International Finance

CHAPTER 18

CHAPTER OUTLINE

In the last 50 years business has become increasingly international.[1] The change has occurred in two distinct ways. First, we do more business with other countries than ever before. In 1960, imports and exports were 3% and 4% of gross domestic product (GDP), respectively. By 2005, imports were about 13% of GDP, while exports were about 7%.

Second, the nature of international business has changed. In 1960 doing business with a foreign country generally just meant importing and exporting goods. Now, international business as often as not implies a **direct investment** in facilities and equipment in another country and the operation of a full-scale business there. Companies that have divisions and branches in other countries are known as **multinational corporations**, abbreviated MNCs.

Financial markets are also increasingly international. Fifty years ago it was very unusual for an investor to buy the stock of a foreign company. Today people make **portfolio investments** in foreign stocks and bonds all the time.

International business is an increasingly large part of commercial activity in the United States. Virtually all companies of any size have some international dealings. It's clearly important, therefore, that we understand the basic financial principles of doing business with companies from other countries. Such business has all of the problems and challenges of operating domestically but includes several additional complications and risks. We'll begin by examining exchange rates in some detail.

1. The term "global" is often used to describe business's current international character. We'll discuss the broad concept of globalization later in the chapter.

The volume of **international business** is steadily **increasing** worldwide.

International business has changed from import/export to **operating full-scale businesses** in other countries.

Building a business in another country is a **direct investment**, while buying foreign securities is a **portfolio investment**.

Currencies are traded on **foreign exchange markets**.

An **exchange rate** states the price of one currency in terms of another.

CURRENCY EXCHANGE

Companies operate and expect to be paid in the currency of the countries in which they're located. That means anyone wanting to buy from a firm in another country has to acquire some of that country's currency first.

For example, if a U.S. company that operates department stores wants to buy expensive wool sweaters from a British manufacturer, it has to pay the bill in British pounds, not U.S. dollars. But the American firm has only dollars, not pounds. Clearly, to make the purchase, it has to *exchange* some dollars for pounds. We also say the firm *buys* pounds with dollars.

THE FOREIGN EXCHANGE MARKET

The purchase is accomplished in the **foreign exchange market**, which is organized for the purpose of exchanging currencies.[2] The foreign exchange market operates much like other financial markets, but it isn't located in a specific place like a stock exchange. Rather, it's a network of brokers and banks based in financial centers around the world. Most commercial banks are able to access the market and provide exchange services to their clients.

EXCHANGE RATES

Currencies are traded at an **exchange rate** that, in effect, is the price of each currency in terms of the other. In our illustration, the American firm needs to know how many pounds can be purchased for a dollar. That lets it calculate how many dollars it will need to pay the British firm's price in pounds.

The essence of the foreign exchange market is a table of exchange rates like Table 18.1. The table shows two reciprocal rates for each currency. For the moment ignore the *forward* rates in some currencies; we'll get to those shortly. Rates in the first column are called the *direct quote* and show the number of U.S. dollars required to buy one unit of the foreign currency. Rates in the second column are known as *indirect quotes* and represent the inverse relationship, how many units of the foreign currency it takes to buy one U.S. dollar. The direct and indirect quotes are reciprocals of one another.

Suppose the American company in our example wants to import 500 sweaters that cost a total of 35,000 pounds, written as £35,000 (where £ is used like the U.S. $). Noting that British currency is listed under U.K. for United Kingdom, the exchange rate table indicates that £1 is worth $1.8507, so the American firm will have to exchange

$$£35{,}000 \times \$1.8507/\text{pound} = \$64{,}775$$

to pay for the sweaters. In other words, the cost of the purchase is expected to be $64,775. Alternatively, the £35,000 could be divided by .5403 pounds per dollar to reach the same result (within rounding error).

The Effect of Exchange Rates on Prices and Quantities

It's important to notice that the exchange rate is part of the cost of product to a firm importing foreign goods. To illustrate, let's continue the sweater example we began in the last section. The expected cost per sweater at the time of ordering is

$$\$64{,}775/500 = \$129.55$$

2. The term **foreign exchange** is also used as a noun to refer to the foreign currency itself. We say a nation that wants to buy foreign goods needs foreign exchange.

Table 18.1

Exchange Rates, July 24, 2006

	Direct Quote ($ per unit of foreign currency)	Indirect Quote (foreign currency units per $)
Argentina (Peso)	.3247	3.0798
Australia (Dollar)	.7551	1.3243
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Brazil (Real)	.4566	2.1901
Canada (Dollar)	.8764	1.1410
1-month forward	.8772	1.1400
3-months forward	.8790	1.1377
6-months forward	.8817	1.1342
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China (Renminbi)*	.1252	7.9876
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Denmark (Krone)	.1692	5.9102
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Israel (Shekel)	.2245	4.4543
Japan (Yen)	.008563	116.78
1-month forward	.008603	116.24
3-months forward	.008674	115.29
6-months forward	.008785	113.83
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Mexico (Peso)	.0918	10.8932
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U.K. (British Pound)	1.8507	.5403
1-month forward	1.8520	.5400
3-months forward	1.8544	.5393
6-months forward	1.8578	.5383
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Euro	1.2628	.7919
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*The Chinese renminbi is also called the *yuan*. *Renminbi* literally means "people's money." As of late 2003, the currency is not fully convertible. (See page 720.)

Source: *The Wall Street Journal*, July 25, 2006.

The exchange rate is **part of the cost** of product paid by an **importing** firm.

plus shipping and handling. Hence, a reasonable retail price would probably be about $259 (assuming roughly a 100% retail markup).

But what would happen if the exchange rate was less favorable? Suppose, for example, the direct quote is $2.20 per pound. Then the expected cost of the shipment would be

$$£35{,}000 \times \$2.2000/\text{pound} = \$77.000$$

a single sweater would cost

$$\$77{,}000/500 = \$154.00$$

and a reasonable retail price might be about $308.

In other words, the exchange rate has an influence on the domestic prices of imported goods. The more a foreign currency costs, the more expensive that nation's products are when offered to American buyers regardless of their cost in the country of origin.

Exchange rates **affect the quantity of foreign product demanded** in an importing country.

It's an economic fundamental that when a product is more expensive, people buy less of it. For foreign goods that means higher prices due to less favorable exchange rates lead to decreased imports. In our illustration, the $2.20 pound implies a $49 higher retail price for a sweater. The American importer might well feel that the product won't sell at such a price and may order fewer than 500 or forgo the order entirely. Conversely, a more favorable exchange rate makes foreign products cheaper in the United States, causing larger quantities to be demanded leading to more imports. We'll come back to this important concept later.

Cross Rates

http://

For a listing of stock exchanges and major companies worldwide visit **http://www.euroyellowpages.com/bizlink/wldstock.html**

Given the information in the table, it's possible to develop an exchange rate between any two currencies without going through dollars. These are called *cross rates*. For example, the exchange rate between Brazilian reals and British pounds can be calculated from the direct quote column of Table 18.1 as follows.

$$\frac{1.8507 \text{ dollars per pound}}{.4566 \text{ dollars per real}} = 4.0532 \text{ reals per pound}$$

CHANGING EXCHANGE RATES AND EXCHANGE RATE RISK

Exchange rates are constantly changing, sometimes quite rapidly and by significant amounts. We'll get into why they change in a little while, but first it's important to understand the implications of the fact that they do change.

Moving exchange rates give rise to **exchange rate risk**, a very important facet of international business. Exchange rate risk means that a firm can make or lose money on an international transaction because of rate movements aside from the business deal itself.

For example, imagine that the American company we've been talking about ordered its 500 sweaters on July 24, 2006 when the exchange rate was $1.8507 per pound. At that time it expected to pay the $64,775 we calculated earlier for the shipment. Also suppose the purchase is part of a contract that calls for payment three months after the order is placed.

When the U.S. firm returns to the foreign exchange market three months after ordering, the pound rate is unlikely to be the same. For the sake of illustration,

Exchange rate risk is the chance of gain or loss from exchange rate movement that occurs **during** a transaction.

suppose the direct quote has risen to $2.2000 per pound. That means paying the £35,000 bill will take

$$£35{,}000 \times \$2.2000/\text{pound} = \$77{,}000.$$

That's $12,225 more than was expected at the time the order was placed. The implication is that the profit made on the U.S. sale of the sweaters will be reduced by $12,225 just due to the fluctuation in the exchange rate.

Of course, the rate could have gone the other way. In that case, more profit than expected would be made. The point is that exchange rate variation throws an element of risk into the American firm's business that wouldn't be there if the sweaters were purchased domestically.

Transactions subject to exchange rate risk as well as the companies that do such transactions are said to have exchange rate *exposure*.

Spot and Forward Rates

The exchange rates we've described so far are *spot rates*, meaning that they're good for immediate, "on the spot" transactions.[3] Notice that the major currencies also have quotes on *forward rates* for one, three, and six months. These rates are quotes for delivery of the currency the indicated number of months in the future. Notice that they're somewhat different from the spot rates. The difference reflects the movement that foreign exchange brokers expect in the future relationship between the two currencies.

Forward rates quote prices for **future delivery** of currencies.

For example, Table 18.1 shows that on July 24, 2006, the British pound was expected to become slightly more valuable in terms of dollars during the next six months. To see this, notice the increase in the direct quote from $1.8507 to $1.8578 which says that it will take a little more U.S. money to buy a pound in the future. The indirect quote shows the same thing looking from the dollar to the pound; a dollar is expected to buy slightly less pounds in the future, because the indirect quote falls from .5403 to .5383 pounds per dollar.

When a foreign currency is expected to become more valuable in the future, as in this case, the forward currency is said to be selling at a *premium* over the spot currency. In the reverse situation, when a future dollar will buy more of the foreign currency than a present dollar, the forward currency is said to be selling at a *discount*.

The Terminology of Exchange Rate Movements

When a currency becomes or is expected to become more valuable in terms of dollars, we say that it is becoming *stronger* or *rising* against the dollar. The same idea can also be expressed by saying that the dollar is becoming *weaker* or *falling* against the foreign currency. On July 24, 2006, the pound was expected to strengthen against the dollar, which was expected to weaken against the pound.

Hedging with Forward Exchange Rates

As we've said many times, people avoid risk whenever they can, and exchange rate risk is no exception. Most companies prefer to operate without it and are willing to pay a premium to do so.

The forward market provides a way to eliminate foreign exchange risk from international transactions with a process called **hedging**.[4] A firm that knows it will need

3. Delivery on spot transactions is made in two days.
4. "Hedge" is a general term applied to an arrangement that reduces or avoids risk.

Exchange rate risk can be eliminated by **hedging** with a forward contract.

foreign currency at some time in the future can lock in an exchange rate by contracting with a bank for future delivery at the appropriate forward rate.

In our illustration, the American firm can negotiate a three-month *forward contract* for pounds with a bank at the time it places the sweater order. The three-month forward rate is $1.8544 per pound, which is a little more expensive than the spot rate (this isn't always the case; as often as not the forward rate is lower), so the shipment will cost

$$£35{,}000 \times \$1.8544/\text{pound} = \$64{,}904$$

Once the forward contract is written, exchange rate risk is eliminated from the transaction, as £35,000 will be delivered in three months for $64,904. The firm is said to have *covered* its obligation with a *forward market hedge*. Forward contracts can be written between any two currencies, for any amount, and for any length of time. There is a cost, however, because brokers and banks charge fees for the service.

The forward market enables companies to transfer foreign exchange risk to professionals who are in the business of bearing such risks.

EUROPEAN CURRENCIES IN THE TWENTY-FIRST CENTURY—THE EURO

On January 1, 2002, 12 European countries adopted a common currency known as the **Euro (€)**. A single currency was expected to help to solidify Western Europe into an economic force better able to compete with the United States and Japan. It also was expected to promote trade between the countries sharing the currency because the flow of goods between them will no longer be influenced by exchange rate fluctuations.

The 12 participating nations are Austria, Belgium, Ireland, Italy, Finland, France, Germany, Greece, Luxembourg, the Netherlands, Portugal, and Spain. Great Britain, conspicuous by its absence, has not gone along with the idea.

SUPPLY AND DEMAND—THE SOURCE OF EXCHANGE RATE MOVEMENT

Simply stated, an exchange rate is the price of a unit of foreign currency. For example, Table 18.1 tells us that on July 24, 2006, a British pound cost $1.8507.

We can think of the pound as a commodity offered for sale in a free market. Its price, like that of any commodity, is determined by the interaction of supply and demand, traditionally represented by supply and demand curves like those in Figure 18.1(a). The intersection of the two curves determines the market price of the commodity—in this case the direct quote exchange rate.

Figure 18.1(b) shows the supply and demand picture from the British side where the dollar is a commodity purchased with pounds. In this view the intersection is the exchange rate in terms of pounds per dollar, the indirect quote.

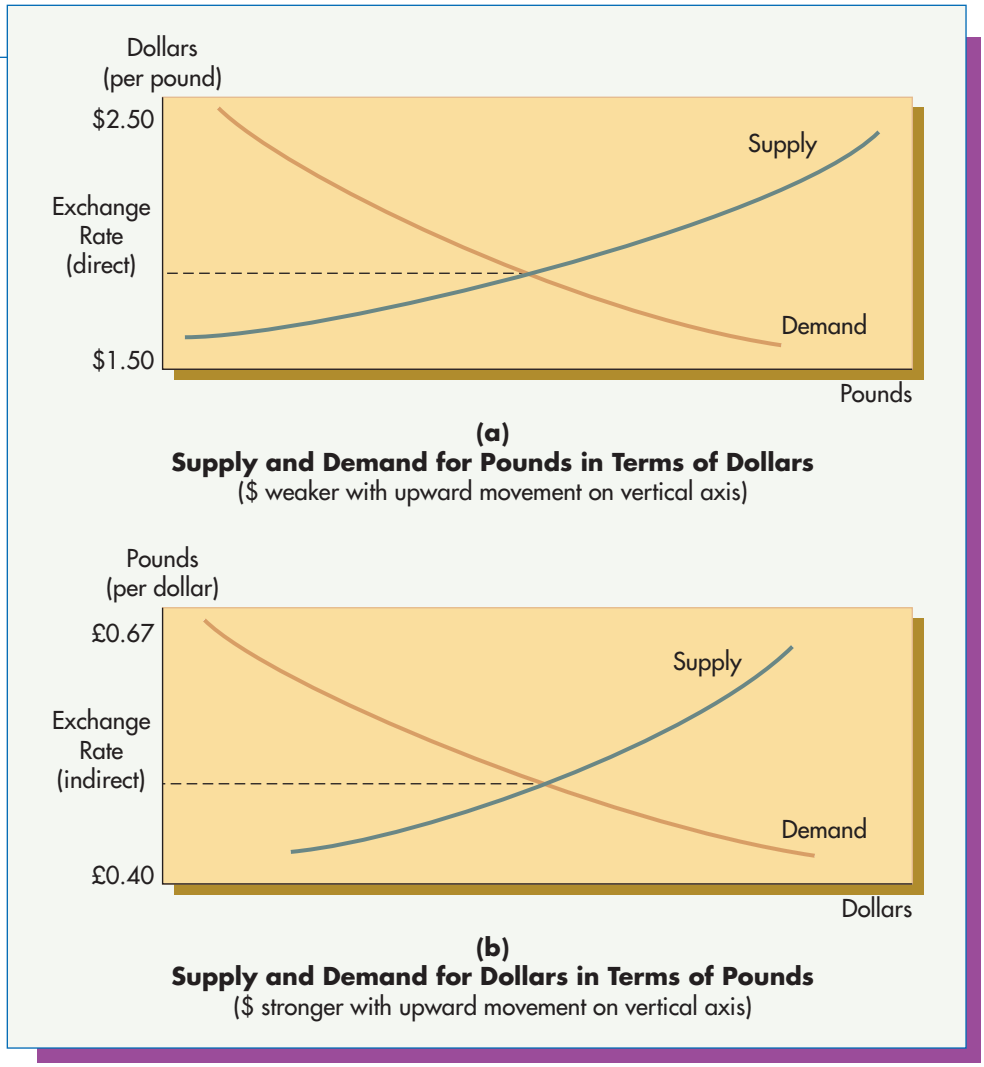
The Origins of the Supply and Demand for Foreign Exchange

The demand for and the supply of foreign exchange between any two nations stem primarily from trade and the flow of investment capital between those nations. First let's look at trade.

When companies in the United States want to buy things (import) from another country, say Britain, they also need to buy the currency to make their purchases. This sets up a demand for pounds. At the same time, British companies that want to buy American goods have to buy dollars with pounds. This sets up a supply of pounds.

Figure 18.1

Foreign Exchange: British (U.K.) Pounds and U.S. Dollars



The supply/demand for foreign exchange is **derived** from each country's **demand** for the other's **goods** and investments.

Now look at Figure 18.1(a). As the direct exchange rate gets higher on the vertical axis—that is, as a pound becomes more expensive in terms of dollars—British goods get more expensive in the United States. That leads to a reduction in the quantity of those goods demanded by U.S. consumers and consequently to a reduction in the need for pounds. This is reflected by the downward slope of the demand curve in the diagram.

At the same time, moving up on the vertical axis of Figure 18.1(a) means a British pound buys more U.S. dollars. That makes U.S. goods cheaper in England, so people are willing to buy more of them. British importers therefore would like to buy more dollars with pounds, which increases the available supply of pounds. This is reflected by the upward slope of the supply curve.

Capital flows work in exactly the same way. A strong dollar makes British investments cheaper, so people want more of them, leading to a big demand for pounds. A weaker dollar makes American investments cheap for the British, which leads to a demand for more dollars and a larger supply of pounds.

In summary, the supply and demand curves that establish exchange rates are *derived* from each country's demand for the other country's trade goods and investments.

Why the Exchange Rate Moves

Movement in exchange rates results from shifts in the supply and demand curves for foreign exchange. Because the curves arise primarily from the demand within each country for the other's products and investments, anything that changes those demands affects the curves for currency. Let's examine several such changeable factors.

Preferences in Consumption

Exchange rates move in response to **changes in the demand for imported goods** within the two countries.

Anything that makes one country's products more or less desirable to the other's population will move the curves. For example, for many years Japanese and certain European cars have been perceived as higher quality, and more cost-effective than American cars. As a result, Americans buy increasing numbers of foreign cars. This influence tends to shift the demand curve for Japanese and German currencies to the right.

Government Policy

Governments can actively encourage or discourage imports by imposing quotas, charging tariffs and duties, and making import licenses difficult to obtain. Foreign investment can be similarly encouraged or made difficult. For example, some countries prohibit foreign ownership of a majority interest in companies operating within their borders. That makes foreign direct investment less attractive.

Economic Conditions

A number of economic conditions influence the foreign exchange market. Here are a few.

1. In general, more prosperous economies demand more imports than economies undergoing recession.
2. Economies that are growing rapidly have more investment opportunities than those that aren't and therefore attract more foreign investment.
3. Countries in which interest rates are relatively high attract foreign investment because their financial assets offer higher returns than are available in other countries (if the high interest rates aren't accompanied by excessive inflation).
4. Countries with relatively high inflation rates make poor foreign investment targets. During periods of high inflation, a country's currency can lose value at a rate that's greater than the returns offered on most investments. Therefore, the net effect of an investment is likely to be a loss.

Speculation

Changes in exchange rates create speculative opportunities just like changes in the prices of stocks. If a foreign currency is strengthening against the dollar, holding it results in a gain. Hence, some people trade in currencies for profit rather than to do international business. The transactions made by such speculators can be significant in size and sometimes have a noticeable effect on overall demand and supply.

Direct Government Intervention

Governments sometimes buy and sell their own currencies for the express purpose of keeping exchange rates within desirable ranges. We'll discuss the reasons behind this activity shortly.

In the modern world, the factors that cause exchange rate movement change all the time. Hence, the supply and demand curves for foreign exchange are constantly shifting, as is their intersection, the exchange rate.

GOVERNMENTS AND THE INTERNATIONAL MONETARY SYSTEM

A strong dollar makes **imports cheaper,** but has a negative effect on **employment** because it reduces exports.

Recall that earlier we said exchange rates influence the domestic prices of imported goods. Let's pursue that idea a little further.

Suppose a nation's currency suddenly strengthens relative to the currencies of other countries. We'll use the U.S. dollar to illustrate, but the results are true for any currency. As a result of a strengthening dollar, two things happen, one good and the other bad. First, imported goods become cheaper, because a dollar buys more foreign exchange and hence more foreign product. That's generally good for consumers, and people like it.

At the same time, however, U.S. exports become more expensive in other countries. That means fewer are sold and the demand placed on U.S. manufacturers for exported product diminishes. The result is a reduction in industrial activity in the United States and eventually a loss of jobs, which, of course, is bad.

Conversely, if the dollar weakens, foreign products become more expensive here, which leads to a general lowering of our standard of living. However, our exports increase because they're cheaper in other nations, and the increased business creates jobs here.

Summarizing, we can say that exchange rates affect the domestic economy through two opposing forces: the cost of imported goods and the employment generated by producing goods for export.

Government Influence on Exchange Rates

It's important to recognize that these opposing forces need to be kept in balance. In other words, it isn't good for an economy if the exchange rate goes too far in either direction. Cheap imports aren't worth excessive unemployment, and low unemployment isn't worth a substantially higher cost of living. For that reason, governments occasionally intervene in foreign exchange markets to keep rates within what they feel are reasonable ranges.

Governments sometimes **intervene** in foreign exchange markets to keep **exchange rates within desirable limits.**

Governments accomplish this intervention by buying and selling their own currencies in the foreign exchange market. For example, if the dollar is getting too weak, the U.S. Treasury will buy dollars. This action adds to other demands for dollars and pushes all dollar demand curves to the right in diagrams like Figure 18.1(b). It thus raises the exchange rate for dollars in terms of the other currencies (the indirect quote).

A government's ability to *support* a weakening currency in this way is limited because it has to pay for its purchases of its own money with either gold or foreign exchange already in its possession. Both of these are clearly of limited availability.

Conversely, if a currency is too strong, the government will sell its own currency. This action has the effect of increasing supply and lowering its cost in terms of other currencies.

The International Monetary System

The international monetary system is the set of rules by which countries collectively administer the exchange of currencies. The system in place at the present time, which we've been describing, is known as a *floating exchange rate system*. That means exchange rates are determined essentially by free market forces. Some government intervention does occur, but not much, and it's usually the result of an agreement between several nations to maintain economic stability.

The floating rate system has been in effect since the early 1970s. Between the end of World War II (1945) and that time the world was on a *fixed exchange rate system*,

In a **floating exchange rate** system, **market forces** set rates with **little intervention** from governments.

meaning rates were fixed by international treaty and administered by an organization known as the International Monetary Fund (the IMF still exists).

Under the fixed rate system, market forces tended to push rates around just as they do now, but each country had the responsibility of holding its exchange rate with the U.S. dollar nearly constant. The value of the dollar was fixed in terms of gold at $35 per ounce. Countries maintained the value of their currencies against the dollar by buying and selling in the foreign exchange market as we described in the last section.

As the economic status of nations changed during the post–World War II period, it sometimes became impossible to keep certain exchange rates constant. When that happened a nation could go through a *revaluation* to officially raise the value of its currency relative to the dollar or a *devaluation* to lower its value. As the West German economy strengthened, it went through two revaluations in the 1960s, while the British pound was devalued in 1967.

By the 1970s the dollar's tie to gold at $35 per ounce had become unrealistic because the market price of gold had risen to more than $100.[5] At that time the fixed rate system was abandoned along with the fixed dollar price of gold, and the floating rate system was established.

Convertibility

A currency that isn't **convertible** cannot be exchanged for other currencies at **market-determined** rates.

Not all currencies are *convertible*. That is, many can't be exchanged in the way we've described in this chapter. For its currency to be convertible, a nation must allow it to be traded on foreign exchange markets and be willing to accept the resulting value. The currencies of Russia and China have traditionally not been convertible.

Nonconvertibility doesn't mean there isn't an exchange rate. If you want to buy a Russian product, the Russian government will be glad to sell you the *rubles* you need at its official exchange rate. However, the system works only one way. If you have rubles, there is generally no one willing to exchange them for dollars or any other major currency at the exchange rate set by the Russian government.

Inconvertibility is a significant impediment to international business. Suppose a Western company establishes a branch in Russia and makes a profit doing business there. The profit is in rubles, and because the currency isn't convertible it's very difficult to repatriate it back into the company's home country. To get value out of the country, it's generally necessary to buy something made in Russia with the ruble profit (like vodka), export it to the home country, and sell it there. Unfortunately, nations with nonconvertible money don't tend to have a great many things that people in other countries want to buy.

The Balance of Trade

Let's go back to the supply and demand diagrams of Figure 18.1. Unlike the supply and demand diagrams for other commodities, those for foreign exchange represent a reciprocal arrangement. That is, the supply of another nation's currency seen by Americans depends on the demand in that other country for U.S. dollars. In other words, the only place you can get pounds is England, and the English have to want to buy U.S. dollars or there won't be any pounds available.

The total money flow between countries includes trade, investing activities, and payments made directly between governments. The latter include loans, loan payments along with interest, and foreign aid.

5. The price of gold fluctuates a great deal sometimes reaching as much as $800 per ounce.

If we **import more** from a country than we export to it, a **trade deficit** exists and our currency accumulates in that country.

The net flow between two countries from trade is known as the **balance of trade**. If the U.S. imports more from another country than we export to it, we say a *trade deficit* exists between the nations from the U.S. perspective. If we export more to a country than we import, we say a *trade surplus* exists.

A consistent trade deficit or surplus with respect to a particular country can continue for a long time if it's offset by other financial flows between the two nations, or if the country with the trade surplus is willing to accumulate a store of the currency of the country with a deficit. When such an accumulation happens, the available pool of the deficit country's money tends to weaken the value of its currency. In Figure 18.1(b), it pushes the supply curve to the right, lowering the indirect exchange rate. That should make the deficit nation's exports cheaper in the surplus nation, thus bringing trade back in balance. However, that tendency toward balance doesn't happen if the surplus nation artificially restricts imports from the deficit nation.

The trade relationship between the United States and Japan during the 1970s, 1980s, and early 1990s provides an excellent example of this phenomenon. A trade deficit existed from the U.S. perspective largely because of Japan's restrictions on U.S. imports. During the period the dollar fell by about 60% against the yen. Further, the surplus of dollars available to the Japanese coupled with the low exchange rate enabled them to make massive investments in real estate and productive capacity in the United States. This led many people to become concerned about the level of economic control the Japanese exercised in this country.

However, the problem eased substantially beginning in the mid-1990s. Under U.S. government pressure, the Japanese eased import restrictions somewhat. But more significantly, the Japanese economy suffered a series of financial crises in the mid-1990s that weakened the nation's international position and led to a normalization of the trade relationship between the two nations.

Nevertheless, the Japanese have strong, established positions in many U.S. markets today at the expense of U.S. manufacturers. The most visible examples are automobiles and electronics. That gain to their economy and loss to ours can be traced to currency and trade balance issues from decades ago.

A somewhat similar problem currently exists with respect to China and its currency, which we will discuss later in the chapter.

INTERNATIONAL CAPITAL MARKETS

http://

Qualisteam provides information on worldwide markets at **http://www.qualisteam.com/**

Today it is common for individuals and businesses to make investments in countries other than their own. We've already discussed making a direct investment in facilities in another country and a portfolio investment in the securities of a business from another country. A portfolio investment can also be made in bonds issued by another government. These activities require the flow of capital funds among nations, and several institutional practices have arisen to assist in those flows. We'll have a brief look at the Eurodollar market and international bonds after a digression on the status of the American dollar.

The Unique Status of the U.S. Dollar

Since World War II, the U.S. dollar has been the world's leading currency. In a sense it functions as international money. The dollar has this unique role because people have more confidence in its continuing value than they have in the value of any other currency. This confidence no doubt stems from America's unique status as a superpower in both military and economic terms.

The **U.S. dollar** is the world's leading currency and in some ways serves as **"international money."**

In any event, most international businesspeople are willing to take dollars in trade because they're confident that American money can be exchanged for their own currencies at any time and that its value isn't likely to fall suddenly. (The exchange rate is still needed to determine how many dollars something priced in another currency is worth.) In fact, a dollar may be preferable to their own currency, which may not be as stable.

Many international contracts are denominated in dollars even when none of the parties to the contract are American.

THE EURODOLLAR MARKET

Eurodollars are dollar deposits in **foreign banks** that are loaned to international businesses in the **eurodollar market**.

A **Eurodollar** is an American dollar deposited in a bank outside the United States. People deposit money in foreign banks because their interest rates on dollar deposits are somewhat higher than those offered by domestic banks.

The foreign banks create the **Eurodollar market** by lending the Eurodollars to international companies and foreign governments that have a need for American currency. The borrowers use Eurodollars for a variety of things, including payment for U.S. exports, portfolio investments in American stocks and bonds, and as a medium of exchange between parties that don't want to deal in their own currencies.

Eurodollar deposits don't have to be in European banks; they can be anywhere in the world. They're called Eurodollars simply because the practice started in Europe. The deposits are typically made for fixed periods that can range from a single day to approximately five years. They're also rather large, starting at about $500,000.

THE INTERNATIONAL BOND MARKET

In earlier chapters, we talked about bonds issued by domestic corporations sold in the United States. (Keep in mind that selling a bond means the issuing company is borrowing money from the bond's buyer.) It is possible, however, for companies to borrow internationally by selling bonds outside their own countries. Any bond sold outside the home country of the borrower is called an **international bond**.

An **international bond** is sold outside of the home country of the borrower.

The idea of an international bond raises a question about the currency in which the bond's face value is stated. The bond can be *denominated* in the currency of the issuing company's home country, or in the currency of the country in which it is sold, or in some third currency.

A bond issued by a foreign company but denominated in **local** currency is a **foreign bond**.

A bond denominated in the currency of the country in which it is sold, but issued by a foreign borrower, is called a **foreign bond**. For example, a Japanese auto manufacturer like Honda or Toyota might want to open an assembly plant in the United States financed in some part by borrowing. It could do that by issuing dollar-denominated bonds in the United States, registering them with the Securities and Exchange Commission (SEC), and selling them through American financial markets. To buyers, the bonds would be just like those of domestic companies except for the headquarters location of the issuing company. Importantly, they would be subject to all of the registration and disclosure requirements of U.S. securities law, which tend to be more stringent than the requirements of other nations.

A **Eurobond** is denominated in a currency other than that of the country in which it is sold.

A bond denominated in a currency other than that of the country in which it is sold is called a **Eurobond**. For example, Honda could sell bonds denominated in Japanese yen to Americans in the United States or to people in any other country. Once again, the term "Euro" is historically derived and doesn't imply that the issuing company is European. In fact, most Eurobonds are denominated in American dollars and sold to investors in other countries.

Eurobonds have several distinguishing features. First, securities regulations in most countries require a much lower level of disclosure for Eurobonds than for domestic or foreign bonds. This significantly lowers the cost of issuing them in comparison with the cost of issuing foreign or domestic bonds.

Second, Eurobonds are issued in *bearer* form, so the owner is not identified. Third, most governments don't withhold income tax on Eurobond interest payments. The second and third features make Eurobonds attractive to some investors, perhaps those who are interested in privacy and/or avoiding their own countries' taxes.

POLITICAL RISK

Political risk is the chance that a foreign government will **expropriate** property or that **terrorists** will destroy it.

When capital is invested in another country, especially through direct investment, it becomes subject to the authority of the government of that country. **Political risk** refers to the probability that the value of a firm's investment in a foreign country will be reduced by political actions taken primarily by the country's government.

Nations have a unique set of powers described as *sovereignty* that aren't shared by companies or lower level government units regardless of their size. In the extreme, a sovereign nation can take human life and seize property located within its borders without compensating the owner. Property taken by a foreign government is said to be **expropriated**.

Expropriation is generally the worst-case scenario contemplated within the idea of political risk. It is relatively rare, but it has happened in a number of less developed countries including Chile, Bolivia, Cuba, Libya, and Iran.

Although not as drastic as expropriation, certain other actions can reduce the value of a foreign venture substantially. They take the form of arbitrarily imposed rules and regulations on operations and ownership. For example, a host country government can:

- Raise taxes of all kinds on the business.
- Limit the amount of profit that can be taken out of the country, either directly or through controls on currency conversion.
- Require that key inputs be purchased from local suppliers at arbitrary prices.
- Limit the prices charged for product sold within the country.
- Require part ownership by citizens of the host country, forcing sale of an interest in the business at an unrealistically low price.

Political risk also includes potential losses due to the actions of politically motivated terrorist groups. In the past these have included sabotage and bombing of property, as well as the murder and kidnapping for ransom of key executives.

Political risk is quite small in industrialized nations with which the United States is on good terms, such as the Western European countries, Japan, Taiwan, and Australia. It can be substantial, however, in the Third World nations of Africa, Asia, and South America and in places where the political climate is unstable or free enterprise capitalism is new to the population and the government, like the former Soviet Union and the Eastern Bloc countries.

TRANSACTION AND TRANSLATION RISKS

Earlier we defined exchange rate risk as the potential gain or loss that arises from changes in the exchange rate between the time an international transaction is contracted and the time it's completed. This idea is also called *transaction risk* because it

INSIGHTS

ETHICS

The Foreign Corrupt Practices Act— A Legal/Ethical Dilemma for U.S. Companies

Corruption in government is a worldwide problem and has been throughout recorded history. Corrupt practices occur in every nation, but they're particularly flagrant in some less developed countries (LDCs), including many in Africa, Asia, and South America.

In international business, the corruption issue typically arises when a government official has control over the selection of a foreign company to perform some work and allows that choice to be influenced by bribes. Virtually all countries have laws against officials taking bribes, but in LDCs they're usually ignored. In fact, in many LDCs bribery is a common practice that everyone knows about and expects.

In the mid-1970s the fact that U.S. companies were making payments to foreign officials to obtain business came to light in a big way. Congress and the public were appalled by the level of corruption that existed in some countries and the extent to which American companies were taking part in it. Congress responded by passing the Foreign Corrupt Practices Act of 1977, which makes it illegal for U.S. companies to pay bribes to influence decision makers in foreign governments. Companies can be fined and executives can be jailed for violating the law.

However, the act creates a big problem for U.S. companies trying to compete against firms from other industrialized nations that don't have similar laws. For example, suppose an oil-rich Middle Eastern country wants to construct a $1 billion building complex in its capital city and that contractors from the United States, Germany, and Japan submit bids. Profit on the job might be $200 million.

Also suppose local government officials expect gifts of $10 million from the winning bidder according to a long-standing practice that's accepted even though it's technically against local law. Notice that from a financial perspective, the bribe is a relatively minor cost that any of the bidders would be glad to pay to get the profitable contract.

The problem should be obvious. The German and Japanese companies can pay the bribe to get the business, but the American company can't. That may shut it out of the competition.

Are we doing the ethically right thing as a nation? Or are we stepping on our own toes over something no one else cares about, while other industrialized nations laugh at us behind our backs?

Translation gains/losses arise when assets and liabilities held in a foreign country are translated into dollars.

arises from transactions as they occur. **Transaction gains and losses** have real profit and cash flow impacts because they're *realized* in cash as they happen. For this reason, they're taxable events.

However, exchange rates also generate the risk of another type of gain or loss. **Translation risk** refers to the potential gain or loss that arises from translating the financial statements (especially the balance sheet) of a foreign subsidiary[6] from the

6. Recall that a subsidiary is a company owned by another company which is known as its parent.

local currency into dollars for consolidation with the parent company's financial statements.[7]

For example, suppose an American firm spends $2 million to build a factory in England when the exchange rate is two dollars to the pound (direct quote $2.00 = £1.00; indirect quote $1.00 = £.50). Immediately after the factory is built, the balance sheet of the English subsidiary shows an asset of £1 million representing the factory and an equity account of the same amount. The parent's balance sheet shows an asset of $2 million representing its investment in the foreign company.

When the parent company closes its *consolidated* books in dollars, the value of the British factory effectively replaces the account carrying the investment in its foreign subsidiary.[8] While the exchange rate remains at two dollars to the pound, the £1 million factory on the British books translates exactly into $2 million, which replaces the $2 million investment account, so there's no problem.

Now suppose the dollar strengthens so that a pound is worth only $1.75 (indirect quote $1.00=£.57). On the British subsidiary's books, the factory is still valued at £1 million. However, translating at the new rate gives a dollar value of

$$£1{,}000{,}000 \times \$1.75/£ = \$1{,}750{,}000$$

But the parent's investment account still carries a $2 million balance. The difference implies that the factory has lost $250,000 in value in dollar terms. That loss has to be recognized in the consolidation procedure. This is a *translation loss*.

In other words, because the factory in England is valued in pounds, and the pound lost value against the dollar, the factory also lost value. And that loss has to be reflected in the company's overall consolidated books. Of course, if the pound had strengthened against the dollar, the firm would have had a translation gain.

The Relevance of Translation Gains and Losses

Notice that a translation gain or loss isn't quite real; it's only on paper. In our example, the American firm still owns the English factory regardless of its value in pounds, so nothing's really changed. As long as the company doesn't sell the factory and attempt to repatriate the proceeds to the United States, the loss isn't *realized* in cash and is something of an abstraction.

Recognizing this, the accounting rules for consolidating international subsidiaries specify that translation gains and losses are not to be included in consolidated income statements. Rather they're shown cumulatively in an account that adds to or offsets stockholders' equity. And because they're not realized, they're not taxable.

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7. Three sets of financial statements are used when one company owns another: the parent's, the subsidiary's, and the consolidated sum of the two. The parent's balance sheet carries an asset called *investment in subsidiary* that reflects its ownership of the subsidiary. That account's balance is equal to the balance in the equity account of the subsidiary.

When the parent's and the subsidiary's balance sheets are consolidated, like assets and liabilities are added together for companywide totals. However, the investment in subsidiary (a debit) on the parent's books is combined with the subsidiary's equity (a credit). Normally, the two accounts are equal in magnitude, so they eliminate one another, and the consolidated books look like one big company.

8. In this simplified example the subsidiary has only one asset and no liabilities other than equity. Hence, the exchange rate changes on the asset will be mirrored in the equity account.

CURRENT ISSUES IN INTERNATIONAL TRADE: GLOBALIZATION, OUTSOURCING, IMMIGRATION, AND CHINA'S CURRENCY

As we've already said, there's more international business going on today than ever before. The term "globalization" is used to refer to this rapidly expanding cross-border trade as well as to some unexpected social and political effects that may come along with it. We'll have a look at globalization in this section after beginning with a little background.

BACKGROUND: FREE TRADE, THE THEORY OF COMPARATIVE ADVANTAGE, AND PROTECTIONISM

Countries can take a variety of positions for or against international trade. The two extremes are free trade and protectionism. To illustrate imagine that there are two countries, A and B, each of which has just two industries, growing wheat, and making steel. Assume that there are wheat growers and steel producers in both nations.

Free trade implies that businesses in both countries are at liberty to market their products in the other country as well as in their own.[9] The other extreme is protectionism in which one or both countries pass laws that limit or prohibit the importation of goods and foreign ownership of business.[10] The question we'll ask initially is, why would a country want to limit or prohibit imports?

To understand the motivation, imagine that you're in the steel business in country A when something happens in country B that enables it to produce steel more cheaply than is possible in A. (Perhaps the labor rate is lower in B or it has access to cheaper raw materials.) Under free trade, country B's steel industry will under-price country A's in steel markets in both nations driving A's steel mills out of business.

This is bad news for steel industry stockholders and employees in country A because they stand to lose either their investments or their jobs. Understanding this they go to their government and ask it to pass laws that "protect" A's steel industry from lower cost imports. A's legislators may pass the laws to maintain popular support or because they're concerned that a loss of jobs will damage A's economy.[11]

A's government may also protect its steel industry for strategic reasons. For example, what if A later goes to war with B? A would be in bad shape if it didn't have a steel industry for weapons production. This kind of strategic concern often prompts governments to protect key industries from foreign competition. Similarly officials of A's government may limit or prohibit foreign ownership of businesses, because they fear excessive foreign influence and control.

The negative effect of protectionist legislation in country A is that steel will be more expensive there than it might have been. That can be a very big issue, because it leads to higher prices for everything made of steel and will generally lower the standard of living of A's population.

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9. They're also free to make direct investments in the other country and set up business operations there, but we won't get into that in this simple illustration.
10. Import limits usually come in the form of *tariffs*, which are taxes on imported products as they cross the border. Tariffs make imported goods more expensive, which reduces the quantity of foreign products demanded in the importing country.
11. A counter argument is generally made to the second reason stating that the displaced workers should simply go to work in another industry. That, however, can be very difficult and is sometimes impossible.

Because of these offsetting positive and negative effects, it isn't clear whether A is better off in the short run with a protectionist or free trade policy. Of course it isn't necessary to take either extreme position, and most nations are somewhere in the middle.

The Theory of Comparative Advantage

Economists and financial scholars are virtually unanimous in their support of free trade. Their position is traceable to a fundamental economic principle called the Theory of Comparative Advantage popularized by an English economist named David Ricardo in the early 1800s.

We can use countries A and B to illustrate the idea behind the theory. Remember that both countries produce wheat and steel. Suppose A is better at growing wheat than it is at making steel, and B is better at making steel than it is at growing wheat. We say that each country has a *comparative advantage* in one product over the other.

The theory says that the overall two-country community will be better off if each nation specializes in what it does best, and buys the other product from the other country. That is, more value will be produced if A just grows wheat and buys its steel from B, while B produces only steel and buys its wheat from A. It can be shown that this is true even if one country is better at both tasks than the other!

The theory of comparative advantage is a powerful argument for free trade in the long run, because it leads to a higher level of aggregate production. In the short run, however, it results in a serious economic burden on people like the steel industry employees in country A whose jobs are displaced. The immediate question is how long does it take to get through the "short run" and reach the happy "long run" situation? Economists define the long run as the time in which all productive inputs are variable. In this context, that's the time it would take for all of A's capital and labor resources to be redeployed from steel into wheat. Realistically that's probably one or two generations, at least 20 and perhaps as much as 40 or 50 years. During that period the people displaced by the movement of steel production out of A will suffer a great deal of economic pain due to lost jobs and shrinking investment values.

Comparative advantage also has some technical problems. Although it's true that more can be produced under free trade because of the specialization implied, it isn't clear how the additional value will be distributed among the people of countries A and B. Indeed there seems to be some real-world evidence that little of the benefit of free trade filters down to the working classes and that there's a widening of the wealth gap between the very rich and the very poor under free trade.

GLOBALIZATION

Globalization is a broad term that refers to the general movement of the world economy toward free trade as it undergoes a dramatically increasing level of international business. Some observers say that the trend has really been ongoing for at least 200 years, while others maintain that it's only been significant since the end of World War II. In any event most agree that the process has accelerated in the last 20 or 30 years and that technology is driving it faster all the time.

The question also arises as to whether globalization is a result of government policies favoring free trade, or it's an inevitable result of the capitalist, free enterprise system. But even if globalization is inevitable in the long run, it's clear that government policies are driving its development faster. The most prominent government actions to promote free trade involve forming groups of countries that reduce or eliminate trade barriers among themselves. The best example is the European Union (EU) which consists of 12 nations that have joined together to encourage trade and the

movement of labor within itself. The EU has gone so far as to adopt a common currency, the Euro. (See page 716.) Another important example is the North American Free Trade Association (NAFTA) under which the United States, Canada, and Mexico have eliminated most trade restrictions but not those on labor movement.

Proponents of globalization rely heavily on the comparative advantage argument that more production is available when trade is unrestricted than when it's limited, and that that leads to a better life and a higher standard of living for everyone involved.

ANTI-GLOBALIZATION

Although few would argue that the comparative advantage benefits of free trade are real, not everyone agrees that globalization is a good thing for everyone.

In our example involving steel and wheat, production was carried out in the home country and free trade just meant selling across a national border. In the modern world, however, free trade also means setting up factories in other countries to produce goods that can be sold anywhere. It is this aspect of globalization that's criticized most harshly.

To those who see its dark side, globalization simply means using the cheapest labor available regardless of where it's located. Put another way, critics say it means finding the world's most poverty-stricken countries, paying people subsistence wages to work under horrible conditions, and then making big profits on the products of their labor. This, they say, amounts to exploitation of underdeveloped countries.

THE MIGRATION OF JOBS—OUTSOURCING

When companies move production work to overseas locations, the people who were doing that work at home lose their jobs. This has been happening in the United States since the end of World War II. The work generally flows to the areas of the world with the lowest cost labor. Immediately after the war, work tended to be done in Japan, then it shifted to Taiwan and South Korea, then to the nations of the Pacific Rim. Most recently it has been going to China.

For many years the exodus was primarily in lower skilled manufacturing jobs. This did create an unemployment problem in the United States but it was believed to be manageable in the long run. The argument was that America had to change the nature of its industrial economy. We had to shift from being manufacturers relying on heavy, physical processes for our livelihoods to a nation of more intellectual workers with strengths in research, innovation, design, and information management. Basically the workforce had to be retrained into these knowledge-based careers as manufacturing jobs moved "offshore" to other countries. Clearly this wouldn't work for everyone. It's always been difficult to imagine retraining someone who's worked in a factory for 30 years into, say, computer programming. Nevertheless, the concept was generally accepted as a long-term strategy for the nation as a whole.

But another phenomenon called *outsourcing* was developing at the same time. Outsourcing is related to specialization. Companies have long realized that they don't have to do all of the functions necessary to run their businesses themselves. They can generally get some things done better and cheaper by outside firms that specialize in those functions. For example, most colleges and universities don't run their own dining halls. They hire food service companies to bring their employees on campus to prepare and serve meals.

Traditionally, companies outsourced functions to specialists that were located nearby or at least in the United States, so the outsourced jobs didn't move very far. It was also true that key, knowledge-intensive jobs like design and engineering, weren't outsourced.

It's important to notice that sending manufacturing to low-labor-cost countries constitutes outsourcing production labor. The term *offshore* or *offshoring* was frequently used when referring to the practice.

Outsourcing Knowledge Based Jobs

An unexpected development related to outsourcing began in the 1990s and is currently causing a great deal of concern with respect to the employment situation in the United States. To understand the phenomenon it's important to appreciate that there are some relatively undeveloped countries in the world in which wages are very low, but segments of the population are very well educated. The primary example is India, which has been exporting brilliant engineers, mathematicians, and scholars to the United States and Western Europe for decades.

Starting in the 1990s and continuing today, unprecedented advances in computer and information transfer technology have made it possible to outsource many of the knowledge-based jobs that were expected to become the mainstay of U.S. industry to those countries without physically moving anything.

Here's an example from the health care industry. Suppose you have a medical problem and your doctor orders an X-ray. Your X-ray will generally be read by a radiologist (a physician who specializes in reading X-rays), who sends a report to your doctor. The radiologist doesn't see you in person, and your doctor may never see the X-ray. Today it's possible to outsource the radiologist's function by sending the X-ray to India where it's read by a perfectly competent Indian radiologist who returns his or her report electronically. And because labor of all kinds is cheaper in India, the process is done at a fraction of the U.S. cost. Notice that this practice has the potential to destroy the employment market for radiologists in the United States.

Professional level outsourcing is now happening nationwide. Information technology (IT) services are particularly vulnerable as are engineering and telephone-based customer support functions. This suddenly widespread phenomenon has led to a middle-class outcry for the government to do something to discourage companies from sending jobs overseas, but as yet no such action has been taken.

LABOR MIGRATION AND ILLEGAL IMMIGRATION

Another important aspect of globalization is the movement of labor between countries, usually at the low end of the pay/skill scale. Developed countries often face shortages of people who are willing to do low-end jobs like harvesting crops and cleaning homes and offices. But many people in nearby undeveloped countries are willing to do those jobs for very little money. That creates an incentive for large numbers of workers to migrate into the more developed country.

The developed countries are usually reluctant to admit large numbers of foreign workers and their families, because it can strain the nation's social support infrastructure with respect to things like public education, medical care, and welfare.

One solution is the idea of a guest worker program that allows foreigners to work in developed countries for limited periods after which they must leave. Guest worker programs have existed in Europe for some time.

The migration problem is particularly severe in the United States because it has been relatively easy to enter the country and remain here illegally (without official permission) for many years. In 2006 there are an estimated 12 million *illegal immigrants* in the United States, most of whom are from Mexico. Critics say that they are taking jobs that should go to Americans while not paying taxes to support the public

services they consume. The other side of the argument is that Americans don't want the majority of the jobs the illegal immigrants do, and that a good portion of American industry has come to depend on them.

In 2006 the nation is seriously divided on the issue. Many are calling for the deportation of illegal immigrants while others favor letting those who are here stay and eventually earn citizenship. Major legislation is pending on the issue.

THE BALANCE OF TRADE WITH CHINA AND ITS INCONVERTIBLE CURRENCY

Between the end of World War II and the 1980s, China was a rigidly communist country with a backward economy that despite its enormous population had relatively little commercial contact with the rest of the world. But in the last 20 or so years, while still a politically authoritarian regime, China has transformed itself into an essentially free market economy that's been growing at a staggering rate.

But much of that growth is due to the Chinese government's currency policy. As of mid-2006, the Chinese government refuses to let its yuan float on international currency markets, instead keeping it grossly undervalued relative to the U.S. dollar. This coupled with low Chinese labor rates makes their products very cheap in the United States. Indeed it's estimated that they have at least a 40% price advantage over U.S. manufacturers. Of course that's killing U.S. companies competitively. American industry leaders have been crying foul and begging our government to impose a tariff on Chinese imports to level the playing field, but so far their pleas have fallen on deaf ears. In the meantime the trade deficit with China was $295 billion in 2005 and is expected to be higher in the future.

Strongly advocating free trade, a conservative U.S. administration has argued that we shouldn't adopt protectionist policies and that the low prices of Chinese goods currently flooding retail shelves are good for the American people. Opposing interests in Congress are promoting legislation that would impose stiff tariffs on Chinese imports if that government doesn't make significant exchange rate adjustments.[12] The issue remains a difficult problem of globalization.

QUESTIONS

1. Describe the ways in which international business has changed during the last 50 years. Include the concept of an MNC and the different types of foreign investment.
2. After World War II, the United States was the world's dominant economic power. We're still the largest economy, but the rest of the world has caught up significantly. In some areas we've lost the lead. The production of consumer electronic equipment, for example, is largely done in the Far East. Is this trend good or bad for Americans? Explain.
3. When you want to buy something from another country, you have to find a seller who's willing to take dollars, but that isn't too hard because the U.S. dollar is widely accepted. Comment on this statement.

12. The Chinese government allowed a token strengthening (about 2%) of the yuan relative to the dollar in July of 2005, but it hasn't made of a difference in the trade imbalance.

4. Exchange transactions between two currencies, neither of which is the U.S. dollar, have to be made by changing one currency into dollars and then changing the dollars into the other currency. This procedure is necessary because the exchange tables are all set up to convert between other currencies and dollars, the world's leading currency. Are these statements true or false? Why? If false, how does the conversion work?
5. What generates the supply of and the demand for foreign exchange? Why do the supply and demand curves have the shape they do? What makes the supply and demand curves and hence the exchange rate move around?
6. Why might the government be interested in influencing exchange rates from time to time? How would it go about moving the exchange rate?
7. Describe the difference between a floating and a fixed exchange rate system.
8. What is a trade deficit, and why does it hurt us to consistently run a deficit with another country?
9. How and why is the U.S. dollar unique among the world's currencies?
10. A British importer has to pay for American goods, but the exchange rate is temporarily very unfavorable from the British perspective. Describe the Eurodollar market and tell how it might help the importer.
11. Broadly define and describe globalization and its implications.
12. China refuses to allow its currency, the yuan, to float on international currency exchanges. Why is that a problem for the United States?

BUSINESS ANALYSIS

1. You're the treasurer of Warm Wear Inc., which imports wool sweaters from around the world. Kreploc, a company in the country of Slobodia, has a product your marketing department would like to carry, and doesn't require payment until 90 days after delivery. Unfortunately the Slobodian blivit tends to vary in value by as much as 30% over periods as short as three months. This makes you reluctant to do business with Kreploc because of exchange rate risk. The marketing department can't understand why you have any concerns at all. Prepare a brief explanation, including an illustration, of why you're concerned.
2. You're the CFO of the Overseas Sprocket Company, which imports a great deal of product from Europe and the Far East and is continually faced with exchange rate exposure on unfilled contracts. Harry Byrite, the head of purchasing, has a plan to avoid exchange rate losses. He suggests that the firm borrow enough money from the bank to buy a six-month supply of foreign exchange that would be kept in a safety deposit box until used. "We'd never have another unexpected exchange rate loss again," says Harry. Prepare a polite response to Harry's idea. Explain why you do or don't like it, and suggest an alternative if you feel one is appropriate.
3. You're the CFO of the Kraknee Roller Skate Company, which sells roller skates worldwide and also builds and operates roller rinks. Some time ago Archie Speedo, the head of international marketing, proposed selling skates in Russia.

Everyone thought he was crazy, but the idea turned out to be very successful. Archie lined up a talented Russian importer, who managed to sell more skates than anyone imagined possible. Now Archie has proposed a new Russian venture. He wants to open and operate a roller rink in Moscow. He says that since the breakup of the Soviet Union, Russians are interested in Western pastimes, and a roller rink in the capital city would make a fortune. Based on his earlier success in Russia, the rest of the executive team is in favor of the idea. You, however, have some concerns. Write a memo explaining how the roller rink proposal differs from exporting skates to Russia, and what problem is likely even if the venture is as commercially successful as the skates. What other risk is involved?

4. Your friend James is an exchange student from an underdeveloped country. He comes from a privileged family that's influential in the government, but the bulk of the nation's population is very poor despite the fact that the people are frugal and hardworking. James is an idealistic young man who intends to return home after his education and spend his life working to improve the economic condition of his country and its people. You met him for lunch yesterday and noticed that he was unusually excited. He told you he's taking a theoretical economics course and has been studying Ricardo's Theory of Comparative Advantage, which he now feels is the answer to his people's problems. He intends to return home a staunch advocate of free trade and attempt to get his government to open the nation's borders to investment by any multinational companies that are interested in doing offshore production there. Write a short paragraph for James discussing globalization and explaining why his government should be cautious as it enters the world of international business.

PROBLEMS

Use the exchange rates in Table 18.1 on page 713 for Problems 1 and 2.

1. An American importer owes vendors the following sums.

   a. 140,560 Canadian dollars
   b. 392,000 Australian dollars
   c. 1,362,000 Mexican pesos
   d. 680,540 British (U.K.) pounds
   e. 14,673 Euros

   State each debt in U.S. dollars.

2. A Japanese importer owes an American exporter $450,520.

   a. What is her bill in yen if she pays immediately?
   b. What would the bill be if the importer wanted to lock in an exchange rate today but pay in three months?

3. Go to *The Wall Street Journal* and look up today's exchange rates for the currencies in Problems 1 and 2. Resolve the problems using today's rates. Analyze how the rates have changed since July 24, 2006.

4. The following direct quote exchange rates are found on the spot market today.

   a. Euro: $.9347
   b. Israeli shekel: $.2586

c. British (U.K.) pound: $1.6544
d. Japanese yen: $.009423

Calculate the price of a U.S. dollar in terms of each currency, the indirect quote.

5. Bob and Chris received a grant through their University to travel to Germany to do research. The grant awarded them $2,000 for room and board during their stay. It was paid to them in U.S. dollars On May 31 at which time the Euro was worth $.77980. They spent the money in Germany during July when the Euro was worth $78597.

   a. How many Euros were they awarded in May?
   b. Did the change in the Euro work to their advantage or disadvantage and how much?

6. Steve Harris, CFO of Alston Concrete Products, is currently evaluating the purchase of an innovative machine that tests the strength of concrete. The machine is sold only in England and Alston has a price quote at £52,500 from the manufacturer that's good for 60 days. Steve has read that the British pound is expected to strengthen against the dollar by 15% during the next two months. Currently the pound is worth $1.88 U.S. dollars. If Steve believes the currency forecast is accurate, should Alston buy the machine now or wait until just before the price quote expires? How much difference might the decision make in dollars?

7. The Cline family made a trip to Europe in 2006. They paid the following amounts in local currency for hotel, entertainment, and transportation.

England	£855
France	€1,462
Germany	€2,753
Denmark	K6,280

   How much did the trip cost in U.S. dollars once they got to Europe? Use the exchange rates in Table 18.1.

8. Suppose a car manufactured in Japan in the mid-1980s, when there were 250 yen to the dollar, cost 2 million yen to produce and was marked up 25% for sale in the United States. Assume the car's cost in yen and markup are the same today, but the exchange rate is 100 yen to the dollar.

   a. What did the car sell for in dollars in the United States in the mid-1980s?
   b. What does it sell for now?

9. The Greenbay Motor Company ordered six German-built engines at €15,000 each when the direct exchange rate was $1.2500 per euro and elected not to cover the obligation with a forward contract. When the bill was due three months later, the rate was $1.1500. Greenbay's marginal tax rate is 40%.

   a. How much was the exchange rate gain or loss on the deal?
   b. What kind of exchange rate gain or loss was it?
   c. What was the tax impact?

10. Hampshire Motors Ltd., a British manufacturing company, wants to buy a production machine that isn't available in England. Comparable products are made by an American company and a French firm. The Americans have quoted Hampshire a price of $175,000, while the French want €192,000. How much is each price in British pounds? Calculate a cross rate to state the French quote in pounds. Use the exchange rates in Table 18.1.

11. The Latimore Company invested $8.5 million in a new plant in Italy when the exchange rate was 1.1500 euros to the dollar. At the end of the year, the rate was 1.2000 euros to the dollar.

    a. Did Latimore make or lose money on the exchange rate movement? If so, how much?
    b. What kind of exchange rate gain or loss was it?
    c. What was the tax impact?

12. Hanover Inc. spent £11.5 million building a factory in England in 1996 when the British Pound cost $1.5500. The plant operation was set up as a British subsidiary to manufacture Hanover's product for sale and distribution in the United Kingdom and Europe. Hanover closed its consolidated books for the 2005 *fiscal* year on July 24, 2006. (Many companies keep their books on fiscal years that don't coincide with calendar years.) Hanover is subject to a 40% tax rate in the United States and a 45% rate in the United Kingdom.

    a. How much did Hanover make or lose on the value of its English factory due to exchange rate movements in the ten years since it was built? Use the exchange rates in Table 18.1.
    b. Explain the tax impact of the gain or loss?
    c. Where does the gain or loss show up in Hanover's financial statements? Where doesn't it show up in 2006 or in previous years?

INTERNET PROBLEMS

Use http://www.x-rates.com for the next five problems.

13. Identify the graph of the indirect exchange rate between the U.S. dollar and Japanese yen for the past 120 days.

    a. When was the dollar strongest against the yen? When was it the weakest?
    b. If you converted $1,000 into yen when the indirect rate was the highest and converted back when it was the lowest, what return would you have made on your investment?
    c. Use the EAR formula on page 239 to convert the rate calculated in (b) into an annual rate. Use a 365-day year.

14. Analyze the exchange rate between the U.S. dollar and the Chilean peso. Record the monthly average for the indirect exchange rate over the last 18 months.

    a. What has the general trend been for the exchange rate between these two currencies?
    b. If you had invested $1,000 in Chilean pesos at the average rate at the beginning of the period and held that currency until now (your most recent rate), how much would your investment be worth in U.S. dollars?

15. Use the exchange rates between the U.S. dollar and the British pound and between the U.S. dollar and the Canadian dollar to calculate the cross rate between the Canadian dollar and the British pound. Look up that rate to see if your calculation was correct.

16. You just purchased a new sound system for $1,542.75. Based on current exchange rates, how much would the system have cost in:

    a. Brazilian reals
    b. Danish krones
    c. Polish zlotys
    d. Swiss francs

17. You are the CFO of Symantics Corp., which is considering investing $40 million in a plant in India. You have heard that there has been quite a bit of movement in the exchange rates between the U.S. dollar and the Indian rupee in the past few years. Before investing the firm's money, you want to understand the exchange rate risks involved.

    a. Record the indirect exchange rate between the rupee and the dollar for each month of the last three years.
    b. During which periods has the dollar been *strengthening* against the rupee and during which periods has it been *weakening*?
    c. Assume Symantics builds the plant when the exchange rate is 45 rupees to the dollar. Describe the financial impact of an exchange rate movement to 40 rupees to the dollar on Symantics. Describe the impact of a movement to 50 rupees to the dollar.