

PART III

The Global Financing Strategy

Part III (chapters 11–14) describes sources of global finance. One major facet of financial management is to raise funds on favorable terms. In the case of global financial management, this involves those sources of funds necessary to finance world trade and foreign investment. These funds can come from either internal or external sources. Internal sources of funds, such as earnings and depreciation, are the major sources of funds for most multinational companies (MNCs). But external sources of funds, such as bank loans and Eurodollars, are important as well.

A dramatic expansion in international capital flows has emerged in recent years for several reasons. First, revolutionary advances in information and communications technology, together with significantly lower transportation and transaction costs, have accelerated the growth of cross-border financial flows. Second, financial innovations in the United States and other industrial countries, such as mutual funds, hedge funds, and derivatives, have made cross-border investments more accessible to institutional and individual investors. Third, the removal of capital controls and broader liberalization of financial markets in most countries around the world have stimulated competition and resulted in a growing integration of domestic and offshore markets. MNCs should take into account these three factors in financing their international transactions. This is because the factors have not only increased the efficiency of global capital markets, but have also created new systematic risks associated with increased asset-price variability.

CHAPTER 11

International Financial Markets

Opening Case 11: Foreign Investors Load Up with Asia's Shares

Since May 21, 2003, US and other foreign investors have begun to pile funds back into Asia because they believe that the region will once again prove to be a leveraged bet on US growth (figure 11.1). That newfound taste for Asian shares, however, could sour as the same factors that make stocks in the region attractive leave them vulnerable should US recovery expectations prove premature.

Investors purchased Asia-focused funds as they switched out of fixed-income securities back into stocks, reasoning that shares in Asia will rise faster and further in front of a US recovery, as they have in the past. Another reason for a current Asian markets boom is the return of investor interest in so-called cyclical stocks, whose prices rise and fall with overall economic performance. In Asia, entire markets tend to be cyclical as they follow the ups and downs of the US economy.

The flipside of being a leveraged bet on US growth is Asia's predilection to fall harder when that growth slows. Asian leaders would prefer that the region lessen its reliance on the hot and cold flows of global trade and rely more on domestic consumption and trade within Asia for growth. That, they reason, would make growth more stable over the long term and make Asia less of a cyclical play for investors. However, Geoffrey Banker, chief Asian economist for HSBC Bank in Hong Kong, says those desires have yet to be translated into concrete changes in Asian economies. Most Asian countries have become more reliant on exports in the past few years, he said. And that leaves them more vulnerable to disappointment should a US recovery not materialize soon.

Source: P. Day, "Foreign Investors Load Up with Asia's Shares," *The Wall Street Journal*, July 17, 2003, p. C12.

The recent stock rally has been more significant for tech-heavy Asian stock market indexes and the NASDAQ than for the Dow Jones Industrial Average. At left, index performance since May 20; in US-dollar terms. At right, growth in total assets through new investment in Asian regional funds compared with growth in international fund assets in general* since May 21.

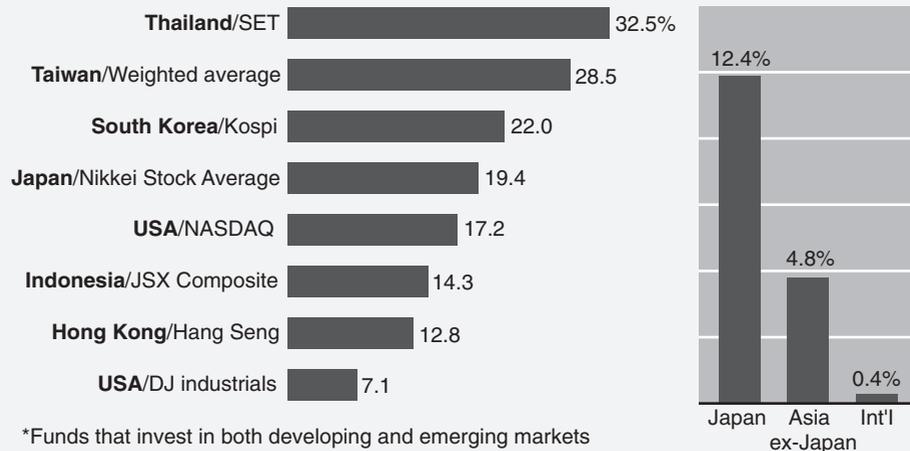


Figure 11.1 Asian markets boom as foreigners pile in

Source: P. Day, "Foreign Investors Load Up with Asia's Shares," *The Wall Street Journal*, July 17, 2003, p. C12.

International financial markets are a major source of funds for international transactions. Most countries have recently internationalized their financial markets to attract foreign business.

Recent financial globalization is being driven by advances in data processing and telecommunications, liberalization of restrictions on cross-border capital flows, deregulation of domestic capital markets, and greater competition among these markets for a share of the world's trading volume. This globalization involves both a harmonization of rules and a reduction of barriers that will allow for the free flow of capital and permit all firms to compete in all markets. In other words, financial market imperfections have declined because of this global integration of money and capital markets. Yet, there are still excellent opportunities for companies to lower their cost of capital and for investors to increase their return through international financial markets. This chapter examines the three financial markets – Eurocurrency, international bond, and international equity – that allow companies to serve customers around the world.

● 11.1 Eurocurrency Markets

The **Eurocurrency market** consists of banks that accept deposits and make loans in foreign currencies outside the country of issue. These deposits are commonly known as Eurocurrencies. Thus, US dollars deposited in London are called Eurodollars; British pounds deposited in New York are called Eurosterling; and Japanese yen deposited in London are called Euroyen.

Because Eurodollars are the major form of Eurocurrency, the term "Eurodollar" frequently refers to the entire Eurocurrency market. **Eurodollars** could be broadly defined as dollar-

denominated deposits in banks all over the world except in the United States. These banks may be foreign banks or foreign branches of US banks. However, many experts narrowly define Eurodollars as dollar-denominated deposits in Western European banks or foreign branches of US banks in Western Europe. Hence, they distinguish between Eurodollars and petrodollars in the Middle East, or between Eurodollars and Asian dollars in Hong Kong or Singapore. The dominant Eurocurrency remains the US dollar. More recently, however, the euro (€) has become an important currency for denominating Eurocurrency loans and Eurobonds as the US dollar has weakened during 2002.

Eurocurrency markets are very large, well organized, and efficient. They serve a number of valuable purposes for multinational business operations. Eurocurrencies are a convenient money market device for MNCs to hold their excess liquidity. They also are a major source of short-term loans to finance corporate working capital needs and foreign trade. In recent years, the so-called “Eurobond markets” have developed as a major source of long-term investment capital for MNCs.

11.1.1 *The creation of Eurodollars*

Many MNCs and governments have learned to use the Eurodollar market as readily as they use the domestic banking system. Major sources of Eurodollars are the dollar reserves of oil-exporting countries, foreign governments or business executives preferring to hold dollars outside the US, foreign banks with dollars in excess of current needs, and MNCs with excess cash balances. Once Eurodollars come into existence, they can create themselves through the lending and investing activities of commercial banks.

Because there are usually no legal reserves against Eurodollar deposits, we may argue that Eurodollar deposits could expand indefinitely. Who creates this infinite expansion of Eurodollars? Three parties do so jointly: (1) public and private depositors, by always keeping their money in non-US banks on deposit; (2) banks, by keeping none of their Eurodollar deposits in the form of cash; and (3) public and private borrowers, who make it possible for the banks to find Eurodollar loans. However, there are a number of checks to this expansion. First, public and private depositors may hold a portion of their money in the form of nondeposit cash. Second, banks may retain a part of their Eurodollar deposits as a liquid reserve. Third, borrowers may convert the dollars borrowed into local currency. This conversion will not only stop the further expansion of Eurodollar deposits, but it may actually reduce the volume of outstanding Eurodollar deposits.

USES OF EURODOLLARS European banks with Eurodollars may use these funds in a number of ways. First, they may redeposit their Eurodollars in other European banks or in European branches of a US bank. Second, they may make loans to nonbank users such as MNCs. These MNCs use the dollars to meet their dollar obligations or to buy local currencies. Third, they may transfer their dollars to Eurodollars in European branches of a US bank, which in turn would lend these funds to the US home office.

Heavy borrowers in the Eurodollar market are governments and commercial banks. Many countries have recently been suffering problems related to foreign loans. Hence, they want Eurodollars to improve their international reserves. Many commercial banks rely on Eurodollars to grant credit to exporters and importers. Eurobanks frequently swap Eurodollars with local currencies in order to make loans to domestic companies. In addition, international development

banks have been regular borrowers in the market. European countries outside the Group of Ten, Latin America, and Asia are the three largest users of Eurodollars.

Many of the private nonbank borrowers continue to be companies engaged in international operations, such as exporters, importers, and investors. They are attracted by the size of the market and the importance of the US dollar as an international reserve. A second advantage of Eurodollar loans is that there are no restrictions about the deployment of funds raised in the external market. In contrast, funds raised in national money markets are subject to restrictions in almost all cases. Finally, international money markets provide MNCs with flexibility in many ways such as terms, conditions, and covenants.

11.1.2 *Eurodollar instruments*

The two major types of instrument used in the Eurodollar market are Eurodollar deposits and Eurodollar loans.

EURODOLLAR DEPOSITS Eurodollar deposits are either fixed-time deposits or negotiable certificates of deposit. Most Eurodollar deposits are in the form of time deposits.

Time deposits are funds being placed in a bank for a fixed maturity at a specified interest rate. In contrast to the US practice, Eurobanks do not maintain checking accounts (demand deposits) for their customers. While the maturities of these time deposits range from 1 day to a few years, most of them have a maturity of less than 1 year. Time deposits are for fixed periods, but Eurobanks are frequently flexible if the depositor desires to withdraw his deposits early.

A **certificate of deposit (CD)** is a negotiable instrument issued by a bank. In other words, negotiable CDs are formal negotiable receipts for funds left with a bank for a specified period of time at a fixed or floating rate of interest. The important advantage of a CD over a time deposit is its liquidity, because the holder of a CD can sell it on the secondary market at any time before the maturity date. Eurobanks issue negotiable CDs to attract idle funds from MNCs, oil-exporting countries, and wealthy individuals.

Negotiable CDs for Eurodollars were first introduced in 1966 by the London branch of First National City Bank of New York (now Citicorp). Currently, most major Eurobanks issue negotiable CDs, whose safety and liquidity are assured by an active secondary market. The secondary market consists of broker/dealer firms that are members of the International CD Market Association. This association was established in London in 1968 to provide customers with the highest quality of services.

EURODOLLAR LOANS Eurodollar loans range from a minimum of \$500,000 to \$100 million, typically in multiples of \$1 million. Their maturities range from 30 days to a few years. Short-term Eurodollar financings represent the major part of the Eurodollar lending business. Short-term Eurodollar loans are usually conducted under prearranged lines of credit. Under such an arrangement, the Eurobank establishes a maximum loan balance (line of credit) after investigation of its client's credit standing. Although the commitment period is typically 1 year, advances under a line of credit are normally made against notes with maturities of 90 or 180 days. Lines of credit are renewable after a thorough review process. These short-term Eurodollar loans are usually made on an unsecured basis and repaid at the maturity date.

Eurobanks also provide international concerns with medium-term loans. Two major forms of medium-term Eurodollar loans are revolving Eurodollar credits and Eurodollar term loans. A

revolving credit is a confirmed line of credit beyond 1 year. Maturities of Eurodollar term loans range from 3 years to 7 years. These term loans are a less popular form of medium-term Eurodollar loans than revolving Eurodollar credits.

INTEREST RATES Two sets of interest rates are Eurodollar deposit interest rates and Eurodollar loan interest rates. Eurodollar deposit and loan rates are determined by forces of supply and demand. More specifically, these rates depend on the rates in a corresponding home currency, spot and forward exchange rates, domestic and Eurocurrency rates in other currencies, and the inflation rate in various countries. Many economists have assumed that Eurodollar deposit rates depend on US money market rates. In other words, US CD rates provide an effective floor for Eurodollar deposit rates.

Interest rates on Eurodollar deposits are usually higher than those on deposits in the USA. Interest rates on Eurodollar loans are generally lower than similar loan rates in the USA. With deposit rates higher and lending rates lower in the Eurodollar market than in the US market, Eurobanks must operate on a narrower margin. A number of factors enable Eurobanks to operate profitably on narrower margins than domestic markets.

- 1 Eurobanks, being free of reserve requirements, can lend a larger percentage of their deposits.
- 2 Eurobanks have very little or no regulatory expenses, such as deposit insurance fees.
- 3 Eurodollar loans are characterized by high volumes and well-known borrowers; these two features reduce the costs of information gathering and credit analysis.
- 4 Many Eurodollar loans take place out of tax-haven countries.
- 5 Eurobanks are not forced to lend money to borrowers at concessionary rates, which are usually lower than prevailing market rates.

Eurobanks usually establish their lending rate at some fixed percentage above the 6-month London Interbank Offered Rate. The **London Interbank Offered Rate (LIBOR)** is the British Bankers' Association average of interbank offered rates for dollar deposits in the London market, based on quotations at 16 major banks. The LIBOR is an important reference rate in international finance. For example, many loans to developing countries have been priced as LIBOR plus some number of percentage points. The development of the LIBOR concept has created a number of imitators: the Euro Interbank Offered Rate (EIBOR), the Kuwait Interbank Offered Rate (KIBOR), the Singapore Interbank Offered Rate (SIBOR), and the Madrid Interbank Offered Rate (MIBOR). The two latest imitators are the Euro LIBOR and the EURIBOR. The Euro LIBOR (**London Interbank Offered Rate**) is the British Bankers' Association average of interbank offered rates for euro deposits in the London market, based on quotations at 16 major banks. The EURIBOR (**Euro Interbank Offered Rate**) is the European Banking Federation sponsored rate among 57 eurozone banks.

In the absence of tight controls on international financial transactions, arbitrage and risk differences affect the relationship between rates in the internal market (the US market) and in the external market (the Eurodollar market). An absence of government controls on international capital flows results in arbitrage between internal and external segments of the market for dollar credit. The arbitrage keeps the spread between internal and external rates within a narrow margin. In general, risks on external dollar deposits are somewhat greater than those on internal dollar deposits. Table 11.1 shows several money rates that appeared in *The Wall Street Journal* on June 22, 2004. These money rates include interest rates of short-term loans and money market instruments, many of which are discussed in this and other chapters.

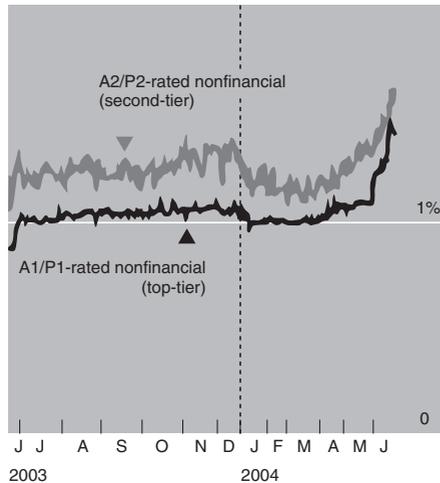
Table 11.1 Money market instruments

Money rates

The key US and foreign annual interest rates below are a guide to general levels but don't always represent actual transactions.

Commercial paper

Yields paid by corporations for short-term financing, typically for daily operation



Source: Federal Reserve

Prime Rate: 4.00% (effective 06/27/03). The base rate on corporate loans posted by at least 75% of the nation's 30 largest banks.

Discount Rate (Primary): 2.00% (effective 06/25/03).

Federal Funds: 1.031% high, 0.969% low, 1.000% near closing bid, 1.031% offered. Effective rate: 1.00%. Source: Prebon Yamane (USA) Inc. Federal-funds target rate: 1.000% (effective 06/25/03).

Call Money: 2.75% (effective 06/30/03).

Commercial Paper: Placed directly by General Electric Capital Corp.: 1.21% 30 to 59 days; 1.32% 60 to 87 days; 1.48% 88 to 94 days; 0.80% 95 to 113 days; 1.59% 114 to 139 days; 1.69% 140 to 174 days; 1.79% 175 to 206 days; 1.89% 207 to 231 days; 1.98% 232 to 270 days.

Euro Commercial Paper: Placed directly by General Electric Capital Corp.: 2.04% 30 days; 2.06% two months; 2.08% three months; 2.11% four months; 2.14% five months; 2.17% six months.

Dealer Commercial Paper: High-grade unsecured notes sold through dealers by major corporations: 1.24% 30 days; 1.35% 60 days; 1.43% 90 days.

Monday, June 21, 2004

Certificates of Deposit: 1.25% one month; 1.50% three months; 1.81% six months.

Bankers' Acceptances: 1.23% 30 days; 1.36% 60 days; 1.49% 90 days; 1.60% 120 days; 1.71% 150 days; 1.80% 180 days. Source: Prebon Yamane (USA) Inc.

Eurodollars: 1.25%–1.22% one month; 1.39%–1.36% two months; 1.52%–1.49% three months; 1.63%–1.59% four months; 1.73%–1.69% five months; 1.82%–1.79% six months. Source: Prebon Yamane (USA) Inc.

London Interbank Offered Rates (LIBOR): 1.2850% one month; 1.55938% three months; 1.86375% six months; 2.40188% one year. Effective rate for contracts entered into two days from date appearing at top of this column.

Euro Libor: 2.07725% one month; 2.12300% three months; 2.20700% six months; 2.44725% one year. Effective rate for contracts entered into two days from date appearing at top of this column.

Euro Interbank Offered Rates (EURIBOR): 2.078% one month; 2.124% three months; 2.211% six months; 2.448% one year. Source: Reuters.

Foreign Prime Rates: Canada 3.75%; European Central Bank 2.00%; Japan 1.375%; Switzerland 2.14%; Britain 4.50%.

Treasury Bills: Results of the Monday, June 21, 2004, auction of short-term US government bills, sold at a discount from face value in units of \$1,000 to \$1 million: 1.315% 13 weeks; 1.675% 26 weeks. Tuesday, June 15, 2004 auction: 1.070% 4 weeks.

Overnight Repurchase Rate: 0.97%. Source: Garban Intercapital.

Freddie Mac: Posted yields on 30-year mortgage commitments. Delivery within 30 days 5.97%, 60 days 6.04%, standard conventional fixed-rate mortgages: 2.875%, 2% rate capped one-year adjustable rate mortgages.

Fannie Mae: Posted yields on 30 year mortgage commitments (priced at par) for delivery within 30 days 6.02%, 60 days 6.10%, standard conventional fixed-rate mortgages; 3.45%, 6/2 rate capped one-year adjustable rate mortgages. Constant Maturity Debt Index: 1.475% three months; 1.797% six months; 2.274% one year.

Merrill Lynch Ready Assets Trust: 0.53%.

Consumer Price Index: May, 189.1, up 3.1% from a year ago. Bureau of Labor Statistics.

Source: *The Wall Street Journal*, June 22, 2004, p. C16.

Table 11.2 Euronote issue facilities (billions of US dollars)

	1997	1998	1999	2000	2001
Euronotes	73.5	61.6	84.8	270.5	154.6
Euro commercial paper	110.4	132.7	175.2	223.3	243.1
Total	183.8	194.3	260.0	493.8	397.7

Source: The Bank for International Settlement, *International Banking and Financial Market Developments*, June 1999 and June 2002, various pages.

11.1.3 Euronote issue facilities

Euronote issue facilities (EIFs), a recent innovation in nonbank short-term credits, are notes issued outside the country in whose currency they are denominated. EIFs consist of Euronotes, Euro commercial paper, and Euro medium-term notes. These facilities are popular because they allow borrowers to go directly to the market rather than relying on financial intermediaries such as banks.

Euronotes are short-term debt instruments underwritten by a group of international banks called a “facility.” An MNC makes an agreement with a facility to issue Euronotes in its own name for a number of years. Euronotes typically have maturities from 1 month to 6 months, but many MNCs continually roll them over as a source of medium-term financing. Euronotes are sold at a discount from face value and pay back the full value at maturity. **Euro commercial paper (ECP)**, like domestic commercial paper, consists of unsecured short-term promissory notes sold by finance companies and certain industrial companies. These notes are issued only by the most creditworthy companies, because they are not secured. Their maturities range from 1 month to 6 months. Like Euronotes, Euro commercial paper is sold at a discount from face value. Table 11.2 shows the year-end value of the Euronote and Euro commercial paper market in billions of US dollars from 1997 to 2001.

Euro medium-term notes (EMTNs) are medium-term funds guaranteed by financial institutions with short-term commitments by investors. The main advantage of the EMTN is that banks underwrite or guarantee the funds for a period of 5–7 years. If the borrower cannot sell all or part of their notes, the banks will then buy all or part of them. At the same time, the borrower does not have to issue new notes every time their old notes mature. Consequently, the EMTN provides a medium-source of funds, without the obligation to pay the interest on the debt when the funds are not needed. In this type of arrangement, the borrower raises funds in the form of short-term notes with maturities of 30 days, 3 months, or even longer. These short-term notes are distributed to investors by financial institutions. At the maturity of these notes, the borrower reissues the notes. At this point, the investors may buy the new notes or take their funds back. This process is repeated at every maturity of the notes.

11.2 The Eurocurrency Interbank Market

The Eurocurrency interbank market plays a major role in channeling funds from banks in one country to banks in another country. The interbank market has over 1,000 banks from 50 different countries, but about 20 major banks dominate the entire interbank market. Although

transactions in US dollars still dominate the interbank market, there are flourishing interbank markets in euros, Swiss francs, Japanese yen, and British pounds.

11.2.1 *An overview of the Eurocurrency interbank market*

THE FUNCTIONS OF THE INTERBANK MARKET The Eurocurrency interbank market has at least four related functions. First, the interbank market is an efficient market system through which funds move from banks in one country to banks in other countries. Second, the interbank market gives banks an efficient mechanism to buy or sell foreign-currency assets and liabilities of different maturities in order to hedge their exposure to interest rate and foreign-exchange risks. Third, the interbank market is a convenient source of additional loans when banks need to adjust their balance sheets either domestically or internationally. Fourth, because of this market, banks sidestep regulations on capital adequacy and interest rates prevalent in many domestic banking markets.

RISKS OF PARTICIPATING BANKS Participating banks in the Eurocurrency interbank market face at least five different risks: (1) credit or default risk, (2) liquidity risk, (3) sovereign risk, (4) foreign-exchange risk, and (5) settlement risk. First, credit risk is the risk that a borrowing bank may default on its interbank loan. This risk is a concern because interbank loans and deposits are not secured. Second, liquidity risk is the risk that other banks may withdraw their interbank deposits suddenly. Here, the bank may have to sell off illiquid assets for less than their face value to meet its deposit drain. Third, sovereign risk is the risk that a foreign country may prevent its banks from repaying interbank loans or deposits received from banks in other countries. Fourth, foreign-exchange risk is the risk that a bank participant in this market will gain or lose due to changes in exchange rates. Fifth, settlement risk is the risk of a breakdown or nonsettlement on the major wire-transfer systems.

Regulators and analysts have expressed some concern about the stability of this market for two major reasons. First, interbank funds have no collateral. Second, central bank regulations are inadequate. These two factors expose the market to potential “**contagion**”; problems at one bank affect other banks in the market. This kind of contagion ultimately threatens the market’s stability and its function.

MINIMUM STANDARDS OF INTERNATIONAL BANKS With the global crisis created by the collapse of several international banks in the 1980s, bank regulators throughout the world agreed that something had to be done to protect against future massive failures. The Basel Committee, under the auspices of the Bank for International Settlements and the central-bank governors of the “Group of Ten” countries, reached an agreement on minimum standards in 1988 for international banks and their cross-border activities. The **Bank for International Settlements** is a bank in Switzerland that facilitates transactions among central banks. This agreement established an international bank capital standard by recommending that globally active banks had to maintain capital equal to at least 8 percent of their assets by the end of 1992. The accord distinguishes between more and less risky assets, so that more capital would be held against investments with greater risk. As a result, the 8 percent standard called for in the accord applies not to a bank’s total assets but to its risk-weighted assets. Safe government bonds or cash, for example, receive a zero weight in calculating aggregate risk exposure, whereas long-term lending to banks and industrial companies in emerging markets receives a 100 percent weight. Such minimum capital standards are meant to work in conjunction with direct supervision of banks and basic market discipline to restrain excessive risk-taking by banks that have access to the safety net.

Several important limitations of the current framework have become apparent over time. For example, one major drawback of the current capital adequacy standard has to do with the fact that the regulatory measure of bank risk (risk-weighted assets) can differ significantly from actual bank risk. Because the current framework provides only a crude measure of bank risk, it sets minimum capital requirements that do not necessarily reflect a bank's true economic risks and thus are inappropriate for regulatory purposes. In order to address such shortcomings, the Basel Committee proposed a new capital adequacy framework in 1998. This proposal consists of three pillars: minimum regulatory capital requirements that expand upon those in the 1988 Accord, direct supervisory review of a bank's capital adequacy, and the increased use of market discipline through public disclosure to encourage sound risk management practices.

In April 2003, the Basel Committee on Banking Supervision released for public comment the new Basel Capital Accord, which will replace the 1988 Capital Accord. These international agreements among banking regulators attempt to set regulatory capital requirements that are comparable across countries. On July 11, 2003, the Federal Reserve of the US issued an interagency advance notice of proposed rulemaking to seek public comments on the implementation of the new Basel Capital Accord in the USA. The new accord, popularly known as Basel II, rests on the three "pillars" described in the above paragraph. Basel II, to be implemented in 2006, maintains the 8 percent equity capital as the minimum standard, but it changes the way in which the capital standard is computed in order to consider certain risks.

THE "THREE CS" OF CENTRAL BANKING The recent movement toward a highly integrated global financial system has caused bankers to develop "three Cs" of central banking: consultation, cooperation, and coordination. Central banks are important participants in the consultation, cooperation, and coordination process due to their key role in monetary and exchange rate policies (see Global Finance in Action 11.1).

Consultation involves not only an exchange of information, but also an explanation of current economic conditions and policies. By reducing the information uncertainty, this process enhances the understanding of what is going on in the world at large and it can successfully contribute to the policy-making process.

In cooperation, countries retain full national sovereignty, but decide voluntarily to allow the actions of the other countries to influence their own decisions. While the central banks make sovereign decisions, they may agree to certain mutually advantageous courses of action and even engage in certain joint efforts that are agreeable to all parties.

Finally, central bank coordination requires individual central banks to relinquish some or all decision-making powers to other countries or international institutions. Some loss of national sovereignty is inevitably involved.

Global Finance in Action 11.1

International Interest Rate Linkages

A change in the federal fund rate target often prompts observers to comment that other central banks are likely to follow suit by changing their own targeted interest rates. **Federal funds** are reserves traded among US commercial banks for overnight use. Figure 11.2 shows that central banks of different countries often change inter-

est rates in the same direction, at about the same time. This is especially true for central banks of countries with close economic ties.

There are at least three reasons why central banks might tend to change their interest rate targets in a similar fashion.

- 1 Countries react similarly to “common shocks.” In making monetary policy, central banks consider the state of the economy, including international prices of oil and other key commodities. Changes in such prices tend to affect countries in the same way, leading to similar changes in monetary policy.
- 2 Countries may desire to maintain stable exchange rates. By raising and lowering interest rates in tandem, central banks might minimize swings in the external value of their currencies.
- 3 Economic conditions in one country affect those in other countries through trade and capital flows. A US recession that leads to lower US interest rates might also slow its trading partners’ growth, prompting their central banks to lower rates as well.

The latter two reasons might explain why the interest rate changes of larger countries generally precede those of their smaller trading partners. Conditions in larger countries, such as the USA, affect conditions in smaller trading partners. Thus, smaller countries are more likely to consider external factors when making monetary policy.

Because the Federal Reserve has conducted monetary policy for the largest economy in the world, it has been less concerned with external factors than most central banks. As a result, it has frequently been a “leader” in international rate movements. For example, figure 11.2 shows that the Federal Reserve led the way for other central banks by starting a series of interest rate reductions in January 2001.

Source: C. J. Neely, “International Interest Rate Linkages,” *International Economic Trends*, The Federal Reserve Bank of St. Louis, Aug. 2001, p. 1.

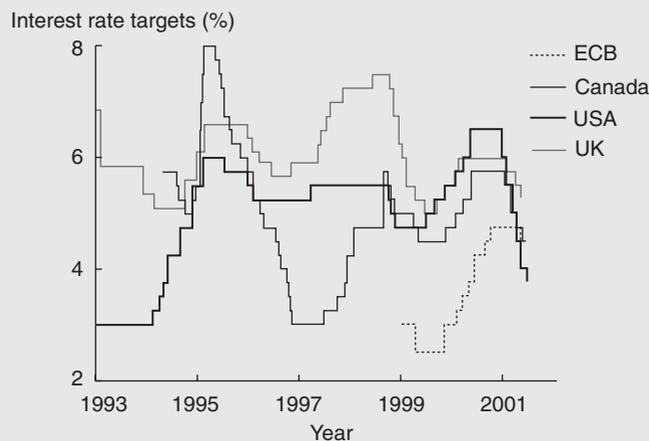


Figure 11.2 International interest rate linkages

Source: Interest rate target data were obtained from the respective central banks.

11.2.2 *The role of banks in corporate governance*

Market-based and bank-based systems of corporate governance reflect the relative importance of public and private capital markets to a nation's economy. In the USA, increasing restrictions on commercial banking has coincided with the growth of public capital markets. However, banks have been the main source of capital in Japan for several reasons. First, the Bank of Japan provides major industries with long-term loans at favorable rates through commercial banks. Second, Japanese banks have ample funds for loans because of the country's high savings rates and huge trade surpluses. Third, there are few restrictions on commercial banking in Japan.

THE USA: A MARKET-BASED SYSTEM OF CORPORATE GOVERNANCE Several pieces of legislation enacted in the wake of the Depression (1929–33) fundamentally altered the role of financial institutions in corporate governance. The legislation caused the fragmentation of financial institutions and institutional portfolios, thereby preventing the emergence of powerful large-block shareholders who might exert pressure on management. In contrast, countries such as Germany and Japan, which do not operate under the same constraints, developed systems that allowed banks to play a larger role in firms' affairs.

Traditionally, US banks have faced the following prohibitions on equity-related activities. First, banks cannot own stock for their own account. Second, banks cannot actively vote shares held in trust for their banking clients. Third, banks cannot make a market in equity securities. Fourth, banks cannot engage in investment banking activities (Butler 1997).

However, US Congress and regulatory agencies have recently started to relax some constraints. For example, interstate banking was legalized in 1994; full interstate branch banking has been permitted since 1997. In addition, US banks, securities firms, insurance companies, and asset managers have been allowed to freely enter each other's businesses or merge since early 2000. These recent changes generated fierce competition among financial institutions and reduced the number of commercial and investment banks. Consequently, the surviving banks are bigger, better capitalized, and better prepared to serve companies in creative ways.

Most financial analysts expect that these recent changes will eventually create universal banks in the USA. A **universal bank** is one in which the financial corporation not only sells a full scope of financial services but also owns significant equity stakes in institutional investors. Although it originated in Europe, universal banking is similar to the Japanese keiretsu.

JAPAN: A BANK-BASED SYSTEM OF CORPORATE GOVERNANCE The national difference in corporate governance results in dissimilar financial structures for corporate control. The bank-based systems in Japan and Germany, for example, rely on a concentrated ownership in the hands of a main bank and/or the business partners for both debt and equity capital. Large Japanese companies use a higher degree of leverage than US companies. The ability to take on such large amounts of debt stems in part from the vast mutual-aid networks – keiretsu – that most Japanese companies can tap. **Keiretsu** is a Japanese word that stands for a financially linked group of companies that play a significant role in the country's economy.

Keiretsu, usually with the main bank at the center, form the backbone of corporate Japan. Keiretsu ties constitute a complex web of tradition, cross-shareholdings, trading relationships, management, cooperative projects, and information swapping. The keiretsu provides financial support, management advice, and favorable contracts to its members. A key mission of the keiretsu is to provide a safety net when corporate relatives get into trouble. Moreover, Japanese

banks, unlike their US counterparts, can hold the borrowing company's common stock. Thus, the main bank has access to information about the company and has a say in its management. In most countries, this sort of bank influence on corporate affairs would be unacceptable.

However, recent economic problems and deregulations in Japan have changed the country's financial structures. These changes include reduced bank borrowing, more capital market financing, the erosion of main bank power in corporate affairs, the reduction of cross-shareholdings, and a weaker keiretsu system. These changes are likely to reduce the role of banks in corporate governance in Japan.

POLITICAL DYNAMICS There is a growing consensus that corporate governance reform should be a matter of global concern. Although some countries face more serious problems than others, existing governance mechanisms have failed to effectively protect investors in many countries. For example, executives and politicians faced public uproar after the US corporate scandals of 2001 and 2002. Other countries, such as the United Kingdom, have also experienced a spate of corporate scandals in recent years. The Sarbanes–Oxley Act in the USA, passed in 2002, is designed to reform three areas: (1) accounting regulation, (2) audit committee, and (3) executive responsibility.

The US government is not the only organization that proposes changes in the corporate governance system. Indeed, groups such as the Business Roundtable (made up of corporate executives), the US Chamber of Commerce, the Securities Industry Association, and the New York Stock Exchange (NYSE) have made their own proposals for change. One particularly influential group is the NYSE, which can enact standards for firms that choose to list on the exchange. As the NYSE is generally considered the most prestigious exchange in the world in which to be listed, it has the power to influence the corporate system not only in the USA but also around the world. Observers believe that these corporate governance reforms of the USA will accelerate the governance reform of the banking sector in the USA and Japan (discussed in the above section).

● 11.3 The Asian Currency Market

In 1968, an Asian version of the Eurodollar came into existence with the acceptance of dollar-denominated deposits by commercial banks in Singapore. Singapore was an ideal location for the birth of the Asian currency market. It had an excellent communication network, important banks, and a stable government. Because the US dollar accounts for most of the foreign-currency transactions in Singapore, the term “Asian dollar market” can be used to represent the Asian currency market.

The Asian currency market developed when the Singapore branch of the Bank of America proposed that the monetary authority of Singapore relax taxes and restrictions. The monetary authority accepted these proposals and extended a number of important incentives to foreign banks so that dollar accounts could be held in Singapore. They included: (1) the removal of an existing 40 percent tax on interest payments on foreign-currency deposits; (2) the reduction of the tax rate on interest earned from offshore loans; (3) the abolition of stamp duties on CDs and bills of exchange; and (4) the abolition of the 20 percent reserve requirements for Asian Currency Units. An **Asian Currency Unit (ACU)** is a section within a bank that has authority and separate accountability for Asian currency market operations.

On October 1, 1968, the Bank of America was authorized to start its ACU operations. In 1969, a number of other banks, such as the Chartered Bank, Citibank, the Hong Kong and Shanghai Bank, and the United Chase Merchants Bank, obtained permission to set up ACUs in Singapore. Since 1969, other leading domestic and foreign banks in Singapore have kept up their own ACUs. There are several guidelines within which ACUs are required to operate:

- 1 They can accept foreign-currency deposits from foreigners without the prior approval of the authorities.
- 2 They can lend to individuals or companies outside the British Commonwealth countries without the prior approval of the authorities.
- 3 They cannot lend to residents of Singapore or British Commonwealth countries without the prior approval of the authorities.

In theory, several reasons explain the development of the Asian currency market in Singapore. First, Asian dollar deposits would attract other deposits, increase banking activities, and earn income from these financial services. These earnings would also improve Singapore's balance of payments and develop a service-oriented industry. Second, Singapore might obtain a degree of additional political security. The existence of foreign deposits and foreign banks in Singapore might build support for its neutrality and increase its importance as an Asian financial center. Third, the presence of the Asian currency market in Singapore would enhance its publicity and prestige. Fourth, most Southeast Asian countries need large amounts of capital for their economic development. Because Singapore is located at the center of this area, it is a logical place for the development of the Asian currency market.

Currently, approximately 150 banks or other financial institutions have licenses from the Monetary Authority of Singapore to operate ACUs. Most deposits in ACUs are in US dollars, but other foreign currencies such as British pounds, Swiss francs, euros, and Japanese yen are also accepted. Domestic residents are normally prohibited from participating in the offshore market. Similarly, offshore financial institutions are restricted in their dealings with the domestic market.

There are no taxes on interest paid on foreign-currency deposits and no restrictions applied to capital outflows and inflows. Regular foreign-currency deposits are accepted in amounts as low as \$25,000. Although the minimum deposit maturity is 1 month, the market offers depositors options of varying maturities. Citicorp introduced negotiable CDs in 1970, but the active market for negotiable CDs really developed in 1977 with the issuance of US\$25 million, 3-year floating-rate CDs by the Dai-Ichi Kangyo Bank. Fixed-rate CDs were introduced in 1978 with maturities of 6–9 months. Since 1978, numerous issues of both floating-rate and fixed-rate CDs have attracted the attention of investors outside the Asian area.

The Asian currency market is primarily an interbank market. Interest rates for Asian currency loans are based on either the Singapore Interbank Offered Rate (SIBOR) or the London Interbank Offered Rate (LIBOR). The LIBOR was preferred by both banks and customers in the early years of the market's development, but in recent years the SIBOR has been used more frequently. Asian dollar interest rates closely follow those in the Eurodollar market.

In the 35 years of its existence, the Asian currency market has obtained a major status. It has expanded beyond its original base in Singapore, but Singapore remains its leading center in terms of cross-border trading volume, which rivals the International Banking Facilities of the USA and the Japan Offshore Market. While the funds deposited with banks in the Asian currency market are primarily lent to Asian borrowers, close links join this market to non-Asian financial centers.

With the Asian currency market, the Eurocurrency market, like the foreign-exchange market, has come to operate on a 24-hour basis.

● 11.4 The International Bond Market

The **international capital market** consists of the international bond market and the international equity market. Table 11.3 shows selected indicators at year-end 2001 on the size of the capital markets around the world. Several inferences can be drawn from this table. First, the world's stock market capitalization was almost as big as the world's gross domestic product (GDP). Second, the US GDP was only 1.4 times as big as the combined GDP of some 130 emerging market countries, but its stock market capitalization was 7.1 times as big as the combined stock market capitalization of these emerging market countries. Third, G-5 countries (the USA, Japan, Germany, the UK, and France) accounted for 61 percent of the world's GDP, 71 percent of the world's total equity market capitalization, and 75 percent of the world's total debt securities.

These statistics indicate how powerful these G-5 countries are in terms of their wealth and capital market activities.

11.4.1 *Types of international bonds*

International bonds are those bonds that are initially sold outside the country of the borrower. International bonds consist of foreign bonds, Eurobonds, and global bonds. An important issue with bond financing has to do with the currency issue. The currency of issue is not necessarily the same as the country of issue, although the two may coincide. For example, if a US company sells a yen-denominated bond in Japan, the currency of issue is that of the country of issue. However, if a US company sells a dollar-denominated bond in Japan, the currency of issue is not that of the country of issue. In the former of these situations, the bond is called a foreign bond; in the latter, the bond is called a Eurobond. A global bond is hybrid in nature, because it can be sold inside as well as outside the country in whose currency it is denominated. For example, a

Table 11.3 Selected indicators on the size of the capital markets, 2001 (billions of US dollars)

<i>Country</i>	<i>Gross domestic product</i>	<i>Stock market capitalization</i>	<i>Debt securities</i>
USA	10,082	13,827	18,504
Japan	4,165	2,294	6,295
Germany	1,855	1,072	3,060
UK	1,423	2,165	1,748
France	1,312	1,068	1,681
Emerging markets	7,212	1,947	2,345
All others	<u>4,946</u>	<u>6,502</u>	<u>8,159</u>
World total	30,995	28,875	41,792

Source: The International Monetary Fund, *Global Financial Stability Report*, Washington, DC, Mar. 2003, p. 121.

dollar-denominated bond tradable in New York (domestic market) and Tokyo (Eurobond market) is called a global bond. Let us provide a more general description of these three international bonds: foreign bonds, Eurobonds, and global bonds.

FOREIGN BONDS Bonds sold in a particular national market by a foreign borrower, underwritten by a syndicate of brokers from that country, and denominated in the currency of that country are called **foreign bonds**. Of course, foreign bonds fall under the regulatory jurisdiction of national or domestic authorities. Dollar-denominated bonds sold in New York by a Mexican firm are foreign bonds; these bonds should be registered with the US Securities and Exchange Commission (SEC). Foreign bonds are similar in many respects to the public debt sold in domestic capital markets, but their issuer is a foreigner.

The first foreign bond was issued in 1958. Most large foreign-bond issues have been floated in the USA, the UK, and Switzerland. The weakening British pound in the late 1950s reduced the importance of the domestic British capital market for foreign firms. The Interest Equalization Tax (1963–74) of the USA effectively stopped New York's usefulness as a capital market for new foreign bonds. Thus, international borrowers and investors shifted their activities from the USA to Europe. This shift caused the Eurobond market to develop.

EUROBONDS Bonds underwritten by an international syndicate of brokers and sold simultaneously in many countries other than the country of the issuing entity are called **Eurobonds**. In other words, since the term "foreign bonds" refers to those bonds that are issued in the external sectors of financial markets – sectors that fall outside the regulatory environment of national authorities – Eurobonds are, therefore, issued outside the country in whose currency they are denominated. The Eurobond market is almost entirely free of official regulation, but is self-regulated by the Association of International Bond Dealers. For example, dollar-denominated bonds sold outside the USA are Eurobonds; these bonds are not registered under the US Securities Act and may not be offered or sold to Americans as part of the distribution.

The first Eurobond issue was launched in 1963. Eurobonds are direct claims on leading MNCs, governments, or governmental enterprises. They are sold simultaneously in many countries through multinational syndicates of underwriting brokers. The Eurobond market is similar to the Eurodollar market in one respect. Both markets are "external," because obligations available in these markets are denominated in foreign currencies outside the country of issue.

There are a number of important differences between the Eurodollar market and the Eurobond market. First, the Eurodollar market is an international money market, but the Eurobond market is an international capital market. Second, the Eurodollar market is a financial intermediation market; major world banks operate as intermediaries between depositors and borrowers of Eurodollars. By contrast, the Eurobond market is a direct market in which investors hold the securities issued by the final borrowers; in other words, Eurobonds are issued directly by the final borrowers.

The Eurobond market has a number of attractive factors. First, interest income earned on Eurobonds is usually not subject to a withholding tax. The absence of this tax makes Eurobonds attractive to those investors who either want to evade taxes or who cannot recover taxes withheld. Second, the Eurobond market is often described as a market free from national regulations. Many countries, including the USA, tend to strictly regulate the access of foreign borrowers to their domestic capital markets. But these countries are often more flexible about securities denominated in foreign currencies and sold to their residents who already possess those foreign cur-

rencies. Moreover, disclosure requirements in the international bond market are less stringent than those of the USA.

GLOBAL BONDS As noted above, there is some separation between the Eurobond market and the domestic bond market. An issue normally must choose on which bond market to sell. Demand for the bond is thus constrained by the barriers between the markets. In the past few years, an instrument known as the global bond has been developed to overcome this segmentation.

Global bonds are bonds sold inside as well as outside the country in whose currency they are denominated. For example, dollar-denominated bonds sold in New York (domestic bond market) and Tokyo (Eurobond market) are called dollar global bonds. Similarly, pound-denominated bonds sold in London and Los Angeles are pound global bonds. While global bonds follow the domestic market practice of registration of bonds, they follow the Eurobond market practice regarding their distribution. Dollar global bonds combine SEC registration and US clearing arrangements with separate clearing on the Eurobond market.

The World Bank issued the first such bonds in September 1989 and still remains the leading issuer of global bonds. The Bank raised \$1.5 billion through a dollar global bond issue that was offered in the USA as well as in Eurobond markets. It has issued in US dollars, euros, Japanese yen, and British pounds. On July 15, 1992, Japan's Matsushita Electric Industrial issued the first global bond by a corporate borrower. A number of sovereigns have also issued global bonds. Among the "Group of Ten" countries, Italy and Sweden have used this technique. Sweden issued \$2 billion in dollar global bonds in February 1993; and Italy issued \$5 billion in dollar global bonds in September 1993. Some developing countries have just begun to issue global bonds. For example, in early September 1997 Venezuela sold \$4 billion of new 30-year global bonds to investors from around the world. This issue was described as the largest global bond deal issued by a developing country.

By allowing issuers to solicit demand for a variety of markets and to offer greater liquidity to investors, global bonds have potential to reduce borrowing costs. Such cost savings might be, however, offset by the fixed costs of borrowing through the global format, such as registration and clearing arrangements. These costs for global bonds are presumably higher than for comparable Eurobond issues.

11.4.2 *The international bond market size and its currency denomination*

Table 11.4 shows that the outstanding amount of international debt securities reached a historical high of \$10,266 billion in 2003. Eurobonds account for approximately 70 percent of the international bond market, whereas foreign bonds and global bonds account for only 30 percent of the market. Industrial countries account for approximately 85 percent of the international bond market, while developing countries accommodate the remaining 15 percent of the market.

International bonds are denominated in various currencies: British pounds, euros, Japanese yen, Swiss francs, US dollars, and composite units of currencies. These multiple-currency bonds may be classified as currency option bonds and currency cocktail bonds. Table 11.4 shows the currency composition of international bond issues from 1996 to 2003. In 2003, 28 percent was denominated in US dollars, 41 percent was denominated in euros, and the remaining 31 percent was denominated in either other single currencies or composite units of currencies. International

Table 11.4 Outstanding amounts of international debt securities (billions of US dollars)

	1996	1997	1998	1999	2000	2001	2002	2003
Outstanding debts	2,939	3,285	4,055	4,999	5,875	7,113	8,344	10,266
All currencies	100%							
US dollar	33.9	43.7	45.2	47.2	49.5	50.8	47.6	27.9
ECU/euro	2.5	2.0	3.9	29.0	30.1	32.2	35.9	41.4
Other currencies	63.6	54.3	50.9	23.8	20.4	17.0	16.5	30.7

Source: The International Monetary Fund, *Global Financial Stability Report*, Washington, DC, various issues.

bond issues denominated in ECU/euros expanded sharply from \$74 billion in 1996 to \$4,250 billion in 2003. This was a growth rate well above the average for the international market, and it was reflected in a rise of the euro share from 2.5 percent in 1996 to 41.4 percent in 2003. The **European Currency Unit (ECU)** was a weighted value of a basket of 12 European Community currencies and the cornerstone of the European Monetary System; the euro replaced the ECU as a common currency for the European Union in January 1999.

CURRENCY OPTION BONDS The holders of **currency option bonds** are allowed to receive their interest income in the currency of their option from among two or three predetermined currencies at a predetermined exchange rate. The original bond contract contains the currencies of choice and the exchange rates. The currency option enhances the exchange guarantee for the investor. Thus, the investor will make some gain if all currencies included in the contract do not depreciate against the desired currency.

CURRENCY COCKTAIL BONDS Bonds denominated in a standard “currency basket” of several different currencies are called **currency cocktail bonds**. A number of these bonds have been developed to minimize or hedge foreign-exchange risk associated with single-currency bonds. Some popular forms of such bonds include special drawing rights and euros, both of which are described in chapter 4. The currency diversification provided by these bonds can be replicated by individual investors. Thus, currency cocktail bonds have never gained wide acceptance with Euromarket borrowers.

11.4.3 *Types of international bonds*

Five types of international bonds are straight (fixed-rate) bonds, floating-rate notes, convertible bonds, bonds with warrants, and other bonds.

STRAIGHT BONDS These bonds have fixed maturities and carry a fixed rate of interest. Straight bonds are repaid by amortization or in a lump sum at the maturity date. The **amortization method** refers to the retirement of a long-term debt by making a set of equal periodic payments. These periodic payments include both interest and principal. Alternatively, a borrower may retire his or her bonds by redeeming the face value of the bonds at maturity. Under this method, a fixed interest on the face value of the bonds is paid at regular intervals.

Fixed-rate bonds are technically unsecured, debenture bonds, because almost all of them are not secured by any specific property of the borrower. Because of this, debenture bondholders become general creditors in the event of default; they look to the nature of the borrower's assets, its earning power, and its general credit strength.

Perhaps the greatest advantage of all types of international bonds for individual investors is that interest income on them is exempt from withholding taxes at the source. Investors must report their interest income to their national authorities, but both tax avoidance and tax evasion are extremely widespread. Official institutions hold a large portion of investment in international bonds and are not liable for tax. Another large class of investors in international bonds consists of private institutions. These private institutions legally avoid tax by being in tax-haven countries.

FLOATING-RATE NOTES These notes are frequently called floating-rate bonds. The rate of return on these notes is adjusted at regular intervals, usually every 6 months, to reflect changes in short-term market rates. Because one of their main objectives is to provide dollar capital for non-US banks, most floating-rate notes are issued in dollars.

Like other international bonds, floating-rate notes are issued in denominations of \$1,000 each. They usually carry a margin of 1/4 percent above the LIBOR, and this margin is normally adjusted every 6 months. The link between the rate of return on floating-rate notes and LIBOR rates is intended to protect the investor against capital loss.

CONVERTIBLE BONDS Bonds of this type are convertible into parent common stock. The conversion price is usually fixed at a certain premium above the market price of the common stock on the date of the bond issue. Investors are free to convert their fixed-income securities into common stock at any time before the conversion privilege expires; the borrowing company is obliged to issue new stock for that purpose.

The convertible provision is designed to increase the marketability of fixed-rate Eurobonds. Convertible bonds provide investors with a steady income and an opportunity to participate in rising stock prices. Thus, their interest rates have been 1.5 to 2 percent below those on fixed-rate bonds. Because international investors are inflation-conscious, they prefer convertible bonds, which maintain the purchasing power of money.

BONDS WITH WARRANTS Some international bonds are issued with warrants. A **warrant** is an option to buy a stated number of common shares at a stated price during a prescribed period. Warrants pay no dividends, have no voting rights, and become worthless at expiration unless the price of the common stock exceeds the exercise price. Convertible Eurobonds do not bring in additional funds. When they are converted, common stock increases, and the convertible securities are retired. When warrants are exercised, common stock and cash increase simultaneously.

OTHER BONDS A major portion of other bonds consists of **zero-coupon bonds**, which provide all of the cash payment (interest and principal) when they mature. These bonds do not pay periodic interest, but are sold at a deep discount from their face value. The return to the investor is the excess of the face value over the market price.

Zero-coupon bonds have several advantages over conventional bonds. First, there is immediate cash inflow to the issuing company but no periodic interest to pay. Second, a big tax advantage exists for the issuing company, because any discount from the maturity value may be amortized for tax purposes by the company over the life of the bond.

Table 11.5 The percentage breakdown of the total bond market by instrument (billions of US dollars)

<i>Instruments</i>	1997	1998	1999	2000	2001	2002	2003
Straight bonds	71.9	72.3	71.2	70.7	70.6	71.5	75.2
Floating-rate notes	21.1	22.5	24.2	25.1	25.4	25.0	21.5
Convertible bonds	4.6	4.6	4.3	3.9	3.8	3.4	3.2
Bonds with warranties	<u>2.4</u>	<u>0.4</u>	<u>0.0</u>	<u>0.1</u>	<u>0.2</u>	<u>0.1</u>	<u>0.1</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: The Bank for International Settlements, *International Banking and Financial Market Developments*, various issues.

THE PERCENTAGE BREAKDOWN OF THE TOTAL BOND MARKET BY INSTRUMENT Table 11.5 shows the instrument composition of international bond issues and their percentage breakdown during the period from 1997 to 2003. In 2003, the percentage breakdown of the total bond market by instrument was 75 percent for straight bonds, 22 percent for floating-rate bonds, and 3 percent for convertible bonds. Straight bonds are most popular because their two major features, fixed maturities and a fixed rate of interest, eliminate uncertainty in the eyes of investors. It is fair to assume that the percentages for the two types of bonds discussed just above – bonds with warrants and other bonds – are negligible.

● 11.5 The International Equity Market

Besides debt instruments such as the Eurodollar and bond markets, the equity capital market is another important source of financing. Evidence indicates that the final decade of the twentieth century will go down in history as the period in which much of the world discovered the stock market as a major source of funds for their global expansion. Companies will increasingly turn to the stock market to raise money. This section focuses on how ownership in publicly owned corporations is traded throughout the world. The stock market consists of the primary market and the secondary market. The **primary market** is a market in which the sale of new common stock by corporations to initial investors occurs. The **secondary market** is a market in which the previously issued common stock is traded between investors.

11.5.1 *New trends in the stock markets*

In recent years, a number of new trends have begun to emerge in the stock markets around the world: (1) alliance, (2) crosslisting, and (3) concentration.

STOCK MARKET ALLIANCES There are some 150 stock exchanges in the world. Within the past 10 years, these stock exchanges have scrambled to align with each other. Markets in Paris, Amsterdam, and Brussels have agreed to form Euronext, while a group of Scandinavian markets has agreed to form Norex. Those deals prompted the London Stock Exchange and Frankfurt's Deutsche Bourse to consider a merger into a new market, but that deal fell through in Septem-

ber 2000. In 2001, the Lisbon Exchange decided it would join Euronext. NASDAQ has joint ventures and alliances in Japan, Hong Kong, Australia, Canada, the UK, and Germany. In September 2002, Euronext and the Tokyo Stock Exchange signed an alliance for cooperation and investor protection. In November 2002, the New Zealand Stock Exchange and the Hong Kong Stock Exchange signed an information-sharing agreement. The New York Stock Exchange has recently discussed alliances with markets in Canada, Latin America, Europe, and Asia.

There is a variety of reasons for this consolidation of stock exchanges: the growing speed and power of telecommunication links, big and small investors' keen interest in stocks from all parts of the world, and the fear of being left behind. Moreover, if national exchanges do not take the initiative, they could be bypassed by new electronic trading systems. These same forces have caused the burgeoning of online trading and have pushed national securities firms to expand their business overseas.

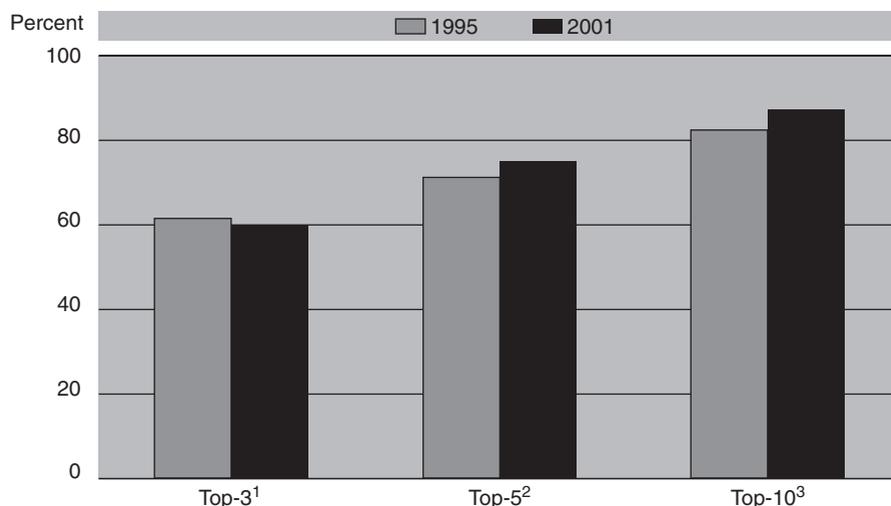
In addition, these same factors have caused another wave of stock markets becoming publicly traded on the different stock exchanges. In 2001, the London Stock Exchange and the Deutsche Bourse went public and are traded on their markets, while the Toronto Stock Exchange and Spain's four regional stock exchanges went public in 2002. In December 2002, the Chicago Mercantile Exchange, the world's second largest futures market, became publicly traded on the New York Stock Exchange.

CROSSLISTING With the rise of cross-border mergers during the 1990s and the early 2000s, there arises a need for companies to crosslist their stocks on different exchanges around the world. By crosslisting its shares on foreign exchanges, an MNC hopes to:

- 1 Allow foreign investors to buy their shares in their home market.
- 2 Increase the share price by taking advantage of the home country's rules and regulations.
- 3 Provide another market to support a new issuance.
- 4 Establish a presence in that country in the instance that it wishes to conduct business there.
- 5 Increase its visibility to its customers, creditors, suppliers, and the host government.
- 6 Compensate local management and employees in the foreign affiliates.

Companies are obligated to adhere to the securities regulations of all countries where their shares are listed. A decision to crosslist in the USA means that any company, domestic or foreign, must meet the accounting and disclosure requirements of the US Securities and Exchange Commission. Rules for listing requirements differ markedly from country to country, but analysts regard US requirements as the most restrictive in the world. Reconciliation of a company's financial statements to US standards can be a laborious process. Some foreign companies are reluctant to disclose hidden reserves and other pieces of company information. It might not appear too difficult for US companies to crosslist on certain foreign exchanges because their listing requirements are not that restrictive, but certain barriers still exist, such as a foreign country's specific rules and reporting costs.

STOCK MARKET CONCENTRATION European stock markets have become more integrated since the European Union's decision to switch their monetary union from the European Currency Unit to the euro, which was launched in 1999. Increasing integration, as reflected in converging price dynamics across markets, results from various structural changes in European stock markets. There is already a large amount of crosslisting and trading among exchanges. Competition among



Note: The data used are from the World Federation of Exchanges (market capitalization in US\$ millions, end of period) and are subject to price changes between 1995 and 2001.

1 1995: NYSE, Tokyo Stock Exchange (TSE), and London Stock Exchange (LSE). 2001: NYSE, NASDAQ, and TSE.

2 1995: NYSE, TSE, LSE, NASDAQ, and Deutsche Börse. 2001: NYSE, NASDAQ, TSE, LSE, and Euronext.

3 1995: NYSE, TSE, LSE, NASDAQ, Deutsche Börse, Paris Bourse, Swiss Exchange, Toronto Stock Exchange, Hong Kong Stock Exchange and Clearing, and Amsterdam Exchange. 2001: NYSE, NASDAQ, TSE, LSE, Euronext, Deutsche Börse, Toronto Stock Exchange, Borsa Italiana, Swiss Exchange, and Hong Kong Stock Exchange and Clearing.

Figure 11.3 Major stock exchanges as a share of world stock market capitalization

Source: OECD, *Financial Market Trends*, Mar. 2003, p. 109.

exchanges for listing and order flow has long characterized European securities markets. In addition, exchanges have become subject to competition for order flow from alternative trading systems. Because there are benefits from achieving large size and attracting liquidity, another important response to competitive pressures has consisted of mergers among exchanges.

The concentration of stock market capitalization is not an “EU phenomenon,” but reflects a worldwide trend toward a single global market for certain instruments. Figure 11.3 shows the share of the three, five, and 10 largest stock exchanges of total world stock market capitalization. The three largest stock markets accounted for 60 percent of the total market capitalization in 1995 and 2001. Furthermore, the share of the five and 10 largest stock markets has increased from 1995 to 2001. These statistics indicate a trend toward concentration of the world stock markets.

11.5.2 Privatization

In November 1996, Deutsche Telekom – a government-owned telecommunications company in Germany – raised \$13.3 billion through its initial public offering. During the 1990s, the rolling-

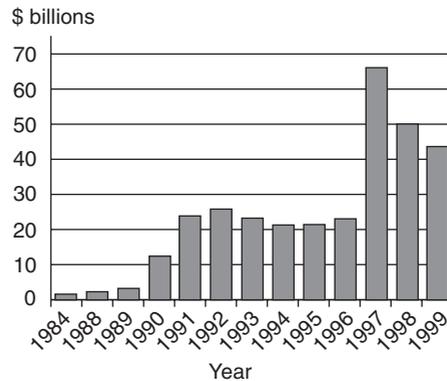


Figure 11.4 Developing countries' privatization revenues

Source: The World Bank, *Global Economic Prospects*, 2003, p. 96.

back of state ownership in the economy through privatization gathered considerable pace both in OECD countries and outside the OECD arena. The OECD – the Organization for Economic Cooperation and Development – is an organization of 29 countries and most of these countries are industrialized.

Privatization is a situation in which government-owned assets are sold to private individuals or groups. In recent years, even many developing countries have been selling government-owned enterprises to private investors. For example, the amount of money raised through privatization by the Indian government increased from \$100 million in 1996 to \$1,234 million in 1999. In May 2000, the Indian government announced that it would privatize most of the government-owned enterprises, including Air India, which is the international flag carrier for India. Figure 11.4 shows that the global amount of money raised through privatization by developing countries surged from almost nothing in the early 1980s to \$67 billion in 1997, before decreasing to \$42 billion in 1999. The World Bank estimates that cumulative privatization revenues worldwide have exceeded \$1 trillion by 2000. Privatization could play an important role in the ongoing transformation of emerging capital markets: due to its high profile, privatization may facilitate a switch from investment in bonds to investment in equities.

Why privatize? First, governments try to assist the development of capital markets by increasing market capitalization and liquidity. Second, a closely related motive is to widen share ownership and to create a “shareholder culture” in the population at large. Third, governments use privatization to raise money. Fourth, by replacing public-sector decision-making and control with those of the private sector, privatization is inducing notable changes in the corporate governance structure in important segments of the economy. Finally, privatization enables governments to use their resources more efficiently. By 1990, state-owned enterprises (SOEs) consumed nearly 20 percent of gross domestic investment in developing economies, while producing just more than 10 percent of gross domestic product: “Overall, privatization has dramatically improved the performance of former SOEs” (The World Bank 2003b, p. 96).

How is it done? Privatization takes many forms. First, a government sells state-owned companies directly to a group of ultimate investors. Second, the government divests itself of a company it owns through public offerings of equity in the primary market. The primary market is a market in which the sale of new securities occurs. Third, the government may sell residual

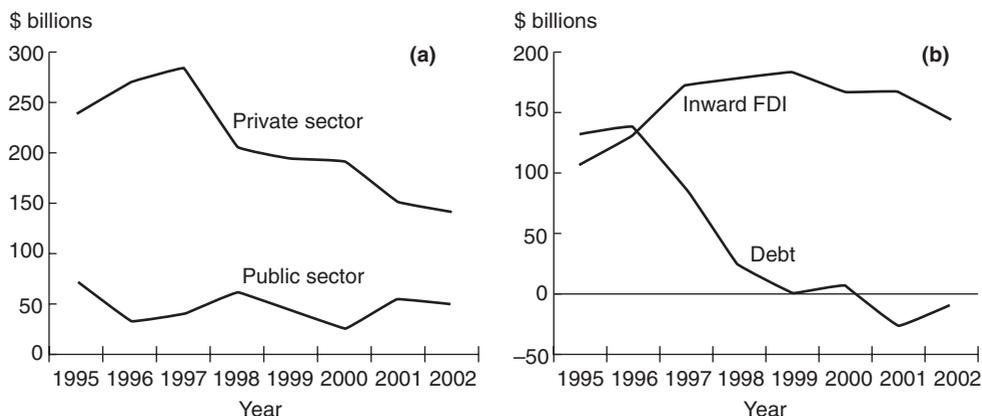


Figure 11.5 (a) Net financial flows to developing countries, 1995–2002; (b) net financial flows to developing countries from the private sector, 1995–2002

Source: The World Bank.

stocks of partly privatized companies in the secondary market. The secondary market is a market for securities that have already been issued and sold. Finally, other privatization methods include leasing, joint ventures, management contracts, and concessions. In 1998, direct sales of government-owned enterprises by developing countries accounted for almost 75 percent of privatization revenues and public offerings contributed to most of the remaining sales.

What are the essential elements for a successful privatization? Any successful privatization involves at least three elements. First, a government needs a political agreement to sell all or part of a company it owns. Second, the company should have the potential to transform itself into a profit-making entity rather than a government-subsidized burden. Third, the government has to find underwriters who will distribute and market the shares domestically and internationally.

● 11.6 Long-Term Capital Flows to Developing Countries

Figure 11.5(a) shows that long-term capital flows to developing countries have declined since 1998, mainly due to the Asian financial crisis of 1997–8 and the recent slowdown of the global economy. New long-term flows totaled \$261 billion in 2002, \$83 billion below the peak in 1997. Sharp declines in private capital market flows in recent years – bank loans, bonds, and portfolio equity flows – account for nearly all of this decline. As a result, the share of emerging markets in global capital market financing fell to 3 percent in 2002, compared to 6.4 percent in 1998 and 11 percent in 1997. Figure 11.5(b) shows that even foreign direct investment (FDI), which tends to be more resilient than capital market flows, has slowly but steadily declined since 1999.

11.6.1 Rotation from debt to equity

The weakness in the growth of private-sector debt flows is unprecedented in the post-1965 period. In the decade of the 1970s, developing-country debt posted a compound annual growth

Table 11.6 Developing countries' debt-to-equity ratios, 1997 and 2002

Region	External debt		
	1997	2002	% GDP
East Asia and Pacific	218%	134%	65.0%
Europe and Central Asia	505%	293%	66.8%
Latin American and the Caribbean	284%	162%	67.7%
Middle East and North Africa	394%	371%	42.5%
South Asia	968%	613%	30.5%
Sub-Saharan Africa	515%	303%	90.6%
All developing countries	316%	196%	61.7%

Source: The World Bank, *Global Development Finance*, Washington, DC, 2003 and 2004.

rate of 24 percent. The Latin American debt crisis of the early 1980s slowed this growth but did not end it. Since the middle of 1998, however, the whole context for development financing has shifted. As borrowers have chosen, or been required by their creditors, to pay down their debts, the external debt of developing countries has fallen in dollar terms. As debt is being repaid to private-sector creditors, net equity flows to developing countries remain significant, mainly though the route of FDI.

The shifting pattern of private flows – debt down, equity up – has had an important implication for the associated stock of debt (see table 11.6). While the stock of developing country external debt outstanding from all sources has fallen since 1998, the stock of equity capital owned and controlled by foreigners has risen over the past decade. Table 11.6 shows that the drop in the external debt-to-equity ratio, from 316 percent in 1997 to 196 percent in 2002, has been spread across all regions of the developing world. The World Bank highlighted three aspects of the shift in its 2004 *Global Development Finance*. First, the shift is partly driven by investor preferences. Debt investors have become more wary of holding debt claims on developing countries, while MNCs have increasingly come to believe that the developing world offers significant growth opportunities. Second, the shift is privately driven by the preferences of developing country policy-makers. To protect against debt crises, such as the Asian financial crisis of 1997–8, countries have strengthened their precautionary reserve holdings and shifted their liabilities to more stable form of investment, especially FDI. Finally, on balance, the shift is a positive development. This rotation from debt to equity is best seen as a constructive development, because it puts development finance on a stable footing.

SUMMARY

The international financial market consists of the Eurodollar market, the international bond market, and the international equity market. Eurodollars are dollar-denominated deposits in banks all over the world except the USA. The Eurodollar market is the truly international money market, undisturbed by the rules and restrictions of any national authority. Eurodollars have become a major

source of short-term loans for MNCs to finance their working capital needs and foreign trade. With the growth in availability of Eurodollars, Eurobanks have begun to extend medium-term Eurodollar loans for MNCs to finance their medium-term needs.

Although the international bond and equity markets are of a more recent vintage, they parallel the importance of multinational financial management and mainly facilitate expansion involving fixed asset commitment. During the 1990s, the rolling-back of state ownership in the economy through privatization gathered considerable pace in the world. Privatization may play an important role in the ongoing transformation of capital markets in the world: due to its high profile, privatization may facilitate a switch from investment in bonds to investment in equities.

Questions

- 1 Explain the globalization of financial markets.
- 2 How has technology affected the globalization of financial markets?
- 3 Why has the Eurocurrency market grown so rapidly?
- 4 If Germany imposes interest rate ceilings on German bank deposits, what is the likely effect of this regulation on the euro interest rate?
- 5 Why have bank regulators and market analysts expressed some concern about the stability of the interbank market?
- 6 What is the difference between Eurobonds and foreign bonds?
- 7 What is the difference between currency option bonds and currency cocktail bonds?
- 8 Describe two new instruments: Euronotes and global bonds.
- 9 Explain the Basel Accord of 1988.
- 10 What is the major difference in the role of commercial banks in corporate governance between the USA and Japan?
- 11 How can a government privatize state-owned companies?
- 12 In April 2003, the Basel Committee on Banking Supervision released for public comment the new Basel Capital Accord, which will replace the 1988 Capital Accord. What are the three pillars of this new proposal?
- 13 What are some reasons for a company to crosslist its shares?
- 14 The World Bank highlighted three aspects of the recent developing-country shift from debt to equity in its 2003 *Global Development Finance*. Briefly describe these three aspects of the shift.

Problems

1 Fill in the following blank spaces with a reserve ratio of 20 percent:

	Acquired reserves	Required reserves	Excess reserves	Amount bank can lend
Bank 1	\$100.00	\$20.00	\$80.00	\$80.00
Bank 2				
Bank 3				
Bank 4				
Bank 5				
Bank 6				
Bank 7				
Bank 8				
Bank 9				
Bank 10				
Bank 11				
Bank 12				
Bank 13				
Total amount loaned				

2 Assume that an international bank has the following simplified balance sheet. The reserve ratio is 20 percent:

Assets		1	2	Liabilities and net worth	1	2	
Reserves	\$4,400	-	-	Demand deposits	\$20,000	-	-
Securities	7,600	-	-				
Loans	8,000						

- (a) Determine the maximum amount that this bank can safely lend. Show in column 1 how the bank's balance sheet will appear after the bank has loaned this amount.
- (b) By how much has the supply of money changed?

- (c) Show the new balance sheet in column 2 after checks drawn for the entire amount of the new loans have been cleared against this bank.
- (d) To what extent will this lending alter the supply of money?
- (e) Aside from the leakage of required reserves at each stage of the lending process, there are some other leakages of money from the lending process. List and discuss them.
- (f) Assume: (1) an American citizen transfers \$2,000 of his deposits from a US bank to a Eurobank, and (2) Eurobanks as a whole keep 5 percent of their Eurodollar deposits in vault cash. Determine the maximum amount of Eurodollar supply that Eurobanks can create on the basis of \$2,000.
- 3 A multinational company holds a \$1,000 zero-coupon bond with a maturity of 15 years and a yield rate of 16 percent. What is the market value of the zero-coupon bond?
- 4 A multinational company has issued a 10-year, \$1,000 zero-coupon bond to yield 10 percent.
- (a) What is the initial price of the bond?
- (b) If interest rates dropped to 8 percent immediately upon issue, what would be the price of the bond?
- (c) If interest rate rose to 12 percent immediately upon issue, what would be the price of the bond?
- 5 A multinational company has common stock outstanding. Each share of the common stock pays \$3.60 dividends per year, and the stockholder requires a 12-percent rate of return. What is the price of the common stock?

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Case Problem 11: The Rise and Fall of the US Stock Market

The USA and Japan have long been like an old married couple. The USA likes to borrow and spend, while Japan likes to save and invest. And for almost 20 years, this odd relationship has endured, but not without strain. By the late 1990s, however, a new question came to the forefront: whether the world's biggest saver would continue to provide relatively cheap capital to the world's biggest spender.

It is no secret that the US economic expansion of the 1990s had been sustained with borrowed money abroad. American companies accrued huge debts, often to buy back company shares. American consumer debt is enormous, and continues to grow with no end in sight. And the spending boom has generated record trade deficits, including \$500 billion in 2002. To finance current-account deficits, the USA has been forced to borrow approximately \$2 billion every working day, most of which comes from foreign investors. For many years, only a small number of gloomy economists and investors worried aloud about this, but to no avail. By the late 1990s, however, many Japanese investors and policy-makers believed that US financial markets were in a bubble (see figure 11.6). US stock prices relative to earnings were high by historical standards. Various studies of stock market valuations concluded that by past standards the main US stock indices could be overvalued by some 20–40 percent. On the other hand, most Americans thought that US financial markets reflected fundamentals, until the US stock market collapsed in March 2000.

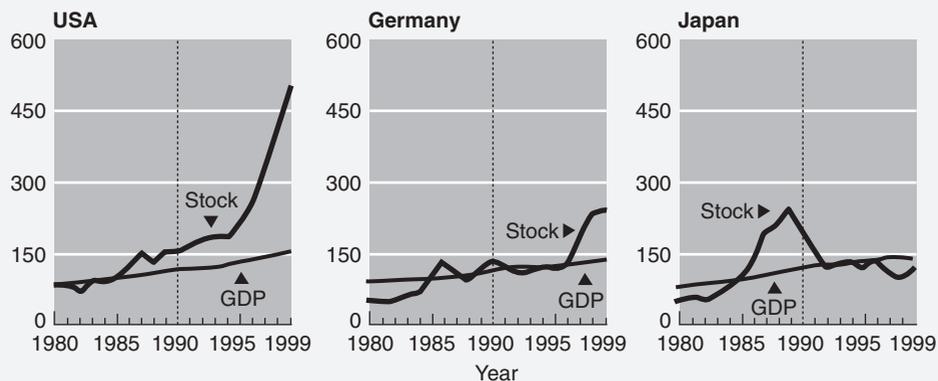


Figure 11.6 Stock prices and gross domestic product, inflation-adjusted, logarithmic scale, 1985 = 100

Source: The International Monetary Fund, Washington, DC.

Table 11.7 The performance of the major US stock indexes

<i>Index</i>	<i>2003</i>	<i>2002</i>	<i>2001</i>	<i>2000</i>	<i>1999</i>
Dow Jones	+0.25	-0.17	-0.7	-0.6	+0.25
Standard & Poor's 500	+0.26	-0.23	-0.13	-0.10	+0.20
NASDAQ Composite	+0.50	-0.31	-0.21	-0.39	+1.02

Source: "Stocks Post First Winning Year Since 1999," www.cnn.com, Jan. 1, 2004.

Japanese and other foreign investors continue to fund the US economy even today, but the boom in the US economy and its stock market ended in March 2000. In addition, as war and terrorism fears mount, nobody thinks that this kind of inflow can be sustained indefinitely – a change that may boost the inflation rate and hurt corporate profits, the US dollar, and investment returns. The financial reversal would also bring the collapse of the US security policy and of its calculated strategy of world pacification.

In 2003, all US stock indexes recorded their strongest rally since the Internet bubble burst in March 2000. Table 11.7 shows that all three major stock indexes – the Dow Jones, Standard & Poor's 500, and the NASDAQ Composite – posted their first annual gains since 1999. Nevertheless, the NASDAQ Composite Index of 2,000 at the end of 2003 was still 60 percent lower than its peak of 5,000 in 1999. Furthermore, some portfolio managers, such as Richard Bernstein of Merrill Lynch, argued that US stocks were so overpriced that they could fall as much as 14 percent in 2004. No wonder some pros continue to feel uncomfortable as they return from the beach. The worry is that investors have overdone things again. The stock market appears to feel like "the mania-inspired environment of the late 1990s," a time in which investors ignored repeated warning signs. Factors such as rising interest rates, over-aggressive earnings forecasts, and more violence in Iraq could ruin the stock market rally again.

There are new concerns that the current US economy may follow Japan's trail of the 1990s. Figure 11.7 shows that the patterns of the Nikkei 225 and the NASDAQ indices before and after their booms and bursts are strikingly similar. Lingering possibilities of deflation and low interest rates intensify the worry. Some experts say that the US economy is different from Japan's in several ways and thus will not follow Japan's trail.

Case Questions

- 1 What is a bubble?
- 2 Japanese investors and policy-makers believed that the US financial markets of the late 1990s were in a bubble. On the other hand, most Americans thought that US financial markets reflected market fundamentals. Why were Japanese people so sensitive to asset bubbles?

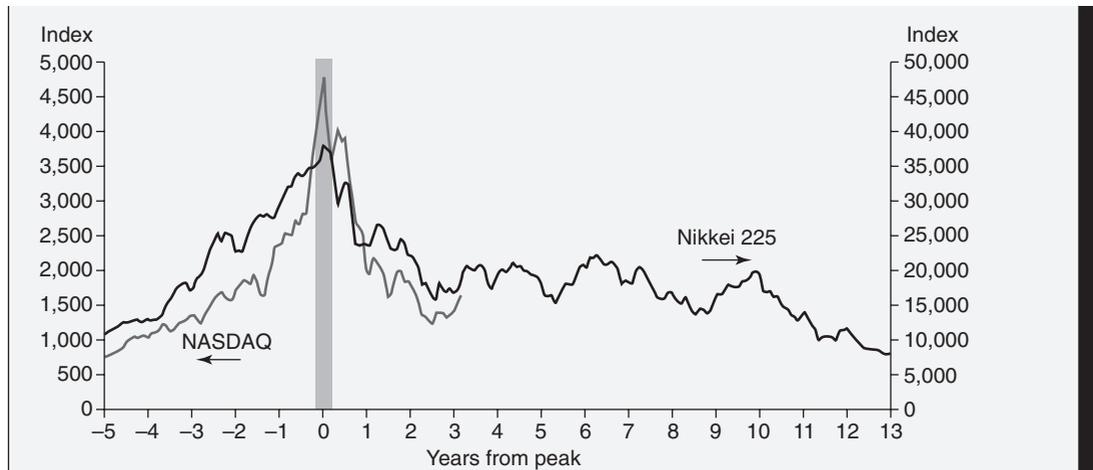


Figure 11.7 The boom and bust of the US and Japanese stock markets: the shaded area represents the peaks of the US and Japanese stock markets, in March 2000 and December 1989, respectively

Source: The Tokyo Stock Exchange, NASDAQ.

- 3 Why did most Americans think that the US financial markets of the 1990s reflected market fundamentals?
- 4 List and discuss a number of major differences between the US economy and Japan's economy.
- 5 Describe the Japanese-style capitalism that had worked well up until 1990. How has Japan tried to revive its sluggish economy?
- 6 The website of the US State Department, www.state.gov/background_notes, and the website of the US Central Intelligence Agency, www.odci.gov/cia/publications/factbook, provide a variety of economic information about most countries around the world. Use these two websites to perform a comparative economic analysis of the USA and Japan.

Sources: E. S. Browning, "After Hot Summer for Stocks, Time to Study," *The Wall Street Journal*, Sept. 2, 2003, pp. C1, C3; "Does the US economy follow the Japanese Path?" *Southwest Economy*, Federal Reserve Bank of Dallas, July/Aug. 2003, p. 10; L. E. Ohanian, "When the Bubble Bursts: Psychology or Fundamentals?" *Business Review*, Federal Reserve Bank of Philadelphia, Jan./Feb. 1996, pp. 1–14; J. Sapsford, "Japanese Exodus From Overseas Banking Picks Up Speed and Prestigious Names," *The Wall Street Journal*, Nov. 13, 1998, p. A15; M. R. Sesit, "Japan Gets Ready to Flood Bond Markets as Other Global Offers are Drying Up," *The Wall Street Journal*, Jan. 24, 2000, pp. C1, C23; B. Spindle, "A Flip of the Coins: Yen Dances, Euro Won't," *The Wall Street Journal*, May 19, 2000, pp. A21, A23; and B. Wysocki, "Investment Bears Fret Over Goldiblocks," *The Wall Street Journal*, Sept. 27, 1999, p. A1.