Chapter 9

The International Monetary and Financial Environment

Learning Objectives *After studying this chapter, you should be able to:*

- **9.1** Learn about exchange rates and currencies in international business.
- **9.2** Explain how exchange rates are determined.
- **9.3** Understand the emergence of the modern exchange rate system.
- **9.4** Describe the monetary and financial systems.
- **9.5** Identify the key players in the monetary and financial systems.
- **9.6** Understand the global debt crisis.

The European Union and the Euro

The European Union (EU) was established in 1993. In 2017, it had 28 member countries. The EU created the European Monetary Union (EMU) and the European Central Bank (ECB; www.ecb.int) with the goal of establishing a common currency, the euro. In 2002, euro banknotes and coins were issued and replaced older national currencies. In 2018, the euro was the sole official currency of 19 EU member states: Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Portugal, Slovakia, Slovenia, and Spain. The remaining EU countries opted not to join the eurozone. By establishing a common currency, the EMU aims to knit the participating EU economies into a unified whole, reduce the problem of fluctuating exchange rates, and facilitate trade and price comparisons.

MNEs operating in the eurozone have reduced business costs by simplifying their accounting, financial, and marketing activities with the use of a single currency. The euro allows firms to coordinate prices across the EU.

The ECB treats the eurozone as one region rather than as separate countries with differing economic conditions. ECB monetary policy is complex because of the diverse economic and fiscal conditions that characterize each eurozone country. For example, the ECB aims to keep inflation low by carefully limiting the supply of euros, but the policy response for controlling deflation, just as harmful as inflation, is to increase the money supply. ECB policy aimed at fixing deflation in one country might trigger inflation in another. Devising monetary policy that suits economic conditions in all EMU countries is challenging.

Monetary policy is further complicated by the recent admission into the EU of lower-income countries such as

Source: jakobradlgruber/123RF

Slovakia and Slovenia. As more countries join the EU, the risk of very diverse economic conditions across the union rises. Such pressures have increased in Europe's recent economic crisis, especially in Greece, Portugal, and Spain. The EU plan to assist Greece includes loans and surveillance from the ECB. The crisis has sparked discussion about the risks of EU monetary integration and survival of the euro.

A key goal of launching the euro was to shield EMU countries from exchange rate risk by creating a large, unified economy. Historically, the euro was relatively strong against the U.S. dollar. More recently the euro has weakened. A weak euro helps European exporters because it makes their products less expensive to foreign importers. A weak euro yields stronger earnings for European MNEs when they convert non-euro profits into euros. On the negative side, a weak euro decreases the buying power of European firms and consumers who purchase non-euro foreign goods.

The success of the euro as a unifying force in Europe has changed the international balance of power. The EU and EMU have empowered European governments to challenge U.S. policy initiatives in the wider global arena. The central banks of numerous countries—including Canada, China, and Russia—have given greater weight to the euro in their foreign currency reserves. Some governments are increasing their euro holdings, and Asia is now less dollar-centric than in the past.

AACSB and CKR Intangible Soft Skills to improve employability and success in the workplace: Written and Oral Communication, Analytical Thinking, Diverse and Multicultural Environments, Reflective Thinking

Questions

9-1. What benefits does using a single currency, the euro, provide to European countries?

9-2. What challenges does the European Central Bank face in developing monetary policy for the EU?

9-3. What is the effect of a weak euro on European exporters? What is the effect on European consumers?

SOURCES: T. Catan, "Spain's Struggles Illustrate Pitfalls of Europe's Common Currency," *Wall Street Journal*, September 14, 2009, p. A2; Gianmarco Daniele and Benny Geys, "Public Support for European Fiscal Integration in Times of Crisis," *Journal of European Public Policy* 22, No. 5 (2015), pp. 650–670; *Economist*, "Don't Get Europhoric," April 11, 2015, pp. 12–14; European Union, *Official Website of the European Union 2018,* www.europa.eu; J. Perry, "ECB Expects No Recovery Before 2010," *Wall Street Journal*, June 10, 2009, p. A7; Carla Power, "Border Control," *Time International*, March 5, 2012, pp. 40–44; "Too Long an Illness," *Economist*, February 25, 2012, p. 66; Philip Whyman, *Rethinking Economic and Monetary Union in Europe* (New York: Routledge, 2018).

International business transactions take place within the global monetary and financial systems. Fluctuating exchange rates are an important challenge and risk for international managers. The opening case explains how the European Union aimed to eliminate this problem in the EU by introducing a single currency, the euro. Before its launch, numerous national currencies—the French franc, the Spanish peso, the Italian lira, among others—were the means of exchange for doing business in Europe.

As the barriers that once restricted global trade and investment have faded, the monetary and financial activities of firms and nations have intensified. People usually think of international trade as trade in products and services. However, the markets for foreign exchange and capital are much larger. Firms regularly trade the U.S. dollar, European euro, Japanese yen, and other leading currencies to meet their international business obligations. In this chapter, we explore the monetary and financial structure that makes trade and investment possible. We explain the nature, organization, and functions of the foreign exchange market and the monetary and financial issues that confront internationalizing firms.

9.1 Learn about exchange rates and currencies in international business.

Exchange Rates and Currencies in International Business

More than 170 currencies are in use around the world today. Cross-border transactions occur through an exchange of these currencies between buyers and sellers. A currency is a form of money and a unit of exchange. Each country prefers using its own unique currency, which complicates international business transactions. When buying a product or service from a Mexican supplier, for example, you must convert your own currency to Mexican pesos to pay the supplier. The currency system is being simplified in some locations. As we saw in the opening case, many countries in Europe use the euro. Other countries, such as Ecuador, Panama, and East Timor, have adopted the U.S. dollar as their currency, a process known as dollarization.

Exchange rate
The price of one currency expressed in terms of another; the number of units of one currency that can be exchanged for another.

Currency risk
Potential harm that arises from changes in the price of one currency relative to another.

The **exchange rate**—the price of one currency expressed in terms of another—varies over time. It links different national currencies so that buyers and sellers can make international price and cost comparisons. Exhibit 9.1 shows the exchange rates for the U.S. dollar and a sample of other currencies. The values of these national currencies and, thus, their exchange rates, fluctuate constantly. Specifically, currencies *appreciate* (go up in value) and *depreciate* (go down in value) relative to other currencies.

Exchange rate fluctuations and similar complications in international business create **currency risk**, the potential harm that can arise from changes in the price of one currency relative to another. It is one of the four types of international business risk that we introduced in Chapter 1. It is also

EXHIBIT 9.1

U.S. Dollar Exchange Rates for a Sample of Currencies on March 1, 2018

Source: Adapted from www.x-rates.com.

Currency	Currency per One U.S. Dollar	U.S. Dollars per Unit of Currency
Australian dollar	1.288	0.776
Brazilian real	3.247	0.308
British pound	0.727	1.376
Canadian dollar	1.284	0.779
Chinese renminbi (yuan)	6.331	0.158
Euro	0.820	1.219
Indian rupee	65.227	0.015
Japanese yen	106.586	0.009
Mexican peso	18.842	0.053
New Zealand dollar	1.388	0.720
Norwegian kroner	7.903	0.127
Saudi Arabian riyal	3.750	0.267
Singapore dollar	1.325	0.755
South African rand	11.792	0.085
Turkish lira	3.803	0.263

Constantly fluctuating exchange rates require international managers to keep in mind three facts:

- The prices the firm charges can be quoted in the firm's currency or in the currency of each foreign customer.
- Because several months can pass between placement and delivery of an order, fluctuations in the exchange rate during that time can cost or earn the firm money.
- The firm and its customers can use the exchange rate as it stands on the date of each transaction, or they can agree to use a specific exchange rate.

known as *financial risk*. If you buy from a supplier whose currency is appreciating against yours, you may need to pay a larger amount of your currency to complete the purchase. Currency risk also arises if you expect payment from a customer whose currency is depreciating against your own. You may receive a smaller amount of your currency if the sale price was expressed in the currency of the customer. If the foreign currency fluctuates in your favor, you may gain a windfall. Exporters or importers worry constantly about *losses* that arise from currency fluctuations.

Exporters and licensors also face risk because foreign buyers must either pay in a foreign currency or convert their currency to that of the vendor. Foreign direct investors face currency risk because they both receive payments and incur obligations in foreign currencies.

Convertible and Nonconvertible Currencies

A *convertible currency* can be easily exchanged for other currencies. The most easily convertible are called *hard currencies* and include the British pound, European euro, Japanese yen, and U.S. dollar. They are strong, stable currencies that are universally accepted and used most often for international transactions. Nations prefer to hold hard currencies as reserves because of their relative strength and stability in comparison to other currencies.

A currency is *nonconvertible* when it is not acceptable for international transactions. Some governments may not allow their currency to be converted into a foreign currency. They prevent this conversion to preserve their supply of hard currencies, such as the euro or the U.S. dollar, or to avoid the problem of capital flight. **Capital flight** is the rapid sell-off by residents or foreigners of their holdings in a nation's currency or other assets. This usually occurs in response

Capital flight
The rapid sell-off by residents or foreigners of their holdings in a nation's currency or other assets, usually in response to a domestic crisis that causes investors to lose confidence in the country's economy.

to a domestic crisis that causes them to lose confidence in the country's economy. The investors exchange their holdings in the weakening currency for those of another, often a hard currency. Capital flight from a country diminishes its ability to service debt and pay for imports.

As national economies have become more integrated in recent years, capital flight has become a relatively common occurrence. For example, wealthy Chinese citizens have moved trillions of renminbi out of China in the decade through 2018 into investments in other countries. Capital flight was triggered by concerns the Chinese government would impose controls on capital, thereby restricting how investors can utilize their funds in China. After coming to power in Venezuela, President Nicolas Maduro confiscated foreign company assets and made questionable financial deals. Dubious governance, depreciating currency, and other economic problems have panicked foreign investors and Venezuela's wealthier citizens, and many withdrew their liquid assets from the country's economy.[1] In some developing economies, currency convertibility is so strict that firms may avoid using currencies altogether. They receive payments in goods; in other words, they engage in barter.

Recent years have seen the rise of *cryptocurrencies*, electronic units of exchange that use secure digital code to facilitate buying, selling, and other transactions. The most well-known cryptocurrency is bitcoin. Cryptocurrencies are not issued by governments or other central authorities. The currencies are supported through *blockchain* technology. A blockchain is an unlimited list of digital, highly secure records, called "blocks," that comprise an electronic ledger of account activity. Numerous MNEs and financial firms are experimenting with blockchain as a means to securely and efficiently share digital ledgers among the parties to international transactions. Only a small fraction of large online retailers accept cryptocurrencies as a payment, and it is unclear whether cryptocurrencies will emerge as an alternative to money or become widely used in international business.[2]

Foreign Exchange Markets

Money facilitates payment for the products and services that companies sell. Getting paid in your own country is straightforward; the U.S. dollar is accepted throughout the United States, the euro is widely used in Europe, and the Japanese use the yen to transact with each other. But suppose a Canadian needs to pay a Japanese, or a Japanese needs to pay an Italian, or an Italian needs to pay a Canadian. What then? The Japanese wants to be paid in yen, the Italian wants to be paid in euros, and the Canadian wants to be paid in Canadian dollars. All these currencies are known as *foreign exchange*. **Foreign exchange** represents all forms of money that are traded internationally, including foreign currencies, bank deposits, checks, and electronic transfers. Foreign exchange resolves the problem of making international payments and facilitates international investment and borrowing among firms, banks, and governments.

Foreign exchange
All forms of money that are traded internationally, including foreign currencies, bank deposits, checks, and electronic transfers.

Currencies such as the euro, yen, and U.S. dollar are traded on the **foreign exchange market**, the global marketplace for buying and selling national currencies. The market has no fixed location. Rather, trading occurs through continuous buying and selling among banks, currency traders, governments, and other exchange agents located worldwide. International business would be impossible without foreign exchange and the foreign exchange market.

Foreign exchange market
The global marketplace for buying and selling national currencies.

Currency Risk

Today, 19 member states of the European Union have adopted the euro as their common currency and sole legal tender. The countries' use of the euro eliminates the problem of exchange rate fluctuations in trade and investment with each other. Other countries in Latin America, the Caribbean, and the Middle East have opted to use a regional or hard currency. The challenges posed by fluctuating exchange rates motivate countries to coordinate their monetary policies. Governments attempt to manage exchange rates by buying and selling hard currencies and by keeping inflation under control. However, the foreign exchange market is huge, and it shifts very quickly. Even major governments have difficulty controlling exchange rate movements.

As illustrated in Exhibit 9.2, exchange rate fluctuations between the euro, U.S. dollar, and other currencies are sometimes dramatic. In 2014, for example, the European euro was trading at 0.784 euros to the U.S. dollar. By 2016, the U.S. dollar was buying 0.940 euros—the euro's value went down relative to the dollar by 20 percent. Specifically, in 2014, a European could buy one dollar for 0.784 euros; by 2016, she had to pay 0.940 euros. From a U.S. perspective, in 2014 an American could obtain one euro for 1.27 dollars; by 2016 the same euro could be bought for only 1.06 dollars. Implications for international business between Europe and the United States

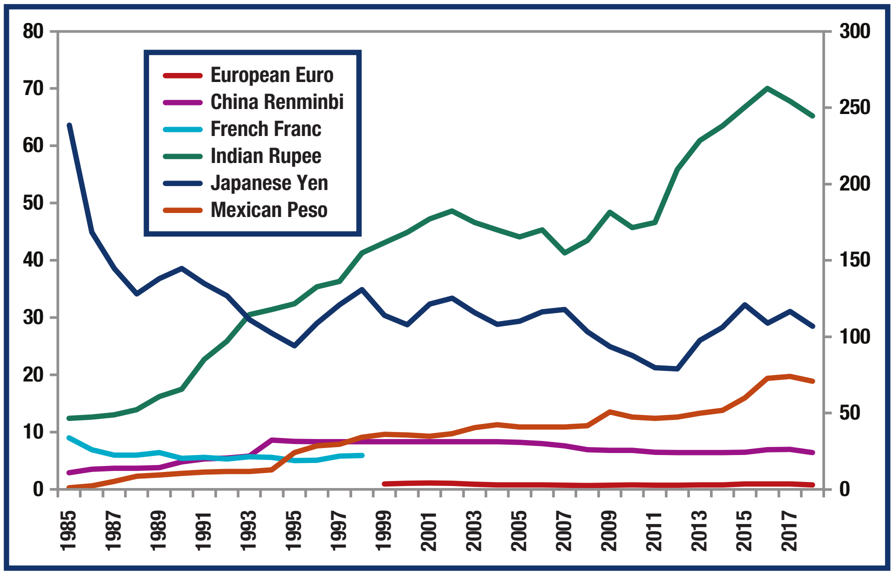


EXHIBIT 9.2

Selected Exchange Rates Against the U.S. Dollar over Time

Note: Right-hand scale is for Japanese yen; left-hand scale is for all other currencies. For example, in 2015, the Mexican peso was trading at 16 pesos per one U.S. dollar. The euro became the common currency of various European Union countries in 1999, replacing the French franc and other European currencies.

Sources: Based on data from the International Monetary Fund and World Bank.

Fluctuating exchange rates affect both firms and customers. Suppose today the euro–dollar exchange rate is €1 = $1; that is, for a European to buy one U.S. dollar, he or she must pay one euro. Next, suppose that during the coming year the exchange rate goes to €1.50 = $1. Now the dollar is much more expensive to European firms and consumers than before—it costs 50 percent more to acquire a dollar. Let's examine the effect of this change on Europeans.

Effect on European Firms

- European firms must pay more for inputs from the United States, such as raw materials, components, and support services they use to produce finished products and services.
- Higher input costs reduce profitability and may force firms to raise prices to final customers; these higher prices reduce customer demand for goods and services.
- Because the euro has become less expensive for U.S. consumers, firms can increase their exports to the United States. Firms can even raise their export prices and remain competitive in the U.S. market.
- Increased exports to the United States generate higher revenues and higher profits.

Effect on European Consumers

- Because U.S. products and services now cost more, European consumers demand fewer of them.
- The cost of living rises for those Europeans who consume many dollar-denominated imports.
- Fewer European tourists can afford to visit the United States. Fewer European students study at U.S. universities.

Now, suppose the euro–dollar exchange rate goes to €0.50 = $1. What are the effects on European firms and consumers? They are essentially the opposite of those summarized above. European firms pay less for inputs from the United States, which means they can drop their prices on goods and services. Because U.S. products and services now cost less, consumers demand more of them.

were substantial. In the span of only two years, European firms perceived a significant upturn in their exports because European products became less expensive to Americans. Meanwhile, as euro-buying power for dollars decreased, U.S. firms experienced a decline in their exports to Europe.[3] Exhibit 9.2 also shows that the French franc is one of the European currencies taken out of circulation and replaced by the euro.

A fluctuating exchange rate affects both sides of international transactions. Management must monitor exchange rates constantly and create strategies to maintain company performance in light of strong and weak currencies.We discuss these strategies in Chapter 10.

In 2018, U.S. companies such as Apple and Qualcomm saw rising international sales due to weakening of the U.S. dollar against world currencies. In the year through February 2018, the dollar fell in value by about 10 percent against the EU euro and the Chinese renminbi. Sales of Apple, Qualcomm, and numerous other U.S. firms rose as buyers in Europe and China benefited from the cheaper dollar. Meanwhile, European tourists who visited the United States in the summer of 2018 benefited significantly from the increased buying power of the euro against the weaker dollar. The cheaper dollar made travel in the U.S. and American-made products a bargain.[4]

9.2 Explain how exchange rates are determined.

How Exchange Rates Are Determined

In a free market, the price of any currency—that is, its exchange rate—is determined by supply and demand. Supply and demand adjust according to market forces. Exchange rates fluctuate constantly because the global market for most major currencies is free and active. Continuous shifts in the supply of and demand for dollars result in continuous changes in the dollar exchange rate. Some currencies are pegged to fixed exchange rates and, thus, may not respond to market forces.

In a free market, the levels of supply and demand for a currency vary inversely with its price. Thus, all else being equal,

- The greater the supply of a currency, the lower its price.
- The lower the supply of a currency, the higher its price.
- The greater the demand for a currency, the higher its price.
- The lower the demand for a currency, the lower its price.

Suppose a Canadian consumer wants to buy a BMW, sourced from Germany and priced at the nominal price of 30,000 euros. Assume further that the exchange rate of the euro to the Canadian dollar is €1 = $1.25. Now suppose the consumer delays six months, during which the exchange rate shifts, becoming €1 = $1.50. That is, due to increased demand for and/or decreased supply of euros, the euro has become more expensive to Canadian customers. Assuming the euro price of the BMW remains unchanged, the car will now cost more in Canadian dollars, making the consumer less inclined to buy the BMW. By contrast, if, during the six-month period, the euro becomes cheaper (with, say, an exchange rate of €1 = $1), the Canadian consumer will be more inclined to buy the BMW. As this example implies, the greater the demand for a country's products and services, the greater the demand for its currency.

Four main factors influence the supply and demand for a currency: economic growth, inflation and interest rates, market psychology, and government action. Let's examine these.

Economic Growth

Economic growth is the increase in value of the goods and services an economy produces. To ensure accuracy, we usually measure economic growth of a nation as the annual increase in real GDP in which the inflation rate is subtracted from the growth rate. Economic growth results from continual economic activities, especially innovation and entrepreneurship. It implies a continued increase in business activities and a corresponding increase in consumer need for money to facilitate more economic transactions.

Central bank
The monetary authority in each nation that regulates the money supply and credit, issues currency, and manages the exchange rate of the nation's currency.

To accommodate economic growth, the **central bank** increases the nation's money supply. The central bank is the monetary authority in each country that regulates the money supply, issues currency, and manages the exchange rate of the nation's currency relative to other currencies. Economic growth is associated with an increase in the supply and demand of the nation's money supply and, by extension, the nation's currency. Thus, it has a strong influence on the supply and demand for national currencies. For example, recent rapid economic growth in East Asian countries has increased demand for their currencies by firms and individuals, both domestic and foreign.[5]

Inflation and Interest Rates

Inflation is an increase in the price of goods and services. When inflation occurs, money buys less than in preceding years. Exhibit 9.3 shows that inflation rates can reach high levels. Argentina, Zimbabwe, and some other countries have had prolonged periods of *hyperinflation*—persistent annual double-digit and sometimes triple-digit rates of price increases. A practical effect of hyperinflation is the need for a restaurant owner to change the menu every few days to increase the prices. With high inflation, the purchasing power of the nation's currency is constantly falling.

Interest rates and inflation are closely related. In countries with high inflation, interest rates tend to be high because investors expect to be compensated for the inflation-induced decline in the value of their money. If inflation is running at 10 percent, for example, banks must pay more than 10 percent interest to attract customers to open savings accounts.

Inflation occurs when demand for money grows more rapidly than supply, or when the central bank increases the nation's money supply faster than the rise in national productive output. Inflation is often a problem for developing economies and emerging markets. When inflation occurs, the value of the nation's currency will fall relative to foreign currencies. Triggered by big increases in the national money supply, for example, annual inflation in Brazil ran to more than 1000 percent in the mid-1990s. Imagine the difficulty to both buyers and sellers of adjusting to a constant decline of the currency's value and ever-rising prices!

The link between interest rates and inflation, and between inflation and the value of currency, implies that there is a relationship between real interest rates and the value of currency. For example, when interest rates in Japan are high, foreigners seek profits by buying Japan's interest-bearing investment opportunities, such as bonds and deposit certificates. Investment from abroad will have the effect of increasing demand for the Japanese yen.

Market Psychology

Exchange rates are often affected by *market psychology*, the unpredictable behavior of investors. *Herding* is the tendency of investors to mimic others' actions. *Momentum trading* occurs when investors buy stocks whose prices have been rising and sell stocks whose prices have been falling. It is usually carried out with computers set to do massive buying or selling when asset prices reach certain levels. Herding and momentum trading tend to occur in the wake of financial crises. Recently, Brazil, Russia, and other emerging markets have experienced large-scale flight of portfolio investment amid concerns about deteriorating economic conditions. Foreign investors have panicked, and many have deserted stocks in those countries.[6]

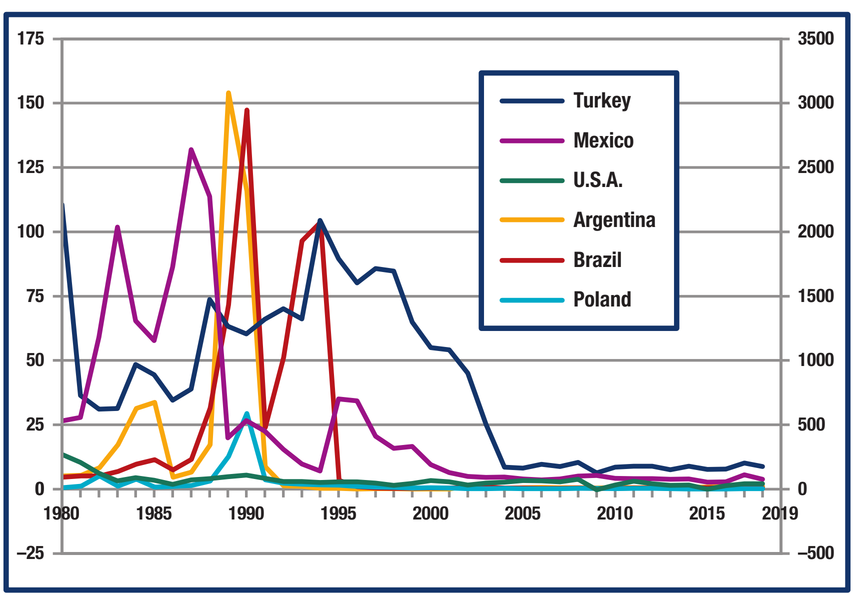


EXHIBIT 9.3

Inflation in Selected Countries, 1985–2018

Note: Chart shows annual percentage rate of inflation. Left-hand scale is for Turkey, Venezuela, and the United States; right-hand scale is for Argentina, Brazil, and Poland.

Sources: Based on International Monetary Fund, *World Economic Outlook Database*, 2018, www.imf.org; and *CIA World Factbook, 2018*, www.cia.gov.

Government Action

The pricing of currencies affects company performance. When a nation's currency is expensive to foreigners, its exports are likely to fall.[7] When a nation's currency is cheap to foreigners, exports increase. When the value of a nation's currency depreciates over a prolonged period, consumer and investor confidence can be undermined. Steep currency depreciation weakens the nation's ability to pay foreign lenders, possibly leading to economic and political crisis.

To minimize these effects, governments often act to influence the value of their own currencies. The Chinese government regularly intervenes in the foreign exchange market to keep the renminbi undervalued, helping to ensure that Chinese exports remain strong.

Trade surplus
A condition in which a nation's exports exceed its imports for a specific period of time.

Trade deficit
A condition in which a nation's imports exceed its exports for a specific period of time.

An undervalued national currency can result in a **trade surplus**. A trade surplus arises when a nation's exports exceed its imports for a specific period of time, causing a net inflow of foreign exchange. By contrast, a **trade deficit** results when a nation's imports exceed its exports for a specific period of time, causing a net outflow of foreign exchange. The *balance of trade* is the difference between the monetary value of a nation's exports and its imports over the course of a year. For example, if Germany exports cars to Kenya, money flows out of Kenya and into Germany because the car importer in Kenya pays the exporter in Germany. This results in a surplus item in Germany's balance of trade and a deficit item in Kenya's balance of trade. If the total value of Kenya's imports from Germany becomes greater than the total value of Kenya's exports to Germany, Kenya will have a trade deficit with Germany. Factors that affect the balance of trade include the prices of goods manufactured at home, exchange rates, trade barriers, and the method the government uses to measure the trade balance.

Devaluation
Government action to reduce the official value of its currency relative to other currencies.

Many economists believe a persistent trade deficit is harmful to the national economy. When a trade deficit becomes severe or persists for a long time, the nation's central bank may devalue its currency. A **devaluation** is a government action to reduce the official value of its currency relative to other currencies. It is usually accomplished by the buying and selling of currencies in the foreign exchange market. Devaluation aims to deter the nation's residents from importing from other countries, potentially reducing the trade deficit.[8]

Balance of payments
The annual accounting of all economic transactions of a nation with all other nations.

At a broader level, governments must manage their **balance of payments**, the annual accounting of all economic transactions of a nation with all other nations. The balance of payments is the nation's balance sheet of trade, investment, and transfer payments with the rest of the world. It represents the difference between the total amount of money coming into and going out of a country. Consider an American MNE that builds a factory in China. In the process, money flows from the United States to China, generating a deficit item for the United States and a surplus item for China in their respective balance of payments. The balance of payments is affected by other transactions as well, as when citizens donate money to a foreign charity, when governments provide foreign aid, or when tourists spend money abroad.

9.3 Understand the emergence of the modern exchange rate system.

Emergence of the Modern Exchange Rate System

During much of the period from the late 1800s through the 1920s, global trade grew significantly. The Great Depression (1929–1939) and World War II (1939–1945) coincided with a collapse of the international trading system and relationships among nations. Following the war, several countries came together to energize international commerce and devise a framework for stability in the international monetary and financial systems. In 1944, the governments of 44 countries negotiated and signed the Bretton Woods Agreement.

The Bretton Woods Agreement

This agreement pegged the value of the U.S. dollar to an established value of gold at a rate of $35 per ounce. The U.S. government agreed to buy and sell unlimited amounts of gold to maintain this fixed rate. Each of Bretton Woods' other signatory countries agreed to establish a par value of its currency in terms of the U.S. dollar and to maintain this pegged value through central bank intervention. In this way, the Bretton Woods system kept exchange rates of major currencies fixed at a prescribed level relative to the U.S. dollar and, therefore, to each other.

In the 1960s, however, emergent global economic conditions led to high trade deficits in the United States. Gradually growing demand for U.S. dollars exceeded supply. The U.S. government could no longer maintain an adequate stock of gold. This situation put pressure on governments in Europe, Japan, and the United States to revalue their currencies. As a result, the link

The Bretton Woods Agreement left a legacy of principles and institutions that remain in use today. Specifically, Bretton Woods established:

- The concept of international monetary cooperation, especially among the central banks of leading nations.
- The importance of currency convertibility, in which countries agree not to impose restrictions on currency trading and to avoid discriminatory currency arrangements.
- The concept of fixing exchange rates within an international regime to minimize currency risk.
- The **International Monetary Fund** (IMF; www.imf.org) and the **World Bank** (www.worldbank.org). The IMF is an international agency that attempts to stabilize currencies by monitoring the foreign exchange systems of member countries and lending money to developing economies. The World Bank is an international agency that provides loans and technical assistance to low- and middle-income countries, with the goal of reducing poverty.

International Monetary Fund (IMF) An international agency that aims to stabilize currencies by monitoring the foreign exchange systems of member countries and lending money to developing economies.

World Bank An international agency that provides loans and technical assistance to low- and middle-income countries with the goal of reducing poverty.

between the U.S. dollar and gold was suspended in 1971. The promise to exchange gold for U.S. dollars was withdrawn. This action brought an end to the Bretton Woods system.

Following the 1997 Asian financial crisis, finance ministers and central bank heads from 20 advanced and emerging market economies established the Group of Twenty (G20). The organization aims to bring greater stability to the global financial system. Representing about 90 percent of the world economy, its members have met annually to develop measures that promote economic growth and strong financial systems. They have held meetings in Canada, South Korea, the United Kingdom, and the United States. The members were instrumental in devising new policies to address the global economic crisis. Policies included increasing financial resources, coordinating expansionary macroeconomic policies, and enhancing national financial regulations. The G20 cooperates closely with the IMF and World Bank.

The Modern Exchange Rate System

Today most major currencies are traded freely, with their value floating according to the forces of supply and demand. The official price of gold was formally abolished. Governments became free to choose the type of exchange rate system that best suited their individual needs. Fixed exchange rate systems were given equal status with floating exchange rate systems. Countries were no longer compelled to maintain specific pegged values for their currency. Instead, they were urged to pursue domestic economic policies that would support the stability of their currency relative to others. The exchange rate system today consists of two main types of foreign exchange management: the floating system and the fixed system.

THE FLOATING EXCHANGE RATE SYSTEM Most advanced economies use the floating exchange rate system. Currency values are determined by market forces. Major world currencies—including the British pound, Canadian dollar, euro, U.S. dollar, and Japanese yen—float independently on world exchange markets. Their exchange rates are determined daily by supply and demand. The floating system gives governments the flexibility to modify monetary policy to fit the circumstances they face at any time.

Source: Jon Bilous/Shutterstock

The Bretton Woods Agreement, which set the course for contemporary global financial relations, was conceived by 44 nations at the Mount Washington Hotel in Bretton Woods, New Hampshire, United States, in 1944.

Source: REDPIXEL.PL/Shutterstock

The international monetary system provides the framework within which national currencies, including the U.S. dollar, British pound, and European euro, are exchanged for one another.

If a country is running a trade deficit, the floating rate system allows it to be corrected more naturally than if the country uses a fixed exchange rate regime.

THE FIXED EXCHANGE RATE SYSTEM This approach is similar to the system used under the Bretton Woods Agreement and is sometimes called a *pegged exchange* rate system. Using this system, the value of a currency is set relative to the value of another (or to the value of a basket of currencies) at a specified rate. As this *reference value* rises and falls, so does the currency pegged to it. In the past, some currencies were also fixed to some set value of gold.

Many developing economies and some emerging markets use the fixed system today. China pegs its currency to the value of a basket of currencies. Belize pegs its currency to the U.S. dollar. To maintain the peg, the governments of China and Belize, for instance, will intervene in currency markets to buy and sell dollars and other currencies to maintain the exchange rate at a fixed, preset level. A fixed regime promotes greater stability and predictability of exchange rate movements and helps stabilize a nation's economy. The central bank must stand ready to fill any gaps between supply and demand for its currency.

At times, countries try to hold the value of their currency within some *range* against the U.S. dollar or other important reference currency, in a system often referred to as *dirty float*. That is, the value of the currency is determined by market forces, but the central bank intervenes occasionally in the foreign exchange market to maintain the value of its currency within acceptable limits relative to a major reference currency. Many Western countries resort to this type of intervention from time to time.

9.4 Describe the monetary and financial systems.

The Monetary and Financial Systems

We have seen how currencies facilitate international transactions and how exchange rates affect the amount of international trade. Let's now examine the two systems that determine exchange rates: the international monetary system and the global financial system.

International Monetary System

International monetary system
Institutional framework, rules, and procedures by which national currencies are exchanged for one another.

Firms seek to be paid for the products and services they sell abroad. Portfolio investors seek to invest in stocks and other liquid assets around the world. The resulting monetary flows take the form of various currencies traded among nations. Accordingly, the **international monetary system** consists of the institutional frameworks, rules, and procedures that govern how national currencies are exchanged for one another. By providing a framework for the monetary and foreign exchange activities of firms and governments worldwide, the system facilitates international trade and investment. To function well, national governments and international agencies have focused on creating a system that inspires confidence and ensures liquidity in monetary and financial holdings.

Global Financial System

Global financial system
The collective of financial institutions that facilitate and regulate investment and capital flows worldwide, such as central banks, commercial banks, and national stock exchanges.

The **global financial system** consists of the collective financial institutions that facilitate and regulate flows of investment and capital funds worldwide. Key players in the system include finance ministries, national stock exchanges, commercial banks, central banks, the Bank for International Settlements, the World Bank, and the International Monetary Fund. The system incorporates the national and international banking systems, the international bond market, the collective of national stock markets, and the market for bank deposits denominated in foreign currencies.

The global financial system is built on the activities of firms, banks, and financial institutions engaged in ongoing international financial activity. It also has many linkages with national financial markets. Since the 1960s, the global financial system has grown substantially in volume and structure, becoming increasingly more efficient, competitive, and stable.

Today, the global financial system can accommodate massive cross-national flows of money and the huge foreign exchange markets these transactions have engendered. Initially triggered by the rapid growth in world trade and investment, the globalization of finance accelerated in the 1990s with the opening of the former Soviet Union and China to international business. More recently, very large flows of capital—mostly in the form of pension funds, mutual funds, and life insurance investments—have been pouring into stock markets worldwide. Firms can increasingly access a range of capital markets and financial instruments around the world.[9]

Money flowing abroad as stock portfolio investments is a relatively new trend. The volume of these flows is enormous. For example, more than 25 percent of total outstanding U.S. equity securities are typically held by people outside the United States.[10] In developing economies, inward investment increases foreign exchange reserves, reduces the cost of capital, and stimulates local development of financial markets.

The growing integration of financial and monetary activity worldwide has several causes, including:

- The evolution of monetary and financial regulations worldwide.
- The development of new technologies and payment systems and the use of the Internet in global financial activities.
- Increased global and regional interdependence of financial markets.
- The growing role of single-currency systems, such as the euro.

Capital flows are much more volatile than FDI-type investments because it is much easier for investors to withdraw and reallocate liquid capital funds than FDI funds. FDI funds are directly tied to factories and other permanent operations that firms establish abroad.[11]

The globalization of financial flows has yielded many benefits, but it is also associated with increased risk. Economic difficulties in one country can quickly spread to other countries like a contagion. Financial instability is worsened when governments fail to regulate and monitor their banking and financial sectors adequately.[12] Let's discuss various organizations that attempt to reduce capital flight and manage other challenges in the global monetary and financial systems.

Ethical Connections

The global financial crisis of 2008–2009 raised many ethical issues. Globalization of the financial sector allowed the crisis to spread quickly, harming people worldwide. However, financial globalization has contributed greatly to economic development in poor countries. Critics point to self-interest in the banking sector as a basic cause of the crisis. But self-interest is a natural human condition. Pensioners and other investors happily accept rapid gains in stocks and bonds, often ignorant of how the gains are made. Some argue the real cause of the crisis was a failure of governments to adequately regulate the financial sector.

Key Players in the Monetary and Financial Systems

9.5 Identify the key players in the monetary and financial systems.

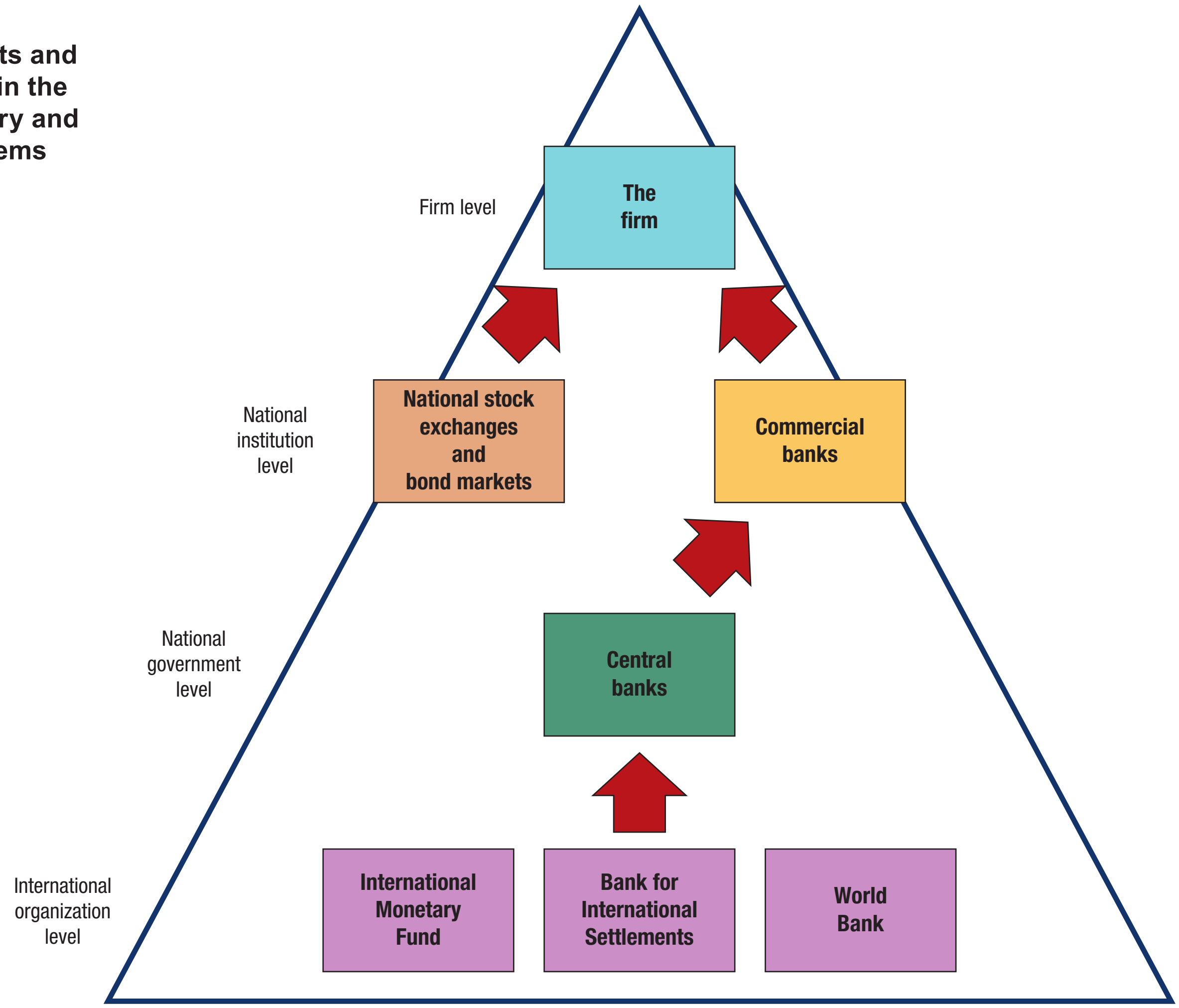
A variety of national, international, private, and government players make up the international monetary system and the global financial system. Exhibit 9.4 highlights the major players and the relationships among them. These players operate at the levels of the firm, the nation, and the world.

The Firm

As companies engage in international trade and are paid by their customers abroad, they typically acquire large quantities of foreign exchange and must convert them to the currency of the home country. Firms also engage in investment, franchising, and licensing activities abroad that generate revenues they must exchange for their home currency. For example, Schwabengarage in Stuttgart, Germany, is one of the largest car dealerships in Europe, specializing in Ford automobiles. Schwabengarage imports thousands of Fords every year and ultimately must pay for them in U.S. dollars. Schwabengarage deals in the foreign exchange market to convert European euros to U.S. dollars.

EXHIBIT 9.4

Key Participants and Relationships in the Global Monetary and Financial Systems



Some MNEs with spare cash acquire foreign currencies for speculative purposes. They invest in currencies with the intention of profiting from exchange rate fluctuations. Other firms may acquire foreign currency to invest in foreign stock markets and other foreign investment vehicles for short-term gains. Other private-sector players in the international monetary and financial systems include life insurance companies, savings and loan associations, and stockbrokers that manage pensions and mutual funds. Some large MNEs have in-house finance departments that manage their foreign exchange and financial transactions.

Nontraditional financial institutions play a key role in international funds transfers. Foreign residents in Australia, Canada, the United States, and countless other countries use wire-transfer technology to wire billions of dollars to family members in India, Mexico, and many other less-developed economies. These funds are then converted into local currencies. Such remittances by Africans living abroad constitute a major source of funds flowing into Africa, helping sustain the continent's poorest countries. Some nations receive more foreign income from remittances than from either foreign aid or inward FDI.[13] Read this chapter's *You Can Do It: Recent Grad in IB* feature, which highlights Maria Petit, who works in international finance.

National Stock Exchanges and Bond Markets

Selling stock (shares of ownership) is an important way for firms to raise the funds they need to engage in international business. A *stock exchange* is a facility for trading securities and other financial instruments, including shares issued by companies, trust funds, pension funds, and corporate and government bonds. Information technology has revolutionized the functioning of stock markets, greatly reducing the speed and cost of transactions. Today, many exchanges are electronic networks not necessarily tied to a fixed location. Each country sets its own rules for issuing and redeeming stock.

Trade on a stock exchange is by members only. For example, the Tokyo Stock Exchange (TSE; www.jpx.co.jp/english/) is the home stock market to such firms as Toyota, Sony, and Canon and the major vehicle through which some 2,000 Japanese firms raise capital to fund their business activities. Several foreign companies, such as BP and Chrysler, are also listed on the TSE. Today, MNEs often list themselves on a number of exchanges worldwide to maximize their ability to raise capital.

The character of markets varies worldwide. For example, corporations hold the majority of shares in the Japanese market. In Britain and the United States, individuals hold more shares. Despite these differences, stock exchanges are increasingly integrated into the global securities market.

Bonds are another type of security sold through banks and stockbrokers. They are a form of debt that corporations and governments incur by issuing interest-bearing certificates to raise capital. Bonds enable the issuer to finance long-term investments. For example, SK Telekom, the main wireless communications provider in South Korea, financed much of its operations by selling bonds in the global market. Several European telecommunications providers, such as Telecom Italia, Deutsche Telecom, and France Telecom, issued international bonds to fund their activities.[14]

In many national stock and bond markets, the most important players today are *institutional investors*—managers of pensions and mutual funds, as well as insurance companies. They have now assumed an enormous role in driving capital markets around the world.

Commercial Banks

Banks are important players in the global financial sector. They raise funds by attracting deposits, borrowing money in the interbank market, or issuing financial instruments in the global money market or securities markets. Commercial banks—for example, Bank of America, Mizuho Bank in Japan, and BBVA in Spain—operate at the most essential level of the international monetary system. They circulate money and engage in a wide range of international financial transactions. Banks are regulated by national and local governments, which have a strong interest in ensuring the solvency of their national banking system.

The many types of banks and their primary activities include the following:

Investment banks underwrite (guarantee the sale of) stock and bond issues and advise on mergers, such as the merger of Goldman Sachs in the United States and Nomura Securities in Japan.

Merchant banks provide capital to firms in the form of shares rather than loans. They are essentially investment banks that specialize in international operations. They do not provide regular banking services to the general public. The Arab-Malaysian Merchant Bank is an example.

Private banks manage the assets of the very rich. Union Bank in Switzerland (UBS) and ABN AMRO Private Banking in Luxembourg are examples.

Offshore banks are located in jurisdictions with low taxation and regulation, such as Switzerland and Bermuda. Banco General in Panama and Bank of Nova Scotia in the British Virgin Islands are examples.

Commercial banks deal mainly with corporations or large businesses. Credit Lyonnais in France and Bank of America are examples.

For firms, the most important functions of banks are to lend money to finance business activity, exchange foreign currencies, and facilitate adjustments in national money supplies. The major world banking centers are London, New York, Tokyo, Frankfurt, and Singapore, with London having the world's greatest concentration of international banks. Many banks are MNEs themselves, such as Citibank, Britain's HSBC, and Spain's BBVA. Smaller banks participate in international business by interacting with larger correspondent banks abroad. A correspondent bank is a large bank that maintains relationships with other banks worldwide to facilitate international banking transactions.

You Can Do It

RECENT GRAD IN IB

MARIA PETIT

Maria's majors: Finance, international business, and Spanish
Objectives: Move into the executive suite at Motorola or other multinational firm
Maria's jobs since graduation: Various jobs at Motorola—credit analyst (U.S.), finance manager (UK); financial controller (Dubai, United Arab Emirates), corporate finance consultant (UK), finance director (Brazil)

Source: Maria Petit

In college, Maria Petit spent a year in Spain and served as the president of the international business club. She majored in finance, international business, and Spanish. After graduation, she took a job as a credit analyst with Motorola (www.motorola.com), a leading producer of cell phones and other wireless handsets. Maria used analytical, problem-solving, and communication skills acquired in college to serve Motorola clients and subsidiaries throughout Latin America.

At Motorola, Maria analyzed risk levels of various customers and countries. She managed accounts receivable and conducted audits in Motorola's international operations. These duties required her to travel often to Latin America. She became the primary contact for financial analysis support to northern Latin America, the Caribbean, and Central America. Her tasks included the analysis, tracking, and reconciliation of Motorola's funds for regional marketing activities.

Eager to gain experience in Europe, Maria volunteered to transfer to Motorola's London office, where she served as a finance manager in the firm's $160 million mobile phone business for the Middle East, North Africa, and Turkey. She also sought her CIMA certification, the British equivalent of certified public accountant (CPA). After two years in London, Maria transferred to Dubai, the United Arab Emirates, as financial controller in Motorola's Middle East region. In this role, she coordinated the management of Motorola's financial activities in the Islamic world. Most recently, Maria worked as a corporate finance consultant for Barrows, a global retail marketing company, based in London. She also served as interim director of finance for Barrows in Sao Paulo, Brazil.

Lessons Learned

Maria commented on her diverse and multicultural work experience in the world of international financial management. "One of my big challenges was increased regulations that required stricter auditing of financial records in the wake of accounting scandals. It's critical to ensure that all of Motorola's legal entities are compliant worldwide. Local regulations also must be assimilated and integrated. The time I allocated to compliance activities greatly increased. Simultaneously, competition in the mobile devices industry grew, and I had to increase support to our sales and marketing operations as well.

"The languages in my region are French (North Africa), Arabic (Middle East), and Turkish (Turkey). Although I studied Arabic, I still cannot carry a business conversation in Arabic and only manage to use my Spanish while visiting a particular distributor in Morocco that is partially owned by Telefonica (www.telefonica.com), Spain's telecom provider. Luckily, most of our business partners spoke English. There is definitely a disadvantage to not speaking the local language.

"Much of the Islamic world has specific norms for women, who usually do not participate in professional business activities. But people generally treat me with respect. I have found that if I establish myself as a knowledgeable professional, people in the Middle East generally treat me as well as they do their male colleagues. There is one last cultural difference that puts me at a disadvantage: being a nonsmoker in countries where people still smoke a lot. Most of the debriefing after a challenging meeting happens during cigarette breaks. Given the relaxed atmosphere, the parties are more likely to discuss issues in a candid manner. But I'm not willing to take up smoking to be more effective in my job. It is a cultural difference that I accept."

Maria's Advice

The qualities that contributed most to Maria's success include "hard work, having a deliberate career strategy, and cultivating interpersonal relationships and teamwork with helpful people both when I was in college and in the professional world. You really have to plan. Set goals for yourself and work hard to meet them." As for the future, Maria hopes to move into the executive suite at a multinational firm. But having a career, especially an international one, is still challenging these days for women who also want to start a family. Maria looks forward to fulfilling both her career and personal goals.

Source: Courtesy of Maria Petit.

Source: sean pavone/123RF

Chinese banks play a growing role in global finance. China is home to the world's four largest banks: ICBC, China Construction Bank, Agricultural Bank of China, and Bank of China. Pictured here is the financial district in Beijing.

Banking practices vary widely. In some countries, banks are owned by the state and are extensions of government. In other countries, they face little regulation and may lack safety nets that might prevent their failure. In developing economies, private banks are usually subject to substantial government regulation.

The density of banks varies cross-nationally. Consider Canada, Sweden, and the Netherlands. Just five banks in each country control more than 80 percent of all banking assets. In Germany, Italy, and the United States, by contrast, the top five banks control less than 30 percent of all banking assets. Banks also charge different rates for their services. For a typical customer, the annual price of core banking services in Italy is more than $300, in the United States it is $150, and in China and the Netherlands it is only $50. Customers in many countries are turning increasingly to Internet banking to avoid high fees.[15]

Banking has long been problematic in Africa. Egypt and South Africa are among the few African countries that possess a thriving, homegrown banking sector. In the rest of Africa, industry and governments have tended to rely on international banks because local banks are sometimes unstable and corrupt. Heavy restrictions on foreign banks reduced competition in the past and often delayed the development of a strong indigenous banking sector. Recently, however, globalization of the financial industry has contributed substantially to the development of efficient markets and financial institutions. Foreign banks have brought technology, managerial expertise, and new product ideas to Africa. Tough foreign competition has put pressure on indigenous banks to be more innovative. In addition, many banks use widespread mobile telephone technology to offer banking services in Africa.[16]

Central Banks

As the official national bank of each country, the central bank regulates the money supply and credit, issues currency, and manages the rate of exchange. The central bank also seeks to ensure the safety and soundness of the national financial system by supervising and regulating the nation's banking system. A key goal is to keep price inflation low. The central bank regulates the nation's money supply and credit by:

- Buying and selling money in the banking system.
- Increasing or decreasing interest rates on funds loaned to commercial banks.
- Buying and selling government securities, such as treasury bills and bonds.

Many central banks also buy and sell government securities to finance government programs and activities.

Monetary intervention describes how central banks manipulate currency rates, usually with the aim of maintaining stable or orderly exchange rates. Such intervention is achieved by buying or selling currencies in the foreign exchange market. For example, if the central bank of the United States (called the Federal Reserve Bank) wants to support the value of the U.S. dollar, it might buy dollars in the foreign exchange market. By so doing, the supply of dollars is reduced, which increases the value of dollars still in circulation.

Monetary intervention
The buying and selling of currencies by a central bank to maintain the exchange rate of a country's currency at some acceptable level.

Other central banks include the Reserve Bank of India, the Bank of England, the Banque de France, and the Bank of Japan. They work with the International Monetary Fund, the Bank for International Settlements, the Organisation for Economic Co-operation and Development (OECD), and other international agencies to ensure sound international monetary and financial policies in global markets.

Source: asiastock/Shutterstock

Banks, stock exchanges, and other participants in the global monetary and financial systems make international business possible. Shown here is the Bank of England in London.

The Bank for International Settlements

Based in Basel, Switzerland, the Bank for International Settlements (www.bis.org) is an international organization that fosters cooperation among central banks and other governmental agencies. It provides banking services to central banks and assists them in devising sound monetary policy. It seeks to support stability in the global monetary and financial systems and help governments avoid becoming too indebted. It also attempts to ensure that central banks maintain reserve assets and capital/asset ratios above prescribed international minimums. Maintaining adequate capital is prescribed by the Basel Capital Accord, a set of recommendations on how central banks should structure their banking laws and regulations.[17]

International Monetary Fund

Headquartered in Washington, DC, the IMF provides the framework of and determines the code of behavior for the international monetary system. The agency promotes international monetary cooperation, exchange rate stability, and orderly exchange arrangements and encourages countries to adopt sound economic policies. These functions are critical because economic crises can destroy jobs, slash incomes, and cause human suffering.

Governed today by 189 countries, the IMF stands ready to provide financial assistance in the form of loans and grants to support policy programs intended to correct macroeconomic problems. During recent economic crises, the IMF pledged several billion dollars to assist Colombia, Cote d'Ivoire, Egypt, Mexico, Poland, Tunisia, and numerous other countries.[18]

To help manage currency valuation worldwide, the IMF established a type of international reserve known as the **Special Drawing Right (SDR)**. The SDR is a unit of account or a reserve asset, a type of currency central banks use to supplement their existing reserves in transactions with the IMF and manage international exchange rates. For example, a central bank might use SDRs to purchase foreign currencies to manage the value of its currency on world markets. The value of the SDR is very stable because it is based on a basket of currencies: the euro, the Japanese yen, the UK pound, and the U.S. dollar.

Special Drawing Right (SDR)
A unit of account or a reserve asset, a type of currency central banks use to supplement their existing reserves in transactions with the IMF.

The IMF plays an important role in addressing financial and monetary crises nations face around the world. Typical crises fall into three major categories.

A *currency crisis* results when the value of a nation's currency depreciates sharply or when its central bank must expend substantial reserves to defend the value of its currency. This usually results in a rise in interest rates. Currency crises occur more commonly in smaller countries and are sometimes the result of a sudden loss of confidence in the national economy or speculative buying and selling of the nation's currency.

A *banking crisis* results when domestic and foreign investors lose confidence in a nation's banking system that leads to widespread withdrawals of funds from banks and other financial institutions. This situation arose in the United States in the 1930s during the Great Depression. Millions of people panicked about their savings and rushed to withdraw funds from their bank accounts. The crisis led to the failure of numerous banks. Banking crises tend to occur more frequently in developing economies with inadequate regulatory and institutional frameworks. These crises can lead to other problems, such as exchange rate fluctuations, inflation, abrupt withdrawal of FDI funds, and general economic instability.

A *foreign debt crisis* arises when a national government borrows an excessive amount of money, either from banks or from the sale of government bonds. For example, China's total foreign debt now exceeds $1.4 trillion. The debt is manageable because China's economy and foreign exchange reserves are huge. By contrast, Greece's foreign debt is about 250 percent of the country's GDP. In an effort to pay its debt, Greece must use financial resources that its leaders might prefer to invest instead in important national priorities. Indebted governments draw huge sums out of their national money supply, which reduces the availability of these funds to consumers and to firms attempting to finance business activities.[19]

The IMF assists countries in resolving crises by offering technical assistance and training. It provides assistance by setting fiscal policy, devising monetary and exchange rate policies, and supervising and regulating banking and financial systems. It also provides loans to help distressed countries in recovery. However, the agency has been criticized because its prescriptions often require national governments to undertake painful reforms. For example, the IMF may recommend that a government downsize state-owned enterprises or give up subsidies or price supports for basic commodities. Some critics charge that the IMF harms countries by imposing too much austerity in times of financial distress. The IMF argues that any country in an economic crisis usually must undergo substantial restructuring, such as the deregulation of national industries or privatization of state enterprises.

The World Bank

Originally known as the International Bank for Reconstruction and Development, the World Bank (www.worldbank.org) was founded to fund reconstruction of Japan and Europe after World War II. Today it aims to reduce world poverty and is active in various development projects to bring water, electricity, and transportation infrastructure to poor countries. Headquartered in Washington, DC, the bank is a specialized agency of the United Nations with more than 100 offices worldwide. It is supported by some 189 member countries that are jointly responsible for how the institution is financed and how its money is spent.

The World Bank's collection of sub-agencies oversees various international development activities. The International Development Association loans billions of dollars each year to the world's poorest countries. The International Finance Corporation works with the private sector to promote economic development. It invests in sustainable private enterprises in developing countries and provides equity, loans, loan guarantees, risk management products, and advisory services to clients in need. The Multilateral Investment Guarantee Agency aims to encourage FDI to developing countries by providing guarantees to foreign investors against losses caused by noncommercial risks.

The IMF and the World Bank often work together. Whereas the IMF focuses on countries' economic performance, the World Bank emphasizes longer-term development and the reduction of poverty. The IMF makes short-term loans to help stabilize foreign exchange, and the World Bank makes long-term loans to promote economic development.

MyLab Management Watch It!

If your professor has assigned this, go to the Assignments section of **www.pearson.com/mylab/management** to complete the video exercise titled The G20 and the Global Monetary and Financial Systems.

The Global Debt Crisis

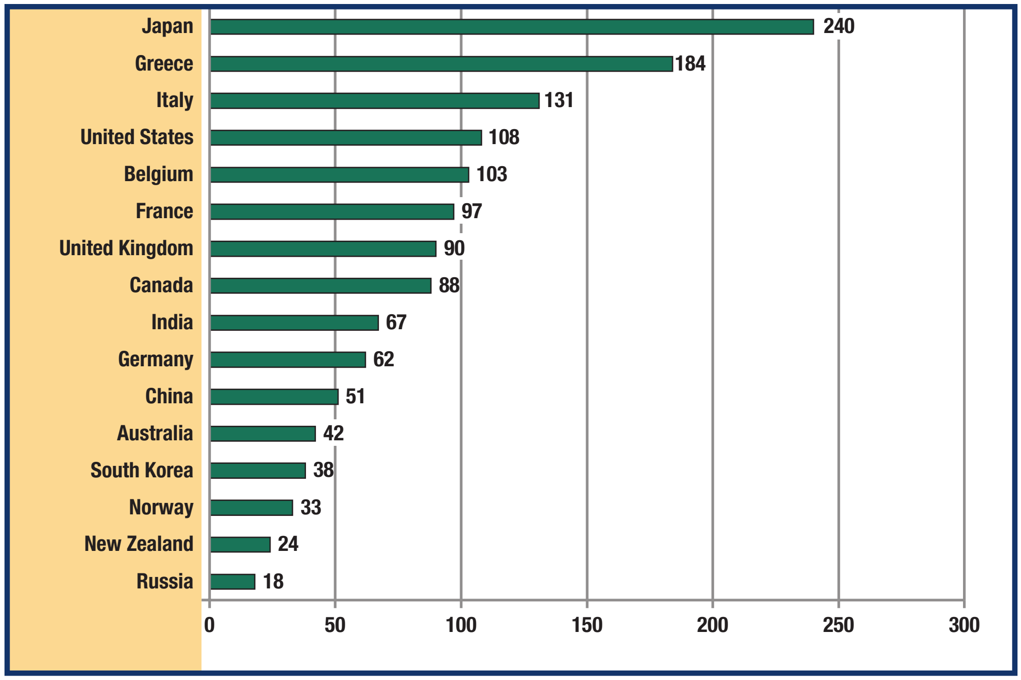
9.6 Understand the global debt crisis.

Growing imbalances in the finances of numerous national governments is an emergent crisis in the international monetary and financial environment.[20] Exhibit 9.5 shows the amount of gross government debt as a percentage of GDP for selected countries. Debt is especially high in Japan and Greece. In these countries, as well as in Belgium, Italy, and the United States, gross government debt exceeds 100 percent of each nation's GDP. National debt in

EXHIBIT 9.5

Gross Government Debt as a Percentage of GDP

Source: Based on International Monetary Fund, *World Economic Outlook Database*, 2018.



total dollar terms is highest in the United States, but the indicator is less useful than debt as a percentage of GDP. The reason is that countries can pay down their debt more easily if it is a smaller percentage of their annual GDP. For example, in 2018, the national debt of Germany was about $2.1 trillion, a huge amount in dollar terms. However, because it represents only 62 percent of Germany's GDP, it would take less than eight months (62 percent of a year) of national productive output for Germany to pay it off. By contrast, Japan's debt is 240 percent of its GDP. Japan would need to give up roughly 240 percent of its annual GDP to pay its national debt.

Fiscal imbalances are an important source of risk and uncertainty in the global business environment. Recently, debt has substantially increased in major advanced economies. This is mainly due to excessive government spending and insufficient revenues. Governments spent huge sums of borrowed money in the latest global recession to bail out financial systems and reduce recessionary pressures. Governments face unfunded liabilities of pension and health care programs. Japan, the United States, numerous countries in Europe, and others are suffering under the weight of excessive government debt.[21] Recently, credit rating agencies Moody's and Standard & Poor's downgraded the sovereign debt ratings of some European countries to reflect their susceptibility to growing financial and monetary risks.[22]

Research shows that national debt that exceeds 90 percent of a nation's GDP tends to diminish GDP growth, which exacerbates government debt.[23] As the government tries to pay down its debt, money is drawn out of the national money supply. This hinders economic activity and reduces tax revenues. In the past few years, numerous countries have surpassed the 90 percent threshold, including Japan, the United States, and several countries in Europe. The International Monetary Fund and other agencies have stated that, without significant adjustments, most advanced economies face serious threats to fiscal solvency in the long run.[24]

The largest proportion of government debt results from national pension and health care programs. In the advanced economies, pension shortfalls have emerged because birth rates have declined in the past several decades, resulting in less workforce participation. Combined with the tendency for people to live longer, advanced economies face severe challenges in generating tax revenues sufficient to fund pensions and health care programs for seniors and others. MNEs should proceed with caution when entering countries with substantial government debt because such nations tend to experience economic instability, reduced buyer purchasing power, and other challenges.

CLOSING CASE Asian IFCs: Singapore and Hong Kong

IFCs: An Overview

International financial centers are one of the most dynamics realities of international finance today. These are cities or regional centers where financial services providers, especially banks, insurance companies, and stock exchanges concentrate. Asia, the center of the world manufacturing, is also home to a few financial hubs, two of which have become especially famous in the course of the last century, presenting some similar characteristics but also substantial differences: Hong Kong and Singapore.

The existence of IFCs is not a novelty, and places like London and New York have an old tradition in this sense. Asian hubs are more recent but assuming a more prominent character to reflect the new, dynamic role of Asia as one of the centers of the world economy. Both Hong Kong and Singapore do figure prominently in the Global Financial Centers Index, compiled semiannually by the London-based British Z/Yen, a financial think tank sponsored by the Qatar Financial Centre Authority. The two Asian hubs represent the third (Hong Kong) and fourth (Singapore) world IFCs respectively after London and New York. Both Hong Kong and Singapore have a central place in the East Asian production and distribution channels as leading RDCs (regional distribution centers) and important locations of free trade zones, which add to their attractiveness.

Hong Kong

Hong Kong SAR (Special Administrative Region) is the oldest of the two, a former British colony handed over to China in 1997 that has nonetheless preserved an autonomous and independent economy from the Mainland according to the formula "one country, two systems." While considered here in terms of its role as a financial hub—its financial role has strongly contributed to its success as a trade and logistics hub and a leading exhibition center of the region—Hong Kong is certainly more than that. The territory was the world's sixth largest trading economy by export in 2017 ($550.2 billion), the second in Asia ($104 billion) as recipient of FDIs after China ($136 billion), and often the first port of call for Western companies approaching Asian markets, both to export and for sourcing. In terms of GDP composition, Hong Kong is a very sophisticated service economy, where services account for about 90 percent in terms of contribution (2018). More to the point, financial services constitute the second in importance (17.6 percent of GDP in 2017), after trading and logistics, and before tourism and other professional services.

Hong Kong is home to the HKEx (Hong Kong Stock Exchange), Asia's third largest in terms of market capitalization ($4.46 trillion in March 2018), behind the Tokyo Stock Exchange and Shanghai Stock Exchange, and the fifth largest in the world. As of August 31, 2015, the Hong Kong Stock Exchange had 1,955 listed companies, some 49 percent of which are from Mainland China (H Shares and Red Chips) and the rest from Hong Kong itself. An important addition has been at the end of 2014 in the Shanghai-Hong Kong Stock Connect, which gave, for the first time, the opportunity for investors in Hong Kong (including foreign companies) to access Mainland China's stock market through Shanghai.

Singapore

While Hong Kong looks at China and at the northern part of East-Asia, Singapore instead offers access to Southeast Asia, and from its location on the tip of Peninsular Malaysia, it aims to serve the fast-growing emerging markets of ASEAN. Compared to Hong Kong, Singapore is a more recent institution, having emerged as a US-dollar-linked economy only in the course of the 1960s.

A veritable trade hub, Singapore, like Hong Kong, is now a key component in the Asian supply chains, and, on top of that, it presents a strong and transparent legal framework that has proved effective in attracting many international corporations to choose it as a center for their holdings. The tax breaks and low rates have certainly helped in this sense. It has also been an early starter in preferential trade agreements, which have progressively become a fundamental tool in international trade, contributing to Singapore's success in attracting corporations.

Its share of financial services of the GDP, though inferior to Hong Kong, is still a quite impressive 12 percent of the total, and growing. The Singapore Stock Exchange (SGX) was formed on December 1, 1999, as a holding company, joining together the capitals of three previous exchange companies: the Stock Exchange of Singapore (SES), Singapore International Monetary Exchange (SIMEX), and Securities Clearing and Computer Services Pte Ltd (SCCS). As of February 2017, there were 754 listed companies, with commodity derivatives being the fastest-growing part of the trading. Forex is another important sector whose importance is on the rise. As of December 2017, Singapore was the 21st largest exchange in the world and ninth in Asia.

Competition Between the Asian Hubs

There has always been competition between the two hubs, and shifting fortunes over the years have seen one or the other taking advantage of the world's economic and financial situation. As their domestic economies are rather small, both hubs are affected by what happens first in the markets they serve as access points and more in general by the rest of the financial environment.

The competition between the two is evident not only in the financial sector but in services in general, especially the ones related to international trade. Their deep-water ports are consistently among the world's most competitive and busy. Singapore leads in terms of container ports (second in the world after Shanghai; Hong Kong is currently fourth) while its rival hosts the busiest airport for international cargoes.

This competition extends to other areas. There are many people, especially among expats, who prefer settling down and working in Singapore rather than in Hong Kong. The Lion City is considered a more suitable location in terms of superior living standards, quality of life, environment (more green areas in the city), and affordable accommodation. Hong Kong, on the other hand, is certainly superior to its southern rival is in terms of stock exchange for equities and IPOs. In 2018, Hong Kong took top position in the global IPO market (KPMG), and the exchange managed to have a new listing totaling over $38.4 billion. Wealth management also sees Hong Kong prevailing as the choice of three times the number of billionaires over its rival.

Outlook

IFCs are one of the most important aspects of global finance, and given the current status of the world economy and its financial markets, their centrality will likely continue and even soar in the following years. Hong Kong and Singapore have seen their relevance growing along with that of the other IFCs. What makes their position different is that both are certainly going to be affected by the economic fortunes of China.

In the case of Hong Kong, as part of China, it is the main supplier of imports, and even if many countries take benefit of its free-trade regime, the Closer Economic Partnership Arrangement (CEPA) of 2004 will continue to foster a progressively closer integration of Hong Kong's economy with the Chinese Mainland, not only in the traditional manufacturing and logistics sectors but in services too, which are generally off-limits to foreign companies. Thanks to CEPA's provisions, Hong Kong suppliers are enjoying preferential treatment when entering into the Mainland market in various service areas and also have professional titles and qualifications recognized in China.

But Singapore too is well-positioned to exploit the increasingly busy Chinese market. It is already East Asia's largest center for both commodity and foreign exchange trading, and Singapore has recently become the hub of negotiation for the renminbi, China's currency, which is not yet convertible. This opens even more opportunities for the rise of Singapore as the leading forex center of East Asia.

In addition to that, the ongoing regional integration in Asia—from the free trade area of ASEAN (AFTA) to more ambitious plans to integrate China, Japan, and Australia in that framework as well—is going to offer even more opportunities for the two hubs to thrive.

Risks to Singapore and Hong Kong can come instead from exogenous threats (like a global financial crisis or the recent fall of the Chinese stock market in 2015) or from the rise of local competitors, like Shanghai, which can build on existing vantage points like logistics and manufacturing to threaten their supremacy.

AACSB and CKR Intangible Soft Skills to improve employability and success in the workplace: Written and Oral Communication, Analytical Thinking, Diverse and Multicultural Work environments, Reflective Thinking, Application of Knowledge.

Case Questions

9-4. Look up the IMF's definition of IFCs and explain how this applies to the two Asian territories described here.

9-5. Describe structural similarities and differences between Hong Kong and Singapore, and describe the two IFCs in terms of financial markets and stock capitalization. What are the most striking differences among them? What are the respective points of strength and weakness?

9-6. Both IFCs are central not only for financial services, but also for other factors, like supply chains, exhibitions, and logistics hubs. Their deep-water container ports are consistently among the world top ten. How does this help their status as financial centers?

9-7. Consider the last section on what lies ahead, and research the sources provided. Which one is more promising in terms of scenarios and why? What has to happen for Singapore to overtake Hong Kong as the most important IFC of the region? What can do Hong Kong to maintain its dominant position?

Sources: IMF, "Offshore Financial Centers: IMF Background Paper," June 23, 2000, https://www.imf.org/external/np/mae/oshore/2000/eng/back.htm; Credit Suisse, "Singapore as a Financial Hub," 2014, https://www.credit-suisse.com/sg/en/private-banking/ bank/financialhub.html; Long Finance, "Global Financial Centres Index," March 2015, http://www.zyen.com/research/gfci.html; "Singapore Jostles with Hong Kong for Financial Crown," *Financial Times*, October 24, 2014, http://www.ft.com/cms/s/0/b18372a6-5297-11e4-a236-00144feab7de.html#axzz3pIN6Gfw1; CEPA Partnership Agreement, http://www.tid.gov.hk/english/cepa/cepa_overview.html; World Bank Group, "Container Port Traffic (TEU 20 Foot Equivalent Units) Data," http://data.worldbank.org/indicator/IS.SHP.GOOD.TU; Hong Kong Stock Exchange, official website, http://www.hkex.com.hk/eng/listing/ listhk/our_markets.htm; Singapore Stock Exchange, official website, http://www.sgx.com/wps/portal/sgxweb/home/marketinfo/market_statistics; "Chinese Stock Markets Do Not Matter," *Forbes*, October 1, 2015, http://www.forbes.com/sites/kennethkim/2015/10/01/chinese-stock-markets-do-not-matter/; Heather Timmons and Zheping Huang, "Beijing Is Blaming Everyone But Itself for China's Stock Market Collapse," *Quartz*, September 1, 2015, http://qz.com/492115/beijing-is-blaming-everyone-but-itself-for-chinas-stock-market-collapse/; United Nations Conference on Trade and Development, "World Investment Report 2018: Investment and New Industrial Policies," https://unctad.org/en/PublicationsLibrary/wir2018_overview_en.pdf; Tanza Loudenback, "Hong Kong Could Overtake New York as the World's Billionaire Capital Very Soon," *Business Insider*, May 15, 2018, https://www.businessinsider.com/billionaire-population-hong-kong-vs-new-york-city-2018-5?r=US&IR=T; Kelly Olsen, "Hong Kong Is Set to Top Global IPO Market in 2018," *CNBC*, https://www.cnbc.com/2018/09/24/hong-kong-is-set-to-top-global-ipo-market-in-2018-kpmg.html.

This case was written by Stefania Paladini, Birmingham City University.

END-OF-CHAPTER REVIEW

MyLab Management

Go to **www.pearson.com/mylab/management** to complete the problems marked with this icon ✪.

Key Terms

Summary

In this chapter, you learned about:

- **Exchange rates and currencies in international business**

  Much of international trade requires the exchange of currencies such as the dollar, euro, and yen. An **exchange rate** is the price of one currency expressed in terms of another. **Currency risk** arises from changes in exchange rates and affects firms' international business prospects. A convertible currency is one that can be readily exchanged for other currencies. Some currencies are nonconvertible and not readily exchangeable. **Foreign exchange** refers to all forms of money that are traded internationally, including foreign currencies, bank deposits, checks, and electronic transfers. **Capital flight** refers to the tendency of international investors to reduce their investments drastically in a troubled currency or other assets. Currencies are exchanged in the **foreign exchange market**—the global marketplace for buying and selling currencies—mainly by banks and governments.

- **How exchange rates are determined**

  Currency values are determined by various factors, including *economic growth, inflation, market psychology*, and *government action*. As inflation rises, so do interest rates, usually accompanied by a decrease in currency value. **Trade deficit** refers to the amount by which a nation's imports exceed its exports for a specific time period. **Trade surplus** is the amount by which a nation's exports exceed its imports for a specific time period. Government action to influence exchange rates is broadly termed **monetary intervention**. When the goal is **devaluation**, the government acts to reduce the official value of its currency relative to other currencies. The **balance of payments** is the annual accounting of *all* economic transactions of a nation with all other nations.

- **Emergence of the modern exchange rate system**

  The Bretton Woods Agreement of 1944 aimed to stabilize exchange rates worldwide. But the system collapsed in 1971 as currency values began floating according to market forces. Today, currency values are determined in some countries by a *floating exchange rate system*, according to market forces, and in developing economies by a *fixed exchange rate system*, controlled by government intervention. The **International Monetary Fund (IMF)** is a key international agency that aims to stabilize currencies by monitoring the foreign exchange systems of member countries and lending money to developing economies. The **World Bank** is an international agency that provides loans and technical assistance to low- and middle-income countries with the goal of reducing poverty.

- **The monetary and financial systems**

  The **international monetary system** is the institutional framework, rules, and procedures by which national currencies are exchanged for each other. It includes institutional arrangements that countries put in place to govern exchange rates. The **global financial system** is the collective of financial institutions that facilitate and regulate investment and capital flows and make possible massive trading of currencies and financial assets. It reflects the activities of companies, banks, and financial institutions, all engaged in ongoing financial activity.

- **Key players in the monetary and financial systems**

  Key participants include firms that generate revenues and acquire foreign exchange in the course of international business, invest abroad, and inject money into the financial system. Trading of securities and bonds takes place in *national stock exchanges* and *bond markets*. Each country has a **central bank**, the monetary authority that regulates the money supply and credit, issues currency, manages the rate of exchange, and acts as lender of last resort. The IMF employs **Special Drawing Rights**, a type of international reserve, to help manage currency valuation worldwide. A *currency crisis* results when the value of the nation's currency depreciates sharply. A *banking crisis* results when investors lose confidence in a nation's banking system and massively withdraw funds. Excessive *foreign debt* can harm the stability of national financial systems.

- **The global debt crisis**

  Growing imbalance in the finances of numerous national governments is an important emergent global risk. Governments spent huge sums to bail out financial systems in the global financial crisis and face financing long-term liabilities of pension and health care programs. National debt that exceeds 90 percent of a nation's GDP diminishes GDP growth; numerous countries have surpassed this threshold. Firms doing international business must proceed with caution because massive government debt can indicate economic instability, reduced buyer purchasing power, and other challenges in national markets.

Test Your Comprehension

AACSB and CKR Intangible Soft Skills to improve employability and success in the workplace: Analytical Thinking, Written and Oral Communication, Reflective Thinking, and Application of Knowledge

9-8. Distinguish between *exchange rate* and *foreign exchange*. What does each term mean?

9-9. Why might a country fear capital flight?

9-10. Distinguish between a trade surplus and a trade deficit and suggest the implications for a country's economy.

9-11. What is the role of the International Monetary Fund, and who funds its operations?

9-12. What are the reasons behind the perceived growth of financial and monetary integration?

9-13. What is the difference between the international monetary system and the global financial system?

9-14. What are the key players in the international monetary and financial systems?

9-15. What are the aims of the World Bank and the International Monetary Fund?

Apply Your Understanding

AACSB and CKR Intangible Soft Skills to improve employability and success in the workplace: Ethical Understanding and Reasoning, Analytical Thinking, Diverse and Multicultural Environments, Reflective Thinking, Application of Knowledge

9-16. When UK-based Hewitt Automotive Designs starting trading, the exchange rate was £1 = €1.50. Most of the company's business is based in the European Union. In the past decade the exchange rate has fallen to €1.10. This represents a depreciation of 26 percent. Their standard customization of a high-end car costs the business £40,000. They sell the finished product in the United Kingdom for £50,000. Explain how the 26 percent depreciation has impacted the selling price in the European Union and the probable impact on demand from that market.

9-17. Nearly 20 EU countries have adopted the euro as their national currency and are termed the *eurozone*. Sharing a single currency eliminates exchange fluctuations and simplifies trade. Eurozone firms had to make various operational changes, especially regarding finance and accounting, but generally prefer dealing in the euro. The ECB views the eurozone as one region and must apply the same monetary policy to all EU members, but this is problematic at times. The United Kingdom opted not to join the monetary union, keeping the British pound as its currency. What types of competitive advantages and disadvantages are associated with the implementation of the euro from the perspective of the firm? What types of changes did firms make once the euro became the new currency? Was adopting the euro worth it? Why or why not?

9-18. *Ethical Dilemma:* You are an advisor to a legislator who oversees the banking industry. During the global financial crisis, several banks collapsed, and private citizens lost much money. Problems arose largely due to inadequate or inappropriate regulation of the banking industry. In recent decades, however, an unrestricted global banking sector has produced numerous benefits. The relative absence of restrictions on international financial flows gave firms access to low-cost capital. The free flow of capital also provided much-needed funding to governments and entrepreneurs in poor countries. A liberated world currency market greatly facilitated international trade. Nations benefit enormously from inward capital flows as portfolio investments. Given the pros and cons of a relatively unregulated global banking system, how would you advise the legislator? Are new regulations needed in the banking sector? If so, what types of regulations? Use the ethical framework in Chapter 4 to help formulate your answer.

globalEDGE

INTERNET EXERCISES

Access globalEDGE™ at www.globalEDGE.msu.edu

AACSB and CKR Intangible Soft Skills to improve employability and success in the workplace: Written and Oral Communication, Information Technology, Analytical Thinking, Reflective Thinking, Application of Knowledge

9-19. There are numerous foreign exchange calculators on the Internet, such as www.x-rates.com. You can find them through globalEDGE™ or by entering the keywords "exchange rate" in your browser. Visit one of these calculators, and compare the exchange rates of various currencies, including the dollar, euro, yen, and renminbi. What is the rate for these currencies today? What was the euro–dollar exchange rate one year ago? What factors might have caused the fluctuation in this rate during the year? Does this website provide a way to trade foreign currencies? What is the amount of commission or other fees charged?

9-20. Assume you are a manager at a firm interested in doing business in Russia. As part of your initial analysis, top management would like to know about the level of currency and financial risks associated with the Russian market. Using resources at globalEDGE™, write a short report on the current status of these risks as well as the state of the Russian financial system and historical exchange rate stability. Based on these findings, what is your recommendation?

9-21. The International Monetary Fund (IMF) lists its purposes as follows.

- Promote international monetary cooperation through consultation and collaboration on international monetary problems.
- Facilitate the expansion and balanced growth of international trade.
- Promote exchange stability to maintain orderly exchange arrangements among members and avoid competitive exchange depreciation.

Visit the IMF website (www.imf.org), and list several examples of how the IMF undertakes and accomplishes these goals. What kinds of specific actions has the IMF taken over the past year to address economic or financial crises of various nations?

Endnotes

1. Ian Bremmer, "5 Reasons Why Venezuela's Nicolas Maduro Won't Last Much Longer," *Time,* August 11, 2017, www.time.com; Frank Gunter, "Why China Lost About $3.8 Trillion to Capital Flight in the Last Decade," *Forbes,* February 22, 2017, www.forbes.com; Girish Gupta, "Venezuela Sets New Exchange Mechanism, as Currency Continues to Slide," *Reuters,* May 24, 2017, www.reuters.com; Gabriel Wildau, "Beijing Hails Success in Battle Against Capital Flight," *Financial Times,* August 7, 2017, www.ft.com
2. Justin Jaffe, "What is bitcoin? Here's Everything You Need to Know," *CNET,* February 12, 2018, www.cnet.com; Arvind Narayanan et al., *Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction* (Princeton, NJ: Princeton University Press, 2016).
3. *Federal Reserve Bulletin,* various years, at www.federalreserve.gov; K. Kumar and Y. Muniraju, "Exchange Rate Fluctuations and Its Impact on Foreign Trade: An Empirical Study," *Finance India* 28, No. 3 (2014), pp. 973–983.
4. Patti Domm, "Shrinking Dollar Could Boost the Market and Make These Stocks Big Winners," *CNBC*, July 24, 2017, www.cnbc.com; Theo Francis and Thomas Gryta, "U.S. Companies Post Profit Growth Not Seen in Six Years," *Wall Street Journal,* July 30, 2017, www.wsj.com; Lananh Nguyen and Katherine Greifeld, "What a Weak Dollar Means in 2018: Staycations and Local Shopping," *Bloomberg,* December 28, 2017, www.bloomberg.com.
5. International Monetary Fund, "Asia's Dynamic Economies Continue to Lead Global Growth," May 9, 2017, www.imf.org; Peter Morgan, "The Role of Macroeconomic Policy in Rebalancing Growth," *Journal of Asian Economics* 23, No. 1 (2012), pp. 13–25.
6. Dimitra DeFotis, "Brazil Economy in 'Great Rotation', Buy Cyclical Stocks?," *Barron's,* September 7, 2017, www.barrons.com; Landon Thomas Jr., "Skittish over Emerging Markets," *New York Times*, December 17, 2014, p. B1.
7. James Gerber, *International Economics* (New York: Pearson, 2018); Abdul-Hamid Sukar and Seid Hassan, "U.S. Exports and Time-Varying Volatility of Real Exchange Rate," *Global Finance Journal* 12 (2001), pp. 109–114.
8. Javier Cravino and Andrei Levchenko, "The Distributional Consequences of Large Devaluations," *American Economic Review* 107, No. 11 (2017), pp. 3477–3509; Gerber, 2018.
9. International Monetary Fund, *Global Financial Stability Report*, 2017, www.imf.org.
10. U.S. Department of the Treasury, "Preliminary Report on Foreign Portfolio Holdings of U.S. Securities at End-June 2017," www.treasury.gov.
11. Joseph Daniels and David VanHoose, *Global Economic Issues and Policies* (New York: Routledge, 2018); Gerber, 2018; Alan Greenspan, "The Globalization of Finance," *Cato Journal* 17 (1997), www.cato.org.
12. Fernando Broner and Jaume Ventura, "Rethinking the Effects of Financial Globalization," *The Quarterly Journal of Economics* 131, No. 3 (2016), pp. 1497–1542; Daniels and VanHoose, 2018; International Monetary Fund, "Effects of Financial Globalization on Developing Countries: Some Empirical Evidence," 2003, www.imf.org.

13. Meiling Pope et al., "Mobile Payments: The Reality on the Ground in Selected Asian Countries and the United States," *International Journal of Mobile Marketing* 6, No. 2 (2011), pp. 88–104; World Bank, "Remittances to Recover Modestly After Two Years of Decline," October 3, 2017, www.worldbank.org.
14. Chris O'Malley, *Bonds Without Borders: A History of the Eurobond Market* (Chichester, UK: Wiley, 2016); Eric Platt, "Italian Telco Seals Record Euro Junk Bond Sale," *Financial Times,* October 24, 2017, www.ft.com.
15. International Monetary Fund (2017); Brian Milligan, "Do other countries offer better banking than the UK?," *BBC,* March 7, 2016, www.bbc.com.
16. Diana Brazzell, "How Mobile Banking Is Transforming Africa," *Huffington Post,* November 14, 2017, www.huffingtonpost.com; Robin J. Lewis, John D. Villasenor, and Darrell M. West, *The 2017 Brookings Financial and Digital Inclusion Project Report: Building a Secure and Inclusive Global Financial Ecosystem* (Washington, DC: Center for Technology Innovation, Brookings Institution, 2017).
17. Bank for International Settlements, *Consultative Document: The New Basel Capital Accord*, 2001, www.bis.org; Bank for International Settlements,*History of the Basel Committee*, December 30, 2016, www.bis.org; Bank for International Settlements, *Consultative Document: Pillar 3 Disclosure Requirements—Updated Framework*, February, 2018, www.bis.org.
18. International Monetary Fund, *IMF Annual Report 2017—Lending,* 2017, www.imf.org.
19. Wayne Arnold, "Has China Got an External-Debt Problem? Not Likely," *Wall Street Journal*, June 13, 2014, http://blogs.wsj.com; Bank of Greece, "External Debt," 2017, www.bankofgreece.gr; Reuters, "China Outstanding Foreign Debt Falls to $1.42 Trillion at End-2016," March 31, 2017, www.reuters.com.
20. Abby Budiman and Drew Desilver, "5 Facts About Government Debt Around the World," *Pew Research Center,* September 19, 2017, www.pewresearch.org; Mathias Dolls, Andreas Peichl, and Klaus Zimmermann, "A Challenge for the G20: Global Debt Brakes and Transnational Fiscal Supervisory Councils," *Intereconomics* 47, No. 1 (2012), pp. 31–38; World Economic Forum, *The Global Risks Report 2018*, 12th ed. (Geneva, Switzerland, 2018).
21. Ibid.
22. Liz Alderman and Rachel Donadio, "Debt Rating Cut for 9 Countries amid Euro Woes," *New York Times*, January 14, 2012, pp. A1 and B6; Bloomberg, "S&P Cuts China's Credit Rating, Citing Risk From Debt Growth," September 21, 2017, www.bloomberg.com; Moody's, "Moody's Downgrades Russia's Sovereign Rating to Ba1 from Baa3, Outlook Negative," February 20, 2015, www.moodys.com.
23. World Economic Forum, 2018.
24. International Monetary Fund, *United States: Selected Issues Paper, IMF Country Report No. 10/248*, July 12, 2010 (Washington, DC: International Monetary Fund); L. Kotlikoff, "A Hidden Fiscal Crisis?" *Finance and Development*, September 2010, (Washington, DC: International Monetary Fund); World Economic Forum, 2018.

Chapter 10

Financial Management and Accounting in the Global Firm

Learning Objectives *After studying this chapter, you should be able to:*

10.1 Understand how to choose a capital structure.

10.2 Understand how to raise funds for the firm.

10.3 Explain how to manage working capital and cash flow.

10.4 Describe how to perform capital budgeting.

10.5 Explain how to manage currency risk.

10.6 Understand how to manage the diversity of international accounting and tax practices.

How a Small Firm Navigates Currency Risk

Markel Corporation is a Pennsylvania-based SME that makes wire and tubing for the automotive and fluid-handling industries. The firm exports to Germany, Spain, Japan, and other countries, generating much of its annual sales from abroad. Markel faces the recurring challenges of fluctuating international currencies.

CEO John Kaestle scans the financial news to keep informed about how exchange rates affect sales and profits. An appreciating dollar makes Markel's products more expensive to European and Japanese customers, lessening demand from such sources. But the currency game works both ways—when the euro and yen strengthen, the buying power of European and Japanese customers increases, boosting Markel's sales.

Exchange-rate fluctuations in the $5 trillion-a-day world currency market exert an impact on small international firms. Markel experienced such a problem when it quoted prices in its customers' currencies. The firm lost more than $600,000 due to exchange-rate losses when the U.S. dollar weakened significantly against the euro.

Let's explain with an example. Suppose Markel sells merchandise to its Spanish importer for €50,000, payable in 90 days. The delay in getting paid exposes Markel to currency risk. If the euro depreciates during the 90-day period, Markel will receive fewer dollars.

To deal with fluctuating currency rates, Markel developed a three-part strategy:

- Quote prices in the customer's currency, which results in more consistent prices for the customer and creates more sales.