of the more expensive American goods. So they desire fewer American dollars and therefore supply fewer British pounds on to the foreign exchange market (supply of pounds shifts to the left). These two changes both would tend to raise the number of dollars to buy one pound, say to \$6. The dollar would depreciate and the pound would appreciate.



However, as members of the Bretton Woods system, both countries have agreed that the exchange rate is not to change. **In London, the Bank of England was pledged to go on to the foreign exchange market and sell British pounds (buy dollars) in order to drive the price back to \$5.** Where does the Bank of England get the British pounds? Since pounds are the money of Britain, the Bank of England simply created the British pounds. **In New York, the Federal Reserve Bank was also obligated to sell British pounds (buy dollars) in order to drive the price back to \$5.** So the exchange rate stays fixed at \$5, making it easier for American and British businesses to do business with each other over a long time period.



How does the Federal Reserve Bank in New York get the British pounds to sell? After all, British pounds are not money in the United States so the Federal Reserve Bank cannot just create them. It is possible that the Federal Reserve might have bought some British pounds in the past (to keep the dollar from appreciating) when inflation rates had been lower in the United States. These British pounds that had been bought in the past by the Federal Reserve Bank in New York were held as *“international reserves”*. These reserves of British pounds could now be sold (to keep the dollar from depreciating). But if the international reserves were not sufficient, the United States had a problem. **One option for the United States was to sell gold it owned** and use the proceeds to buy the British pounds it needed. A second option was to deal with a new international institution that had been created for this purpose. This was called the *International Monetary Fund (IMF)*. The International Monetary Fund, headquartered in Washington D.C and in Paris, was created to be a collection of monies. Each member country contributed gold and a certain amount of its own money to the Fund. So the International Monetary Fund would have the British pounds that the Federal Reserve Bank in New York needed. The United States, through the Federal Reserve Bank, would borrow the British pounds and sell them in the foreign exchange market in New York in order to maintain the exchange rate at \$5 per British pound. In order to obtain this loan, the United States would have to demonstrate to the satisfaction of the International Monetary Fund that it had a plan to reduce the inflation that had been the reason for it having to borrow. The United States would have to show that it would not need British pounds for very long and that it would be able to earn British pounds and pay them back to the Fund in the near future. **A third option was for the United States to borrow the pounds directly from Britain**, circumventing the IMF. If the United States could not solve its problem and had no further ability to borrow from the International Monetary Fund, **the last resort was to declare that there was a “fundamental disequilibrium”**. In that case, the United States would devalue the dollar and therefore revalue the British pound.

Test Your Understanding

In each case below, show the foreign exchange market between dollars and Japanese Yen in equilibrium. Then, assume that there is a recession in the United States but not in Japan.

1. Show the effects in the foreign exchange market assuming that **there are freely floating exchange rates**. Explain why you made the changes that you did.

\$/Y



What would be the effects on the American economy of this change?

2. Show the effects in the foreign exchange market assuming that the world is on **the Bretton Woods system**. Explain why you made the changes that you made.

\$/Y



What would be the effects on the American economy of this adjustment?

Let us examine the effect that this system had on each of the economies. The Federal Reserve Bank in New York would enter the foreign exchange market and sell British pounds. Therefore, people obtained the British pounds and the Federal Reserve Bank obtained the American dollars. **Fewer American dollars were available to the American people to spend. With fewer dollars to spend, spending by Americans declines.** This decline in spending helps reduce the inflationary pressure that caused the problem in the first place. *Therefore, the Bretton Woods system had a self-correcting mechanism.* However, as we have seen, a decline in the money supply in the United States after World War II was more likely to cause a recession than it was to bring about a deflation. Prices had become *inflexible downward*. Experiencing a recession in order to maintain fixed exchange rates was not politically acceptable in the United States.

In Britain, the Bank of England was also selling pounds. British people were exchanging American dollars with the Bank of England for British pounds. The Bank of England would now have more American dollars. The British people would now have more British pounds. What will they do with the new British pounds? Since British pounds are money in Britain, they will spend them. The increased spending in Britain will contribute to inflation there. *Therefore, under the Bretton Woods system, the United States would reduce its problem of inflation partly by giving it to Britain.*

The End of the Bretton Woods System

The Bretton Woods system was ended in large part because of speculation. Go back to the situation described above. The exchange rate is \$5 per British pound. The United States, through the Federal Reserve Bank in New York, is borrowing British pounds (either from the International Monetary Fund or from Britain itself) to keep the exchange rate fixed at \$5 per British pound. Or perhaps the United States is selling its gold to get the British pounds; the gold supply owned by the United States is dwindling. This situation created a great opportunity for a

speculator. The speculator would take perhaps \$5,000,000 and buy one million British pounds. In doing so, the speculator is betting that the United States will soon devalue the dollar and the price will go to \$6 per British pound. The speculator can then sell the million pounds back to get \$6,000,000. If the speculator is correct, he or she has gained \$1,000,000. But what if the speculator is wrong and the United States does not devalue the dollar. The speculator then sells the million pounds and gets his or her \$5,000,000 back. **If correct, the speculator gains \$1,000,000. If incorrect, the speculator breaks even. There is nothing to lose** because, given the situation, there is no possibility of the dollar going up in value.

When many speculators are buying British pounds, they cause the price of the British pound to rise. The Federal Reserve Bank in New York must sell more and more British pounds to keep the exchange rate fixed. These British pounds become harder and harder to get. As British pounds become harder for the Federal Reserve Bank in New York to obtain, there becomes a greater likelihood that the dollar will be devalued. This greater likelihood brings more and more speculators into the process.

In 1971, President Nixon shocked the world when he announced that the American dollar would no longer be exchanged for gold at \$35 per ounce. He also announced that the American dollar “would be allowed to float”. **This means that the United States, through the Federal Reserve Bank, would no longer intervene in foreign exchange markets to keep the exchange rates of the dollar fixed.** The exchange rate would now be whatever rate was determined in the market. The new system became the one we first met earlier in this chapter. The Bretton Woods system was dead, although it was not officially abandoned until 1973.

When the Bretton Woods system was ended in 1973, it was not replaced by a new system that could impose monetary discipline on countries. It was also not replaced by a system that would maintain fixed exchange rates. Indeed, **the new system is mainly one of flexible exchange rates.** From that time on, monetary discipline would have to come only from the choices of those responsible for controlling the supply of money.

International Economic Relations of 1970 to 1990: The New Global Economy

Globalization in Perspective

Over the past 30 years, the world has experienced significant integration of the economies of countries. Today, the economies of the world are linked together through financial relationships and trade relationships as never before. This integration has especially affected the United States, whose economy was quite isolated from the other economies of the world at the beginning of the 1970s. But in fact, this economic integration is the continuation of a trend from long ago. From the mid-1800s until World War I (1914), the economies of the world (or at least of Europe and its colonies, the United States, and Japan) became more highly integrated. People 100 years ago were facing the same forces, and fearing the same fears, as people today. This trend toward integration began to reverse with World War I. But world economic integration --- commonly called “**globalization**” --- began in earnest again in the 1970s and has continued to this day. The economies of the world are more integrated today than they were in the 19th century. This globalization has been very controversial, even sparking “riots” in Seattle in 1999. But the trend seems unstoppable. Let us examine here the manifestations of this globalization.

One important manifestation of globalization is the increase in the importance of international trade. For the world as a whole, trade is twelve times the amount it was at the end of World War II (1945) while production is only six times the amount it was then. The most common measure of the role of international trade is called “**openness**”. *Openness is calculated by adding up the total of exports plus imports and then dividing by the Gross Domestic Product (GDP)*. In 1890, this number was 15.8 for the United States. It then declined to 10.9 by 1930 and to 9.1 by 1950. After 1950, openness in the United States began to rise, reaching 12.5 by 1970 and then doubling to 25.4 by 1990. By one estimate, some 70% of American manufacturing companies now face significant competition from companies in other countries.

Another important manifestation of globalization is the increase in the movement of capital. In this case, “capital” refers to both money and to capital goods. In 1995, it was estimated that the value of transactions in the foreign exchange markets totaled \$1.2 trillion every day (and is perhaps \$1.5 trillion per day today). Stock markets have become global. Companies borrow from financial institutions in other countries on a regular basis and with few restrictions. Governments borrow from other countries or from international agencies. As we saw earlier, this borrowing is called “*portfolio investment*”. The borrowing from international agencies, especially by developing countries, often requires significant changes in policy by the borrowing country --- bringing into question national sovereignty. And **foreign direct investment (the owning and controlling of companies in other countries)** has also become much more extensive and less restricted. American companies produce all over the world just as companies from many countries are producing in the United States.

A third manifestation of globalization is increase in labor migration. Migration of people from one country to another in search of higher wages is not new at all. In fact, a higher percent of the American population was foreign born 100 years ago than is true today. Yet immigration into the United States, especially from Mexico, Central America, and Asia increased greatly after 1970. Immigration is also significant for some of the European countries. Policies related to immigration have been a source of considerable controversy. We will not consider labor migration in this chapter. (See my Microeconomics, Chapter 26)

And a final manifestation of globalization is the increase in regional integration. This includes the North American Free Trade Agreement (NAFTA) and the possibility of a Free Trade Area of the Americas (FTAA). It includes the integration of the formerly socialist countries into the world economy. And most especially, it includes the integration of Western European countries into the European Union. We will not consider regional integration here.

Globalization has involved the spread of the ideas of free market capitalism around the world. Indeed, to participate in the global economy, countries must adopt the principles of free market capitalism. Countries may choose not to participate. But those that make this choice have typically paid a high price in terms of inadequate economic growth. The battle of ideas between socialism and free market capitalism is over. There is only one prevailing set of ideas in the global economy. One journalist refers to these ideas as the “**Golden Straightjacket**”. Upon adopting these ideas, a country's economy grows but the country's independent political life shrinks (that is, its policies are chosen for it by the principles of free market capitalism that necessitate a smaller role for government).

The increased globalization that came after 1980 has some important causes. **One cause is the technological revolution** --- computers, telecommunications, miniaturization, compression,

and digitization --- and the spread of this technological revolution to most countries of the world. This technological revolution allows production to take place all over the globe. The result is to drastically reduce the barriers to entry into almost any business, greatly increasing competition. **A second cause has been the changes in the world of international finance.** From once being dominated by commercial banks, a myriad of new institutions now participate in the world of international finance. This change created the enormously fast shifts of portfolio investment among the countries of the world. **A third cause has been the revolution in information --- the vast amounts of information available to people all over the world and the low cost of gaining access to that information.** While the globalization of the late 19th century was the result of falling costs of transportation, the globalization of the late 20th century was resulted from the falling costs of information. The information revolution both changed the way that companies are managed, allowing production to take place all over the globe, and brought the companies much closer to their customers. **A final cause of increased globalization has involved reductions or elimination on previously existing restrictions on trade, on foreign direct investment, and on portfolio investment.**

The Exchange Rate System After Bretton Woods

The Bretton Woods system collapsed in 1973. The system that followed it can be called a ***“managed float”***. Basically exchange rates were free to go to whatever level would be set by demand and supply. However, as they deemed necessary, countries would intervene in the foreign exchange market to change the exchange rate that would have been set by the market. Countries (actually their central banks) would buy their own monies in the foreign exchange market in order to increase its value. Or they would sell their own monies in the foreign exchange market in order to decrease its value. There were no rules as to when a country could or should do this. As a result, this system has been called ***“limited anarchy”***. Because of various problems that resulted from this anarchy, the governments of the largest trading countries tried to create some order.

The situation from 1980 to 1985 was described earlier. There it was noted that high American real interest rates (combined with an expectation that the American dollar would appreciate) led to an appreciation of the dollar. The exchange rate of the dollar rose by 78.7% between January of 1980 and January of 1985. American exports were badly hurt while American imports soared. The strong dollar was also not welcomed by foreign countries because it hindered their attempt to reduce inflation rates. (The strong dollar raised the prices of their imports and also provided a reason for workers in the foreign countries to demand higher wages.) In September of 1985, the finance ministers (Secretary of the Treasury in the United States) and the central bank governors of the Group of 5 met at the Plaza Hotel in New York. (The Group of 5, or G-5, included the United States, Japan, Germany, France, and Britain.) In the so-called ***Plaza Accord***, they agreed to depreciate the American dollar. This means that all five countries would sell dollars in the foreign exchange markets so as to reduce its value. Indeed, from that time until early 1987, the dollar fell 28.5% in value. Then, in 1987, the members of the Group of Seven (G-7) countries met at the Louvre in Paris (the G-7 includes the G-5 countries plus Canada and Italy.) At the so-called ***Louvre Accord***, they agreed that the dollar should no longer be depreciated. Instead the dollar exchange rate should remain stable. (This meant that the central banks would buy or sell in foreign exchange markets if the dollar exchange rate changed by more than 5% in either direction.) And indeed, the dollar exchange

rate changed very little on average between 1987 and 1995 (although it did vary beyond the prescribed 5% band on several occasions)

Test Your Understanding

Draw the demand and supply curves for British pounds as of 1985. Label the exchange rate as P_1 . Then, show on the graph the results of the decision made at the Plaza Accord in 1985. What was the Federal Reserve Bank in New York committed to do? Show this on the graph. What was the Bank of England committed to do? Show this on the graph. Finally show the resulting depreciation of the dollar.

The Arguments For and Against Globalization

As was stated, the western world became much more “global” in the period from 1870 to 1930. However, from 1930 through 1960, this “globalization” was reversed. If you were taking this course in the early 1960s (as I did), you would study the United States only. Relationships between the United States and the rest of the world would be considered very little, as they were not very important to American economic life. As we have seen, all of this has changed since the 1960s. Unlike the period of 1870 to 1930, the “globalization” of the recent period has included most of the countries of the world – capitalist and former communist countries, northern and southern countries, rich and poor countries. This new “globalization”, a result of both the falling costs of transportation and communication and of the removal of restrictions on trade and movements of capital, has created a very vocal controversy. From both the political left and the political right, there has been loud opposition. As you saw in the questions above, there was strong opposition to the North American Free Trade Agreement (NAFTA) from both the political left and the political right. The protests at the annual meetings of the World Trade Organization (WTO) or Finance Ministers of the G-7 countries have occasionally turned violent. On the other hand, opening to the new global economy is strongly supported by moderate Democrats and by Republicans. Indeed, most economists are in favor of policies that open the world to greater international trade and greater foreign direct investment. Here, we will consider the arguments on both sides of this important issue. After reviewing the arguments, you will be able to form your own opinions.

But before we review the arguments, we need to be sure that we do not overstate the amount of globalization that has already taken place. Certainly, international trade and foreign direct investment are more significant than they were thirty years ago. But **national boundaries are still very significant**. In a recent study of Canada, a country very open to trade and foreign direct investment, it was found that dealings between the Canadian provinces were more significant than those between Canada and the United States. For example, companies in Vancouver British Columbia were more likely to deal with companies in Toronto Ontario (2,000 miles away) than with companies in Seattle Washington (150 miles away). In it possible that in the future we will see the countries of the world as open as we see today between the fifty American states. But that amount of openness does not exist as of yet (2002).

The Case for Globalization

Those who are supportive of globalization tend to make the following arguments. **The first argument focuses on foreign direct investment**. The rich nations have large amounts of capital. With so much capital, the returns from investing in capital are not high. But the poor nations have limited capital. With scarce capital, the returns from investing in capital goods are

much higher. *In a global economy, people in the rich countries will invest in the poorer countries where their returns are greater. Those people in the richer countries will benefit from the higher returns. But the people in the poorer countries will also benefit from having more capital, better technology, more jobs, and higher incomes* (due to the increase in the productivity of the workers in these poorer countries that results from the increased capital they have to work with and from the improved technology that the capital brings).

The second argument focuses on international trade. *The increase in international trade benefits consumers in all of the trading countries.* The consumers have more products available to them, enhancing their ability to choose. And with more goods available, the prices of the consumer goods they buy should be lower.

Third, *the increase in international trade benefits those producers in all of the trading countries that produce for export.* These producers, of course, gain from international trade by having a wider market for their products. *But the increase in the size of the market may also allow these companies to produce their products at a lower cost.* This ability to produce at lower cost should be passed on to consumers as lower prices. (The ability of larger companies to produce cheaper than smaller companies is called “**economies of scale**”.)

Fourth, the increase in international trade would seem to hurt those companies that produce products that compete with the imported products. But in the longer run, the competition from imported products may be good for them. *The competition may force these companies to learn how to produce more efficiently. It may also force them to learn how to produce better products.* The increased efficiency of the American automobile companies and their ability to produce better automobiles when confronted with competition from Japanese automobile companies represents an important example of this point.

Fifth, *greater integration between countries accelerates the transfer of technology between countries.* Gaining access to the most modern technologies is an extremely important way for poorer countries to become richer. So, for example, the shifting of some of the production of computers and computer-related parts to Taiwan also brought computer technology to Taiwan. With access to this new technology, Taiwan is a much richer country than it was three decades ago.

Sixth, *many of the complaints made against globalization don't really have anything to do with globalization.* One example is the decline in the relative wages of American blue-collar workers. Not only have their wages declined relative to other American workers but also the proportion of American workers who work as blue-collar workers in manufacturing has declined. However, these trends have been going on throughout the 20th and 21st centuries. They began long before “globalization” became an issue and have many other causes.

Finally, *some see great non-economic benefits from globalization. For example, it is claimed that globalization makes the costs of going to war much higher for both countries that might be involved.* While not ending wars, it does create incentives for countries to avoid war making. One journalist notes that no two countries that have a McDonalds have ever gone to war since each got its McDonalds! Or more seriously, since the beginning of the creation of a free trade area in Europe, France and Germany, traditional enemies, have not gone to war.

The heart of the argument then is that globalization leads to a richer world --- richer for all of the countries that are integrated into the global economy. Indeed, the evidence seems to show that those poor countries that have had the greatest economic growth are the most integrated into the global economy. Not only have many of the relatively open countries grown

economically, their standards of living actually converged with those of the richer countries over the period 1970 to 1989. China, India, and Mexico --- countries that doubled their ratio of trade to GDP and countries that contain 3 billion people --- experienced an increase in GDP per capita of 5% per year in the decade of the 1990s. On the other hand, *those poor countries that are not integrated into the global economy, especially in Africa and the Middle East, have had little economic growth*. In these countries, the poverty rate has increased. (According to one study, being an open economy for twenty years brought about a cumulative 50% increase in the standard of living compared to being a closed economy, other things the same.)

The Case Against Globalization

As noted earlier, those who oppose globalization are found on both the political right and on the political left. Generally, they oppose agreements to expand trade and lower tariffs. They also oppose policies that remove restrictions to foreign direct investment. Some of their arguments include the following.

First, they argue that, as we have noted above, opening trade benefits certain people in a country but harms others. For the United States, those benefited include those with high skills. Those harmed include the less skilled and less educated – the most disadvantaged. *Therefore, globalization has contributed to the increase in inequality in the United States.* This increase in inequality has contributed to many adverse social effects in the United States, including a higher incidence of crime, a more generally hostile and aggressive society, a weakening of the sense of community, and so forth. The use of resources to control crime and aggressiveness, instead of to produce new goods and services, reduces the productive potential of the economy. Inequality may also reduce the economy's productive potential by discouraging trust and the ability to co-operate in situations in which there is conflict. In this argument, inequality has increased significantly in most countries that have participated in the global economy. For example, in Chile, the Gini Index rose from 0.46 to 0.58 between 1971 and 1989 as it opened to international trade and investment. (The Gini Index is a number between 0 and 1 to measure inequality. The higher the number, the greater is the inequality.)

The period of globalization has also been associated with increased inequality between the rich and the poor countries. The richest countries had 44 times the income of the poor countries in 1973 and 72 times in 1992.

Second, opponents of globalization see increased foreign direct investment by American corporations as a means of escaping American laws. The use of foreign direct investment to avoid American taxes has already been noted. **It is also argued that American corporations use foreign direct investment to escape American labor laws.** In some developing countries, these corporations are able to pay a wage much below the minimum wage in the United States. And they may also be able to create working conditions that would definitely be illegal in the United States (called “sweatshop” conditions). The production of clothing and shoes in Asia by companies such as Nike and Reebok are often cited as examples. **Foreign direct investment is also used by corporations to reduce the influence of American labor unions. In addition, American corporations may use foreign direct investment to avoid American environmental laws.** In some countries, production methods can be used that would not

be allowed in the United States. (As noted above, the extent of the use of foreign direct investment to circumvent American labor or environmental laws is quite small.)

Third and related to the second argument, opponents of globalization argue that it reduces the ability of a country to enforce its own laws. There are many examples of this claim. For example, the United States has a law banning tuna that is harvested in a manner that sacrifices dolphins. Mexico charged that this law was a violation of the trade agreement in that its purpose was to restrict Mexican tuna sales in the United States. The World Trade Organization adjudicates this charge. It cannot force the United States to change its laws. But it can enact a financial penalty on the United States if it sides with Mexico. Another example involves trucks from Mexico coming into the United States. Under the trade agreement, truck companies in either country can operate freely inside the other country. But the United States charges that Mexican trucks do not meet American safety laws or American pollution standards. The trade agreement reduces the ability of the United States to keep these trucks off its roads. A similar example involved the avocado growers of San Diego County. They claimed that avocados from Mexico would bring in pathogens that would cause disease to the avocado plants in California. Mexico claimed that this was only a ploy by California avocado growers to keep Mexican avocados out of California. The trade agreement forces the burden of proof on to the United States. ***One political economist has argued that globalization is simply inconsistent with a world in which nation states are significant and in which many countries are political democracies.*** Either globalization will have to be restricted, he argues, or the sovereignty of countries becomes limited.

If an economy is closely integrated with other economies, it may also lose much of its ability to make monetary policies and fiscal policies in its own interests. Indeed, this was one of the problems that led to the demise of the Bretton Woods System. As one example, Argentina completely gave up its monetary policy by anchoring its money to the American dollar. The result has been considerable unemployment in Argentina, unemployment that the Argentine government can do nothing to reduce.

A fourth and related argument is that globalization generates the spread of economic problems from one country to another. Countries have less ability to isolate themselves from problems that begin in other countries. Take, for example, the Asian financial crisis of 1997. This crisis spread throughout the countries of Asia. One country that was largely spared was China. The reason China was spared is that, while China had indeed opened itself to trade, it had restricted the buying or selling of its foreign exchange for speculation purposes. More “globalized” countries would not be allowed to do this.

In the new global economy, the main anxiety comes from the fear of rapid change caused by economic and technological forces that cannot be seen or controlled --- fear that one’s workplace or community can be changed at very short notice. ***Because globalization increases a country’s exposure to risk coming from other countries, it increases the demand for social insurance programs (such as unemployment benefits, welfare, and so forth).*** It has been consistently found that, because of this demand for social insurance programs, ***where trade is a higher percent of GDP, governments tend to be bigger.*** Dealing with the enhanced anxiety is one of the challenges of the new global economy.

Fifth, opponents of globalization argue that the period during which the world experienced the greatest increase in globalization (after 1980) has not been a good period for the poor and medium income countries of the world. For example, Mark Weisbrot et. al. of the Center for Economic and Policy Research compared the period 1980 to 2000 with that of 1960 to 1980 (a period of less globalization) for five groups of countries. They found that **the poorest group of countries (those with a per capita GDP of \$375 to \$1,121 in 2000 dollars) experienced negative growth in 1980 to 2000**, after slow positive growth in the preceding period. Those countries with per capita GDP of \$1,121 to \$1,826 (in 2000 dollars) had their growth rates fall from 2.1% per year to 0.8% per year. And those with per capita GDP of \$1,826 to \$3,364 (the United States per capita GDP was \$22,331) had their growth rates fall from 3.6% to less than 1%. They also found that **the period of more rapid globalization saw less improvement in life expectancy, reducing infant mortality, and literacy** than occurred in the preceding period. This does not prove that globalization alone caused this worsening situation. But it could give pause to those who support globalization.

The argument given by those who support globalization is that those countries that have been the most “globalized” have had the greatest growth on per capita GDP and the greatest reduction in poverty. But a closer look at the evidence reveals that **there are very few highly “globalized” countries that have had economic success. These include China and India**, home to about one quarter of the world’s population and half of the world’s poor people. Vietnam and Uganda might also be included on this short list. *Most of the economies of the other poor countries of the world did not do well at all during the period of globalization.* An examination of the economic history of those countries that were once poor but have become more developed (Japan, Korea, Taiwan) reveals that they had many restrictions to international trade and foreign direct investment. *Latin America seems to be the region that has become the most “globalized”. In the 1990s, it suffered slow economic growth rates, rising inequality, and significant volatility.* Most of the countries that would be considered to have the most successful economies today, including the United States, started their economic growth with very high tariff rates. These tariff rates were only lowered after the economies became successful. **Finally globalization is opposed by people who distrust market economies in general. They argue that markets erode the relationships that form people into communities.** With a global economy, people move around too much to form stable communities. It becomes much harder to create policies to specifically benefit all of the people in the community. To understand this, consider the problems that Americans have had with the large number of immigrants and with the increased presence of Japanese companies. **They also argue that globalization acts to homogenize peoples and cultures** --- known as a Coca Cola world. The value of the possible loss of cultural diversity is incalculable. **Finally, they argue that it is very alienating for so many people around the world to feel so out of control of their own lives**, to have their lives controlled by a large number of faceless, nameless money managers, corporate executives, and so forth from countries all over the world.

Test Your Understanding

1. “Look closer at the Chinese experience and you discover that it is hardly a poster child for globalization. China’s economic policies have violated virtually every rule by which the proselytizers of globalization would like the game to be played.”

Read the Chapter on International Economic Relations in the Economy of China on my web page. Then briefly describe how “globalized” the Chinese economy has been during its period of economic success. Consider the ways it became integrated into the global economy and the ways it did not. How accurate is the quote above?

2. “Argentina ... tried harder than any country to endear itself to international capital markets. The Argentine strategy ... was solidly grounded in the theories expounded by U.S. based economists”.

Get on the Internet. As a group, find some articles and data on the Argentine economy. To what extent did it pursue policies of globalization? (That is, how accurate is the quote?) Document the economic success or failure of the Argentine economy during the period of globalization.

3. Answer the same questions as in Question 2 for Mexico. You can get some information by reading my sections on trade and foreign direct investment under The Economy of Mexico on my web page.

4. There is a current proposal for a Free Trade Area of the Americas (FTAA). Go on the Internet and find exactly what this is intended to be. Then, if you were a supporter of the Free Trade Area of the Americas, what arguments would you make? And, if you were an opponent of the Free Trade Area of the Americas, what arguments would you make?

Conclusion

Globalization involves an increase in international trade, an increase in portfolio investment, and an increase in foreign direct investment as restrictions against these are lowered or removed. It has been argued that increased globalization is inevitable. Indeed, falling costs of transportation and communications provide good evidence for this argument. Trade, which has gone on for thousands of years, is hardly likely to be stopped. There are many benefits to be achieved from this increase in globalization. These have been documented above. No country that has a successful economy today has cut itself off from international trade or from direct foreign investment. **Virtually all countries that have experienced economic growth over time have also experienced a rise in the share of foreign trade as a percent of GDP.** But there are also many problems that have resulted --- again documented above. **Indeed, no country that has a successful economy today has opened itself completely to international trade and to direct foreign investment.** Instead, this opening was done slowly. One supporter of globalization put it this way: “ I am .. a believer that a bet on increased international economic integration is our best hope for rapidly moving to a truly human world... But I think that this bet in increased international economic integration is a *bet*. It is not a sure thing.” How do we change the rules of the global economy to realize more of the benefits and incur fewer of the costs? How do we preserve a sense of identity, home, and community while still participating in, and gaining the benefits of, the global economy? These are likely to be some of the most important questions of the 21st century.

Practice Quiz for Classes 29 and 30

1. Which of the following would have **increased** the demand by Americans for French Francs (i.e. shift the demand to the right)? (The French have used Euros instead of French Francs since 1998.)

- Americans like American-made wine more than French wine
- More Americans decide to travel to France this summer
- The United States is in a recession
- France has a higher inflation rate than does the United States

2. Which of the following would have increased the **supply of French Francs** on foreign exchange markets (i.e., shift the supply to the left)?

- The United States has a high rate of inflation
- Real interest rates rise in the United States
- France experiences a recession
- General Motors decides to build a new factory in France

3. Which of the following is an example of **portfolio investment**?

- An American travels to France
- An American opens an account at a bank in Canada

- b. An American buys an automobile made in Japan d. Americans build a new factory in Mexico
4. In one year, the exchange rate was \$1 equaled 125 Japanese yen. Two years later, the exchange rate was \$1 equaled 80 Japanese yen. Which of the following is true?
 a. the dollar appreciated and the yen depreciated c. both the dollar and the yen appreciated
 b. the dollar depreciated and the yen appreciated d. both the dollar and the yen depreciated
5. If **interest rates rise in the United States** and are much higher than in Japan,
 a. the dollar will appreciate and the yen will depreciate c. both the dollar and the yen will appreciate
 b. the dollar will depreciate and the yen will appreciate d. both the dollar and the yen will depreciate
6. Under the Bretton Woods System, which of the following became a **reserve currency**?
 a. Gold b. the American Dollar c. the British Pound d. All of the above
7. The **international agency** that would lend foreign monies to countries that needed them is called
 a. the UN b. the World Bank c. the IMF d. NATO
8. Under the Bretton Woods System, an official **decrease** in the international value of a country's money was called
 a. appreciation b. revaluation c. devaluation d. diminution
9. Under the Bretton Woods System, if there were **inflation** in the United States,
 a. Gold would leave the United States c. Britain would sell American dollars
 b. The United States would sell British Pounds d. The dollar would depreciate
10. Which of the following was true about the **Bretton Woods System**?
 a. It imposed monetary discipline on the countries involved
 b. It maintained fixed exchange rates
 c. It was subject to speculation
 d. All of the above
11. Globalization has been defined as including
 a. an increase in international trade
 b. an increase in foreign direct investment
 c. an increase in labor migration
 d. all of the above
12. Since the early 1980s, the United States has experienced continual
 a. trade deficits b. trade surpluses c. current account surpluses d. trade balance
13. A situation in which the exchange rate is allowed to change according to demand and supply, but is influenced by a country's central bank, is called
 a. a fixed exchange rate b. a flexible exchange rate c. a managed float d. an influenced exchange rate
14. Those who believe that globalization is good would make which of the following arguments?
 a. Globalization leads to a richer world
 b. Globalization spreads technological advances to the poorer countries
 c. Globalization enhances competition, making all companies more efficient
 d. All of the above
15. Those who believe that globalization is bad would make which of the following arguments?
 a. Globalization increases equality in the United States
 b. Globalization makes it easier for the United States to conduct its own monetary and fiscal policies
 c. Globalization makes it easier for companies to do things that would be illegal under American laws
 d. All of the above