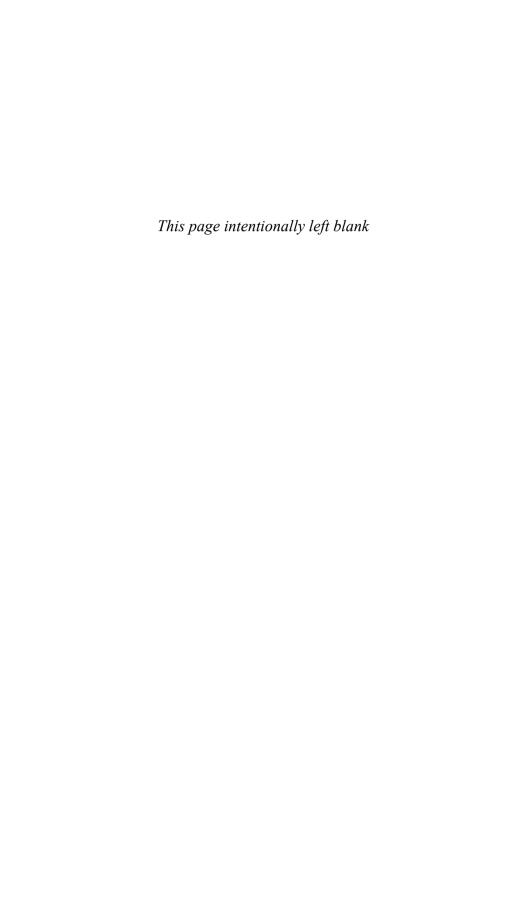
Worldwide Financial Reporting: The Development and Future of Accounting Standards

George J. Benston, et al.

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WORLDWIDE FINANCIAL REPORTING



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George J. Benston Michael Bromwich Robert E. Litan Alfred Wagenhofer



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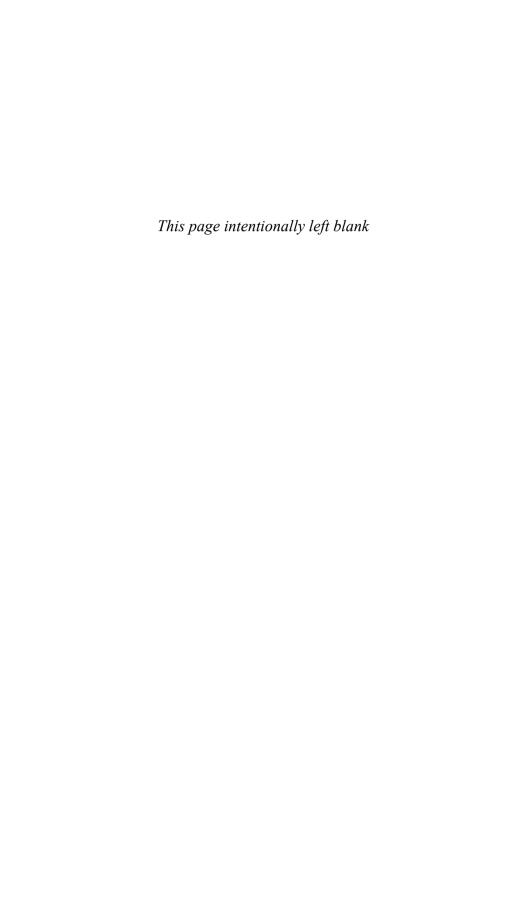
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WORLDWIDE FINANCIAL REPORTING



Changes in Equity Markets in the Major Developed Countries and Overview of the Book

Sound financial reporting is one of those things that is taken for granted—until something goes wrong. And in the last several years, much has gone wrong. In the late 1990s, a breakdown in financial reporting contributed to the Asian financial crisis. Investors poured too much money into the region unwisely, in part because the financial reports of private firms were overly optimistic. And investors took their money out of those countries in a hurry, largely because they couldn't trust the official figures for the levels of foreign exchange reserves held by the central banks. Then, in the first part of this decade, poor or rigged financial reports in the United States, and later in Europe, made news headlines and cost investors billions of dollars when once-prominent companies—Enron, WorldCom, Parmalat and others—were revealed to have cooked their books to show profits that really weren't there.¹

Both sets of events have put a harsh spotlight on the accounting profession, which is supposed to assure investors of the quality of financial reports; some of the financial reporting rules themselves (such as those governing accounting for stock options or financial derivatives); and the way in which standards for reporting and auditing are set throughout the world. Much attention, in particular, has been paid to securing support for a single set of internationally accepted financial reporting standards, those set by the International Accounting Standards Board (IASB). The growing globalization of capital markets is the main argument for a single body of standards, or a single "financial language." As investors increasingly look beyond their borders for places to put their money, they naturally want to be able to compare the performance of companies across countries.

While the desire for such "apples-to-apples" comparisons is understandable, we believe, for reasons spelled out in various parts of this book, that those who want this outcome are likely to be sorely disappointed. Among them are that we doubt that a single set of standards would be a stable outcome, it being more likely the case that the global standards would tend to fragment over time under the weight of accelerating changes in financial instruments and strategies in the private sector. Even if the reporting standard were stable, however, it is even more doubtful that countries would agree to and enforce it with the same degree of vigor as would be applied to a single set of auditing standards. The lack of consistency in enforcement of the reporting rules, by itself, would render any attempt to achieve true apples-to-apples comparability across countries virtually impossible to achieve. And even if the national accounting authorities could reach and implement such an agreement, reasonable alternative methods of accounting for the events, assets, and liabilities that are applicable to individual companies make direct comparisons among companies, at best, imperfect and often not meaningful.

For these reasons, it is our view that despite the increased globalization of capital markets, companies and investors still will have to look to national bodies to set and enforce financial reporting standards for the foreseeable future. That is a central reason why we have written this book: to educate investors about the nature and trends in financial reporting in the major industrialized countries and, in particular, those that are home to the largest capital markets in the world. To put the issues into perspective, we precede the chapters on financial reporting in the United States, the United Kingdom, Germany, the European Union, and Japan with analyses of the usefulness of accounting data and standards for investment decisions. We conclude by contrasting financial standards in these countries, considering the benefits and costs of a single or multiple standards, rules-based versus principles-based standards, and other contemporary issues.

In the remainder of this introductory chapter, we discuss several threshold issues related to financial reporting, beginning with the reasons why investors and countries find equity ownership valuable, and the trends in equity investment around the world that have generated increased interest not only in having a single set of reporting standards worldwide, but also in differences in national reporting rules. We conclude the chapter by outlining the logic of the subsequent chapters of the book.

THE BENEFITS OF EQUITY-STOCK OWNERSHIP DOMESTICALLY AND WORLDWIDE

Equity shares offer individuals and economies considerable benefits. For individuals, they represent investments that can increase substantially in value. Although risky in themselves, put together with other investments equities actually can reduce risk, because their values may increase when other investments lose value.

One of the most important "other investments" is the time and effort individuals put into developing their "human capital"—skills and experience that give individuals the ability to generate income. Many individuals also have a large portion of their wealth invested in personal housing. Investments in equity shares can be useful for diversifying both of these other investments, so that the cash flows people get from their portfolios of human and non-human investments are more predictable and less volatile.

Most people value more predictable and stable cash flows that they can use for consumption and additional investments. (We emphasize "cash flows," because cash and its close equivalents can be used at very low cost to purchase other assets.) Substantial decreases in cash flows are costly, and not only because of the loss of wealth: the shortfall has to be made up with borrowing and/or forced sale of assets, both of which usually are significantly more costly than simply withdrawing money held in a bank or money market account. The same is true of shortfalls made in deferred consumption—of purchases of housing, cars, appliances, vacations and other goods and services, planned education for oneself or one's children, and health maintenance. A shortfall in expected cash flows thus is costly, both monetarily and emotionally.

Increases in cash flows, of course, are highly desired, because they permit individuals to increase their consumption, either currently or in the future. Indeed, this is the driving force behind purchases of lottery tickets, where the expected payout is less than the cost of the ticket. But even unexpected increases in cash flows are somewhat costly. The funds must be invested or otherwise put to use, information must be gathered, and financial advisors may have to be employed who may or may not provide useful information.

Consequently, for all these reasons, most individuals tend to prefer stable and predictable cash flows—which is to say, they are averse to risk. While equity shares can be useful in contributing to rising cash flows, investors must be able to value their shares and determine the extent to which those values might change. This exercise, too, can be costly, particularly if it is difficult for investors to obtain information about how corporations are managed and what returns they might achieve. The less costly it is for investors to get and use this information and the more they believe they can trust its validity, the greater their benefit from owning equity shares. We discuss in detail in the next chapter how and why investors' costs are reduced when they get trustworthy and relevant accounting reports on the financial condition and performance of corporations whose shares they hold or might purchase.

Equity-share investments also greatly benefit economies. The funds companies raise by issuing shares provide entrepreneurs and the managers of established corporations with the resources they require to produce goods and services that enrich a nation and the world. The lower the cost of raising this capital, the more that firms can produce and the lower will

be the cost of generating and delivering their goods and services. Meanwhile, the extent to which the cost of capital can be reduced depends substantially on the efficiency with which equities are purchased and sold. Therefore, both consumers and investors benefit from greater efficiency, higher market liquidity, information transparency, and lower costs of trading and holding equity securities.

THE BENEFITS FROM GLOBAL CAPITAL MARKETS

Ownership of equity shares in corporations that do business in countries other than an investor's own country can provide additional diversification beyond that provided by diversifying investments in home-country firms and other investments (in human capital and real estate). The benefits of this additional source of diversification are especially important for people living in small countries, since their jobs, the value of their homes, and the values of home-country equities are likely to be similarly affected by the same events. Furthermore, investments in foreign corporations can potentially yield greater returns if those firms earn higher returns on their investments.

Companies also benefit when they can sell their securities to investors in other countries. These benefits are likely to be the greatest for corporations in countries that have a less well-developed or less-than-competitive banking system or securities markets. Both companies and investors in the source country benefit when capital can flow efficiently to corporations that promise the best risk-adjusted returns.

TRENDS IN DOMESTIC AND GLOBAL EQUITY MARKETS

Before we begin to describe and assess disclosure rules and practices in key countries around the world, readers should know about some broad trends that have affected and likely will continue to affect equities markets:

- The growth in these markets and the increasing trend toward equity ownership in the United States and in the European Union and, to a lesser extent, in many other parts of the developed world.
- Technological changes that are enhancing global equities markets
- Perhaps most important for the purposes of this study, the increasing globalization—or cross-border integration—of capital markets, and specifically the markets for publicly traded equity capital.

The Growth in the Equities Markets

One of the more noticeable changes in the equities markets is the tremendous growth in their size. This is true for all four major countries whose markets and reporting rules we consider in this study. In the United States, home to the largest capital market in the world, the market value of all publicly traded companies soared from just under \$1.6 trillion in 1990 to more than \$13 trillion by the end of the decade.² Stock prices continued to rise through early 2000, but as of December 2003 had fallen, about 25.4 percent off their peak.³

Market trends in the United Kingdom were similar, with equity capitalization among domestic companies rising from £0.45 billion in 1990 to nearly £1.4 billion in 2003; the latter figure was down by 25 percent from its 1999 peak. Companies from outside the United Kingdom, but listed on the London Exchange, are even more significant. Their total equity capitalization stood at £1.1 billion in 1990 and almost £2 billion in 2003 (with their peak, too, in 1999 at £3.5 billion).

Data on equity capitalization for the German domestic equity market are not available before 2000 (largely due to the reorganization of exchanges in that market, coupled with the reunification of East and West Germany in the 1990s). But, as in the United States and the United Kingdom, the data that do exist show a substantial decline in total market capitalization between 2000 and 2003 (after almost certainly having risen prior to 2000), from 1.56 billion Euro in January 2000 to 0.59 billion Euro in April 2003, when it began to rise again.⁴

Even in Japan, where stock prices have fallen sharply since the bubble burst in the later 1980s, the total market capitalization of companies listed on Japanese exchanges rose through much of the 1990s—from 394 trillion yen in 1994 to a peak of 466 trillion yen in 1999—before declining again by some 50 percent by 2002 to 251.0 trillion yen. At this writing (early 2005), Japanese prices have again risen, so the current total is well above the 2002 low.⁵

Market capitalizations of equities generally rose throughout the 1990s in the United States and much of Europe largely because stock prices also generally increased during this period. In turn, share prices rose because of increased demand for stocks, whether through direct ownership or holdings of mutual funds. This is especially true in the United States, where the share of households investing in stock directly or through mutual funds rose from 19 percent in 1983 to 39 percent in 1992 and to 50 percent in 2002.⁶

Stock ownership has also risen in other countries. The pattern in Canada, for example, looks very much like that of the United States. However, stock ownership in Europe and Japan still lags behind the United States significantly. Moreover, the patterns of ownership over time between Europe and Japan differ significantly. For example, in the United Kingdom the percentage of UK shares owned directly by individuals or through mutual funds (unit trusts) was 26 percent in 1990, declining to about 20 percent in 1998 and falling further to 15 percent in 2002. Indirect investments add still more households, but even here, the shares have fallen, from 32 percent in 1990 to 16 percent in 2002. In Germany, the shares of equity held by individuals have fallen from 17 percent in 1994 to 14 percent in 2002.

In Japan, security companies, banks, and insurance companies dominate share ownership. But although the fraction of households investing in the stock market is substantially below that of the United States, that fraction has increased somewhat remarkably, given the bursting of the share price bubble over a decade ago. Thus, in 2002, shares held by individuals accounted for some 20 percent of total shares outstanding, almost double the 11 percent in the mid-1990s.⁹

Technological Changes in Securities Trading

Corporations can sell securities to the public in a variety of ways, depending on the legal requirements in their countries. If they want those securities to be traded regularly, they must be accepted for listing on a stock exchange. Stock exchanges impose specific requirements for listing. Examples of these requirements include the publication of detailed prospectuses for new issues for which the directors are responsible and that contain past information that must be audited by an independent public accountant (IPA); a minimum percentage of shares that must be publicly held; and rules stating how the corporation is governed. Corporations with publicly traded shares also must conform to the laws of their country that govern securities issues and trading. Companies listed on foreign exchanges are also subject to the law of their home country.

The markets on which equity shares are traded can be classified into three groups, which have evolved over time. The first markets developed when groups of equity holders physically came together to buy and sell securities, either for themselves or for clients. In some markets a single broker specialized in a particular stock or group of stocks and all trades went through that specialist. Other brokers who were members of the exchange (membership of which is limited) offered and bought equity securities through the specialists and sometimes directly (off the floor). This was the situation in the United Kingdom until 1986 and in Japan until 1999; it still is the way the New York Stock Exchange and the German Stock Exchange operate.

The second type of market developed as technology, in the form of computers and trading screens on which bids and offer prices and numbers of shares are displayed, came into use. Dealers in securities used interlinked computers and programs to trade with each other for the benefit of clients. Membership in these markets, such as the NASDAQ in the United States, is more widespread throughout the world than in the specialist markets. These markets grew largely by attracting newer, technology-based companies.

The third market, currently under development, has grown out of the increasingly widespread use of the Internet; it promises perhaps the most revolutionary change of all. Rather than using computers to complete trades manually, the Internet literally allows the computers themselves to complete trades, automatically matching bids and offers. A variety of these Electronic Communications Networks (ECNs)—such as Instinet and

Archipelago in the United States, Stock Exchange Electronic Trading Service (STS) with the London Stock Exchange, and Xetra with the German and Vienna Stock Exchanges—are taking an increasing share of trades from, or have been incorporated as part of, the already established exchanges. ¹⁰ Because ECNs operate with far lower costs than the traditional, manual exchanges (even the second-generation computer-screen exchanges), they have substantially lowered transactions costs to investors [Domowitz and Steil, 2001]. This is a main reason why the New York Stock Exchange acquired Archipelogo and the NASDAQ purchased Instinet in 2005. (Both transactions were still under review by U.S. regulators at the time this chapter was written.)

THE GLOBALIZATION OF FINANCE

The Internet not only has reduced the cost and enhanced the speed of trading, but also, because the Internet itself is global, now allows investors throughout the world to buy and sell securities anywhere around the world. Such trading can take place almost continuously, as securities markets are open somewhere almost all the time. Regulators are uncomfortable with this development, however, and in various countries have attempted to restrict Internet-based cross-border trading. In particular, the U.S. Securities and Exchange Commission (SEC) has ruled that all trades made by a U.S. broker or dealer (all of whom must be registered by the SEC) must conform to U.S. requirements for corporations with securities listed in the United States.

Nonetheless, even without the Internet, financial markets already were well on the way toward becoming "globalized." One way this happened, of course, is the rise over time in gross flows of various kinds of capital—currencies, bank loans, and bond issues—that move across borders (see generally Herring and Litan [1995]). Moreover, many large financial institutions themselves have become increasingly global in their operations, although the acceleration in merger-and-acquisition activity in the financial sector in all major industrialized countries in the 1990s took on a multinational character largely only outside the United States [Group of Ten, 2001]. And last but not least, the accounting profession itself has become global in reach. The "Big Four" accounting firms in the United States (with one of them, KPMG, headquartered in Amsterdam), which are by far the largest in the world, generate about 65 percent of their revenues from locations outside the United States [White, 2001].

Cross-border capital flows certainly are not new; in some ways they were as important, relative to overall economic activity, even before World War I as they are now. But they are fundamentally different in character today, more diversified across industries and relatively more evenly balanced between portfolio investments and direct investment.¹¹

The rise of cross-border capital movements has been as much influenced by national policies as by technology. After World War II, nations

fixed their exchange rates under the Bretton Woods system, anchored to the dollar, which in turn was pegged to the price of gold (at \$35 per ounce). The United States stood ready to convert dollars to gold, while nations throughout the world restricted capital movements to help support the fixed-rate exchange system. This system worked reasonably well for about a quarter of a century—although some nations occasionally changed their exchange rates (almost always through devaluation) when their international payments became too imbalanced—but fixed rates, and with them capital controls, ironically were undermined by the United States, one of the leading architects of Bretton Woods.

In retrospect, fixed rates were doomed when the United States placed a tax on dollar outflows in the 1960s in an effort to support the dollar. Multinational banks, including those headquartered in the United States, responded to the tax by creating dollar-denominated accounts (Eurodollars), leading to rapid growth in dollar-based assets outside the United States. Ultimately, the volume of dollar assets held abroad became so large in relation to the U.S. stock of gold reserves that the U.S. promise under Bretton Woods to exchange its dollars for gold at a fixed price (of \$35 per ounce) lacked credibility. In 1971, the United States formally went off the gold standard, and by 1973 fixed exchange rates were officially scrapped. With fixed rates gone, the case for capital controls weakened, and through the 1970s the United States and other developed countries abandoned them. By the 1990s, a number of emerging market economies followed suit (although the loosening of controls over short-term capital inflows, especially debt, has since been widely attacked in the wake of the Asian financial crisis of 1997-98).

In this book, we concentrate primarily on the issuance and trading of equities, and this part of the financial business, too, has expanded beyond national borders in several respects. Figures 1-1 and 1-2¹² depict annual outflows and inflows of portfolio equity or net purchases of securities in either direction as percentages of gross domestic product (GDP) during the 1990s for three of the major countries reviewed in this study: the United States, Germany, and the United Kingdom. For the most part, the charts show an increasing trend toward greater portfolio capital movements, although with significant year-to-year variation.

Gross purchases of equities are much greater in volume. For example, for the United States alone, gross annual purchases by foreigners of U.S. equities in the year 2000 totaled \$7 trillion. The comparable figure for gross purchases by U.S. residents of foreign securities in that year was \$3.6 trillion. These figures are up by roughly a factor of 10 or more over the last decade [Griever et al., 2001, p. 640].

Another indicator of the growing integration of capital markets, at least among two of the world's major equities markets, is the rising number of cross-listings by companies whose shares are traded on both the New York and London Stock Exchanges, illustrated in Figure 1-3.¹³ Companies that cross-list incur the expense of complying with the rules

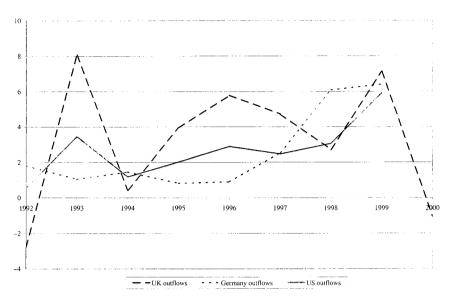


Figure 1-1. Portfolio Equity Outflows as Percent of GDP, 1992–2000. Outflows are the change in Portfolio Equity Assets during the year. *Source:* International Financial Statistics CD-ROM, International Monetary Fund, 2001.

of multiple exchanges, but nonetheless must also believe that benefits, in terms of accessing a wider base of potential investors, more than justify the costs. A substitute for cross-listings, at least for trading in U.S. and European markets, is for a foreign company to trade as a Depository Receipt (DR), a negotiable instrument backed by the shares of the foreign firm, which is typically placed in a trust with a local (U.S. or European) bank. Trading value in American DRs (ADRs) in 2000 exceeded \$1 trillion, or about 17 percent of trading in corresponding local markets. In that same year, 115 DR offerings took place in the United States and Europe, a 32 percent increase over 1999 [Claessens et al., 2002]. Though total ADR value has fallen since 2000, the share volume has increased to over \$34 billion in 2003, a 14 percent increase over 2002.

A third indication of increasing global markets integration is the increased correlation over time in stock returns across markets. Looking at four core markets (United States, United Kingdom, Germany, and France), Goetzmann, Li, and Rouwenhorst found an increasing trend in correlation in such returns from approximately 0.4 in 1990 to nearly 0.6 in 2000. ¹⁴ This is mostly true for markets within developed countries, as the correlation between developed and emerging market country returns, at least through 1998, has been relatively low. However, as the Asian financial crisis demonstrated, volatility in emerging markets at times can certainly infect developed countries' markets [Kaushik and Santicchia, 2000].

Increased cross-border integration, as well as the development of equities markets more broadly, has been highly uneven around the world,

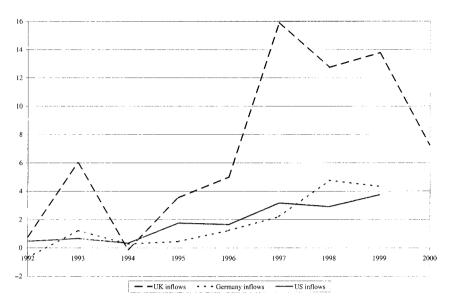


Figure 1-2. Portfolio Equity Inflows as Percent of GDP, 1992–2000. Inflows are the change in Portfolio Equity Liabilities during the year. *Source:* International Financial Statistics CD-ROM, International Monetary Fund, 2001.

however. As of 1998, for example, although emerging market countries accounted for 85 percent of the world's population and 22 percent of its output, their equity markets accounted for less than 9 percent of the world's total market capitalization [Levich, 2001, p. 6]. More broadly, while total capital flows to emerging markets overall rose substantially during the 1990s, reaching almost 30 percent of all equities around the world, they have been concentrated in a relative handful of countries, primarily in Southeast Asia and a few countries in Latin America [see generally World Bank Policy Research Report, 1997]. If attention is paid just to long-term capital flows, or foreign direct investment (FDI), the picture is especially distorted: among all FDI sent to developing countries, the share of FDI going to countries defined by the World Bank to be "low income" fell from 13 percent in 1990 to just 7 percent in 2000 [World Bank, 2001A, p. 39]. Moreover, while FDI flows to developing countries as a whole marched steadily upward during the 1990s, they were interrupted by the Asian crisis and by the end of the decade accounted for roughly the same share of global FDI—20 percent—as they did at the beginning of the 1990s [World Bank, 2001B].

In any event, measures of cross-border integration based solely on the volumes of flows can be misleading. As integrated as they have become, financial markets still remain less integrated across national borders than within countries. One easy measure of this proposition is to compare portfolio compositions of domestic residents or institutions. If equities of foreign and domestic securities were viewed as substitutes, one would

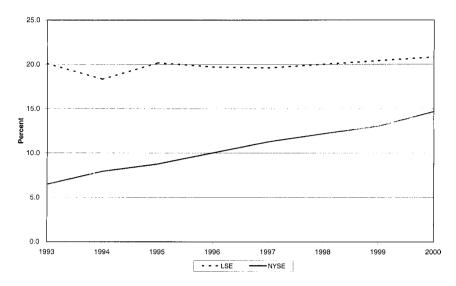


Figure 1-3. International Companies Listed on NYSE and LSE as Proportion of Total Listings, 1993 through 2000. http://www.londonstockexchange.com/market/historic.asp, http://www.nyse.com/pdfs/nonussum010813.pdf, http://www.nyse.com/pdfs/10_HISTORICAL.pdf.

expect equity portfolios to be divided among domestic and foreign stocks in proportion to the relative share valuations of domestic country markets as a share of the worldwide market. Yet the data reveal otherwise. Although the allocations have been increasing modestly over time, investors in the United States, Europe, and Japan devote 10 percent or less of their portfolios to foreign stocks, far below the shares one would expect if investors considered foreign and domestic stocks to be perfect substitutes.¹⁵

Several factors are most likely to account for this "home country bias" on the part of investors: language barriers, currency exchange risk, higher transactions costs on foreign stock purchases, uncertainty about and the costs of filing tax returns that include foreign-sourced dividends and capital gains, and risk aversion on the part of investors to putting their money into companies with which they are not familiar. The latter impediment is noteworthy even inside countries: U.S. investment managers display distinct regional preferences in picking stocks [Coval and Moskowitz, 1999]. Another key factor limiting international diversification of equity portfolios, of course, is the disparity in information about companies in different countries, to which the differences in the quality of corporate disclosure in various countries contribute. We discuss this in greater detail below and in subsequent chapters.

We also still do not live in an age where investors in any country may buy stocks from other countries in their own local currencies during their own normal business hours. The major impediment to that happening now is the settlement and clearance system, which currently works for trades only in the currency of the markets in which stocks are listed and traded. That is why the DR was developed: to allow American investors to buy shares of foreign stock in U.S. markets in U.S. dollars. Equities markets will become truly global and DRs unnecessary when the settlement and clearing systems allow investors to pick and choose the time and currency in which they want to execute their trades of stocks from any country. Of course, when that day arrives—or, most likely, well before it—regulators will have to confront and surmount a series of cross-border policy challenges, including the applicability of insider trading laws, stockholder rights, margin rules, tax compliance, and reporting of trades in different markets [Blume, 2002].

Given all that has happened in the world economy in recent years, from the Mexican and Asian financial crises in the 1990s to the global economic downturn in 2000-01, accentuated by the demonstrations against globalization each time some international body, such as the International Monetary Fund, World Bank, or Group of Seven meets, it is useful to ask whether more cross-border trading and listing of stocks across national borders is necessarily a good thing. The weight of the evidence, which is positive, is clearest for foreign direct investment, which transfers not only resources but also skills and technology to recipient countries. ¹⁶ But there is also a strong case to be made for encouraging further two-way movement of portfolio equity, or stocks that typically are held for shorter periods than FDI, which is inherently longer term. Inward portfolio equity helps to add liquidity to local or regional equities markets, and thus enhances the ability of local firms to go public when they are ready. Institutional investors, in particular, can help improve local corporate governance by providing the same kind of monitoring functions of the companies they invest in as they do in developed markets. Outward equity flows, meanwhile, allow local investors to diversify their portfolios and, thus, lower their risks and/or enhance their returns from saving. Further cross-border integration of financial markets, equity markets in particular, therefore remains in the economic interest of all countries and their citizens throughout the world.

IMPLICATIONS FOR INFORMATION DISCLOSURE

The forces rocking the equities markets around the world have several important implications for corporate disclosure. As equities play a greater role in individual and institutional saving, reliable and timely disclosure of relevant and reliable information becomes increasingly important. This is less true, however, to the extent that individuals invest in markets through index funds. In these cases, timely information is unnecessary, except to the extent that its disclosure is required for listing and other regulatory purposes. However, reliable information still is desirable, particularly when reliability is based on audits by IPAs that act to prevent or mitigate misuse of corporate resources, because corporate officers and insiders fear disclosure of their misdeeds.

Meanwhile, although technical developments in equities markets have lowered the cost to individuals and institutions of trading equities and bonds in stock exchanges in many countries, this change has not been greeted with equanimity by the regulatory authorities. From their point of view, globalization diminishes their power to regulate securities dealings by residents of their countries. Worldwide stock trading also has brought to public and regulatory attention the diversity of rules and practices that govern the preparation and presentation of financial data and other information that are useful to investors.

Does this mean, therefore, that the world must move toward common disclosure and enforcement standards? Certainly not, if one looks to the exchanges as being the arbiters of the rules. As long as there are major national exchanges, it is only natural to expect that the exchanges will compete for business on both price and regulatory dimensions. For this reason alone, any proposals (discussed later in this book) that might give greater authority over disclosure matters to exchanges cannot be expected to produce harmonized disclosure standards. To the contrary, we would expect competition in standards and/or disclosure to be the order of the day if responsibilities in this area were eventually given to the exchanges.

Perhaps surprising to some, we hold the same view with respect to disclosure regulation by national or international bodies. For reasons discussed at the outset of this chapter and later in this book, we do not believe that harmonized rules—which the authorities currently feel committed to—are either desirable (because they are likely to lag behind market developments by substantial margins) or are a stable outcome (because national bodies are likely to depart from international norms in the meantime).

OVERVIEW OF THE REST OF THE BOOK

But all of this is to come. In the next chapter, we begin our analysis explaining why and to what extent financial accounting statements are useful and necessary for most investors (those who do not invest through index funds). We argue that the current move to fair value accounting by some standard-setters is not desirable because the resulting numbers are not trustworthy if there are no active markets, and they cannot be audited by IPAs. Financial reports are useful only to the extent they are governed by some standards. Chapter 3 explains the roles and usefulness of both accounting and auditing standards and discusses who would be best equipped to set these standards.

Chapters 4 through 8 then discuss corporate disclosure regimes in the major industrialized countries, beginning with a brief look at their history and then their present regulatory regimes. We review financial disclosure required by listed and unlisted companies, accounting standards, investor protection, corporate governance, auditing, and enforcement. Based on these reviews, we discuss shortcomings and current issues in these

countries. We begin our country analyses with the United States (Chapter 4) and proceed through the major European capital markets (the United Kingdom in Chapter 5, Germany in Chapter 6). We then consider the ever-increasing influence of the European Union for financial disclosure (Chapter 7) and conclude with a discussion of disclosure in Japan (Chapter 8). Overall, we find that all countries we review have adapted their disclosure regimes over time to deal with pressures from the globalization of capital markets, but also in response to accounting scandals. Particularly, the European Union, Germany, and Japan have introduced regimes that seem to correspond to those of the United States and the United Kingdom.

Chapter 9 compares and assesses these different regimes. We find evidence that diversity in financial disclosure regimes continues to exist, even though the reviewed countries have been following a more common approach recently. This observation leads to our pessimistic view of current efforts to institutionalize a global accounting standard. In Chapter 10 we develop further the important current issues of global versus competitive accounting standards and argue for constrained competition in standards. We also discuss the effect of the Internet on access to financial information and problems of enforcement of accounting and auditing standards. We conclude in Chapter 11 by discussing the validity of current accounting theories, while highlighting some important issues in corporate disclosure that remain to be resolved.

Why and How Audited Financial Accounting Statements Are Useful

Financial information about corporations—or, indeed, about enterprises generally—is useful to many different types of people associated with those organizations. These people include investors, creditors, customers, suppliers, managers and other employees, regulators, and government officials. Because their requirements differ and because preparers of financial statements generally have incentives to serve them all to some degree, the numbers presented in financial statements necessarily are of limited, but often of substantial, value to any one group of users. Although we concentrate in this study on the needs of investors in publicly traded corporations (as do many standard setters when they explicitly give priority to informed investors), it is important to recognize that the rules governing the data presented in the statements are meant to serve the requirements of other users as well. These rules are referred to as generally accepted accounting principles (GAAP), which are coupled with generally accepted auditing standards (GAAS). When the standards are referred to without qualification (GAAP rather than, for example, U.K. GAAP), we mean them to be generic concepts. We also recognize that financial disclosure is part of the greater picture of corporate governance mechanisms of corporations.

Investors, whether present or prospective, generally benefit from learning about how their investments have been and might be used by the managers of their companies. One source of such information is financial reports that managers render to their boards of directors and shareholders. These statements are the principal formal means by which managers convey how they have managed the enterprise's resources over a period,

usually no longer than a year, and the resultant financial condition of the enterprise at the end of a period, as determined by their accounting records. Prospective investors realize that once they have committed their funds to a corporation by purchasing new shares directly or from an existing shareholder, they usually have little control over how the corporation is managed. Non-controlling shareholders, in particular, have reason for concern. Consequently, they usually are interested in how those over whom they have no control have used corporate resources, and the extent to which these controlling persons (including senior managers) have conflicts of interest that might result in costs being imposed on the non-controlling shareholders. Financial reports also help to motivate managers to operate their corporations in the interest of shareholders. Reporting in these areas is called the "stewardship" function of accounting.

In addition to a report of stewardship, investors would want data that help them determine the present and possible future economic value of their investments. If the corporation's shares are actively traded in a share market, shareholders can obtain unbiased estimates of the economic value of their investments from share prices. But these prices are based, in part, on the information provided in financial reports. If this information were not relevant and reliable, its receipt would not change the value given to shares or provide investors with insights that they want. Hence, prospective investors might have to incur costs to obtain information elsewhere or discount the amount they were willing to pay for the shares, using the information currently available to them. This would make the shares worth less to them. Thus, present shareholders, including those who can exercise some control over the corporation, also benefit from their managers providing potential investors with financial reports that the investors find trustworthy.

Creditors must determine the likelihood that they will be repaid if they advance funds to the enterprise. They also are well advised to monitor how the funds are being used, that the conditions imposed by loan covenants have been satisfied, and the extent to which the borrowers' ability to repay debt as promised has changed. Suppliers to the corporation want to be paid for their goods, a likelihood about which financial statements can provide useful information. Customers who purchase products that require replacement or servicing must determine whether the vendor is likely to continue in business. Thus, suppliers' and customers' interests are similar to those of creditors: they want assurance that their contractual relationships with enterprises will be fulfilled as promised. Consequently, they tend to be concerned only with the possibilities that the enterprise will not be able to repay its debts or honor its obligations. Because this ability is affected primarily by the enterprise's present and possible future losses rather than by increases in economic value, creditors and suppliers generally favor conservative accounting rules, or those where all expected losses are recorded and gains are delayed until they are almost certain. They also usually want statements of cash flows, and current asset market or (in situations of financial distress) current liquidation values.

Employees often find financial information useful for determining the extent to which their employer has prospered and the possibility that they might lose their jobs, or get a promotion or pay raise. Managers' and other employees' bonuses and other rewards often are partially based on the financial performance of their firms, as measured by financial accounting data reported in financial statements. Thus, their concerns are similar to those of investors, except that the bulk of their wealth (human and financial capital, particularly for senior managers) tends to be tied to their company. Unlike investors, they rarely can hold a portfolio of investments that is sufficiently diversified to offset potential losses with gains, except for very wealthy top managers. They also may have been compensated with share options that could become worthless (or considerably less valuable) if their corporation's share prices decline. Therefore, they are concerned with the impact of accounting figures on the share's price performance in the market. For these reasons, employees and senior managers tend to worry about the possibilities that their firm might appear to have performed badly, resulting in the loss of their positions and investments in company share and retirement plans. Furthermore, those senior managers whose bonuses, job security, and prospects are based on financial accounting data, rather than on share prices, have reason to want financial-accounting reports to present numbers that benefit them. For example, they would like the statements to show that they have done at least as well as predicted by share analysts and report net earnings that are sufficient for them to earn bonuses.

The *taxing authorities* of some governments (e.g., Germany and Japan) base tax liabilities on financial statement data. In some other countries (e.g., the United Kingdom and the United States), the tax authorities refer to these data to assess the validity of the numbers reported in tax returns, because both are based on the taxpayer's accounting records. They recognize that company (as well as other) taxpayers would prefer to pay as little in taxes as possible, often to the extent of deliberately understating the amounts on which taxes are based. Consequently, the authorities are concerned about the validity of the numbers presented in financial statements.

Antitrust authorities and competition authorities generally often make their decisions on market performance analyses based on rates of return and market shares constructed from data presented in financial reports. Regulatory authorities (such as the SEC in the United States and the Financial Services Authority in the United Kingdom) are charged with assuring investors that stock markets are "fair" and that the financial reports they receive are unbiased and, if possible, include information that is useful for them or their agents to aid in determining the value and performance of publicly traded equity and debt investments. Public policy towards corporations, especially industry regulation, often is based on the profits or losses corporations report in their financial statements. Government and its agencies have a wide range of interests in this reporting of enterprises' activities; for example, accounts also serve as the basis for national income

and similar statistics. The general public is affected by enterprises in a wide variety of ways, and accounting statements may help provide relevant information.

Thus, although different users of financial statements want somewhat different information for often very different reasons, we believe that they have one interest in common: they want numbers that they can trust.

THE USEFULNESS OF AUDITED FINANCIAL ACCOUNTING DATA TO NON-CONTROLLING INVESTORS

Our primary concern is with the usefulness of audited financial accounting data to non-controlling investors in publicly traded corporations. By virtue of their positions, controlling shareholders usually can obtain whatever information they demand; hence, we are not concerned with them, other than how they may affect information supplied to others. Creditors, suppliers, customers, and employees often can request any information that they might find useful, depending on their importance to the corporation, or they can decline to deal with the corporation or seek to charge enough for their products or services to compensate them for the lack of information.¹ (As we note earlier, corporations have strong incentives to provide information that those who deal with them would find useful.)

Non-controlling shareholders have a strong interest in the trustworthiness of financial numbers for at least three reasons: (1) stewardship (motivating, evaluating, and rewarding corporate officers and reducing the cost of potential conflicts of interests, misappropriation of resources, and fraud by those in control); (2) increasing share value for all investors; and (3) maximizing the value of their own shares. Financial figures will be trustworthy, in turn, only when they are based on accounting standards that provide figures that faithfully represent what they purport to represent and that can be independently verified.² As we discuss in more detail later, ensuring that figures are reliable is the principal purpose of audits by independent public accountants (IPAs), such as Certified Public Accountants (U.S. and Japan), Chartered Accountants (UK), or Wirtschaftsprüfer (Germany). By their attestations of the validity of the numbers presented, IPAs indicate and provide surety that they have examined the corporate records in a manner that is expected to be sufficient to uncover material misstatements and omissions and that they have conducted an audit that conforms to GAAS.

As for the stewardship function, it is sufficient for the numbers presented to be trustworthy and the audits be designed to uncover and the financial statements to reveal misuse of corporate resources, misstatement of income and expenses, and understatement of liabilities. These numbers should reveal the extent to which managers and controlling shareholders have misappropriated corporate resources and (of greatest importance) thereby give the managers and controlling shareholders a strong incentive to forbear misuse of corporate resources. Incomplete and inadequate

reporting of income, expenses, and liabilities often is not discovered without unrestricted access to corporate books of account. Only an audit, therefore, can verify this information. (GAAS make this process more efficient, as we discuss in the following chapter.) Trustworthy reports of the acquisition, presence, and disposition—if not the value—of costs and revenues and of assets and liabilities is necessary for managerial performance measurement and for decision-making.

However, for the purpose of evaluating managers' performance and for investment decisions, it would be desirable if financial statements also could report the value to investors of their corporation's resources at the beginning and end of an accounting period. Net income or loss for the period, then, would be the difference between the beginning-of-year and endof-year values, adjusted for distributions to and additional investments from shareholders. For these purposes, economic market values for assets and liabilities, rather than historical costs, would be most relevant. Indeed, this is an important motivation for those urging the use of "fair values." This seemingly innocuous but important term is defined by the Financial Accounting Standards Board (FASB) in FAS 140, paragraph 68: "The fair value of an asset (or liability) is the amount at which that asset (or liability) could be bought (or incurred) or sold (or settled) in a current transaction between willing parties, that is, other than in a forced or liquidation sale." Fair values are supposed to serve as a proxy for economic market values in place of historical costs in the accounting standards adopted by the FASB and the International Accounting Standards Board (IASB).

The use of fair values in accounting, though, can and often does require numbers that may not be—indeed, often are *not*—trustworthy. Many fair values, perforce, have to be based on estimates rather than market values. Unfortunately, as we demonstrate next, a financial report based on fair values rarely can be achieved consistent with the requirement that the numbers also be trustworthy—reliable and verifiable.

It often is said that there may be a trade-off between trustworthiness and relevance, but relevant information will be weighted in decision-making to the degree that it is reliable; that is, the degree of belief attached to decision-relevant accounting items will be attenuated by the degree of reliability associated with those items.

Trustworthiness is a stronger objective than reliability, in that financial figures are trustworthy only where they are verified according to well-accepted accounting standards. As paragraph 44 of the FASB's "Statement of Financial Accounting Concepts No. 2: Qualitative Characteristics of Accounting Information" recognizes: "almost everyone agrees that criteria for formally recognizing elements in financial statements call for a minimum level or threshold of reliability of measurement that should be higher than is usually considered necessary for disclosing information outside financial statements."

We are aware that the trustworthiness criteria might mean that some potentially useful information might have to be conveyed outside the financial statements, a topic we address in Chapter 11. We emphasize, though, that the lack of trust may render otherwise useful accounting items valueless. Indeed, trustworthy numbers often are more useful and relevant than fair values that are not based on prices determined from arm's-length market transactions because these are more subject to managerial manipulation than is historical cost. This is particularly the case where fair values are based on managerial estimates. Investors and others who want to estimate the economic market value (other than by simply looking at the market price of its shares) of the enterprise must and can look to other sources of information.

GAAP-based audited results do contain estimates, but these can be regarded as trustworthy insofar as they are based on verifiable empirical evidence. For example, bad-debts provisions follow accepted professional rules for deriving estimates from previous experience. Depreciation is based on standard procedures that incorporate generally accepted professional valuation where allowed, such as specific property valuations taken from active markets. We do not conclude, though, that fair values could not or should not be used, only that they should be used only when they are trustworthy. Indeed, performance measurements and investment decisions require a substantial amount of information that goes beyond trustworthy financial accounting numbers, including current and expected changes in market conditions, competitors' products and performance, the potential value of new products and processes, prospective changes in foreign exchange rates and domestic inflation rates, government policies, employee and customer relations, and the quality of management. Financial accounting numbers presented in audited reports do not provide direct information on these often vital issues and many others. Nevertheless, the numbers that are presented can be particularly useful for investors' decisions because they are trustworthy and relevant, not because they are the sole or even the most important source of information.

INFORMATION REQUIREMENTS AND THE INHERENT LIMITATIONS OF FINANCIAL ACCOUNTING

Concerns about the usefulness of financial statements for investment decisions have increasingly dominated discussions about financial accounting as investments in publicly traded corporate equities and bonds have increased. Financial accounting data are useful but of limited value for this purpose. The inherent limitations must be understood and accepted, or the substantial benefit to investors and others of obtaining trustworthy accounting data might be lost.

Information Required for Investment Decisions

The limits of financial accounting data can easily be demonstrated by considering the information that investors and traders must take into account in order to make well-considered investment decisions. As the

following list should indicate, the kinds of data investors should call for are uncertain and subjective, and thus unlikely to meet any trustworthiness test.

For investors, a corporate share is an asset, and the value of an asset generally is the present value of expected future cash flows. This calculation requires estimates of both the amounts and timing of the cash flows the asset (the corporation) will generate and the probabilities that these will be as predicted. The cash flows are affected by the expected demand for the corporation's products, which requires analysis of the market conditions (the competitive environment, government regulation, and consumer tastes and preferences) in which it operates, at present and in the future. The amounts that the corporation must expend to obtain, enhance, and distribute its products and services must be estimated. Financing and administration costs (among others) also affect expected cash flows. Expected changes in the purchasing power of the monetary unit (inflation and deflation) and in relative prices and exchange rates with other currencies must be taken into account. The present value of the expected cash flows requires determination of a relevant discount rate, one that measures the opportunity cost of investment in the asset compared to alternatives (including consumption) over the time periods of the expected cash flows. The expected cash flows and discount rate necessarily are uncertain. Hence, the cash flows must be converted to certainty equivalents by calculating their expected values at each point in time, or by adjusting the discount rate with a "risk premium." The risk premium is affected by the investor's preference for or aversion to risk and his or her other investments and time preferences.

Financial accounting data cannot possibly provide investors with all the information they require (which we outlined just above) for investment decisions. Rather, accounting data are designed primarily to provide a record of individual assets and liabilities and a measure of changes in shareholders' claims as a result of the operations of the enterprise. Although investors might want these numbers to reflect economic values (which require estimates of the present value of future cash flows), financial accounting data are of limited use for this purpose.

THE INHERENT PROBLEMS IN MEASURING ECONOMIC VALUES

One problem in determining economic values stems from the cost and difficulty—often the impossibility—of measuring the value of assets to an enterprise ("value-in-use") and to investors whose decision criteria differ from that of the enterprise. Value-in-use is the present value of the net cash flows expected from the use of an asset (including its disposal) by the enterprise in combination with other assets and liabilities. The net cash flows from individual assets (or even groups of assets) are difficult to estimate, even subjectively.

Moreover, when assets are used jointly or in common to produce output, their individual present values cannot be determined, because the sum of their marginal contributions to the value of the product necessarily exceeds the actual total amount. For example, consider a manufacturing process where three machines are used sequentially to produce a part that is sold for \$100. The present value of machine 1 equals the cash inflow from sale of the part less the cash outflow from the materials, labor, and so forth used to produce the part, say \$40, or a net of \$60. The net cash flows from using machines 2 and 3 are also \$60, because each is necessary to produce the part. Obviously, the net cash flow generated from producing the part from all three machines is not \$180, but \$60. Hence, the economic values of the machines individually cannot be obtained from a present value calculation, but (perhaps) from the machine's replacement value (assuming that it would be replaced if it were irreparably damaged).

Furthermore, the cash flow estimates are likely to change over time as other enterprise operations, market conditions, and general and specific prices change. Although formal or informal estimates of the present values of assets must be made before they are purchased, these estimates need only indicate that the present value of net cash flows exceeds the cost of the asset or the present value of net cash flows from alternative assets. Furthermore, this analysis (called "capital budgeting") often is costly to implement. Consequently, a formal analysis usually is made sporadically; repeating it for each periodic balance sheet would be very costly. Fixed assets, such as buildings, equipment, and land used for operations, even where there are good markets, provide prime examples of these problems. Even more difficult to estimate are the values of intangible assets produced by a company.

In addition, the value of an enterprise to an investor is almost always greater than the sum of the values of its assets less the sum of its liabilities. That is one of the principal reasons that companies exist. Their owners obtain rents (positive externalities) from the combination of assets and liabilities that represent the company, which increase expected net cash flows above the amounts these assets and liabilities separately or in other combinations would have generated. (If the whole were not worth more than the sum of the parts, the company should be liquidated, in which event the value-in-use would be the net disposal value.)³ An extreme example of this situation is closed-end mutual funds. Most of these funds hold securities that are regularly traded in public markets. Nevertheless, these funds often are quoted at prices that are greater or smaller than the sums of the market prices of their individual assets. The premiums and discounts reflect investors' assessment of the funds' managers, cost structure, and other variables. Thus, for almost all corporations, even if investors and IPAs were willing to accept as trustworthy the managers' economic valuations of assets and liabilities, the amount shown as "shareholders' equity" would not equal the economic value of the enterprise.

However, valid proxies for the economic values (value-in-use) of some individual assets and liabilities can be obtained from market prices. Where the exchange value of assets can be determined from market prices or can be reliably approximated and verified and, consequently, are trustworthy,

the numbers clearly would be more relevant to investors than historical costs, particularly when prices have changed substantially. Market prices represent valid proxies for economic value under three conditions. One is that the value-in-exchange of an asset is greater than its value from further usage, in which event the value-in-exchange less the cost of disposal equals the value-in-use, because the best opportunity is to dispose of the asset. The second is when the company is a going concern that expects to purchase similar assets (e.g., inventory), in which event the market price of equivalent services (plus the cost of acquisition) is the value of its existing comparable assets, because this is the maximum amount the company would be willing to pay for these assets. The third is when the assets have value to the enterprise as temporary or short-maturity investments. In this event, market or possibly fair value is the asset's value-in-use. This is the situation for securities and other financial instruments that are regularly quoted and for which transactions costs can be estimated reliably. Even then, financial instruments might generate synergies within the firm—for example, by improving its risk position and credit rating, which makes their value-in-use greater than their market or fair value. Some financial securities, though, such as specialized (nonstandard) derivatives, do not have market prices and must be valued with an analytical model. In many cases, the values are sensitive to the assumptions required for the model, often resulting in a wide range of "reasonable" values.⁵

With the notable exception of long-term fixed-interest-bearing obligations and inventories, other current assets and liabilities have traditionally been reported at their approximate economic values. Accounts receivable is a close approximation when reduced by an allowance for doubtful accounts that is not understated to deceive regulators or investors or inflated to reduce income taxes with higher bad debt expenses. Although fixed-interest-bearing notes and bonds receivable and payable could reliably be revalued at current applicable interest rates, this adjustment is made inconsistently under most standards, including U.S. GAAP and International Financial Reporting Standards (IFRS), and applies only to financial assets. The international Joint Working Group of Standard Setters (JWG) draft standard on Financial Instruments 2000, though, if adopted, would have liabilities reported at fair values.

Inventories, which often represent a substantial proportion of many companies' current assets, could be valued at their opportunity costs. Purchased inventory that the company expects to replace could be valued at replacement cost, including the cost of transportation and stocking. Manufactured inventory could be valued at the variable cost of manufacture when the company is not manufacturing at capacity, provided that these cost figures can be validated. If the production were at capacity, the inventory would be valued at the selling price less the variable costs required to effect the sale (net sales value). At present, GAAP in all countries use historical cost for inventories, with various assumptions about which goods were used and which remain in inventory (e.g., first-in, first-out; last-in,

first-out; or an average), because historical cost does not recognize the as yet unrealized holding gains on inventory. (We note that this is inconsistent with fair-value accounting for financial assets and liabilities.)

Property, plant, and equipment generally cannot be readily or reliably valued. Some of these assets or similar assets might be traded in efficient markets, especially property from which purchase prices might be obtained. Appraisals by presumably independent experts could be used to estimate fair values for specific assets not actually traded at a given time on existing efficient markets. Such appraisals would be generally based on the market prices of assets actually traded in the market during the financial year or, in some cases, replacement costs, which are often equated to open market value. IFRS and U.K. GAAP permit this revaluation. Present-value estimates also could be used when the expected cash flows and the appropriate risk-adjusted discount rate can be estimated reliably. However, as we discussed earlier, the numbers used for these estimates may be subject to manipulation and substantial error, although some standard setters believe that this is unlikely with professionally provided estimates based on active markets.⁶ In any event, these numbers are unlikely to provide a close measure of value-in-use. Should it later appear that the numbers actually were not trustworthy, the IPA is likely to get sued and/or lose reputation value.

Accounting for mergers and acquisitions under present U.S. GAAP and IFRS provides a good illustration of the use and misuse of fair-value estimates. The total value of an acquired enterprise must be recorded at its fair value to the acquiring corporation, as measured by the market value of its shares given in exchange. Then, fair-value estimates must be determined for the individual assets and liabilities acquired, with the difference between the sum of these values and the amount exchanged for the acquired firm recorded as "goodwill." Many of these individual fair values must be based on estimates because actual market prices are not available. The revalued assets and liabilities of the acquired firm are added to the assets and liabilities of the acquiring firm, which remain recorded at historical costs less depreciation and amortization. Thus, the sum is a mix of old and more up-to-date values, some of which may not be trustworthy. Indeed, a similar situation arises with purchases of almost any asset. Under U.S. GAAP, existing (already purchased) assets cannot be revalued to reflect subsequent increases in fair values. Note, however, that GAAP generally require that decreases in the values of assets must be recorded. This is the "conservative" bias in accounting, which we discuss further in the next chapter. This problem also arises with IFRS but is moderated by allowing the revaluation of property, plant, and equipment. Once this exercise is complete, goodwill should be reexamined to determine the extent to which its economic value has decreased (been impaired).

Finally, most enterprises have very important assets that are not traded and were not purchased but that generate net cash flows that are very difficult to estimate. Many intangible assets fall into this category. For example, the willingness of employees to work harder and more effectively to advance their specific company is a valuable asset. Patents, trademarks, and processes developed by a company often have economic value greatly in excess of the amounts expended to develop them. Good relationships with suppliers and customers are valuable. However, it rarely is possible to determine trustworthy or even reasonably reliable values for these assets.

THE LIKELY MANIPULATION BY MANAGERS OF REPORTED ECONOMIC VALUES

The economic values of many very important assets and liabilities can be obtained only with estimates of net cash flows and discount rates that are not only difficult and costly to estimate but also very difficult or impossible for IPAs to verify or accept as reliable. Managers who want to make it appear as if they had done well in a particular accounting period can readily increase their estimates of cash inflows, decrease their estimates of cash outflows, or decrease the applicable discount rate (as long as net present value is positive). They can easily work backward toward the numbers they want, constructing a rationale for the estimates they make that IPAs would find difficult or impossible to refute. If the cash flows they estimated turn out to be incorrect (as they inevitably will, even if the managers sought only to make unbiased estimates), the managers can argue that conditions have changed (as they inevitably do). They can argue further that they could not reasonably have predicted the changes or that they did correctly forecast a range of outcomes with associated probabilities, but that the outcome was not equal to the mean—the "expected" amount. The lack of trustworthiness led the German legislature to prohibit fair-value measurement as early as the 19th-century *Gründerzeit* after many instances of fraud and speculation. IPAs who lend their reputations to managers who present such estimates of economic values by attesting to their statements are in danger of losing those reputations if it turns out that the values were substantially misstated in light of subsequent events.

Both the FASB and the IASB have put considerable effort into providing extensive guidance on the determination of fair values to restrict managerial discretion. Both have developed a fair-value hierarchy that prefers measurement of fair values by reference to market prices of the same item or similar items and use other valuation techniques only if no such market prices exist. The standard setters also increasingly require the disclosure of assumptions underlying the estimation of fair values. However, there is still much leeway in estimating future cash flows that the extensive guidance cannot address.

TIMELINESS

The preparation of financial statements is not instantaneous. Audits of the numbers presented in the statements take even more time, even if