



Basics of Foreign Trade and Exchange, The

Adam Gonnelli

Grade Levels: 9,10,11,12

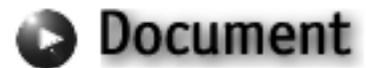
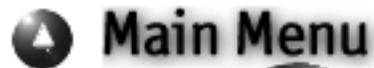
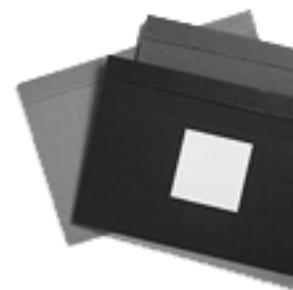
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Description:

Provides an elementary discussion on interest rates and their effect on production, employment, income, and prices.



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THE BASICS OF FOREIGN TRADE AND EXCHANGE

by

Adam Gonnelli

Federal Reserve Bank of New York • Public Information Department

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GOODS AND SERVICES FLOW AROUND

1990 MERCHANDISE EXPORTS

Exports of **\$518 billion**
from U.S. and CANADA

Exports of **\$1,585 billion**
from WESTERN
EUROPE

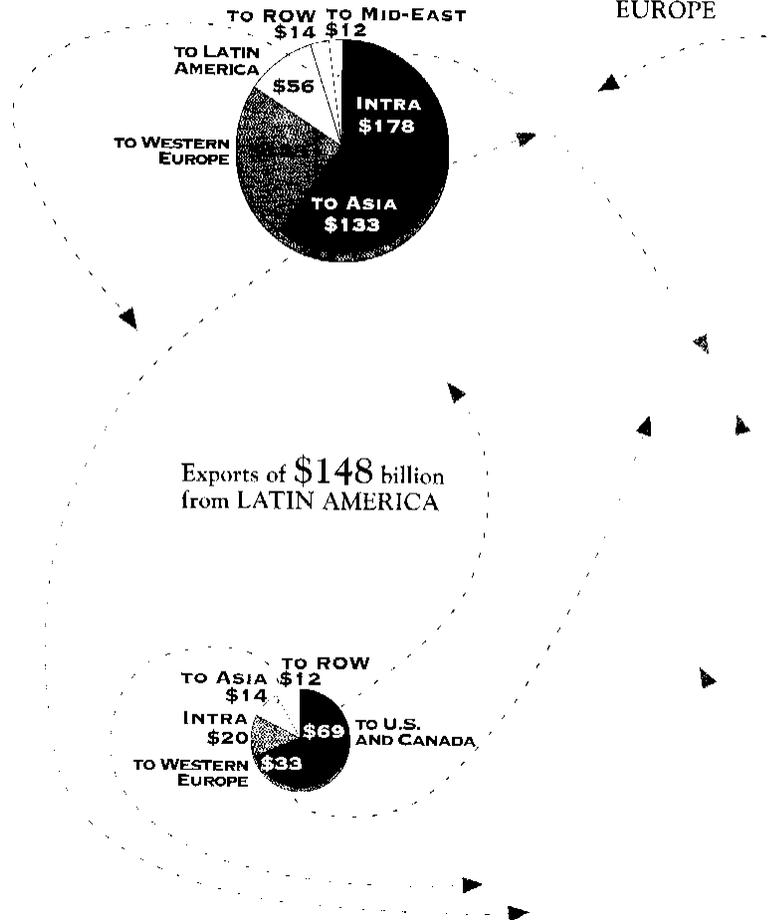
Total
World
Exports of
**\$3,485
Billion**

(Total includes
\$69 billion of
exports to
unspecified
destinations)

ROW=
Rest
of
World

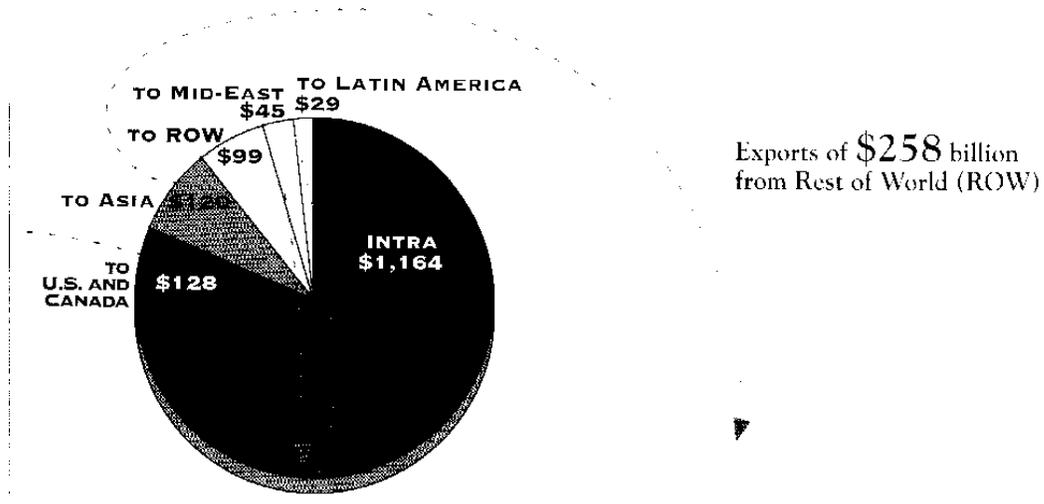
Intra=
Intra-regional
Exports

Sources: GATT;
Federal Reserve
Bank of New York



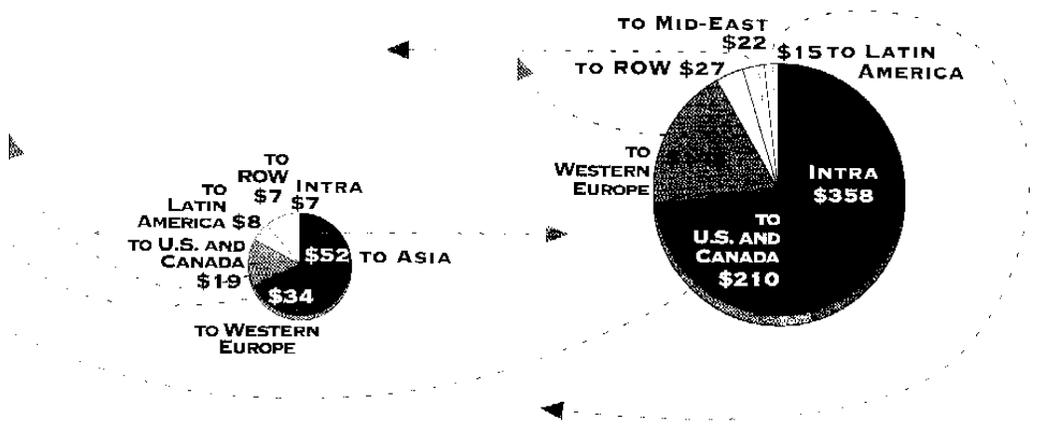
THE WORLD IN COMPLEX PATTERNS

IN BILLIONS OF U.S. DOLLARS



Exports of \$127 billion from the MID-EAST

Exports of \$780 billion from ASIA



GROWING TRADE,

INTERNATIONAL TRADE SHAPES OUR EVERYDAY LIVES AND THE WORLD IN WHICH WE LIVE. WHETHER WE REALIZE IT OR NOT, NEARLY EVERY TIME WE MAKE A PURCHASE WE ARE PARTICIPATING IN THE GLOBAL ECONOMY. PRODUCTS AND PARTS OF PRODUCTS COME TO OUR STORE SHELVES FROM ALL OVER THE WORLD.



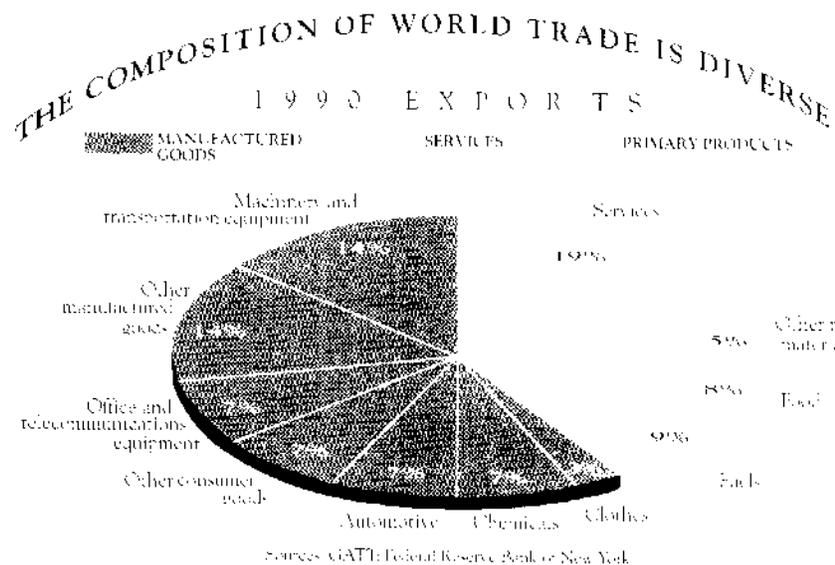
International trade is the system by which countries exchange goods and services. Countries trade with each other to obtain things that are better quality, less expensive or simply different from goods and services produced at home. The goods and services that a country buys *from* other countries are called **imports**, and goods and services that are sold *to* other countries are called **exports**.

While trade takes place mostly between companies, governments and individuals frequently buy and sell goods internationally, too. Most international trade consists of the purchase and sale of industrial equipment, consumer goods, oil and agricultural products. In addition, services such as banking, insurance, transportation, telecommunications, engineering and tourism accounted for one-fifth of world exports in 1990.

One of the most significant trends in the world economy since the end of World War II has been the rapid increase in international trade. In 1950, total world merchandise exports amounted to \$58 billion. In 1990, exports were \$3.5 trillion, over 60 times as much. This rate of increase was roughly three times as fast as overall world economic growth.

IMPORTANCE OF TRADE

As its volume has increased, trade has become more important to the economic well-being of many countries. For example, in the early 1960s, the United States bought less than \$1 billion of foreign cars and parts. By the late 1980s, this figure had increased to more than \$85 billion. During the same period, financial ties between the United States and the rest of the world also increased significantly. The number of foreign banking offices operating in the United States rose from fewer than 40 to more than 800, and the amount of money foreigners invested in U.S. companies, assets and real estate—called **direct foreign investment**—was 20 times greater in 1990 than in 1970. Gross transactions of long-term U.S. government securities by foreigners rose from \$144 billion in 1978 to \$5.6 trillion in 1991. Since 1950, the costs of international transportation and communication have been drastically reduced, making it easier to conduct business across borders. The economies of many countries have become more closely tied together than ever before.

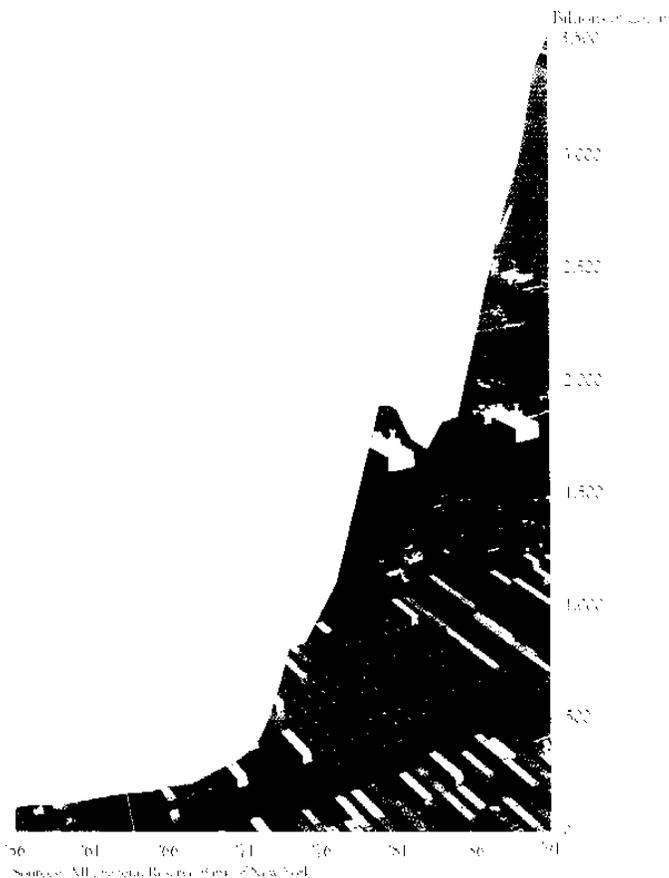


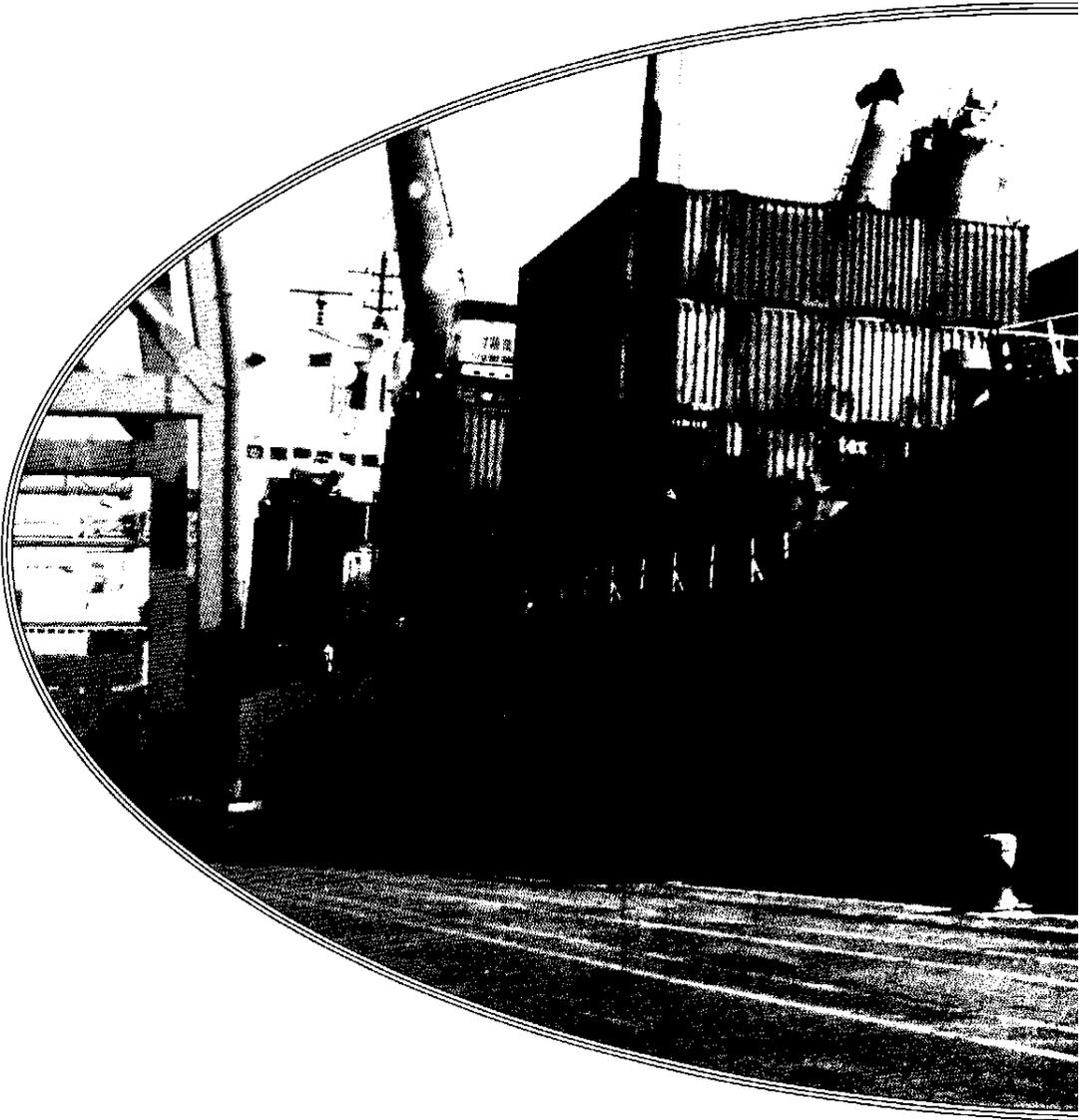
SHRINKING WORLD

AMERICANS DRIVE CARS
MADE IN GERMANY, USE VCR'S MADE IN CHINA.
JAPAN AND WEAR CLOTHING MADE IN CHINA.
JAPANESE WATCH AMERICAN MOVIES, EGYPTIANS DRINK
AMERICAN COLA AND SWEDES JOG IN AMERICAN RUNNING SHOES
THE WORLD ECONOMY IS MORE INTEGRATED THAN EVER BEFORE.

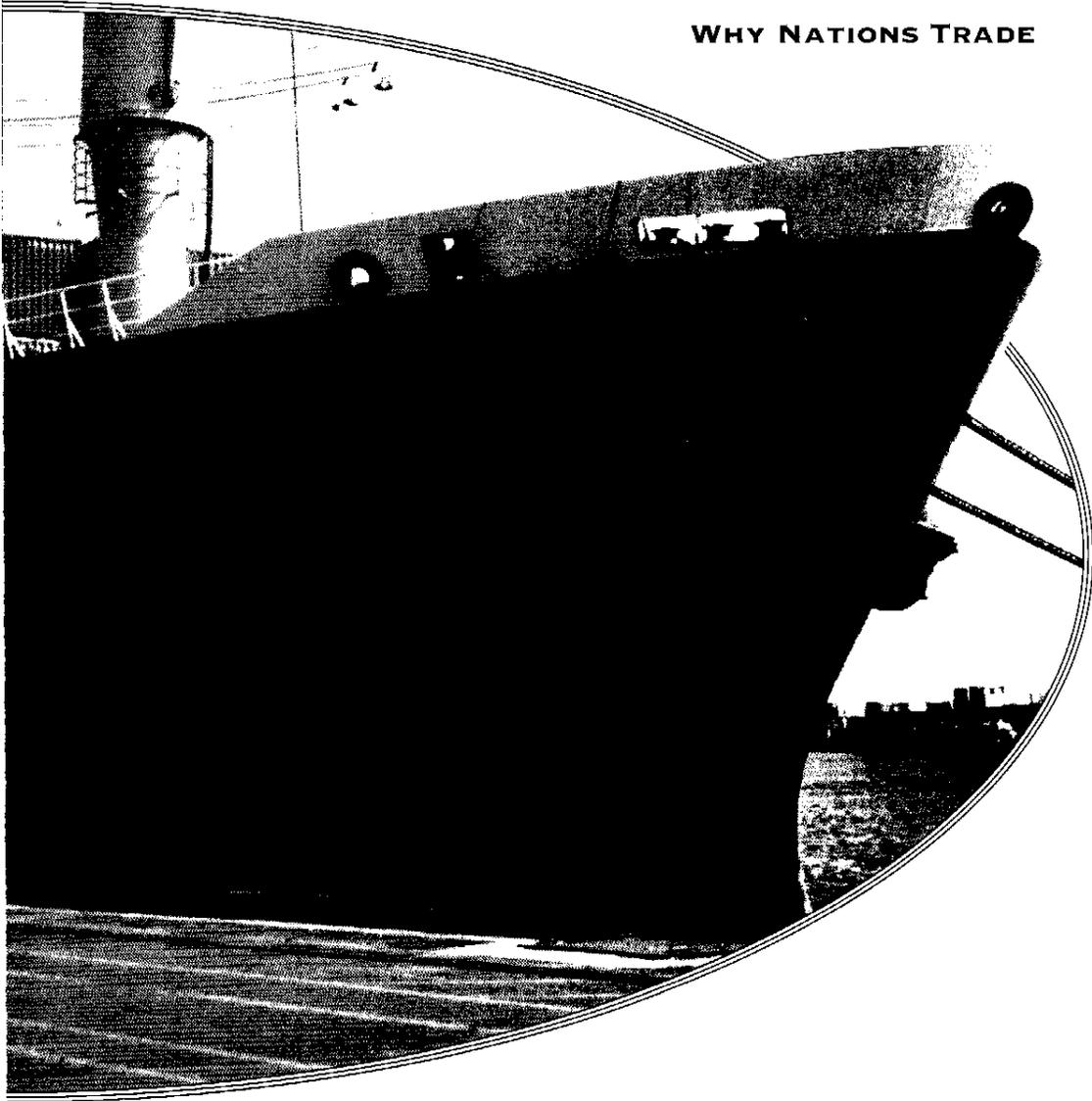
Because countries are so closely linked, economic trends and conditions in one country can strongly affect prices, wages, employment and production in other countries. This condition is referred to as **interdependence**. Events in Tokyo, London and Mexico City have a direct effect on the everyday lives of Americans, just as the impact of events taking place in New York, Washington and Chicago is felt around the globe. If stocks on the New York Stock Exchange plummet in value, the effects are not limited only to the United States; news is transmitted worldwide almost instantly, and stock prices all over the world might change. If factory workers in Taiwan go on strike, prices of Taiwanese toys may be forced up in Europe, Asia and North America.

Interdependence means that countries have to work together more closely, and, to a certain extent, rely on each other for prosperity. Let's take a closer look at how this works.





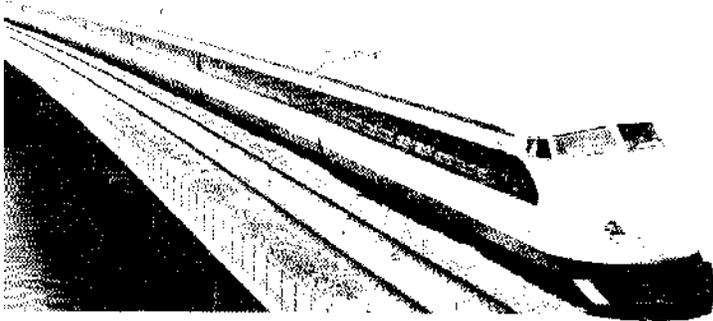
WHY NATIONS TRADE



WHY NATIONS TRADE

International trade occurs because there are things that are produced in a particular country that individuals, businesses and governments in other countries want to buy. Trade provides people with a greater selection of goods and services to choose from, often at lower costs than at home. But what makes trade profitable and productive for both trading partners?

In order to become wealthier, countries want to use their resources—labor, land and capital—as efficiently as possible. However, there are large differences in the quantity, quality and cost of different countries' resources. Some countries have natural advantages, such as abundant minerals or a climate suited to agriculture. Others have a well-trained workforce or highly developed infrastructure, like good roads, advanced telecommunications systems and reliable electric utilities, that help the production and distribution of goods and services.



BENEFITS OF SPECIALIZATION

Instead of trying to produce everything by themselves, which would be inefficient, countries often concentrate on producing those things that they can produce best, and then trade for other goods and services. By doing so, both the country and the world become wealthier.

Suppose the mythical nation of Cottonland is very efficient at producing cloth, but not at making furniture. By dividing its resources evenly between its cotton and furniture industries, Cottonland is able to produce eight bales of cloth and four pieces of furniture each day. The economy of its neighbor, Woodland, is just the opposite; it produces eight pieces of furniture in a day, but only four bales of cloth.

Further, suppose a piece of furniture is the same price as a bale of cloth. In Cottonland, where a bale of cloth can be produced in an hour, but a piece of furniture takes two hours, it makes sense to make a lot of cloth and trade the surplus for furniture. Conversely, for greater productivity, Woodland should direct all of its resources to making furniture.

If Cottonland can produce eight bales of cloth using half of its resources, it will double its cloth production to 16 bales a day by transferring all of its

resources to its cloth industry. By doing so, however, Cottonland would eliminate its furniture industry. Nevertheless, Cottonland would become wealthier; it would have as much cloth as before, plus more cloth to trade for other things that it wants, such as Woodland's furniture. (More accurately, people in Cottonland will buy some of Woodland's currency on the foreign exchange market and use it to buy furniture; Woodland will do the opposite to buy cloth. But more on that later.)

COTTONLAND AND WOODLAND BENEFIT FROM SPECIALIZATION AND TRADE			
Cottonland		Woodland	
Without trade		Without trade	
Cottonland can produce:		Woodland can produce:	
8	4	4	8
bales of cloth	pieces of furniture	bales of cloth	pieces of furniture
Total Production:		Total Production:	
12		12	
UNITS		UNITS	
If Cottonland puts all of its resources into the production of cloth:		If Woodland puts all of its resources into the production of furniture:	
16	0	0	16
bales of cloth	pieces of furniture	bales of cloth	pieces of furniture
Total Production:		Total Production:	
16		16	
UNITS		UNITS	
Cottonland can now trade its surplus cloth for furniture.		Woodland can now trade its surplus furniture for cloth	

Before the two countries directed their resources into their most productive enterprises, total production for both countries stood at 12 pieces of furniture and 12 bales of cloth. After the shift in resources, production increased to 16 bales and 16 pieces. Each country can now trade its surplus goods.

Through specialization and trade, the supply of goods in both Cottonland and Woodland increases; more supply tends to bring prices down, making the goods more affordable. In addition, trade provides a wider variety of goods to consumers: salmon from Scandinavia, bananas from South America and cameras from South Korea, to name just a few of the many thousands of products that trade makes available. If countries did not engage in trade and instead limited their consumption to what they produced at home, consumers would not live nearly as well.

Today, most industrialized nations could produce almost any product they chose. For instance, the United States could conceivably devote all of its

resources to the production of tropical fruits. The United States could compensate for an unsuitable climate in certain areas by clearing and fertilizing land, building hothouses, developing new irrigation techniques and retraining workers—no tropical fruit would ever need to be imported and there would plenty left over to export.

However, this does not make good economic sense. Much of the labor, land and capital that would have to be directed toward the tropical fruit industry could be used more efficiently in other industries. Countries achieve greater total wealth by devoting more resources to their most productive industries.

LAW OF COMPARATIVE ADVANTAGE

But what happens when everything a country produces can be produced more efficiently somewhere else? Does this mean that there is no possibility for profitable trade with other countries?

The answer is no. According to the **Law of Comparative Advantage** a country can profit from international trade even when everything it produces can be produced more efficiently by other countries. A country maximizes its wealth by putting its resources into its most competitive industries, regardless of whether other countries are more competitive in those industries.

Suppose Cottonland produced both cloth and furniture better than Woodland:

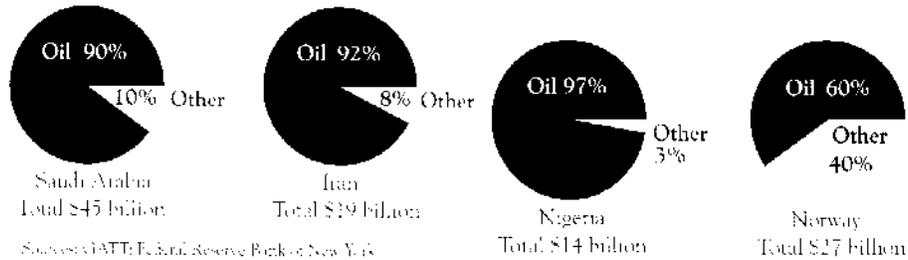
	Cotton-land	Wood-land
Bales of cloth per day	10	2
Pieces of furniture per day	5	3

Cottonland has an **absolute advantage**—it is more efficient—in the production of both products. However, to achieve greater wealth, each country should specialize in producing that item in which it has a **comparative advantage**, or greatest advantage among the products it produces.

Cottonland should continue to make cloth and trade for Woodland's furniture. Woodland should concentrate on producing furniture and trade for cloth. If resources are channeled into the most productive enterprises in each country, there will be more products to trade.

Let's look at it in terms of opportunity cost, or the cost of *not* transferring resources. Cottonland is twice as efficient at producing cloth as furniture, so each time it produces a piece of furniture, it could have produced two bales of cloth instead. In contrast, Woodland is one-and-a-half times as efficient at producing furniture as cloth (three pieces and two bales each day). Each time Woodland produces a piece of furniture, it misses out on the production of only two-thirds of a bale of cloth. Since its missed opportunity for production is less than Cottonland's, it makes sense for Woodland to make the furniture.

SOME COUNTRIES DEPEND VERY HEAVILY ON OIL EXPORTS 1990 EXPORTS



BENEFITS OF DIVERSITY

While it makes good economic sense to put resources into the most productive industries, no country wants to rely on only one product. Specialization in the production of one, or too few, goods makes a country more vulnerable to changes in the world economy, such as recessions, new trade laws and treaties, and new technologies. If a country relies heavily on producing a single product and demand for that product suddenly drops because another country produces a less expensive alternative, or if trade is restricted, the economy could be devastated. For example, several Middle Eastern countries rely on oil for more than 90 percent of their exports; to a large extent the economic fortunes of these countries rise and fall with the oil market.

In addition, the degree to which countries specialize is influenced by that country's **terms of trade**. A country's terms of trade reflect the relative prices of a country's imports and exports. In general, it is most advantageous to a country to have declining import prices compared with the prices of its exports. Exchange rates and productivity differences affect the terms of trade more than any other factors.

By developing a diverse economy, a country can make sure that even if some industries are suffering, other, more prosperous industries will keep the economy relatively healthy. Larger, more developed economies, like those of the United States, Japan, Germany and Great Britain, have many internationally competitive industries. Among many other fields, the United States is competitive in finance, entertainment, aerospace, industrial equipment, pharmaceuticals and communications.

COMPETITIVENESS

Competitiveness is a broad term used to describe the relative productivity of companies and industries. If one company can produce better products at lower prices than another, it is said to be more competitive. If, overall, the steel mills of Germany are more efficient and productive than the steel mills of France or Belgium, it would be said that the German steel industry is more competitive than the French and Belgian steel industries. Governments are always concerned about the competitiveness of their countries' different industries, since it is difficult for uncompetitive industries to survive.

In the long run, competitiveness depends on a country's natural resources, its stock of machinery and equipment, and the skill of its workers in creating goods and services that people want to buy.

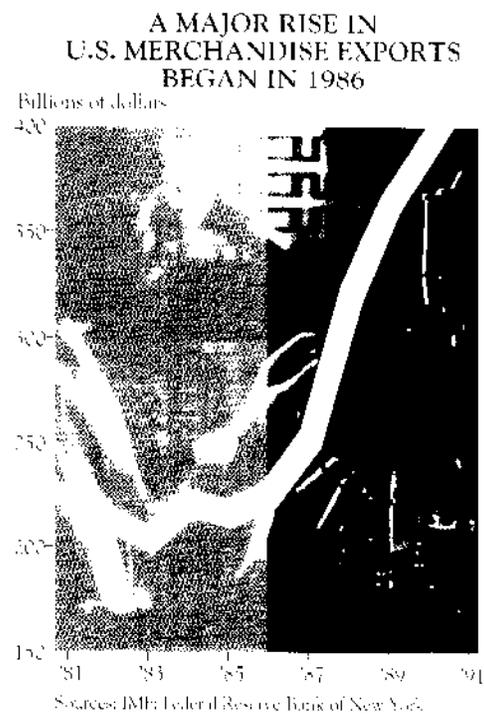
Natural resources are already there and must be used efficiently, but a country's infrastructure and its workers' skills have to be built up over time. The ability of a society to use natural resources wisely, develop new technologies, improve the skills and efficiency of its workforce, and invest in its infrastructure are key factors in trying to remain competitive.

KNOWLEDGE INTENSIVE PRODUCTS CONTRIBUTED TO A U.S. EXPORT BOOM

From 1986 to 1991, there was an enormous boom in U.S. exports, especially in manufactured goods. Exports almost doubled, going from \$227 billion to \$422 billion. One of the driving forces behind the increases in exports was the success of U.S. companies in selling "knowledge-intensive" manufactured goods to other industrialized countries.

The value of knowledge-intensive products depends mainly on the skills that went into them, rather than the costs of the physical components. For example, when producing a new compact disc, the expenses of paying the artist and the advertising, marketing, legal and accounting fees far outweigh the cost of physically producing the disc; or, a custom-made chemical for a new drug might be expensive because of the years of research, development and testing that went into it.

The production of these knowledge-intensive goods relies more on a skills, well-educated work force than on natural resources. many different types of products fit this description, from software to custom-built aircraft engine parts. The most successful exports during the boom were produced for a very specific market niches and substitute products were not easy to come by. These knowledge-intensive products are becoming a major force in international trade and a source of much wealth to countries whose economies are well-positioned to compete in those markets.



ECONOMIES OF SCALE

The Law of Comparative Advantage says that a country can become more competitive by putting its resources, through investment in training and production facilities, into its most efficient industries. Using its resources in this manner may enable a country to achieve **economies of scale**—increasing its output in a particular industry so that its costs per unit decrease. Lower-cost goods become more competitive in international markets.

Having access to international markets may help countries to achieve economies of scale in different industries. For example, it would not be profitable for a small country to produce expensive, sophisticated weapons systems unless it could spread the enormous research and development costs over many units. To do this, it may need to export. If nations know that they have access to foreign markets and can export, it is possible to increase the scale of their manufacturing operations far beyond what they need for their own use, and as a result the nations become more efficient and competitive.

Of course, in reality, the factors affecting a country's trade competitiveness are more complicated. Greater specialization improves competitiveness, but sometimes resources are difficult to transfer from one industry to another. An insurance agent cannot be moved to an architectural company without retraining, and it would cost a great deal of money to turn a car factory into a shoe factory.

To further complicate matters, governments often attempt to restrict or encourage international trade to achieve domestic economic goals, such as increasing employment in certain industries, developing new sources of wealth, or maintaining economic independence.

FREE TRADE VS. PROTECTIONISM

All governments regulate foreign trade. The extent to which they do so is a topic of lively debate and is a source of great controversy. The news is full of reports of different groups demanding to be protected from foreign competition, new trade agreements, and problems with imports and exports. Some call for more government action, others for less.

Although the amount of government involvement in trade varies from country to country and from product to product, overall barriers to trade have been reduced since World War II.

Those who favor **free trade** think that an open trading system with few limitations and little government involvement is best. Advocates of **protectionism** believe that governments must take action to regulate trade and subsidize industries to protect the domestic economy. All governments practice protectionism to some extent. The debate is over how much or how little protectionism to use to reach a country's economic goals.

We've seen how trade can raise people's living standards, so why is there a debate at all about restricting it? If the goal of trade is to provide people with as many different goods as possible at the lowest prices, then shouldn't all barriers to trade be eliminated?

In theory, completely free trade would provide the most goods and services at the lowest possible cost, as consumers everywhere are allowed to buy goods and services from whomever in the world produces them most efficiently. However, the competition that free trade brings to domestic industries may result in unemployment and slower growth. For example, if cars can be produced much more efficiently in another country and consumers are free to buy them, the domestic auto industry will lose business. In this case, a government might seek to protect its auto industry from competition by discouraging imports of lower-cost cars.

Indeed, industries and organizations that stand to suffer from free trade usually want the government to protect them from foreign competition. Our fictional furniture makers in Cottonland would no doubt favor limiting or taxing furniture imports from more competitive Woodland. In the real world, political interest groups often push for legislation to restrict trade.

ARGUMENTS FOR PROTECTIONISM

Sometimes, because of much lower labor costs, less-developed countries can produce goods less expensively than can developed nations. These goods tend to be more competitive on international markets, which is a source of great concern to producers of similar goods in industrialized nations. Therefore, the argument that protectionism is desirable because it protects domestic jobs by compensating for foreign firms' use of inexpensive labor is very powerful in developed nations.



Protectionists also argue that new or **infant industries** often must be protected to give them time to grow and become strong enough to compete internationally. Governments of developing countries may want their economies to become competitive in industries that can provide a firm foundation for future growth, such as computers and telecommunications. Rather than have new companies put out of business by well-established

foreign firms, the government may shield its domestic companies from foreign competition until they develop sufficiently. Critics of this philosophy correctly point out that some of these infant industries never "grow up," meaning that they come to rely on protection and never become competitive.

In addition, traditional protectionist arguments hold that any industry crucial to national security, such as the producers of military hardware, should be protected. This way, the nation will not have to depend on outside suppliers during political or military crises.

Protectionism also may promote diversification of the economy. If a country channels all of its resources into a few products, no matter how internationally competitive those products are, it runs the risk of becoming too dependent on them. However, if other, weaker, industries are kept competitive through protectionism, it may help the nation's economy to diversify.

METHODS OF PROTECTIONISM

Governments use a variety of tools to manage their countries' international trade positions. One of the most important of these tools, the **tariff**, is a tax on an import. It has the effect of making the item more expensive to consumers, thereby reducing demand. For example, if it costs \$1 to produce a widget in an American factory and only \$.75 in a foreign factory, the American factory will have a difficult time staying competitive. If the U.S. government were to impose a tariff of 60 percent, the cost to Americans would jump \$.45 to \$1.20 ($$.75 \times .6 = \$.45$). If consumers base their purchases only on price, people would probably buy the less expensive American widgets; by doing so, they would help the U.S. widget industry to prosper.

However, if the tariff had not been imposed, Americans could have saved money by purchasing the imported widgets for less than the cost of the domestically produced widgets. Under a pure free trade policy, which would not have tariffs, the U.S. widget industry would either have to change in order to compete with the less expensive imported products or face extinction.

Tariffs do not have to push the price of a foreign import above the price of its domestically produced counterpart to be effective. In the example above, a tariff of 20 percent instead of 60 percent on the \$.75 foreign product would increase the price of the widget to \$.90, but would not make the \$1 American product a less-expensive alternative. Such a tariff would have three effects, though:

- it might reduce the consumption of the foreign product, simply by making it more expensive and reducing the price difference between the foreign and domestic products;
- domestic companies still would have to become more efficient and reduce prices to compete, but they wouldn't have as far to go; and
- it could be used as a political bargaining chip during trade negotiations.

Tariffs usually are calculated in terms of a percentage of the value of the imported goods, although sometimes a flat rate is charged (one dollar per item or pound, for example).

Governments sometimes restrict sales of foreign goods by imposing **import quotas**. These limit the quantity of a foreign good that can be imported annually and help domestic producers by limiting the share of the market that can be

taken by foreigners. Sometimes governments negotiate **voluntary restraint agreements** by which the exporting country agrees to limit voluntarily its exports of a certain product. For example, in 1992, Japan began limiting its auto exports to the United States to 1.65 million cars per year, a significant decrease from the limits of previous years. It is important to note, however, that sometimes sales may not even reach these limits.

These types of limits have problems of their own. The free market is not allowed to function since the quantity of goods remains constant while the price changes, instead of supply and demand influencing both price and quantity. In addition, if the price of a restricted good rises, the exporting country profits; if a tariff causes the price of a good to rise, it is the importing country's government that gains revenue.

Another way to achieve the goals of protectionism is to make the domestic industry more competitive, rather than limiting or taxing imports to make foreign goods less competitive. This can be done through **subsidies**, which are payments by the government to an industry. A direct subsidy is an outright payment; indirect subsidies include special tax breaks or incentives, buying up surplus goods, providing low-interest loans or guaranteeing private loans.

In addition to using tariffs and quotas to manage international trade, governments sometimes ban trade with certain countries for political reasons—during times of war or political crises—or ban imports of a certain product to protect domestic industries. The Japanese government, for example, in order to protect its rice industry from competition, allows almost no imported rice into Japan.

The United States offers **most-favored-nation** (MFN) status to many of its trading partners. MFN status assures a country that no other country will get lower tariffs when exporting to the United States. Of course, this status can be revoked at the discretion of the U.S. government.

Health, environmental and safety standards, which often vary from country to country, can function as a form of protectionism. Forcing imported goods to meet certain standards before they are allowed into the country can add to their cost. For example, the United States has strict auto emission standards, which foreign car manufacturers must meet to gain access to the U.S. market. Meeting these standards can be expensive and adds to the cost of the imported car.

INTERNATIONAL ORGANIZATIONS SEEK COOPERATION ON TRADE ISSUES

As trade has become more and more important to nations' economic well-being, countries have attempted to manage it to achieve greater wealth and stability. International organizations have been formed to facilitate cooperation on trade issues.

The **General Agreement on Tariffs and Trade** (GATT) is essentially a treaty among many different nations to help manage global trade. Over 80 percent of world trade occurs between GATT signatories. The basic principles of the treaty are that:

- national origin of an import should not be a factor in considering trade barriers;
- tariffs and not quotas should be used to protect domestic industries;
- countries should consult on trade matters; and
- GATT meetings should provide a forum to discuss trade issues and a legal instrument to codify agreements.

Representatives from the countries that have signed the treaty meet periodically at what are called "rounds" of GATT talks, to negotiate trade agreements and settle disputes. Since World War II, the GATT has played a major role in the reduction of obstacles to international trade.

Another organization, the **International Monetary Fund** (IMF), was founded at the United Nations Monetary and Financial Conference at Bretton Woods in 1944. It was set up to promote monetary and exchange rate cooperation and to facilitate international trade. The IMF provides assistance to nations suffering from short-term financial problems. While a related organization, the **World Bank**, loans only to poor countries in order to help them develop, the IMF loans to any member country that needs foreign currency to meet its obligations. This was especially useful when exchange rates were fixed, because the IMF helped countries to avoid devaluing their currencies.

The **Bank for International Settlements** (BIS) in Basle, Switzerland, functions as a bank for central banks, helping them invest their reserves in financial markets all over the world. The BIS also provides a forum where central bank officials from around the world meet to discuss financial and economic issues. The Basle Committee on International Banking Supervision, a committee of the BIS that consists of representatives of some of the world's largest countries, meets to establish uniform financial and performance guidelines for commercial banks around the world.

The **Group of Seven**, or G-7, consists of the leaders of the United States, Germany, Japan, Great Britain, Canada, Italy and France, who meet semi-annually to discuss a myriad of global economic issues. First held in 1975, these economic "summit meetings" involve discussions on economic growth, trade relations, aid to developing countries and foreign exchange markets. While economic issues still dominate these meetings, discussions on environmental issues and arms control have been included in recent years.

Another "G," the **Group of Thirty** (G-30), is a private, independent organization dedicated to studying the international economy. Top financial experts, economists and government officials from the 30 member nations

participate in smaller groups that address current issues in international economics.

A major development in world trade was the formation of the **European Community**, or EC, in 1957. The EC attempts to bind European nations together into a common market, with no trade obstacles among member nations. In 1990, European nations took a step toward complete financial and economic unification. At a meeting in Maastricht, Holland, plans were made to form one currency and one central bank for member nations by the year 2000.

Other nations have moved to build free-trade zones and common markets as well. The United States, Canada and Mexico have very few trade barriers between them. Many smaller "trade blocs" are developing all over the world, in North Africa, Southeast Asia, different parts of Latin America, Eastern Europe and the Middle East.

A possible problem is that competing trade blocs will adopt protectionist policies and slow worldwide economic growth by restricting trade among groups of nations. However, the rapid proliferation of trade blocs and free-trade zones has occurred because many countries want the benefits of increased trade that accompany lower trade barriers.

Over the past few decades, tariffs have been lowered, but non-tariff barriers like voluntary restraint agreements and quotas have increased. The GATT provides a multinational forum to deal with tariff issues, but other forms of protectionism usually are negotiated between pairs of countries. In the future, organizations may have to facilitate multinational negotiations to deal with non-tariff trade restrictions.

Besides legal restrictions, sometimes there are less formal obstacles to international trade. Cultural factors may play a significant role in the way companies do business with foreigners. In some countries, it is common for businesses to establish long-term relationships with one another. While this practice tends to preserve the stability of the market, it also makes it difficult for foreign companies entering the market to establish new business relationships. In other countries, companies do business with whoever offers the best terms, often changing business partners frequently. This practice strengthens competition, but sometimes at the cost of more stable, mutually beneficial business relationships.



ARGUMENTS FOR FREE TRADE

The debate about how free a trading system should be is an old one, with positions and arguments evolving over time. Free-trade advocate Frederic Bastiat presented the French Chamber of Deputies with a devastating satire of protectionists' arguments in 1845. His petition asked that a law be passed requiring people to shut all windows, doors, skylights and shades during the day, so that the candle industry would be protected from the "unfair" competition of the sun. He argued that this would be a great benefit to the French candle industry, creating many new jobs and enriching suppliers.

While it is undoubtedly true that the candle industry would benefit from a lack of sunlight, consumers would obviously not be happy about being forced to pay for light that they could get for free were there no government intervention.

U.S. free-trade advocates typically argue that consumers benefit from freer trade because foreign competition forces U.S. companies to keep prices low and provides a greater selection of goods and services. Foreign trade also forces U.S. companies to modernize plants, production techniques and technology, which keeps them competitive.

Free-traders argue that imposing protectionist measures, like tariffs, often brings about retaliation by foreign governments, which might seek to restrict sales of U.S. products in their countries. This may increase both inflation and unemployment, as U.S. export industries suffer and prices of imported goods rise. The Smoot-Hawley Tariffs of 1930, which placed high tariffs on both agricultural and manufactured imports, provoked a wave of retaliatory actions by overseas trading partners of the United States. World trade dropped by more than 60 percent, a reduction that deepened the Great Depression of the 1930s.

Another argument for free trade is that the costs of protectionism outweigh the benefits. For example, suppose the United States placed a tariff on imported wrenches that were less expensive than domestic wrenches. The tariff would have four basic costs to the economy:

- wrench-buyers would have to pay more for their protected U.S.-made wrenches than they would have for imported wrenches;
- jobs would be lost at retail and shipping companies that import foreign wrenches;
- jobs would be lost in any domestic industries that suffer from retaliatory tariffs; and
- the extra costs of the wrenches will be passed on to whatever goods and services the wrenches are used on. For example, if these particular wrenches are used to tighten bolts in a photocopy machine factory, the prices of those machines will have to include the extra cost of the wrenches.

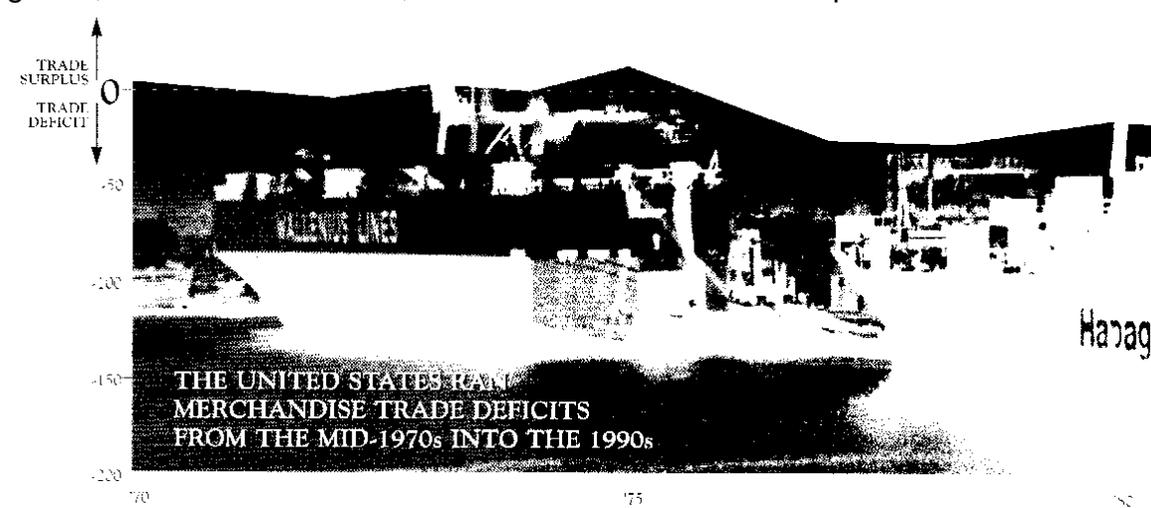
These costs must be weighed against the number of jobs that the tariff would save.

Finally, an open trading system may create a better climate for investment and entrepreneurship than one in which the fear of governments cutting off access to markets is present.

MEASURES OF TRADE

In order to examine a country's position in international trade, it is useful to consult two of the most frequently used statistics, the **balance of trade** and the **balance of payments**. When you hear on the news about the U.S. "trade balance," what you are usually hearing about is the **merchandise trade balance**, which is the difference between a nation's exports and imports of merchandise. A "favorable" merchandise balance of trade, or **trade surplus**, occurs when a country's exports exceed its imports. A "negative" balance of trade, or **trade deficit**, occurs when a country's imports exceed its exports.

From the mid-1970s, throughout the 1980s and into the 1990s, the United States has run persistent trade deficits. Economists disagree as to the effects this has had on the economy, but it is certain that these deficits allowed foreigners to accumulate U.S. dollars earned in payment for products that Americans imported. Many of these dollars were then used to purchase U.S. goods, services and assets, such as real estate and companies.



The balance of trade, however, is not the whole picture; it includes only purchases and sales of merchandise. The complete summary of all economic transactions between a country and the rest of the world—involving transfers of merchandise, services, financial assets and tourism—is called the balance of payments.

Simply, any transaction that results in money flowing into the country is a balance of payments credit, and anything that draws money out of the country is a balance of payments debit.

Balance of payments deficits, where the amount of money leaving the country is greater than the amount flowing in, need to be financed; extra money has to come from somewhere. Usually, payments deficits are financed by borrowing money from overseas.

The balance of payments for a country is separated into two main accounts: the **current account** and the **capital account**. The current account records sales and purchases of goods, services and interest payments. The entire merchandise trade balance is contained in the current account. The capital account deals with investment items, like whole companies, stocks, bonds, bank accounts, real estate and factories. Thus, if you bought a parachute from a factory in Germany, your purchase would be recorded in the current account. But if you bought the entire parachute factory, your purchase would be in the capital account.

The balance of payments is influenced by many factors, including the financial and economic climate of other countries. For example, if other countries want the services of U.S. doctors, bankers, lawyers, accountants, engineers, entertainers and other service-providers, that demand will play a significant role in the U.S. balance of payments. Large amounts of money flow between nations in payment for such services, even if no merchandise is exchanged. In 1991, service exports accounted for over one-quarter of total U.S. exports. Financial conditions also have an effect. If U.S. banks are offering higher interest rates for deposits than banks abroad, foreign deposits will flow to the United States, which improves the U.S. capital account. Conversely, if interest rates are higher abroad, U.S. investors might choose to invest their money in other countries. This would weaken the U.S. capital account.

STATISTICS CAN HAVE DIFFERENT INTERPRETATIONS

Whether it was the tariffs imposed by the North that were a prelude to the U.S. Civil War, the Smoot-Hawley tariffs that contributed to the Great Depression, or the international trade disputes we face today, conflicts over trade issues have played an important role in history.

Trade statistics are often used to support arguments in these conflicts. However, trade statistics, like all statistics, sometimes can be misleading. By themselves, statistics don't mean much at all; their interpretation depends on the questions that are being asked. The U.S. trade deficit, for example, has at different times been viewed as bad, good, irrelevant, overstated, understated and illusory. To a company that exports goods to the United States, the deficit may be viewed as a sign of a healthy U.S. market. To a U.S. trade union, the deficit may be viewed as a sign that companies in the United States are having difficulty competing in world markets.

It is important to know something about the data that is being gathered in order to draw conclusions from them. In a global economy that is measured in trillions of dollars, not every transaction is going to be reported accurately. Statistics for many types of transactions rely heavily on estimates made by statisticians, and even the best estimates are sometimes incorrect. This can produce a skewed measurement of what is actually taking place in the economy.

Each month, U.S. importers file over one million tax documents with the U.S. Customs Service describing the type and value of imported goods. These reports are processed and tabulated to determine the overall level of U.S. imports. Inaccurate reports, delays in processing data and smuggling can affect their validity.

There is no U.S. tax on exports, so to collect information, the U.S. Department of Commerce developed a form called the Shippers' Export Declaration (SED) form, which exporters fill out when they send goods overseas. These forms are tallied to arrive at export totals.

The Bretton Woods Agreements Act of 1945 requires the publication of complete balance of payments information, and statistics are generally reliable. However, the collection process is often difficult; for example, data on travel, services, direct foreign investment and financial transactions is gathered largely through quarterly or annual mail surveys, many of which are only voluntary.

Sometimes, even classifying goods as imports or exports can be difficult. For example, trade usually is tabulated on the basis of national origin rather than national ownership. If a product is shipped from the United States to Germany, it is considered to be a U.S. export and a German import. It makes no difference whether a foreign company owns the U.S. factory that produced the item, or if it is a U.S. company in Germany that buys it. Conversely, if a U.S. company has a plant in Brazil and sells a product to a Japanese company in Great Britain, the transaction is recorded as a British import and a Brazilian export.

It is often also difficult to assign a value to goods. To compare the exports of two countries in a given year, it is necessary to convert the figures into the same currency. However, the exchange rate may distort the significance of the numbers. It may appear that one country is exporting more goods than another, when, in fact, the difference can be attributed to variations in exchange rates, not to the quantity or quality of exports. In addition, real estate values must be adjusted to current market prices, equipment must be depreciated with age, and inflation must be taken into account. If these and many other factors are not considered, the value of an import or export might be misleading.

For example, at first glance it would appear that Germany's exports leaped dramatically from \$269 billion in 1989 to \$346 billion in 1990—nearly a 30 percent increase. Do these figures indicate a weakening of the German mark on foreign exchange markets? A new free-trade agreement? Neither one—after East and West Germany were reunited, East German exports were added into the German total, which made total exports seem significantly larger than they would have been otherwise.

Changes in trade statistics do not necessarily signify changes in a nation's trade patterns; the changes may be merely a result of putting data together in new ways.



**FOREIGN CURRENCY
EXCHANGE**



FOREIGN CURRENCY EXCHANGE

In order to buy foreign products or services, or to invest in other countries, companies and individuals may first have to buy the currency of the country with which they are doing business. Generally, exporters prefer to be paid for their goods and services either in their own currency (Japanese in yen and Germans in marks, for example) or in U.S. dollars, which are accepted all over the world. For example, when the French buy oil from Saudi Arabia, they may pay in U.S. dollars, not French francs or Saudi dinars, even though the United States is not involved in the transaction. The **foreign exchange market**, or "FX" market, is where the buying and selling of different currencies takes place. The price of one currency in terms of another country's currency is called an **exchange rate**.

The market itself is actually a worldwide network of traders, connected by telephone lines and computer screens—there is no central headquarters. The three major centers of trading, which handle more than half of all FX transactions, are Great Britain, the United States and Japan. Transactions in Singapore, Switzerland, Hong Kong, Germany, France and Australia account for most of the rest of the market. Trading goes on 24 hours a day; at 8 a.m. in London, the trading day is ending in Tokyo, Singapore and Hong Kong. At 1 p.m. in London, the New York market opens for business. In the afternoon, traders in San Francisco can do business with their colleagues in the Far East.

The FX market is fast paced, volatile and enormous—in fact, it is the largest market in the world. In 1992, an estimated \$880 billion was traded every day—roughly equivalent to every person in the world trading \$176 each day.

MARKET PARTICIPANTS

Of course, not everyone in the world participates in the foreign exchange market. There are four types of market participants—banks, brokers, customers and central banks.



Currency traders move an average of \$850 billion each day, making the foreign exchange market the largest in the world.

- Banks and other financial institutions are the biggest participants. They earn profits by buying currencies from, and selling currencies to, customers and to each other. Roughly two-thirds of FX transactions involve banks dealing directly with each other.
- Brokers act as intermediaries between banks. Dealers sometimes call them to find out where they can get the best prices for their currencies. Dealing through brokers has the added advantage of anonymity; sometimes banks wish to keep their FX transactions confidential, and by dealing through a broker, this can be easily done. Brokers earn profits by charging commissions on the transactions they arrange.

- Customers are market participants, mostly large companies, who require foreign currency in the course of doing business or making investments. Companies with large foreign exchange needs will sometimes have their own trading desks to manage their currencies. This category also includes individuals, who may need foreign currency for tourism or purchases abroad.
- Central banks, which act on behalf of their governments, sometimes participate in the FX market to influence the value of their currencies.

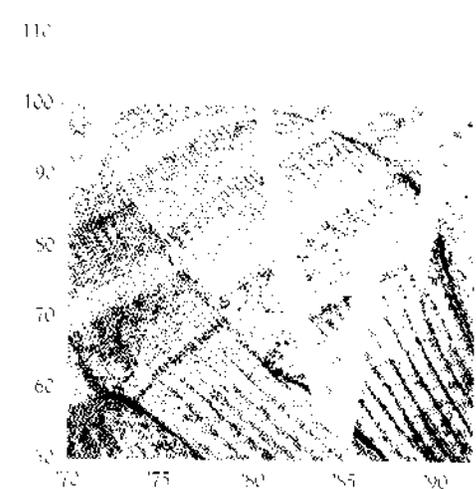
With almost a trillion dollars changing hands every day, the activity of these participants greatly affects the value of every dollar, pound, yen, mark or guilder in our pockets.

The players in the foreign exchange market participate for a variety of reasons: to make short-term profits from fluctuations in exchange rates, to protect themselves from loss due to changes in exchange rates, and to acquire the foreign currency necessary to buy goods and services from other countries.

FOREIGN EXCHANGE RATES

Many people's contact with the world of foreign exchange is limited to changing money for use when traveling in, or buying things from, other countries. Suppose a U.S. tourist traveling in France wants to buy a sweater. The price tag says 500 francs. Before going shopping, the tourist visits a bank and converts, or exchanges, U.S. dollars for French francs. At the bank, he is told the exchange rate at the time is 5.5 francs to \$1. The tourist determines that the 500 franc cost of the sweater is the equivalent of paying \$90.91.

**THE DOLLAR COST OF A
500 FRENCH-FRANC GOOD
HAS VARIED
OVER TIME**



Source: Federal Reserve Bank of New York

However, exchange rates can change at any time, so whenever we engage in FX transactions, we take a risk. There's always a chance that our purchases could actually be less expensive—or, unhappily, more expensive—if we wait to buy them. For example, if the exchange rate changes from 5.5 to 5.6 on the next day (a huge change by market standards) the 500 franc sweater will cost the tourist only \$89.29 instead of \$90.91. The franc is said to have "fallen" or lost value against the dollar, because \$1 will buy more francs than before. The dollar is said to have "risen" against the franc.

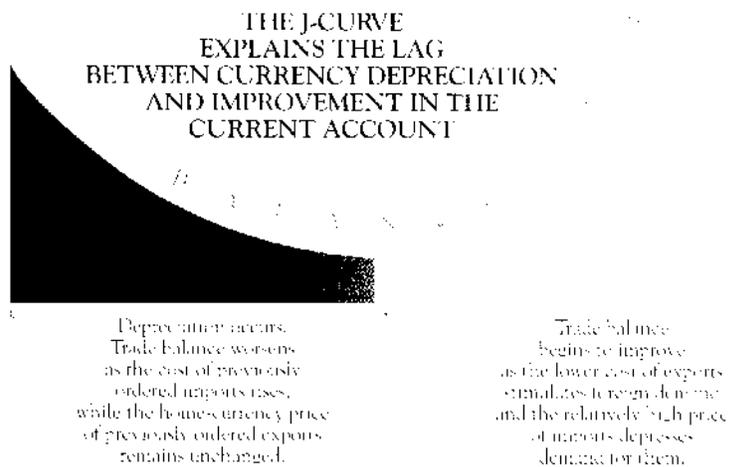
However, if the rate is 5.4, the franc is said to be stronger, or to have "risen" against the dollar, while the dollar has "weakened" against the franc. At 5.4, \$1 will buy fewer francs, and our tourist's sweater will cost \$92.60. These price changes may not seem very significant, but when billions of dollars are involved, even a hundredth of a percentage point change in the exchange rate becomes important.

What effects do exchange rate fluctuations have on a country and the world economy? If one currency can buy an increasing amount of another currency it is said to be "strong." However, just because a currency is strong does not mean that everyone in that country is better off. A stronger dollar means that Americans can buy foreign goods more cheaply, but foreigners will find U.S. goods more expensive. If you work in a company that relies on the sale of exports, a stronger dollar probably is not going to help your firm's business. The goods you produce will be more expensive to foreigners, who therefore may not buy as many. If you are an importer, by contrast, your cost of purchasing foreign goods will drop.

Therefore, it would be logical to assume that if the dollar were weaker, the U.S. trade balance would improve, as foreigners bought more American goods. However, after the dollar depreciates, the U.S. trade balance usually worsens for a few months. A phenomenon called the J-curve explains why: most import/export orders are taken months in advance. Just after a currency's value drops, the volume of imports remains about the same, but the price of the ordered imports rises in terms of the home nation's currency. In the meantime, the value of domestically produced exports tends to remain constant. The difference in value worsens the country's trade balance, until the volumes of imports and exports fully adjust to the new exchange rate.

Exchange rates also are a very important factor to consider when making international investment decisions. Just as our tourist's sweater may increase or decrease in price based on changes in exchange rates, money invested overseas incurs the same risk. When the investor decides to "cash out," or

bring his money back home, any gains could be magnified or wiped out, depending on the changes in exchange rates. Companies that do a great deal of international business must watch exchange rates carefully to try to protect and increase their profits.



In short, changes in foreign exchange rates affect prices of imported goods and the overall level of price and wage inflation in an economy. Tourism patterns may change depending on where currencies can buy the most. Confidence in a currency's strength also may encourage consumers to buy and investors to make long-term commitments.

DETERMINATION OF FOREIGN EXCHANGE RATES

Exchange rates respond quickly to all sorts of events, both tangible and psychological: business cycles, balance of payments statistics, political developments, new tax laws, stock market news, expectations for inflation, international investment patterns, government and central bank policies, and many other things.

At the heart of all this complexity, though, are the same forces of supply and demand that determine the prices of goods and services in any free market. If, at current exchange rates, the demand for a currency is greater than the supply, its price tends to rise; if supply exceeds demand, the price tends to fall.



Trading on the New York Stock Exchange is influenced by economic and political news

The supply of a given currency is heavily influenced by the country's monetary authorities (usually the country's central bank), consistent with the amount of spending taking place in the economy. Governments and central banks must closely monitor economic activity to keep the money supply at a level appropriate to achieve their economic goals. Too much money in the economy can lead to inflation, with the value of money declining and prices rising; too little money can lead to sluggish economic growth and rising unemployment. Monetary authorities must decide whether economic conditions call for a larger or smaller supply of money.

The condition of a country's economy plays a big role in the demand for its currency on the FX market. The currency of a country with a growing economy, relative price stability and a wide variety of competitive goods and services for sale would be more in demand than that of a country in political turmoil, with high inflation and only a few marketable exports.

But it is not only the demand for a nation's tangible goods that influences exchange rates. Money will flow to wherever it can get the highest return with the least risk. If a nation's financial instruments, such as stocks and bonds, offer high rates of return at relatively low risks, foreigners may buy currency to invest in them. In addition, FX traders' speculation within the market about the likelihood of different events will also move exchange rates. For example:

- News of political instability in different parts of the world often causes the U.S. dollar to rise as investors buy dollars, seeking a "safe haven" for their money in the world's largest economy.
- A country's interest rates rise and its currency appreciates, as foreign investors seek a higher return than they can get in their own countries.
- A developing nation implements a low-inflation program of economic growth widely believed to have good prospects for success; its currency rises as

foreign investors seek new opportunities. However, if the government is suddenly replaced and economic plans are changed radically, the currency's value in foreign exchange markets may plummet as foreigners seek to withdraw their money.

FOREIGN CURRENCY TRADING

"Yoshi, it's Maria in New York. May I have a price on twenty cable?"

"Sure. One seventy-five, twenty-thirty."

"Mine twenty."

"All right. At 1.7530, I sell you twenty million pounds."

"Done."

"What do you think about the Swiss franc? It's up 100 pips."

"I saw that. A few German banks have been buying steadily all day..."

"Yoshi, it's Maria in New York. I am interested in either buying or selling 20 million British pounds."

"Sure. I will buy them from you at 1.7520 dollars to each pound or sell them to you at 1.7530 dollars to each pound."

"I'd like to buy them from you at 1.7530 dollars to each pound."

"All right. I sell you 20 million pounds at 1.7530 dollars per pound."

"The deal is confirmed at 1.7530."

"Is there any information you can share with me about the fact that the Swiss franc has risen one-one hundredth of a franc against the U.S. dollar in the past hour?"

"Yes, German banks have been buying Swiss francs all day, causing the price to rise a little..."

Conversations like this one occur thousands of times every day in the foreign exchange market, as traders buy and sell currencies, talk about the markets and exchange information. Of the estimated \$880 billion that is traded every day, less than 20 percent is traded for the import and export needs of companies and individuals or for direct foreign investment. The majority of trading is done to try to profit from short term fluctuations in exchange rates, to manage existing positions or to purchase foreign financial instruments.

In the volatile FX market, traders constantly try to predict the behavior of other market participants. If they can correctly anticipate other traders' strategies, they can act first and beat the competition. FX traders make money for their firms by buying currency and selling it later at a higher price, or, anticipating that the market is heading down, by selling at a high price first and buying back at a lower price later. If a trader purchases a lot of a currency, he is said to be long that currency (long dollars, long yen, etc.); conversely, if a trader sells a currency, he is said to be **short** (short sterling, short francs, etc.).

In order to predict movements in exchange rates, traders often try to determine if a particular currency's price reflects a realistic value in terms of current economic conditions. Analysts attempt to determine a currency's actual value by examining inflation, interest rates and the relative strength of the country's economy. They assume that the price will move up if the currency is under priced, and down if overpriced.

TRADING BETWEEN BANKS

Many banks are major forces in the FX market and employ large numbers of traders. Trading between banks is done in two ways. If a U.S. bank trades with another bank, a foreign exchange broker is sometimes used as an intermediary. The broker arranges the transaction, matching buyer with seller without ever taking a position. The brokerage firm receives a commission for its services, half of which is paid by the buyer and half by the seller. About one-third of FX transactions are arranged in this manner.

Most of the time, banks deal directly with each other. The fictional dialogue at the start of this section is an example of direct dealing. Yoshi "makes a market" for Maria by quoting her a **two-way price**. This means that Yoshi's firm provides prices for both buying and selling and is prepared to do either one. For most currencies, the difference in the two price quotes (the **spread**) is usually no more than 10 **pips**, or hundredths of a currency unit.

Most prices of currencies are quoted by saying how many units of that currency would equal \$1. However, the British pound, New Zealand dollar, Australian dollar, Irish punt and European Currency Unit (ECU) are all quoted in terms of how many dollars would equal one unit of foreign currency.

The currencies of the world's large, industrial economies, or **hard currencies**, are always in demand and are traded actively. In terms of volume, trading in the foreign exchange market is dominated by four currencies: the U.S. dollar, the German mark, the Japanese yen and the British pound. Together, they account for approximately 80 percent of market activity.

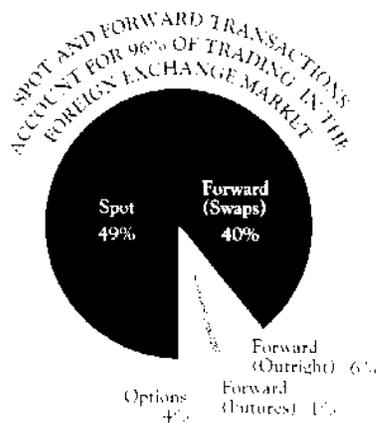
However, it is not always easy to find markets for all currencies. There is a lot less demand for the currencies of less-developed countries (**soft currencies**). This lack of demand along with exchange controls may make these currencies very difficult to convert.

TYPES OF TRANSACTIONS

The most common type of transaction (comprising almost half of the foreign exchange market) is called a **spot transaction**. The spot market is the heart of the foreign currency market. Two parties agree on an exchange rate and one sells the other a certain amount of currency. Here's how it's done: A trader will call a trader from another company and ask for the price of a currency, say, British pounds. This expresses only a potential interest in dealing, without the caller saying whether he or she wants to buy or sell at that point. The other trader provides the first trader with prices for both buying and selling (a two-way price). If the traders agree to do business, one trader will send pounds and the other will send dollars. By convention, payment actually is made two days later, but **next day settlements** are used as well.

Although spot transactions are the most common FX transaction, they leave the currency buyer exposed to some potentially dangerous financial risks. Our earlier example of a tourist in France demonstrated how exchange rate fluctuations can effectively raise or lower prices. This can be a financial planning nightmare for companies and individuals. For example, suppose a U.S. company orders machine tools from a company in Switzerland. The tools will be ready in six months and will cost 15 million Swiss francs. At the time of the order, Swiss francs are trading at 1.5 to the dollar, so the U.S. company budgets for \$10 million in Swiss francs to be paid when they receive the tools (that is $15,000,000 \text{ francs} \div 1.5 \text{ francs per dollar} = \$10,000,000$).

Of course, there is no guarantee that the exchange rate will still be at 1.5 in six months. If the rate drops to 1.4 francs to the dollar, the cost of the tools in dollars would increase from \$10 million to \$10,714,285 ($15,000,000 \text{ Swiss francs} \div 1.4 \text{ francs to the dollar} = \$10,714,285$). The U.S. company would lose over \$700,000 because of a change in exchange rates.



Source: IMF, *Foreign Exchange Statistics*

One alternative for the company would be to pay the Swiss right away, when they know what the exchange rate is. Still, no one wants to part with money any sooner than necessary—if the company does pay in advance, it loses six months worth of interest and risks losing out on a favorable change in exchange rates. Thus, businesses demand foreign currency services to minimize the effects of the market's unpredictability.

A common tool to deal with FX risk is to engage in a **forward transaction**. This differs from a spot transaction in that the money does not actually change hands until some agreed-upon future date. A buyer and a seller agree on an exchange rate for any date in the future and the transaction occurs when the

date arrives, regardless of what the market rates are then. Forward transactions can be arranged for a few days, months or even years in the future.

Foreign currency **futures** are forward transactions with standard contract sizes and maturity dates; for example, 500,000 German marks for next May, or 50 million yen for next November. These contracts are traded on a separate exchange set up for that purpose.

In both forward and futures transactions, market rates might change, but if the rates improve for either the buyer or the seller, they still are locked into a contract at a fixed price. These tools allow market participants to plan more safely, since they know in advance what the foreign currency will cost. It also allows them to avoid an immediate outlay of cash. The prices of currencies in these markets are strongly influenced by the differences in interest rates between countries.

The most common type of forward transaction is the currency **swap**. In a swap, two parties exchange currencies for a certain length of time and agree to reverse the transaction at a later date. For example, if a U.S. company needs 15 million Japanese yen for a three-month investment in Japan, it might agree upon a rate of 150 yen to the dollar, and swap \$100,000 with a company willing to swap 15 million yen for three months. At the end of three months, the U.S. company returns the 15 million yen to the other company and gets its \$100,000 back, with adjustments made for interest rate differentials. Since the agreed-upon rate of 150 does not change, neither company has to deal with the risk of the rates changing. Once again, though, while neither company needs to worry about losing money if the rates change, they will not make any money from a change in rates either.

To address this lack of flexibility, the foreign currency **option** was developed. For a price, a market participant can buy the right, but not the obligation, to buy or sell a currency at a fixed price on or before an agreed-upon future date. This is similar to a forward transaction, except that the owner of the option does not have to buy or sell the currency when the date arrives. The option will be exercised only if market conditions are favorable to the buyer. This allows much more flexibility than a swap or forward contract, because the owner of the option can choose between the option rate or current market rates, whichever is better. An option to buy currency is known as a **call**, while an option to sell is known as a **put**. The agreed upon price is the **strike price**.

For example, if a trader purchases a six-month call on one million German marks at 1.65 marks to the dollar, this means that at any time during the six months the trader can either purchase the marks at 1.65, or purchase them at the market rate. Options—which can be sold and resold many times before their expiration date—serve as an insurance policy against the market moving in an unfavorable direction.

FLOATING AND FIXED EXCHANGE RATES

The FX market was not always so volatile or quick to respond to changing events. Today's FX rates float; they fluctuate according to market value. However, for most of the 20th century, currency rates were **fixed**, or kept at the same level, according to the amount of gold they could be exchanged for; they did not change according to market pressures. This system was called, aptly enough, the **gold-exchange standard**. For example, if one ounce of gold was worth 12 British pounds or 35 U.S. dollars, the exchange rate between the dollar and the pound would remain constant at just under three to one.



In addition to serving as a common measure of value, the gold-exchange standard helped to keep inflation under control by keeping the money supplies in the gold-exchange standard economies relatively stable. And, of course, long-range planning was much easier because exchange rates changed infrequently.

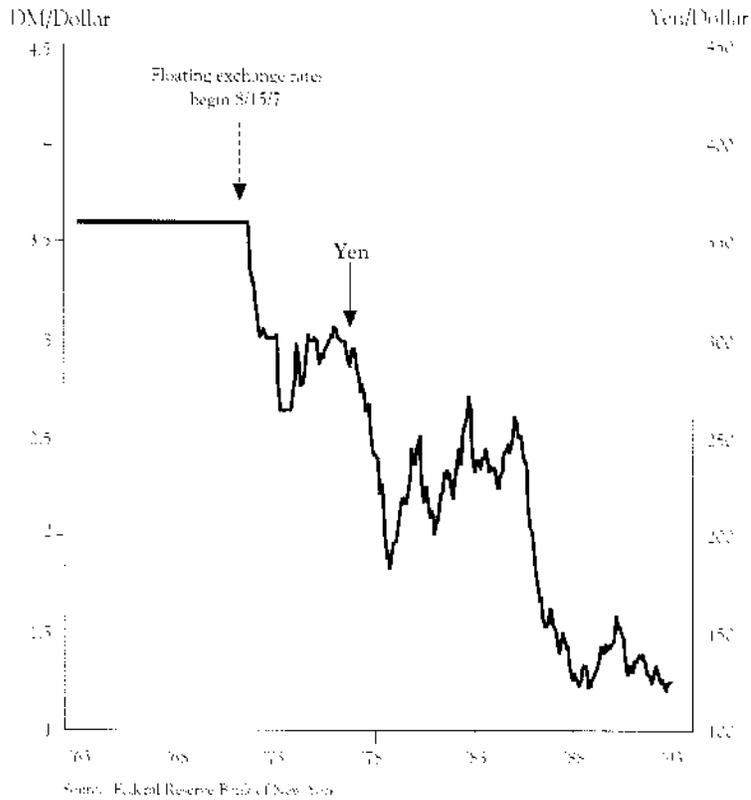
The gold-exchange standard should not be confused with the **gold standard**. The gold standard refers to the system by which U.S. households and businesses could exchange their dollars for gold. This practice was terminated in 1933 during the Great Depression, in large part to allow freer expansion of the money supply. However, foreign governments still were able to exchange their dollars for gold until 1971 when the United States abandoned the gold-exchange standard.

This change marked the end of the "Bretton Woods" international economic system, which had been effective since 1944 when leaders of allied nations met at Bretton Woods, New Hampshire, to set up a stable economic structure out of the chaos of World War II. The U.S. dollar was fixed at \$35 per ounce of gold and all other currencies were expressed in terms of dollars.

BEGINNING OF FLOATING EXCHANGE RATES

The Bretton Woods system began to weaken in the 1960s, when Americans sharply increased their consumption of imported goods. As foreigners accumulated large amounts of U.S. dollars from sales of exports to the United States, these exporting countries began to express concern that the United States did not have enough gold to redeem all of the dollars held overseas. A look at some data shows why. In 1950, U.S. gold reserves were about \$23 billion and the amount of dollars being held by foreign countries was \$8 billion. However, by 1970, gold reserves had fallen to only \$11 billion and dollars held by foreigners stood at \$47 billion.

EXCHANGE RATES HAVE FLUCTUATED WIDELY
SINCE THE FLOATING EXCHANGE RATE
SYSTEM WAS ESTABLISHED

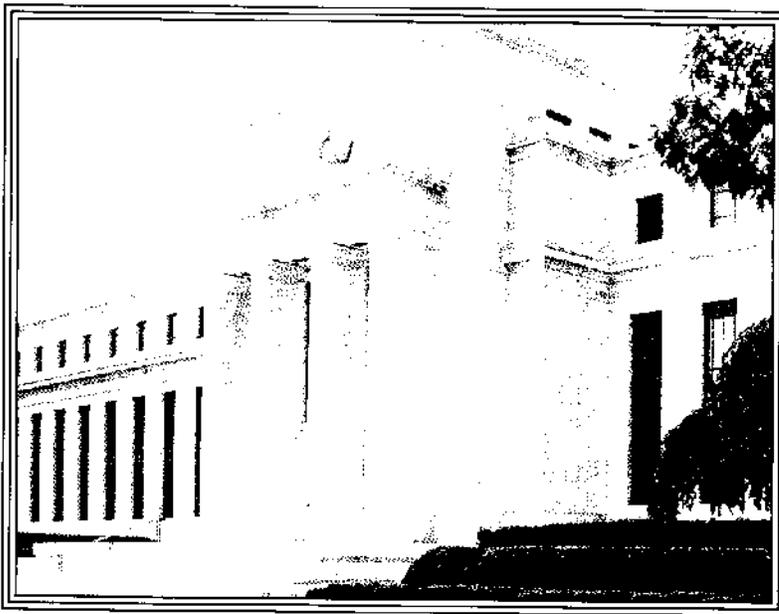


Clearly, if all the countries that held dollars chose to exchange them, the United States would quickly run out of gold. This situation could not be sustained, and in 1971, President Nixon announced that U.S. dollars would no longer be convertible into gold. By 1973, this action led to the system of "floating" exchange rates that exists today, where currencies rise and fall in value according to forces of supply and demand. After the abandonment of the gold-exchange standard, the foreign exchange market quickly went from a relatively unimportant financial specialty to the forefront of international economics.

THE ROLE OF CENTRAL BANKS

Despite the size and importance of the foreign exchange market, it remains largely unregulated. There is no international organization that supervises it, nor any institution that sets rules. However, since the advent of flexible exchange rates in 1973, governments and central banks, such as the **Federal Reserve System** in the United States, periodically act to maintain stability in the FX market.

There is no standard definition of instability or a disorderly market—circumstances must be evaluated on a case-by-case basis. Sharp, rapid fluctuations of exchange rates and traders' reluctance to be ready to either buy or sell currencies (maintaining a "two-way" market) may be signs of a disorderly market. In these cases, central banks often work together to restore stability. However, a country taking a very conservative view toward market intervention would act only in response to unusual circumstances that require immediate action, like political unrest or natural disasters. The monetary authorities would be less likely to try to counteract the usual fundamental factors that drive exchange rates, such as trade patterns, interest rate differentials and capital flows.



The Board of Governors of the Federal Reserve System in Washington, D.C., works closely with the U.S. Treasury in implementing the government's exchange rate policies.

INTERVENTION

The **U.S. Treasury**, which has overall responsibility for managing the U.S. government's foreign currency holdings, works closely with the Federal Reserve to regulate the dollar's position in the FX markets. If the monetary authorities decide that it would be desirable to strengthen or weaken the dollar against a particular currency, instructions are given to the **Federal Reserve Bank of New York**, which intervenes in the FX market as agent for the U.S. monetary authorities. The Federal Reserve Bank of New York buys dollars and sells foreign currency to support the value of U.S. dollars, or sells dollars and buys foreign currency to try to exert downward pressure on the price of the dollar. Most of the transactions the Fed engages in involve the exchange of dollars for either German marks or Japanese yen, the most frequently used currencies in international transactions.

Central banks in other countries have similar concerns about their own currencies and sometimes intervene in the FX market as well. Usually, intervention operations are undertaken in coordination with other central banks. The amount of intervention, from tens of millions to a few billion dollars, is not a great deal in a market whose size sometimes exceeds \$1 trillion per day. The actual purchase or sale of currency by a central bank has the same impact on the supply or demand for currency as the actions of any other market participant. However, the actions of central banks send strong signals to other market participants about what the country's monetary authorities think about the value of the currency; the resulting expectation that the country's economic policy will move in a certain direction can influence trading.

Most of the Federal Reserve Bank of New York's activity in the foreign exchange market is undertaken for far less dramatic purposes than to influence exchange rates. The Bank often deals in the foreign exchange market as an agent for other central banks and international organizations to execute transactions related to flows of international capital.

Some countries have special arrangements with other countries to help keep their currencies stable. Many less-developed nations have their soft currencies **pegged** to hard currencies, which means their value rises and falls simultaneously with the stronger currency. Some peg their currencies to a basket of hard currencies, the average of a group of selected currencies. Those countries that choose to tie their currency to a single currency usually use the U.S. dollar or the French franc. Some European countries are part of an agreement called the **European Monetary System (EMS)**, which requires them to keep their currencies within a certain price range. When currencies move too high or too low relative to other currencies in the EMS, central banks act to try to keep the currency within the range.

Intervention in the FX market is not the only way monetary authorities can affect the value of their country's currency. Central banks also can affect foreign exchange rates indirectly by influencing their countries' interest rates. Relatively high interest rates tend to push the price of a currency up because investors may want to buy the currency to invest at the higher rates. If Germany's interest rates rise to eight percent while those of the United States are at three percent, demand for the German mark will be stimulated. A reduction in interest rates would lessen demand for the currency and its price

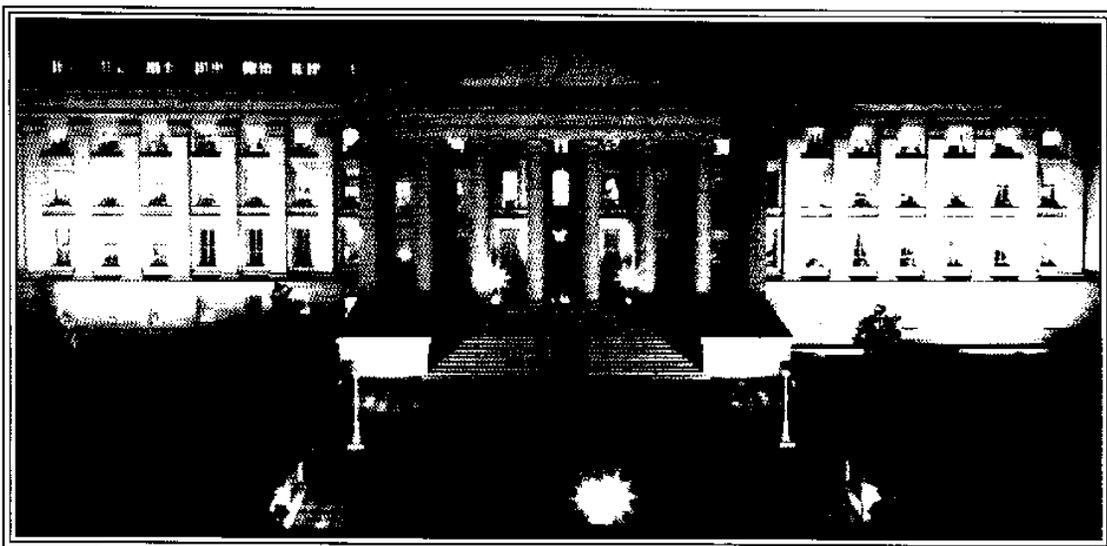
would tend to fall. In addition, if a central bank's policies are viewed by the market as promoting stable growth without inflation, the currency will be viewed as a safe investment, and demand for it will increase.

CONCERNS ABOUT EUROCURRENCY

An important side effect of the increase of international economic activity over the past few decades has been the creation and growth of the **Eurocurrency** market. Eurocurrencies are the name given to any bank deposits in any country held in a different country's currency, like U.S. dollars in a British bank, or French francs in a bank in Germany. These deposits are most often put there by other banks. Actually, "Eurocurrency" is a misnomer, because the term has come to include activity outside Europe, such as U.S. dollars held in a bank in South east Asia. A great deal of foreign exchange market activity involves the transfer of Eurocurrency deposits.

Eurocurrency, particularly **Eurodollars** (approximately two-thirds of Eurocurrency are U.S. dollars), are a source of concern to central banks and regulators because they are "stateless money"—subject to very little regulation. This means that many of a country's rules governing its currency and bank deposits, such as taxes, restrictions on capital movement and exchange controls, do not apply to the currency in the Eurocurrency markets. As a result, banks around the world use the Eurocurrency market to move and store funds more profitably than they could in many countries. This might pose problems for countries attempting to regulate capital flows.

International trade and foreign exchange cannot be viewed as two separate economic processes. They are intimately connected on many different levels. Increased international trade and investment helped to bring the FX market to its present size; in turn, what happens on the FX market has a significant influence on trade and investment patterns. Together, trade and foreign exchange affect peoples' living standards and livelihoods all over the world.



The U.S. Treasury has primary responsibility for determining the country's exchange rate policy.

WORKING ACROSS BORDERS

Many large companies are "international" in that they have branches and subsidiaries overseas; by some estimates, intra-firm trade, or trade between branches of the same company in different countries, accounts for an astonishing 40 percent of U.S. exports. Many more companies buy and sell goods all over the world. Companies frequently form partnerships with companies in other countries so that cooperation sometimes replaces competition. This has had a profound impact on the way companies operate in the global marketplace. Instead of merely exchanging goods and services with other countries, businesses around the world now work side-by-side to produce and market products. This is partially because it is often difficult for a single company to bear the economic risks of global production and marketing.



For example, a running shoe company headquartered in the United States might be financed by a Japanese bank, buy rubber from Indonesia and leather from Spain, and do its manufacturing in Mexico. The legal and accounting work might be handled by Americans, while a British company might do the advertising and marketing. The running shoes might be sold in many countries all over the world. As a result, such companies will often shift resources from country to country to maximize profits and productivity.

Now, if the final product is shipped to Indonesia from San Francisco, it will be recorded, simply, as a U.S. export and an Indonesian import. However, if the Indonesians apply a high tariff to the running shoes, they might harm more than just the U.S. exporters; all the businesses around the world that were involved in the process, including the Indonesian rubber manufacturers, might lose business. With more and more companies operating internationally, it is increasingly difficult for governments to target trade policies effectively.

These changes also mean changes in the ways people prepare for careers. Now more than ever, as economic ties between countries grow and strengthen, it has become very important to a nation's competitiveness to have a workforce that is able to deal with different languages and cultures. Varied business practices in different countries require new approaches to making profits.

Doing business in different countries sometimes can be frustrating; practices that are considered standard procedure in some places may be outrageous in others. In the United States, a signed contract is considered all but sacrosanct;

TEACHER'S GUIDE

The Basics of Foreign Trade and Exchange is intended to give students of economics, business and political science a general overview of international trade and the foreign currency markets. Its principal educational objectives include:

- demonstrating the importance of international trade;
- showing how international trade helps both the exporter and the importer;
- presenting the issues in the debate over free trade and protectionism;
- introducing students to the concept of foreign exchange and discussing its importance to individuals, businesses and the performance of national economies;
- demonstrating how foreign exchange markets work.

Reading **Basics** will give students a comprehensive overview of the theory and practice of international trade and the issues arising from the globalization of markets and of our lives.

The outline below will help educators use **Basics** more effectively. In it, you will find a brief summary of each of the book's sections, several topical questions and suggested student activities to stimulate further study and classroom discussion.

WHY NATIONS TRADE

Trade occurs because people want or need to buy goods and services that are available from other countries. Perhaps the foreign goods are less expensive or of higher quality than similar domestic products; perhaps they're unique and simply not available from domestic sources; or maybe buyers simply prefer them.

DISCUSSION QUESTIONS

1. Indicate the country of origin of three items in your house.
 - a. Why did you buy each item?
 - b. Could you have purchased similar items from a *different* country? Why didn't you?
2. Name five items (other than food) in your home that you believe were made in the United States without any foreign input. Why are such goods becoming more and more difficult to find?

THE LAW OF COMPARATIVE ADVANTAGE

According to the Law of Comparative Advantage, a country maximizes its wealth when its resources go into its most productive industries, even if other nations are more productive in those industries. Yet there are benefits to having a diverse economy; a country that relies on a single good or service too heavily risks economic chaos if demand for that good or service drops suddenly.

DISCUSSION QUESTIONS

1. Which industries and regions would be helped or hurt the most if the United States truly applied the principle of comparative advantage?

COMPETITIVENESS

Competitiveness refers to a country's ability to produce and market goods and services that people want to buy. Strong competitiveness typically leads to job creation and economic growth, while weak competitiveness could result in fewer jobs and slower economic growth. Nations with advantages such as a high-quality workforce, a well-developed infrastructure or abundant natural resources are better able to produce desired goods and services efficiently.

DISCUSSION QUESTIONS

1. Although Canada and the United States have similar cultures, demographics and a common border, U.S. industry has been generally more competitive than Canadian industry in global markets. How do you explain this difference?

2. What steps could business and government take to make the United States more competitive? Why do you think these steps have not been taken?

FREE TRADE AND PROTECTIONISM

Despite its many benefits, trade can pose serious short-term and long-term challenges to a country's economic health. Foreign competition helps to keep prices low, but it can also lead to lower profits and unemployment in uncompetitive industries. As a result, some companies and industries try to get their governments to protect them from foreign competition. All countries practice some protectionism, but the practice is often highly controversial, pitting the interests of households, businesses and governments against on another.

DISCUSSION QUESTIONS

1. If the United States completely stopped importing, what do you think would happen to the economy? What types of businesses and individuals would be helped or hurt? What would happen if the United States stopped exporting?

ARGUMENTS FOR PROTECTIONISM

- Protectionism saves jobs.
- Some countries have an unfair advantage because their labor costs are much lower.
- New industries must be protected from competition until they are strong enough to compete internationally.
- Industries important to national security should be protected so that the country does not have to rely on outside sources for supplies during war.

METHODS OF PROTECTIONISM

Each of the various tools that countries use to restrict and regulate foreign trade—such as tariffs and quotas—has its own advantages and disadvantages, and each affects economic growth and employment in different ways.

DISCUSSION QUESTIONS

1. Try to make a case in favor of government protection of an industry in which one of your relatives works. What impact would protection in other industries have on your industry?
2. List the costs and benefits of unrestricted free trade. Which U.S. industries might favor free trade? Which would oppose it? Why?

ARGUMENTS FOR FREE TRADE

- Free trade provides consumers with a wide variety of goods and services, sometimes less expensively than would be available under a restricted trading system.
- Competition that is brought about by free trade helps keep companies modern and competitive.
- The costs of protectionism outweigh the benefits.

DISCUSSION QUESTIONS

1. You are the president of a U.S. company that makes tape recorders and pays its workers \$10 per hour. A rival company based in Southeast Asia pays its workers only 60 cents per hour. Its less expensive tape recorders are shipped to the United States and are attracting all your customers. What can you do, or try to do, to keep your customers?
2. Countries sometimes enter into economic agreements such as trade blocs in order to minimize trade-related problems. What would be the advantages and disadvantages of a trade bloc which included the United States, Canada and Mexico?

MEASURES OF TRADE

A variety of statistics are used to measure the flows of goods, services and financial assets between countries. These statistics show which countries are importing more than exporting, where money is being invested and many other useful things.

The balance of trade (often reported on the news) measures the difference between a country's imports and exports of merchandise. The balance of payments reflects the complete summary of economic transactions between a country and the rest of the world, including merchandise, raw materials, financial transactions, tourism and foreign aid. In turn, the balance of payments statistics are divided into the current account and the capital account, which separate investment from consumption and interest payments,

DISCUSSION QUESTIONS

1. What are the long-term consequences of a persistent trade deficit?
2. Why can't we conclude that a widening trade deficit is necessarily bad for the country?

FOREIGN CURRENCY EXCHANGE

The foreign currency market is the largest market in the world. In order to engage in trade with other nations, companies and individuals may first have to buy the currency of the country with which they are doing business. This is done in the foreign exchange (FX) market, a worldwide network of banks and brokers where individuals, companies and governments go to buy and sell currency. The four types of participants in the foreign exchange market are banks, brokers, customers and central banks. The price of one currency in terms of another is called the exchange rate. Changes in exchange rates will result in changes in the costs of imports and exports. If, for example, the U.S. dollar depreciates in value against the Japanese yen, U.S. exports to Japan will be less expensive, and Japanese exports to the United States will be more expensive.

DETERMINATION OF FOREIGN EXCHANGE RATES

Since 1973, the foreign exchange rates of major industrial countries have been determined by the law of supply and demand. Demand for a currency is based on how attractive foreigners find the goods, services and investments in that country. Supply of a currency is regulated by the country's monetary authorities.

Speculation in the foreign exchange market is largely responsible for the day-to-day fluctuations of exchange rates. However, long-term trends are a result of changes in economic fundamentals, such as interest rates, trade balances and overall economic strength.

DISCUSSION QUESTIONS

1. How would you find out how much \$100 is worth today in Japanese yen ?
2. If a weaker dollar helps encourage exports and discourage imports, why shouldn't the United States encourage a free-fall in the value of the dollar? How would such a policy affect you?

FOREIGN CURRENCY TRADING

Of the nearly \$1 trillion traded every day on the foreign exchange market, roughly 80 percent is traded for speculation, 15 percent for investment and 5 percent for foreign trade.

TYPES OF TRANSACTIONS

The basic and most common transaction is the spot transaction: two parties agree on an exchange rate and one sells the other a certain amount of currency. Other types of transactions have been developed to help manage the risk of currency fluctuations.

DISCUSSION QUESTIONS

1. If you were a financial official at a large U.S. company that wanted to buy German industrial equipment costing DM 1 million, how would you go about it? What could you do to protect yourself from losses?

FLOATING AND FIXED EXCHANGE

Exchange rates did not always fluctuate from day to day. For most of the twentieth century, they were fixed, not flexible. The entire system was based on gold. The system began to weaken in the 1960s, and rates began to "float" in 1973.

DISCUSSION QUESTIONS

1. What might be the advantages/disadvantages of returning to a fixed exchange rate system?

THE ROLE OF THE CENTRAL BANKS

Despite the fact that the foreign exchange market is the largest market in the world, it remains basically unregulated. However, governments and central banks sometimes act to maintain stability in the FX market. Some countries have agreements to keep the value of their currencies within certain ranges. A group of European nations are part of such an arrangement (the Exchange Rate Mechanism, or ERM) that requires the central banks to act to keep currencies at or near certain levels. In addition, central banks can influence exchange rates by regulating their countries' interest rates. Yet these efforts sometimes cannot stop market forces from driving the exchange value of a particular currency up or down.

DISCUSSION QUESTIONS

1. Under what conditions should a central bank intervene in the currency markets?
2. Under what conditions should a central bank attempt to cause its currency to depreciate?
3. You are the head of a large industrialized country's central bank. Because of a sharp decline in your stock market, your currency is dropping like a stone. Is this necessarily bad, and what can you do about it?

WORKING ACROSS BORDERS

Many large companies are international in that they have branches and/or partnerships overseas; many more buy and sell goods and services all over the world. Global business networks have mostly replaced huge, centrally located, hierarchical companies. This means workers in any country will have to prepare to compete with workers all over the world.

The skills needed to compete successfully will increasingly have international components. Foreign languages, knowledge and experience of business practices in other countries and the ability to deal with different cultures will be more and more valuable.

DISCUSSION QUESTIONS

1. How would you put together a curriculum at your school to best prepare students to live and work in the global economy?
2. Assignment: Interview a foreigner who works in the United States or an American who has worked overseas and find out what skills the person found necessary to succeed in a different country.

MULTIPLE CHOICE QUESTIONS

1. The United States accounts for roughly how much of the world's exports?
 - a. all of them
 - b. one-half
 - c. One-quartet
 - d. one-eighth

2. The Law of Comparative Advantage says that:
 - a. consumers tend to look for the best bargains regardless of the products country of origin
 - b. if one country can produce something better than all other countries it should devote as many of its resources to that industry as possible
 - c. a country should focus its resources on its most efficient industries even if there are other countries that are more efficient in those industries
 - d. none of the above.

3. Economies of scale result in:
 - a. lower per-unit production costs
 - b. a loss of efficiency
 - c. a diversified economy
 - d. the production of tropical fruit .

4. Which of the following is not an argument for free trade ?
 - a. consumers have more goods and services to choose from
 - b. protectionism is too expensive
 - c. the economy should be as diverse as possible
 - d. foreign competition helps keep prices low.

5. To find data on foreign investment in the United States, one would consult:
 - a. The Basics of Foreign Trade and Exchange
 - b. the balance of payments
 - c. the merchandise trade balance
 - d. the terms of trade.

6. Today, the DM is at 1.5487. Yesterday, it was at 1.5469. The DM
 - a. has depreciated against the dollar
 - b. has appreciated against the British pound
 - c. has been devalued
 - d. has strengthened against the dollar.

7. Which of the following can influence foreign exchange rates?
 - a. the difference in interest rates between countries
 - b. inflation
 - c. election results
 - d. all of the above

8. Two banks agree to let each other use a certain amount of foreign currency for a fixed amount of time. This is known as
- a spot transaction
 - an option purchase
 - a call
 - a swap.
9. Which of the following was not characteristic of the "Bretton Woods" international economic system?
- floating exchange rates
 - a gold-exchange standard
 - devaluation
 - fixed exchange rates
10. Which of the following is not an organization that helps to coordinate the economic activities of different nations?
- GATT
 - IMF
 - SED
 - BIS
11. You are a British citizen traveling with U.S. dollars on a French plane from Florence, Italy, to Bonn, Germany, to buy a pair of German roller skates. Which of the following events will directly cause the price of the skates, in marks, to rise?
- a rise in the pound against the dollar
 - a decline in the DM against the dollar
 - a rise in the British pound against the DM
 - a rise in the DM against the dollar

Answers: 1d 2c 3a 4c 5b 6a 7d 8d 9a 10c 11d