MERGERS, CORPORATE CONTROL, AND GOVERNANCE

# Governance and Corporate Control Around the World

**Much of corporate** finance (and much of this book) assumes a particular financial structure—public corporations with actively traded shares and relatively easy access to financial markets. But there are other ways to organize and finance business ventures. The arrangements for ownership, control, and financing vary greatly around the world. In this chapter we consider some of these differences.

Corporations raise cash from financial markets and also from financial institutions. Markets are relatively more important in the United States, United Kingdom, and other "Anglo-Saxon" economies. Financial institutions, particularly banks, are relatively more important in many other countries, including Germany and Japan. In bank-based systems, individual investors are less likely to hold corporate debt and equity directly. Instead ownership passes through banks, insurance companies, and other financial intermediaries.

This chapter starts with an overview of financial markets, financial institutions, and sources of financing. We contrast Europe, Japan, and the rest of Asia to the

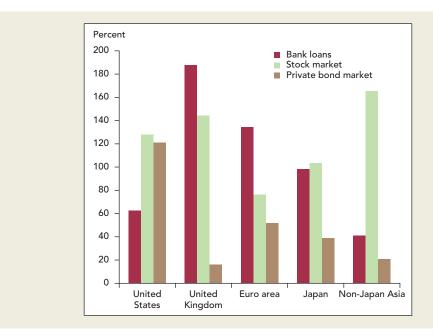
United States and United Kingdom. Then Section 33-2 looks more closely at ownership, control, and governance. Here we start with the United States and United Kingdom and then turn to Japan, Germany, and the rest of the world. Section 33-3 asks whether these differences matter. For example, do well-functioning financial markets and institutions contribute to economic development and growth? What are the advantages and disadvantages of market-based versus bank-based systems?

Before starting on this worldwide tour, remember that the principles of financial management apply throughout the journey. The concepts and basic tools of the trade do not vary. For example, all companies in all countries should recognize the opportunity cost of capital (although the cost of capital is even harder to measure where stock markets are small or erratic). Discounted cash flow still makes sense. Real options are encountered everywhere. And even in bankbased financial systems, corporations participate in world financial markets—by trading foreign exchange or hedging risks in futures markets, for instance.

# Financial Markets and Institutions

In most of this book we have assumed that a large part of debt financing comes from public bond markets. Nothing in principle changes when a firm borrows from a bank instead. But in some countries bond markets are stunted and bank financing is more important. Figure 33.1 shows the total values of bank loans, private (nongovernment) bonds, and stock markets in different parts of the world in 2007. To measure these financial claims on a comparable basis, the amounts are scaled by gross domestic product (GDP).<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> For more detailed data and discussion of the material in this section, see F. Allen, M. Chui, and A. Maddaloni, "Financial Structure and Corporate Governance in Europe, the USA, and Asia," in *Handbook of European Financial Markets and Institutions*, ed. X. Freixas, P. Hartmann, and C. Mayer (Oxford: Oxford University Press, 2008), pp. 31–67.



#### **FIGURE 33.1**

Value of financial claims in 2007, percentage of GDP.

Sources: Bloomberg, IMF, World Federation of Exchanges, and BIS. We are grateful to Michael Chui for this figure.

Company financing in the United States is different from that in most other countries. The United States not only has a large amount of bank loans outstanding, but there is also a large stock market *and* a large corporate bond market. Thus the United States is said to have a market-based financial system. Stock market value is also high in the United Kingdom and Asia,<sup>2</sup> but bank loans are much more important than the bond market in these countries. In Europe<sup>3</sup> and Japan, bank financing again outpaces bond markets, but the stock market is relatively small. Most countries in Europe, including Germany, France, Italy, and Spain, have bank-based financial systems. So does Japan.

Let's look at these regions from a different perspective. Figure 33.2 shows the financial investments made by households, again scaled by GDP.<sup>4</sup> ("Households" means individual investors.) Household portfolios are divided into four categories: bank deposits, insurance policies and mutual and pension funds, equity securities, and "other." Notice in Figure 33.2 the differences in the total amounts of financial assets. Summing the columns for each country and region, the amount of financial assets is 275% of GDP in the United States, 288% in the United Kingdom, 286% in Japan, and 185% in Europe. This does not mean that European investors are poor, just that they hold less wealth in the form of financial assets. Figure 33.2 excludes other important investment categories, such as real estate or privately owned businesses. It also excludes the value of pensions provided by governments.

In the United States, a large fraction of households' portfolios is held directly in equity securities, mostly common stocks. Therefore individual investors can potentially play an important role in corporate governance. Direct equity holdings are smaller in the United

<sup>&</sup>lt;sup>2</sup> Asia here includes Hong Kong, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan, and Thailand.

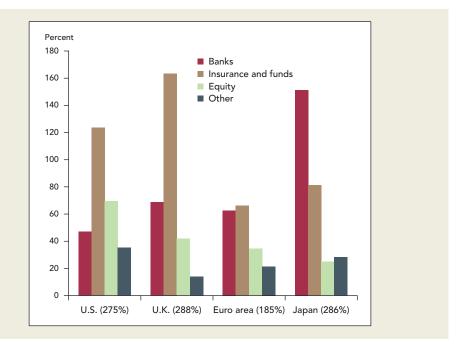
<sup>&</sup>lt;sup>3</sup> Europe here includes: Austria, Belgium, Finland, France, Germany, Greece, Italy, the Netherlands, Portugal, Slovenia, and Spain.

<sup>&</sup>lt;sup>4</sup> Data for Asia are not available for this and the following figures that summarize portfolio allocations.

#### **FIGURE 33.2**

Household portfolio allocations, 1995–2007, percentage of GDP.

Sources: Bank of Japan, EUROSTAT, Federal Reserve Board, and the U.K. Office for National Statistics. We are grateful to Michael Chui for this figure.



Kingdom, smaller still in Europe, and smallest in Japan. Japanese households could not play a significant direct role in corporate governance even if they wanted to. They can't vote shares that they don't own.

Where direct equity investment is small, household investments in bank deposits, insurance policies, and mutual and pension funds are correspondingly large. In the United Kingdom, the insurance and funds category dominates, with bank deposits in second place. In Europe, bank deposits and insurance and funds run a close race for first. In Japan, bank deposits win by a mile, with insurance and funds in second place and equities a distant third.

Figure 33.2 tells us that in many parts of the world there are relatively few individual stockholders. Most individuals don't invest directly in equity markets, but indirectly, through insurance companies, mutual funds, banks, and other financial intermediaries. Of course the thread of ownership traces back through these intermediaries to individual investors. All assets are ultimately owned by individuals. There are no Martian or extraterrestrial investors that we know of.<sup>5</sup>

Now let's look at financial institutions. Figure 33.3 shows the financial assets held by financial institutions, including banks, mutual funds, insurance companies, pension funds, and other intermediaries. These investments are smaller in the United States, relative to GDP, than in other countries (as expected in the U.S. market-based system). Financial institutions in the United Kingdom, Europe, and Japan have invested large sums in loans and in deposits and currency. Holdings of equity are highest in the United Kingdom. These holdings are mainly owned by insurance companies and pension funds.

We've covered households and financial institutions. Is there any other source for corporate financing? Yes, financing can come from other corporations. Take a look at

<sup>&</sup>lt;sup>5</sup> There may be owners not yet present on this planet, however. For example, endowments of educational, charitable, and religious organizations are partly held in trust for future generations.

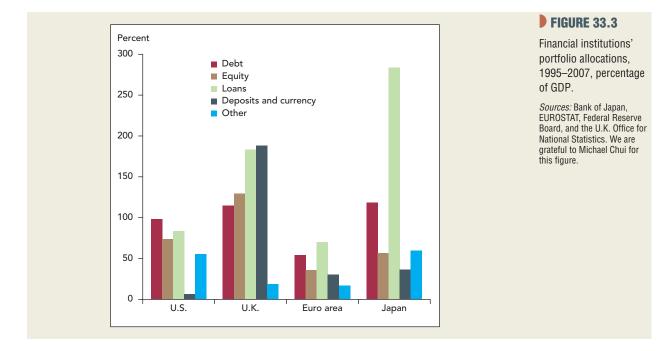


Figure 33.4, which shows the financial assets held by nonfinancial corporations. Perhaps the most striking feature is the large amount of equity held by firms in Europe. The amount of equity held in Japan and the United Kingdom is also large. In the United States it is relatively small. As we will see, these holdings of shares by other nonfinancial corporations have important implications for corporate ownership and governance.

Another interesting aspect of Figure 33.4 is the large amount of intercompany loans and trade credit (mostly trade credit) in Japan. Many Japanese firms rely heavily on tradecredit financing, that is, on accounts payable to other firms. Of course the other firms see the reverse side of trade credit: They are providing financing in the form of accounts receivable.

Figures 33.1 to 33.4 show that just drawing a line between market-based, "Anglo-Saxon" financial systems and bank-based financial systems is simplistic. We need to dig a little deeper when comparing financial systems. For example, more equity is held directly by households in the United States than in the United Kingdom and the portfolio allocations of households, nonfinancial corporations, and financial institutions are also significantly different. In addition, we noted the large cross-holdings of shares among European corporations. Finally, Japanese households put significantly more of their savings in banks and Japanese corporations use trade credit much more than in other advanced economies.

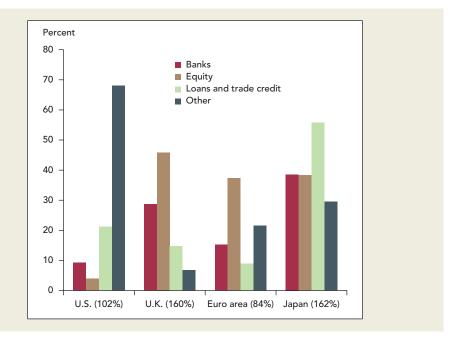
# **Investor Protection and the Development of Financial Markets**

What explains the importance of financial markets in some countries, while other countries rely less on markets and more on banks and other financial institutions? One answer is investor protection. Stock and bond markets thrive where investors in these markets are protected reasonably well.

#### **FIGURE 33.4**

Nonfinancial corporations' portfolio allocations, 1995–2007, Percentage of GDP.

Sources: Bank of Japan, EUROSTAT, Federal Reserve Board, and the U.K. Office for National Statistics. We are grateful to Michael Chui for this figure.



Investors' property rights are much better protected in some parts of the world than others. La Porta, Lopez-de-Silanes, Shleifer, and Vishny have developed quantitative measures of investor protection based on shareholders' and creditors' rights and the quality of law enforcement. Countries with poor scores generally have smaller stock markets, measured by aggregate market value relative to GDP, and the numbers of listed firms and initial public offerings are smaller relative to population. Poor scores also mean less debt financing for private firms.<sup>6</sup>

It's easy to understand why poor protection of outside investors stunts the growth of financial markets. A more difficult question is why protection is good in some countries and poor in others. La Porta, Lopez-de-Silanes, Shleifer, and Vishny point to the origin of legal systems. They distinguish legal systems derived from the common-law tradition, which originated in England, from systems based on civil law, which evolved in France, Germany, and Scandinavia. The English, French, and German systems have spread around the world by conquest, imperialism, and imitation. Both shareholders and creditors are better protected by the law in countries that adopted the common-law tradition.

But Rajan and Zingales<sup>7</sup> point out that France, Belgium, and Germany, which are civillaw countries, had well-developed financial markets early in the twentieth century. Relative to GDP, these countries' financial markets were then about the same size as markets in the United Kingdom and bigger than those in the United States. These rankings were reversed in the second half of the century, after World War II, although financial markets are now expanding and playing a greater role in European economies. Rajan and Zingales believe that these reversals can be attributed to political trends and shifts in government policy. For

<sup>&</sup>lt;sup>6</sup> R. La Porta, F. Lopez-de-Silanes, A. Shleifer, and R. Vishny, "Legal Determinants of External Finance," *Journal of Finance* 52 (July 1997) pp. 1131–1150, and "Law and Finance," *Journal of Political Economy* 106 (December 1998), pp. 1113–1155.

<sup>&</sup>lt;sup>7</sup> R. Rajan and L. Zingales, Saving Capitalism from the Capitalists (New York: Crown Business, 2003).

example, they recount the backlash against financial markets after the stock market crash of 1929 and the expansion of government regulation and ownership in the Great Depression and after World War II.

# -2 Ownership, Control, and Governance

Who owns the corporation? In the United States and United Kingdom, we just say "the stockholders." There is usually just one class of common stock, and each share has one vote. Some stockholders may have more influence than others, but only because they own more shares. In other countries, ownership is not so simple, as we see later in this section.

What is the corporation's financial objective? Normally we just say "to maximize stockholder value." According to U.S. and U.K. corporation law, managers have a *fiduciary duty* to the shareholders. In other words, they are legally required to act in the interests of shareholders. Consider the classic illustration provided by an early case involving the Ford Motor Company. Henry Ford announced a special dividend, but then reneged, saying that the cash earmarked for the dividend would be spent for the benefit of employees. A shareholder sued on the grounds that corporations existed for the benefit of shareholders and the management did not have the right to improve the lot of workers at shareholders' expense. Ford lost the case. 8

The idea that the corporation should be run in the interests of the shareholders is thus embedded in the law in the United States and United Kingdom. The board of directors is supposed to represent shareholders' interests. But laws and customs differ in other countries. Now we look at some of these differences. We start with Japan.

### **Ownership and Control in Japan**

Traditionally the most notable feature of Japanese corporate finance has been the **keiretsu**. A keiretsu is a network of companies, usually organized around a major bank. Japan is said to have a *main bank* system, with long-standing relationships between banks and firms. There are also long-standing business relationships between a keiretsu's companies. For example, a manufacturing company might buy most of its raw materials from group suppliers and in turn sell much of its output to other group companies.

The bank and other financial institutions at the keiretsu's center own shares in most of the group companies (though a commercial bank in Japan is limited to 5% ownership of each company). Those companies may in turn hold the bank's shares or each others' shares. For example, as of March 2009, Sumitomo Corporation held about 10% of Sumitomo Metal Industries, which in turn held about 2% of the shares of Sumitomo Corporation. Because of the cross-holdings, the number of shares available for purchase by outside investors is much lower than the total number outstanding.

The keiretsu is tied together in other ways. Most debt financing comes from the keiretsu's main bank or from affiliated financial institutions. Managers may sit on the boards of directors of other group companies, and a "presidents' council" of the CEOs of the most important group companies meets regularly.

Think of the keiretsu as a system of corporate governance, where power is divided among the main bank, the group's largest companies, and the group as a whole. This

<sup>&</sup>lt;sup>8</sup> Subsequently it appeared that Henry Ford reneged on the dividend so that he could purchase blocks of shares at depressed prices!

confers certain financial advantages. First, firms have access to additional "internal" financing—internal to the group, that is. Thus a company with a capital budget exceeding operating cash flows can turn to the main bank or other keiretsu companies for financing. This avoids the cost or possible bad-news signal of a public sale of securities. Second, when a keiretsu firm falls into financial distress, with insufficient cash to pay its bills or fund necessary capital investments, a workout can usually be arranged. New management can be brought in from elsewhere in the group, and financing can be obtained, again "internally."

Hoshi, Kashyap, and Scharfstein tracked capital expenditure programs of a large sample of Japanese firms—many, but not all, members of keiretsus. The keiretsu companies' investments were more stable and less exposed to the ups and downs of operating cash flows or to episodes of financial distress. It seems that the financial support of the keiretsus enabled members to invest for the long run, regardless of temporary setbacks.

Corporation law in Japan resembles that in the United States, but there are some important differences. For example, in Japan it is easier for shareholders to nominate and elect directors. Also, management remuneration must be approved at general meetings of shareholders. Nevertheless, ordinary shareholders do not in fact have much influence. Japanese boards traditionally have 40 or 50 members, with only a handful who are potentially independent of management. The CEO effectively controls nominations to the board. As long as the financial position of a Japanese corporation is sound, the CEO and senior management control the corporation. Outside stockholders have very little influence.

Given this control, plus the cross-holdings within industrial groups, it's no surprise that hostile takeovers are exceedingly rare in Japan. Also, Japanese corporations have been stingy with dividends, which probably reflects the relative lack of influence of outside shareholders. On the other hand, Japanese CEOs do not use their power to generate large sums of personal wealth. They are not well paid, compared to CEOs in most other developed countries. (Look back to Figure 12.1 for average top-management compensation levels for Japan and other countries.)

Cross-holdings reached a peak around 1990 when about 50% of corporations' shares were held by other Japanese companies and financial institutions. Starting in the mid-1990s a banking crisis began to emerge in Japan. This led firms to sell off bank shares because they viewed them as bad investments. Banks and firms in financial distress, including Nissan, sold off other companies' shares to raise funds. By 2004 the level of cross-holdings had fallen to 20%. In the next few years, however, cross-holdings rose again as companies in the steel and other industries began to worry about hostile takeovers, which was the original motivation for acquisition of cross-holdings in the 1950s and 1960s. 12

## **Ownership and Control in Germany**

Traditionally banks in Germany played a significant role in corporate governance. This involved providing loans, owning large amounts of equity directly, and the proxy voting of

<sup>&</sup>lt;sup>9</sup> T. Hoshi, A. Kashyap, and D. Scharfstein, "Corporate Structure, Liquidity and Investment: Evidence from Japanese Industrial Groups," *Quarterly Journal of Economics* 106 (February 1991), pp. 33–60, and "The Role of Banks in Reducing the Costs of Financial Distress in Japan," *Journal of Financial Economics* 27 (September 1990), pp. 67–88.

<sup>&</sup>lt;sup>10</sup> These requirements have led to a unique feature of Japanese corporate life, the *sokaiya*, who are racketeers who demand payment in exchange for not disrupting shareholders' meetings.

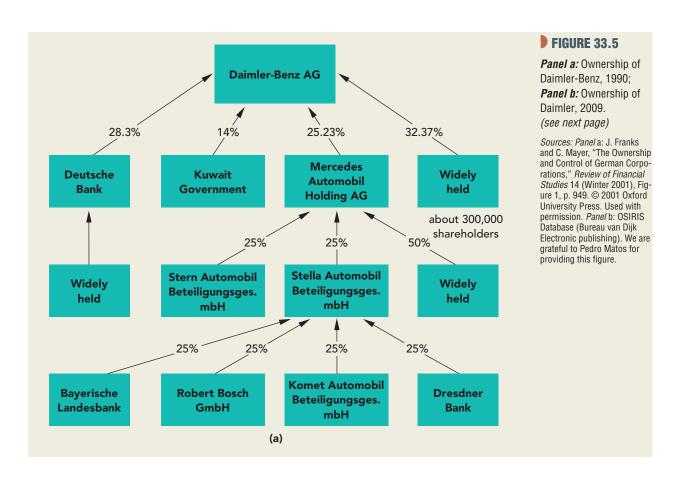
<sup>&</sup>lt;sup>11</sup> In recent years some Japanese companies such as Sony have changed to U.S.-style boards with fewer members and more independent directors.

<sup>&</sup>lt;sup>12</sup> See H. Miyajima and F. Kuroki, "The Unwinding of Cross-Shareholding in Japan: Causes, Effects and Implications," in *Corporate Governance in Japan: Institutional Change and Organizational Diversity*, ed. M. Aoki, G. Jackson, and H. Miyajima (Oxford and New York: Oxford University Press, 2007), pp. 79–124. Also see "Criss-Crossed Capitalism," *The Economist* print edition, November 6, 2008.

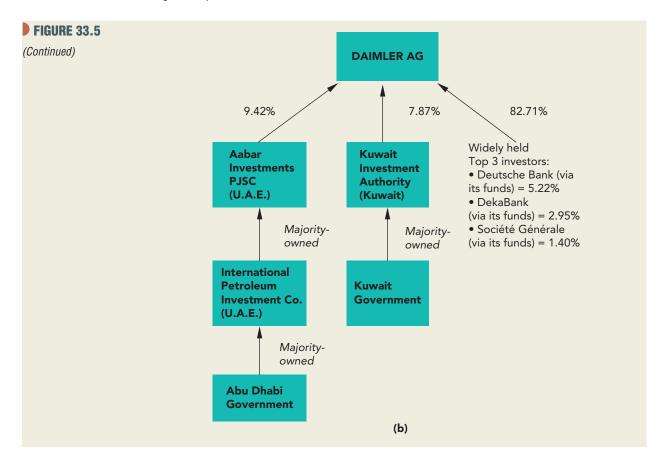
shares held on behalf of customers. Over time this role has changed significantly. The relationship between the largest German bank, Deutsche Bank, and one of the largest German companies, Daimler AG, provides a good illustration.

Panel *a* of Figure 33.5 shows the 1990 ownership structure of Daimler, or as it was known then, Daimler-Benz. The immediate owners were Deutsche Bank with 28%, Mercedes Automobil Holding with 25%, and the Kuwait Government with 14%. The remaining 32% of the shares were widely held by about 300,000 individual and institutional investors. But this was only the top layer. Mercedes Automobil's holding was half owned by holding companies "Stella" and "Stern," for short. The rest of its shares were widely held. Stella's shares were in turn split four ways: between two banks; Robert Bosch, an industrial company; and another holding company, "Komet." Stern's ownership was split five ways but we ran out of space.<sup>13</sup>

Panel *b* shows the ownership structure in 2009. It is quite different. Deutsche Bank does not have a direct stake anymore. Its holdings of 5% are now via its investment funds. The Kuwait government still owns a substantial stake of about 8%, but considerably less than the 14% it owned in 1990. The only other large investor is Aabar Investments, which owns 9%. Aabar is itself majority-owned by International Petroleum Investment Company, which is in turn majority-owned by the Abu Dhabi government. In stark contrast to the situation in



<sup>&</sup>lt;sup>13</sup> A five-layer ownership tree for Daimler-Benz is given in S. Prowse, "Corporate Governance in an International Perspective: A Survey of Corporate Control Mechanisms among Large Firms in the U.S., U.K., Japan and Germany," *Financial Markets, Institutions, and Instruments* 4 (February 1995), Table 16.



1990 when only 32% was widely held, in 2009 82% was widely held. The ownership structure has moved a long way toward the U.S. ownership pattern, where many large companies are entirely widely held.

An important reason for this dramatic change in ownership structure was a tax change that took effect in 2002. This exempted capital gains on shares held for more than one year from corporate taxation. Prior to that, the corporate capital gains rate had been 52%, which made selling shares very costly for corporations.

Daimler was not the only company to experience a significant drop in bank ownership. Dittman, Maug, and Schneider point out that average bank ownership of equity fell from 4.1% in 1994 to .4% in 2005. Board seats held by bank representatives fell from 9.6% to 5.6% of the total. Dittman, Maug, and Schneider's evidence suggests that banks are now primarily interested in using their board representation to promote their lending and investment banking activities. However, the companies on whose boards the bankers sit appear to perform worse than similar companies without such a presence.<sup>14</sup>

Other countries in continental Europe, such as France and Italy, also have complex corporate ownership structures. These countries have not had a dramatic tax change like that in Germany. However, there has been a steady stream of regulatory changes that have

<sup>&</sup>lt;sup>14</sup> See I. Dittmann, E. Maug, and C. Schneider, "Bankers on the Boards of German Firms: What They Do, What They Are Worth, and Why They Are (Still) There," *Review of Finance*, forthcoming.

mostly had the effect of making the legal framework for corporate governance more similar to that in the U.S. 15

#### **European Boards of Directors**

Germany has a system of *codetermination*. Larger firms (generally firms with more than 2,000 employees) have *two* boards of directors: the supervisory board (*Aufsichtsrat*) and management board (*Vorstand*). Half of the supervisory board's members are elected by employees, including management and staff as well as labor unions. The other half represents stockholders and often includes bank executives. There is also a chairman appointed by stockholders who can cast tie-breaking votes if necessary.

The supervisory board represents the interests of the company as a whole, not just the interests of employees or stockholders. It oversees strategy and elects and monitors the management board, which operates the company. Supervisory boards typically have about 20 members, more than typical U.S. and U.K. boards but smaller than Japanese boards. Management boards have about 10 members.

In France, firms can elect a single board of directors, as in the United States, United Kingdom, and Japan, or a two-tiered board, as in Germany. The single-tiered board, which is more common, consists mostly of outside directors, who are shareholders and representatives from financial institutions with which the firm has relationships. The two-board system has a *conseil de surveillance*, which resembles a German supervisory board, and a *directoire*, which is the management board. As far as employee representation is concerned, partially privatized firms and firms where employees own 3% or more of the shares are mandated to have employee-elected directors.

#### **Ownership and Control in Other Countries**

La Porta, Lopez-de-Silanes, and Shleifer surveyed corporate ownership in 27 developed economies. <sup>16</sup> They found relatively few firms with actively traded shares and dispersed ownership. The German pattern of significant ownership by banks and other financial institutions is also uncommon. Instead, firms are typically controlled by wealthy families or the state. The ultimate controlling shareholders typically have secure voting control even when they do not have the majority stake in earnings, dividends, or asset values.

Family control is common in Europe and also in Asia. Table 33.1 summarizes a study by Claessens, Djankov, and Lang, who traced ownership in 1996 for a sample of nearly 3,000 Asian companies. Except in Japan, a high proportion of public firms were family controlled. Thus wealthy families control large fractions of many Asian economies. For example, in Hong Kong, the 10 largest family groups control 32% of the assets of all listed firms. In Thailand, the top 10 families control 46% of assets. In Indonesia, they control nearly 58% of assets.

Family control does not usually mean a direct majority stake in the public firm. Control is usually exercised by cross-shareholdings, pyramids, and dual-class shares. We have already seen an example of cross-holdings with Sumitomo. Pyramids and dual-class shares need further explanation.

**Pyramids** Pyramids are common in Asian countries as well as several European countries.<sup>17</sup> In a pyramid, control is exercised through a sequence of controlling positions in

<sup>&</sup>lt;sup>15</sup> See L. Enriques and P. Volpin, "Corporate Governance Reforms in Continental Europe," *Journal of Economic Perspectives* 21 (2007), pp. 117–140.

<sup>&</sup>lt;sup>16</sup> R. La Porta, F. Lopez-de-Silanes, and A. Shleifer, "Corporate Ownership around the World," *Journal of Finance* 54 (1999), pp. 471–517.

<sup>&</sup>lt;sup>17</sup> L. A. Bebchuk, R. Kraakman, and G. R. Triantis, "Stock Pyramids, Cross-Ownership, and Dual Class Equity," in *Concentrated Corporate Ownership*, ed. R. Morck (Chicago: University of Chicago Press, 2000), pp. 295–318.

	Control <sup>a</sup>				
	Number of Firms in Sample	Family	State	Widely Held	Percentage of Assets <sup>b</sup> Controlled by Top 10 Families
Hong Kong	330	66.7%	1.4%	7.0%	32.1%
Indonesia	178	71.5	8.2	5.1	57.7
Japan	1,240	9.7	8.0	79.8	2.4
Korea	345	48.4	1.6	43.2	36.8
Malaysia	238	67.2	13.4	10.3	24.8
Philippines	120	44.6	2.1	19.2	52.5
Singapore	221	55.4	23.5	5.4	26.6
Taiwan	141	48.2	2.8	26.2	18.4
Thailand	167	61.6	8.0	6.6	46.2

#### TABLE 33.1 Family control in Asia.

Source: S. Claessens, S. Djankov, and L. H. P. Lang, "The Separation of Ownership and Control in East Asian Corporations," Journal of Financial Economics 58 (October/November 2000), Table 6, p. 103, and Table 9, p. 108. © 2000 Elsevier, used with permission.

several layers of companies. The actual operating companies are at the bottom of the pyramid. Above each operating company is a first holding company, then a second one, then perhaps others still higher in the pyramid. Consider a three-tier pyramid and a single operating company. Assume that 51% of the votes confer control at each tier. Suppose that the second holding company—the highest one in the pyramid—holds a 51% controlling stake in a lower holding company, which in turn holds a 51% controlling stake in the operating company. A 51% stake in the highest holding company is really only a 26% stake in the operating company (.51  $\times$  .51 = .26, or 26%). Thus an investor in the top holding company could control an operating company worth \$100 million with an investment of only \$26 million. By adding another layer, the required investment falls to .51  $\times$  26 = \$13 million.

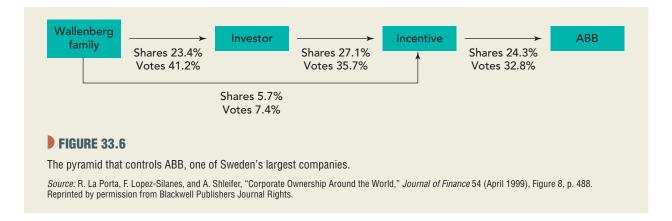
Usually less than 51% of shares are needed for effective control, so the shareholders of the topmost holding company may be able to maintain control with an even smaller investment. Figure 33.6 shows how the Wallenberg family controls ABB, one of Sweden's largest companies. ABB, the operating company, is shown at the right of the diagram. ABB is controlled by Incentive, which holds 24% of ABB's shares but controls about 33% of the shareholder votes. Incentive is in turn controlled by Investor, an investment holding company, and by the Wallenberg family directly. The family also holds about 41% of Investor's votes. At each stage the family's voting control is at least 33%, which is amply sufficient to control the next layer of the pyramid.<sup>19</sup>

<sup>&</sup>lt;sup>a</sup> "Control" means ownership of shares with at least 20% of voting rights. Percentages controlled by financial institutions or corporations are not reported.

<sup>&</sup>lt;sup>b</sup> Percentage of total assets of all sample firms in each country.

<sup>&</sup>lt;sup>18</sup> A holding company is a firm whose only assets are controlling blocks of shares in other companies.

<sup>&</sup>lt;sup>19</sup> Figure 33.6 shows only part of the Wallenberg holdings. The Wallenbergs control companies whose shares account for about 50% of the value of the Stockholm Stock Exchange. See J. Agnblad, E. Berglof, P. Hogfeld, and H. Svancar, "Ownership and Control in Sweden: Strong Owners, Weak Minorities and Social Control," in *The Control of Corporate Europe* ed. F. Barca and M. Becht (Oxford: Oxford University Press, 2001).



**Dual-Class Equity** Another way to maintain control is to hold stock with extra voting rights. (Note the extra voting rights at each level of the pyramid in Figure 33.6.) Extra votes can be attached to a special class of shares. For example, a firm's Class A shares could have 10 votes and the Class B shares only 1. *Dual-class equity* occurs frequently in many countries, including Brazil, Canada, Denmark, Finland, Germany, Italy, Mexico, Norway, South Korea, Sweden, and Switzerland. Stocks with different voting rights also occur (but less frequently) in Australia, Chile, France, Hong Kong, South Africa, the United Kingdom, and the United States. For example, the Ford Motor Company is still controlled by the Ford family, who hold a special class of shares with 40% of the voting power. Dual-class equity is forbidden in Belgium, China, Japan, Singapore, and Spain.

As we briefly discussed in Chapter 14, there is a wide variation in the value of votes across countries. Table 33.2 shows Tatiana Nenova's estimates of the value of controlling blocks in different countries, calculated as a fraction of firms' market values. These values are calculated from the differences in prices between ordinary shares and shares with extra votes. The range of values is large. For example, the Scandinavian countries have uniformly low premiums for control. South Korea and Mexico have very high control premiums.

Why is shareholder control valuable? For two reasons, one positive and one negative. The controlling shareholder may maximize value by monitoring management and making sure that the firm pursues the best operating and investment strategies. On the other hand, a controlling shareholder may be tempted to *capture* value by extracting private benefits at other shareholders' expense. In this case the control premium is really a discount on the

Australia	.23	Italy	.29
Brazil	.23	Korea	.48
Canada	.03	Mexico	.36
Chile	.23	Norway	.06
Denmark	.01	South Africa	.07
Finland	.00	Sweden	.01
France	.28	Switzerland	.06
Germany	.09	U.K.	.10
Hong Kong	03	U.S.	.02

value of control-block votes as a proportion of firm value.

Source: T. Nenova, "The Value of Corporate Voting Rights and Control: A Cross-Country Analysis," Journal of Financial Economics 68 (June 2003), Table 4, p. 336. © 2003 Elsevier, used with permission.

shares with inferior voting rights, a discount reflecting the value that these shareholders cannot expect to receive.

#### **Conglomerates Revisited**

Of course there are also examples of U.S. companies that are controlled by families or by investors holding large blocks of stock. But in these cases control is exercised for a single firm, not a group of firms. Elsewhere in the world, and particularly in countries without fully developed financial markets, control extends to groups of firms in several different industries. These industrial groups are really conglomerates.

In Korea, for example, the 10 largest conglomerates control roughly two-thirds of the corporate economy. These *chaebols* are also strong exporters: names like Samsung and Hyundai are recognized worldwide. Conglomerates are also common in Latin America. One of the more successful, the Chilean holding company Quinenco, is a dizzying variety of businesses, including hotels and brewing, mobile telephone services, banking, and the manufacture of copper cable. Widely diversified groups are also common in India. The largest, the Tata Group, spans 80 companies in various industries, including steel, electric power, real estate, telecommunications, and financial services. All of these companies are public, but control rests with the group and ultimately with the Tata family.

The United States had a conglomerate merger wave in the 1960s and 1970s, but diversification didn't deliver value in the longer run, and most of the conglomerates of that era have dissolved. But conglomerates survive and grow in developing economies. Why?

Family ownership is part of the answer. A wealthy family can reduce risk, while maintaining control and expanding the family business into new industries. Of course the family could also diversify by buying shares of other companies. But where financial markets are limited and investor protection is poor, internal diversification can beat out financial diversification. Internal diversification means running an internal capital market, but if a country's financial markets and institutions are substandard, an internal capital market may not be so bad after all.

"Substandard" does not just mean lack of scale or trading activity. It may mean government regulations limiting access to bank financing or requiring government approval before bonds or shares are issued.<sup>20</sup> It may mean poor information. If accounting standards are loose and companies are secretive, monitoring by outside investors becomes especially costly and difficult, and agency costs proliferate.

Internal diversification may also be the only practical way to grow. You can't be big and focused in a small, closed economy, because the scale of one-industry companies is limited by the local market. Size can be an advantage if larger companies have easier access to international financial markets. This is important if local financial markets are inefficient.

Size also means political power, which is especially important in managed economies or in countries where the government economic policy is unpredictable. In Korea, for example, the government has controlled access to bank loans. Bank lending has been directed to government-approved uses. The Korean conglomerate chaebols have usually been first in line.

Many widely diversified business groups have been efficient and successful, particularly in countries like Korea that have grown rapidly. But there is also a dark side. Sometimes conglomerate business groups *tunnel* resources between the group companies at

<sup>&</sup>lt;sup>20</sup> In the United States, the SEC does *not* have the power to deny share issues. Its mandate is only to assure that investors are given adequate information.

the expense of outside minority shareholders. Group company X can transfer value to Y by lending it money at a low interest rate, buying some of Y's output at high prices or selling X's assets to Y at low prices. Bertrand, Mehta, and Mullainathan found evidence of widespread tunneling in India.<sup>21</sup> Johnson, Boone, Breach, and Friedman note that the temptation to tunnel is stronger during a recession or financial crisis and argue that tunneling—and poor corporate governance in general—contributed to the Asian crisis of 1997–1998.<sup>22</sup>

# 33-3 Do These Differences Matter?

A good financial system appears to accelerate economic growth. <sup>23</sup> In fact, at least rudimentary finance may be necessary for any growth at all. Raghu Rajan and Luigi Zingales give the example of a bamboo-stool maker in Bangladesh, who needed 22 cents to buy the raw materials for each stool. Unfortunately, she did not have the 22 cents and had to borrow it from middlemen. She was forced to sell the stools back to the lenders in repayment for the loans and was left with only 2 cents' profit. Because of a lack of finance, she was never able to break out of this cycle of poverty. In contrast, they give the example of Kevin Taweel and Jim Ellis, two Stanford MBAs, who were able to purchase their own business soon after graduating. They had insufficient capital of their own but were able to raise seed funding to search for the right acquisition, and then additional funding to complete it. <sup>24</sup> Taweel and Ellis were the beneficiaries of a modern financial system, including a sophisticated private-equity market.

It is easy to understand the connection between financial and economic development by considering a very simple financial decision. Suppose you need to decide whether to extend credit to a small business. If you are in the United States, you can almost instantaneously pull down a Dun and Bradstreet report via the Internet on any one of several million businesses. This report will show the company's financial statements, the average size of its bank balances, and whether it pays its bills on time. You will also receive an overall credit score for the company. Such widely available credit information reduces the cost of lending and increases the availability of credit. It also means that no one lender has a monopoly of information, which increases competition among suppliers of credit and reduces the costs to borrowers. In contrast, good credit information is not readily available in most developing economies, and lenders to small businesses are both few and expensive.

Of course finance matters. But does the nature of a country's financial system matter as long as it is advanced? Does it matter whether a developed country has a market-based or bank-based system? Both types are effective, but each has potential advantages.

#### **Risk and Short-termism**

If you look back to Figure 33.2, you will see that in different countries the amount of risk borne by households in their financial portfolios varies significantly. At one extreme is

<sup>&</sup>lt;sup>21</sup> M. Bertrand, P. Mehta, and S. Mullainathan, "Ferreting out Tunneling: An Application to Indian Business Groups," *Quarterly Journal of Economics* 117 (February 2002), pp. 121–148.

<sup>&</sup>lt;sup>22</sup> S. Johnson, P. Boone, A. Breach, and E. Friedman, "Corporate Governance in the Asian Financial Crisis," *Journal of Financial Economics* 58 (October/November 2000), pp. 141–186.

<sup>&</sup>lt;sup>23</sup> R. Levine, "Financial Development and Economic Growth: Views and Agenda," *Journal of Economic Literature* 35 (1997), pp. 688–726; and R. Rajan and L. Zingales, "Financial Dependence and Growth," *American Economic Review* 88 (1998), pp. 559–586.

<sup>&</sup>lt;sup>24</sup> R. Rajan and L. Zingales, Saving Capitalism from the Capitalists (New York: Crown Business, 2003), pp. 4-8.

Japan, where households hold over half of their financial assets in bank accounts. Much of the remainder is in insurance and pension funds, which in Japan mainly make fixed payments and are not linked to the stock market. Only a small proportion of household portfolios are linked to the stock market and to the business risk of Japanese corporations. European households also have relatively little direct exposure to the risks of the corporate sector. At the other extreme, households in the United States have large investments in shares and mutual funds.

Of course someone has to bear business risks. The risks that are not borne directly by households are passed on to banks and other financial institutions, and finally to the government. In most countries, the government guarantees bank deposits either explicitly or implicitly. If the banks get into trouble, the government steps in and society as a whole bears the burden. This is what happened in the crisis of 2007–2009.<sup>25</sup>

Some people argue that firms are free to "invest for the long run" in bank-based systems where financial institutions absorb business risks and few individuals invest directly in the stock market. The close ties of Japanese and German companies to banks are supposed to prevent the dreaded disease of *short-termism*. Firms in the United States and United Kingdom are supposedly held captive by shareholders' demands for quick payoffs and therefore have to deliver quick earnings growth at the expense of long-term competitive advantage. Many found this argument persuasive in the late 1980s when the Japanese and German economies were especially robust.<sup>26</sup> But market-based economies surged ahead in the 1990s, and views have changed accordingly.

#### **Growth Industries and Declining Industries**

Market-based systems seem to be particularly successful in developing brand-new industries. For example, railways were first developed in the United Kingdom in the nineteenth century, financed largely through the London Stock Exchange. In the twentieth century, the United States led development of mass production in the automobile industry, even though the automobile was invented in Germany. The commercial aircraft industry was also mainly developed in the United States, as was the computer industry after World War II, and more recently the biotechnology and Internet industries. On the other hand, Germany and Japan, two countries with bank-based financial systems, have sustained their competitive advantages in established industries, such as automobiles.

Why are financial markets better at fostering innovative industries?<sup>28</sup> When new products or processes are discovered, there is a wide diversity of opinion about the prospects for a new industry and the best way to develop it. Financial markets accommodate this diversity, allowing young, ambitious companies to search out like-minded investors to fund their growth. This is less likely when financing has to come through a few major banks.

<sup>&</sup>lt;sup>25</sup> Another possibility is that banks that take a long-run view and are not subject to intense competition can smooth risk across different generations by building up reserves when returns are high and running them down when returns are low. Competition from financial markets prevents this type of intergenerational risk sharing. Generations with high returns want to receive their full returns and will not be willing to have reserves built up. See F. Allen and D. Gale, "Financial Markets, Intermediaries, and Intertemporal Smoothing," *Journal of Political Economy* 105 (June 1997), pp. 523–546.

<sup>&</sup>lt;sup>26</sup> See M. Porter, "Capital Disadvantage: America's Failing Capital Investment System," *Harvard Business Review*, September/ October 1992, pp. 65–82.

<sup>&</sup>lt;sup>27</sup> There are counterexamples, such as the development of the chemical industry on a large scale in nineteenth-century Germany.

<sup>&</sup>lt;sup>28</sup> See F. Allen and D. Gale, "Diversity of Opinion and the Financing of New Technologies," *Journal of Financial Intermediation* 8 (April 1999), pp. 68–89.

Market-based systems also seem to be more effective at forcing companies in declining industries to shrink and release capital.<sup>29</sup> When a company cannot earn its cost of capital and further growth would destroy value, stock price drops, and the drop sends a clear negative signal. But in bank-based financial systems, uneconomic firms are often bailed out. When Mazda faltered in the 1970s, Sumitomo Bank guaranteed Mazda's debts and orchestrated a rescue, in part by exhorting employees within its keiretsu to purchase Mazda cars. Sumitomo Bank had an incentive to undertake the rescue, because it knew that it would keep Mazda's business when it recovered. In the 1990s, Japanese banks continued to lend to "zombie" firms long after it became clear that prospects for their recovery were hopeless. For example, a coalition of banks kept the Japanese retailer Sogo afloat for years, despite clear evidence of insolvency. When Sogo finally failed in 2000, its debts had accumulated to ¥1.9 trillion.<sup>30</sup>

#### **Transparency and Governance**

Despite all the advantages of market-based systems, serious accidents happen. Think of the many sudden, costly corporate meltdowns after the telecom and dot.com boom of the late 1990s. In the last chapter we noted the \$100 billion bankruptcy of WorldCom (now reorganized as MCI). But the most notorious meltdown was Enron, which failed in late 2001.

Enron started as a gas pipeline company, but expanded rapidly into trading energy and commodities, and made large investments in electricity generation, broadband communications, and water companies. By the end of 2000, its total stock market value was about \$60 billion. A year later, it was bankrupt. But that \$60 billion wasn't really lost when Enron failed, because most of that value wasn't there in the first place. By late 2001, Enron was in many ways an empty shell. Its stock price was supported more by investors' enthusiasm than by profitable operating businesses. The company had also accumulated large hidden debts. For example, Enron borrowed aggressively through *special-purpose entities* (SPEs). The SPE debts were not reported on its balance sheet, even though many of the SPEs did not meet the requirements for off-balance-sheet accounting. (The fall of Enron also brought down its accounting firm, Arthur Andersen.)

The bad news started to leak out in the last months of 2001. In October, Enron announced a \$1 billion write-down of its water and broadband businesses. In November, it consolidated its SPEs retroactively, which increased the debt on its balance sheet by \$658 million and reduced past earnings by \$591 million.<sup>31</sup> Its public debt was downgraded to junk ratings on November 28 and on December 2 it filed for bankruptcy.

Enron demonstrated the importance of *transparency* in market-based financial systems. If a firm is transparent to outside investors—if the investors can see its true profitability and prospects—then problems will show up right away in a falling stock price. That in turn generates extra scrutiny from security analysts, bond rating agencies, and investors. It may also lead to a takeover.

With transparency, corporate troubles generally lead to corrective action. But the top management of a troubled opaque company may be able to maintain its stock price and postpone the discipline of the market. Market discipline caught up with Enron only a month or two before bankruptcy.

<sup>&</sup>lt;sup>29</sup> See R. Rajan and L. Zingales, "Banks and Markets: The Changing Character of European Finance," in V. Gaspar, P. Hartmann, O. Sleijpen (eds.), *The Transformation of the European Financial System*, Second ECB Central Banking Conference, October 2002, Frankfurt, Germany, (Frankfurt: European Central Bank, 2003), pp. 123–167.

<sup>&</sup>lt;sup>30</sup> T. Hoshi and A. Kashyap, "Japan's Financial Crisis and Economic Stagnation," *Journal of Economic Perspectives* 18 (Winter 2004), pp. 3–26.

<sup>&</sup>lt;sup>31</sup> Enron faced many further financial problems. For example, it told investors that it had hedged business risks in SPE transactions, but failed to say that many of the SPEs were backed up by pledges of Enron shares. When Enron's stock price fell, the hedges unraveled. See P. Healy and K. Palepu, "The Fall of Enron," *Journal of Economic Perspectives* 17 (Spring 2003), pp. 3–26.

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Opaqueness is not so dangerous in a bank-based system. Firms will have long-standing relationships with banks, which can monitor the firm closely and urge it to staunch losses or to cancel excessively risky strategies. But no financial system can avoid occasional corporate meltdowns.

Parmalat, the Italian food company, appeared to be a solidly profitable firm with good growth prospects. It had expanded around the world, and by 2003 was operating in 30 countries with 36,000 employees. It reported about €2 billion in debt but also claimed to hold large portfolios of cash and short-term liquid securities. But doubts about the company's financial strength began to accumulate. On December 19, 2003, it was revealed that a €3.9 billion bank deposit reported by Parmalat had never existed. Parmalat's stock price fell by 80% in two weeks, and it was placed in administration (the Italian bankruptcy process) on December 24. Investors learned later that Parmalat's true debts exceeded €14 billion, that additional billions of euros of asset value had disappeared into a black hole, and that its sales and earnings had been overstated.

It's nice to dream of a financial system that would completely protect investors against nasty surprises like Enron and Parmalat. Complete protection of investors is impossible, however. In fact, complete protection would be unwise and inefficient even if it were feasible. Why? Because outside investors cannot know everything that managers are doing or why they are doing it. Laws and regulations can specify what managers can't do but can't tell them what they should do. Therefore managers have to be given discretion to act in response to unanticipated problems and opportunities.

Once managers have discretion, they will consider their self-interest as well as investors' interests. Agency problems are inevitable. The best a financial system can do is to protect investors reasonably well and to try to keep managers' and investors' interests congruent. We have discussed agency problems at several points in this book, but it won't hurt to reiterate the mechanisms that keep these problems under control:

- Laws and regulations that protect outside investors from self-dealing by insiders.
- Disclosure requirements and accounting standards that keep public firms reasonably transparent.
- Monitoring by banks and other financial intermediaries.
- Monitoring by boards of directors.
- The threat of takeover (although takeovers are very rare in some countries).
- Compensation tied to earnings and stock price.

In this chapter we have stressed the importance of investor protection for the development of financial markets. But don't assume that more protection for investors is always a good thing. A corporation is a kind of partnership between outside investors and the managers and employees who operate the firm. The managers and employees are investors too: they commit human capital instead of financial capital. A successful firm requires co-investment of human and financial capital. If you give the financial capital too much power, the human capital won't show up-or if it does show up, it won't be properly motivated.32

<sup>32</sup> It is difficult to observe effort and the value of human capital, and therefore difficult to set up compensation schemes that reward effort and human capital appropriately. Thus it can be better to allow managers some leeway to act in their own interests to preserve their incentives. Stockholders can provide this leeway by relaxing some of their rights and committing not to interfere if managers and employees capture private benefits when the firm is successful. How to commit? One way is to take the firm public. Direct intervention by public stockholders in the operation of the firm is difficult and therefore rare. See M. Burkart, D. Gromb, and F. Panunzi, "Large Shareholders, Monitoring and the Value of the Firm," Quarterly Journal of Economics 112 (1997), pp. 693-728; S. C. Myers, "Outside Equity," Journal of Finance 55 (June 2000), pp. 1005-1037; and S. C. Myers, "Financial Architecture," European Financial Management 5 (July 1999), pp. 133-142.

It's customary to distinguish market-based and bank-based financial systems. The United States has a market-based system, because it has large stock and bond markets. The United Kingdom also has a market-based system: its bond market is less important, but the U.K. stock market still plays a crucial role in corporate finance and governance. Germany and Japan have bank-based systems, because most debt financing comes from banks and these countries' stock markets are less important.

Of course the simple distinction between banks and markets is far from the end of the story. For example:

- U.K. households tend to hold shares indirectly, through equity-linked insurance and pensions. Direct investment in shares is much less common than in the United States.
- Japanese households bear relatively little equity risk. Most of their savings goes into bank accounts and insurance policies.
- In Europe, large blocks of a company's stock are often held by other corporations.
- In Japan, companies rely heavily on trade-credit financing, that is, on accounts payable to other companies.

In Japan and Germany, the role of banks goes beyond just lending money. The largest Japanese banks are the hubs of *keiretsus*, large, cooperative groups of firms. Each keiretsu is held together by long-standing ties to the main bank and by extensive cross-shareholdings within group companies. German banks also have traditionally had long-standing ties to their corporate customers (the *hausbank* system). The banks end up voting shares held for other investors.

Ownership of large, public corporations in the United States and United Kingdom is pretty simple: there is one class of shares, which trade actively, and ownership is dispersed. In Japan, there is usually one class of shares, but a significant fraction of the shares is locked up in cross-shareholdings within keiretsus, although this fraction has decreased since the mid-1990s. Japanese stockholders have little say in corporate governance. European stockholders likewise have little say, given the concentration of ownership by banks and other corporations.

In the United States and United Kingdom, the law puts shareholders' interests first. Managers and boards of directors have a fiduciary duty to shareholders. But in Germany, the management board, which runs the business, answers to a supervisory board, which represents all employees as well as investors. The company as a whole is supposed to come first.

Outside the largest developed economies, a different pattern of ownership emerges. Groups of companies are controlled by families and sometimes by the state. Control is maintained by cross-shareholdings, pyramids, and issues of shares with extra voting rights to the controlling investors.

Wealthy families control large fractions of the corporate sector in many developing economies. These family groups operate as conglomerates. Conglomerates are a declining species in the United States, but a conglomerate's internal capital market can make sense where financial markets and institutions are not well-developed. The conglomerates' scale and scope may also provide political power, which can add value in countries where the government tries to manage the economy or where laws and regulations are enforced erratically.

Concentrated family control can be a good thing, if it is used to force managers to run a tight ship and focus on value-maximizing investments. But concentration of control can also open the door to tunneling of resources out of the firm at the expense of minority investors.

Protection for outside investors varies greatly around the world. Where protection is good, market-based systems flourish. These systems have certain advantages: they appear to foster innovation and to encourage the release of capital from declining industries. On the other hand, market-based systems may end up investing too much in trendy innovations, as the collapse of the dot.com and telecom boom has illustrated. Bank-based systems may be better-suited to established industries. These systems also help shield individuals from direct exposure to stock market risk.

Market-based systems work only when public firms are reasonably transparent to investors. When they are opaque, like Enron, occasional meltdowns can be expected. Bank-based financial



systems may have an advantage in monitoring and controlling opaque firms. The banks have long-standing relationships with their corporate customers, and therefore have better information than outside investors.

# FURTHER READING

The following studies survey or compare financial systems:

- F. Allen and D. Gale, Comparing Financial Systems (Cambridge, MA: MIT Press, 2000).
- T. Hoshi and A. Kashyap, *Corporate Financing and Governance in Japan: The Road to the Future* (Cambridge, MA: MIT Press, 2001).
- J. P. Krahnen and R. H. Schmidt (eds.), *The German Financial System* (Oxford: Oxford University Press, 2004).
- R. La Porta, F. Lopez-de-Silanes, and A. Shleifer, "Corporate Ownership around the World," *Journal of Finance* 54 (April 1999), pp. 471–517.

For excellent discussions of corporate governance, see:

- M. Becht, P. Bolton, and A. Röell, "Corporate Governance and Control" in G. Constantinides, M. Harris, and R. Stulz (eds.), *Handbook of the Economics of Finance* (Amsterdam: North-Holland, 2003), pp. 1–109.
- R. Morck and B. Yeung, "Never Waste a Good Crisis: An Historical Perspective on Comparative Corporate Governance," *Review of Financial Economics* 1 (November 2009), forthcoming.
- A. Shleifer and R. W. Vishny, "A Survey of Corporate Governance," *Journal of Finance* 52 (June 1997), pp. 737–783.

For discussions of the role of law, politics, and finance see:

- R. LaPorta, F. Lopez-de-Silanes, and A. Shleifer, "The Economic Consequences of Legal Origins," *Journal of Economic Literature* 46 (2008), pp. 285–332.
- R. Rajan and L. Zingales, *Saving Capitalism from the Capitalists* (New York: Crown Business, 2003).

For the evidence on why finance matters for growth, see:

- R. Levine, "Financial Development and Economic Growth: Views and Agenda," *Journal of Economic Literature* 35 (1997), pp. 688–726.
- R. Rajan and L. Zingales, "Financial Dependence and Growth," *American Economic Review* 88 (June 1998), pp. 559–586.

Finally, if you'd like to read about corporate governance gone wrong . . .

- P. Healy and K. Palepu, "The Fall of Enron," *Journal of Economic Perspectives* 17 (Spring 2003), pp. 3–26.
- S. Johnson, R. La Porta, F. Lopez-de-Silanes, and A. Shleifer, "Tunneling," *American Economic Review* 90 (May 2000), pp. 22–27.



Select problems are available in McGraw-Hill Connect. Please see the preface for more information.

#### **PROBLEM SETS**

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#### **BASIC**

- 1. Which countries have:
  - a. The largest stock markets?
  - b. The largest bond markets?

- c. The smallest direct holdings of shares by individual investors?
- d. The largest holdings of bank deposits by individual investors?
- e. The largest holdings of shares by other corporations?
- f. The largest use of trade credit for financing?

In each case, define "largest" or "smallest" as total value relative to GDP.

- 2. What is a keiretsu? Give a brief description.
- **3.** Do Japanese investors play an important role in corporate financial policy and governance? If not, could they?
- **4.** German banks often control a large fraction of the shareholder votes for German businesses. How do they get that voting power?
- **5.** What is meant by the German system of *codetermination?*
- **6.** What is the most common form of ownership of corporations worldwide?
- 7. Suppose that a shareholder can gain effective control of a company with 30% of the shares. Explain how a shareholder might gain control of company Z by setting up a holding company X² that holds shares in a second holding company X, which in turn holds shares in Z.
- **8.** Why may market-based financial systems be better in supporting innovation and in releasing capital from declining industries?
- **9.** What is tunneling? Why does the threat of tunneling impede the development of financial markets?

#### **INTERMEDIATE**

- **10.** Agency problems are inevitable. That is, we can never expect managers to give 100% weight to shareholders' interests and none to their own.
  - a. Why not?
  - b. List the mechanisms that are used around the world to keep agency problems under control.
- 11. Banks are not the only financial intermediary from which corporations can obtain financing. What are the other intermediaries? How much financing do they supply, relative to banks, in the United Kingdom, Germany, and Japan?
- **12.** Why is transparency important in a market-based financial system? Why is it less important in a bank-based system?
- **13.** What is meant by dual-class equity? Do you think it should be allowed or outlawed?
- **14.** What kind of industries do you think should thrive in a market-based financial system? In a bank-based system?
- **15.** Why are pyramids common in many countries but not in the United States or United Kingdom?
- **16.** What are some of the advantages and disadvantages of Japanese keiretsus?