International Financial Statement Analysis

INTRODUCTION

Trends in global trade, investment, and external finance, documented in Chapter 1, imply that financial managers, vendors, investors, equity research analysts, bankers, and other financial statement users have a growing need to read and analyze nondomestic financial statements. Cross-border financial comparisons are vital when assessing the financial promise and soundness of a foreign direct or portfolio investment. There has been tremendous growth in international capital issuance and trading in recent years due to privatizations, economic growth, relaxation of capital controls, and continued advances in information technology.

The need to use, and therefore understand, nondomestic financial statements has also increased as merger and acquisition activities have become more international. The value of cross-border mergers grew steadily during the 1990s, and this growth shows no signs of abatement.

Finally, as business becomes more global, financial statements become more important than ever as a basis for competitive analysis, credit decisions, business negotiations, and corporate control. Continued reduction in national trade barriers, the emergence of Europe as a unified market, convergence of consumer tastes and preferences, and a growing sophistication of business firms in penetrating nondomestic markets have significantly intensified multinational business competition. All this creates a further need for international financial statement analysis and valuation.

This chapter synthesizes information presented in Chapters 1 through 8. It examines opportunities and challenges encountered in analyzing foreign financial statements, and provides suggestions for the analyst.

CHALLENGES AND OPPORTUNITIES IN CROSS-BORDER ANALYSIS

Cross-border financial analysis involves multiple jurisdictions. An analyst, for example, may have occasion to study a company outside her home country or to compare companies from two or more countries. Unique challenges face those doing international analysis.

Nations vary dramatically in their accounting and auditing practices, disclosure quality, legal and regulatory systems, nature and extent of business risk, and modes of conducting business. This variation means that analytical tools that are effective in one jurisdiction may be less so in another. The analyst often faces daunting challenges in obtaining credible information. In many emerging market economies, financial analyses often have limited reliability.

International financial analysis and valuation are characterized by many contradictions. On the one hand, the rapid pace of harmonization of accounting standards is leading to enhanced comparability of financial information worldwide. However, vast differences in financial reporting practices remain. An examination of international financial reporting standards (IFRS's) issued by the IASB to date suggest that definitions of corporate transparency are not necessarily consistent with the notion of transparency that analysts are accustomed to. To wit, IASB/IFRSB pronouncements focus on the extent of discloure as opposed to disclosures that help reveal the economics of underlying transactions. Restatement of prior year financial statements for first-time adopters of IFRS's are limited to one year thereby complicating trend analysis. And, some standards continue to permit reporting options. As one example, in adjusting their accounts for changing prices, reporting entities are allowed the option of accounting for general price level changes or specific price changes. As Chapter 7 illustrates, the information content of both measurement options are very different. Some analysts question the extent to which greater uniformity in accounting standards will actually result in the provision of comparable information by leading companies in an industry.[1]

As discussed in Chapter 5, companies around the world are disclosing more information voluntarily, and more credible information. At the national level, many countries are striving to improve the availability and quality of information about public companies. Empirical research has validated the benefits of doing so. Specifically, the strength of a country's disclosure system, including discloure requirements, monitoring, and enforcement, is positively associated with market development.[2] Moreover, access to freely available information relevant for financial analysis is growing dramatically with dissemination of company information on the Internet. However, in many countries there continues to be a great gulf between expectations based on these advances and reality. Financial analysts are often frustrated in their attempts to gather information. Also, many governments continue to publish highly suspect information.

Despite the foregoing contradictions, the environment of international financial analysis and valuation are improving, and the overall outlook for the analyst is positive. Globalization of capital markets, advances in information technology, and increasing competition among national governments, stock exchanges, and companies for investors and trading activity continue. Together these forces are creating incentives for companies to voluntarily improve their external financial reporting practices.

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[1] For example, see Hope, Ole-Kristan, "Variations in the Financial Reporting Environment and Earnings Forecasting," *Journal of International Financial Management and Accounting* 15, no. 1 (2004): 22.

[2] Carol Ann Frost, Elizabeth A. Gordon, and Andrew F. Hayes, "Stock Exchange Disclosure and Market Development: An Analysis of 50 International Exchanges," *Journal of Accounting Research*, Vol. 44, no. 3 (2006): 437–483.

With the implementation of the euro, together with continued advances in European corporate disclosure practices, distinctions between cross-border and within-border financial analysis are blurring. Portfolio diversification strategies in Europe are increasingly based on industry sectors rather than countries. Rather than balancing stock picks among strong and weak currency countries, portfolio managers are increasingly focusing on picking the best companies in an industry regardless of country of origin. Globalization also means that strictly domestic analyses are becoming less relevant. Interdependencies are growing and no company is insulated from events happening worldwide.

BUSINESS ANALYSIS FRAMEWORK

Palepu, Bernard, and Healy provide a useful framework for business analysis and valuation using financial statement data.[3] The framework's four stages of analysis (discussed in more detail in the following pages) are: (1) business strategy analysis, (2) accounting analysis, (3) financial analysis (ratio analysis and cash flow analysis), and (4) prospective analysis (forecasting and valuation). The relative importance of each stage depends on the purpose of the analysis. The business analysis framework can be applied to many decision contexts including securities analysis, credit analysis, and merger and acquisition analysis.

INTERNATIONAL BUSINESS STRATEGY ANALYSIS

Business strategy analysis is an important first step in financial statement analysis. It provides a qualitative understanding of a company and its competitors in relation to its economic environment. This ensures that quantitative analysis is performed using a holistic perspective. By identifying key profit drivers and business risks, business strategy analysis helps the analyst make realistic forecasts.[4] Standard procedures for gathering information for business strategy analysis include examining annual reports and other company publications, and speaking with company staff, analysts, and other financial professionals. The use of additional information sources, such as the World Wide Web, trade groups, competitors, customers, reporters, lobbyists, regulators, and the trade press is becoming more common. The accuracy, reliability, and relevance of each type of information gathered also needs to be evaluated.[5]

Business strategy analysis is often complex and difficult in an international setting. As noted previously, key profit drivers and types of business risk vary among countries. Understanding them can be daunting. Business and legal environments and corporate objectives vary around the world. Many risks (such as regulatory risk, foreign exchange risk, and credit risk, among others) need to be evaluated and brought together coherently. In some countries, sources of information are limited and may not be accurate.

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[3] Krishna G. Palepu, Victor L. Bernard, and Paul M. Healy, Business Analysis and Valuation Using Financial Statements, Cincinnati, Ohio: South-Western College Publishing, 1996.
[4] Profit drivers are principal financial and operating elements that affect a firm's profitability.
[5] Financial analysts are increasingly using techniques developed in the fast-growing business discipline of competitive intelligence (CI).

Information Availability

Business strategy analysis is especially difficult in some countries due to lack of reliable information about macroeconomic developments. Governments in developed countries are sometimes accused of publishing faulty or misleading economic statistics. The situation is much worse in many emerging economies. For example, one reason the 1994/95 Mexican currency crisis was a surprise was that the government concealed information about its shrinking foreign reserves and exploding money supply. Some countries delay publishing statistics when the numbers are unfavorable, or even falsify their economic figures.

Obtaining industry information is also difficult in many countries and the quantity and quality of company information varies greatly. The availability of company-specific information has been strikingly low in many developing economies.[6] Recently, many large companies that list and raise capital in overseas markets have been expanding their disclosures and have voluntarily switched to globally recognized accounting principles such as International Financial Reporting Standards.

EXHIBIT 9-1 Country Information Freely Available on the Internet

Organization	Web Site Address	Description
Canada Department of Foreign Affairs and International Trade	http://www.dfait-maeci.gc.ca/english/menu.htm	Market information
China's Official Gateway to News and Information	www.china.org.cn	Country information on a variety of fronts.
CRUISE	www.cranfield.ac.uk/cils/Library/subjects/country.htm	Country reports including economic and market data.
CIA-The World Factbook	www.cia.gov/cia/publications/Factbook/geos/fm.html	Information on government, economy, communications, and transnational issues.
Financial Times	http://ft.com	Country reports (also industry reports, company news, and financial information)
Political and Economic Risk Consultancy, Ltd. (PERC)	http://www.asiarisk.com/	Country outlooks; connection to other WWW sites
UNCTAD	www.unctad.org	Data for analysis of international trade, foreign direct investment commodities and development
U.S. Federal Reserve	www.federalreserve.gov	Foreign exchange rates
U.S. State Department	http://travel.state.gov/	Travel warnings
World Bank	www.dev.data.worldbank.org	Country development data
World Tourism Organization	http://www.world-tourism.org	Newsletters, press releases

[6] See Chapter 5 for further discussion. Also see S. M. Saudagaran, and J. G. Diga, "Financial Reporting in Emerging Capital Markets: Characteristics and Policy Issues," *Accounting Horizons* (June 1997): 41–64.

Recommendations for Analysis

Data constraints make it difficult to perform business strategy analyses using traditional research methods. Very often, travel is necessary to learn about local business climates and how industries and companies actually operate, especially in emerging market countries. The World Wide Web also offers quick access to information that recently was unavailable or difficult to obtain. Exhibit 9-1 presents a sampling of freely available Web resources that can be used to learn about country risks and travel conditions.

Country information can also be found in "international briefings" publications distributed by large accounting firms, banks, and brokerages.[7] The International Federation of Stock Exchanges (FIBV, http://www.fibv.com) and the Federation of European Stock Exchanges (FESE, http://www.fese.be) publish highly informative international newsletters and *Accountancy, the Economist*, *Financial Analysts Journal*, *Euromoney* articles highly relevant for international financial analysis.

Enormous risks may follow an inadequate business strategy analysis. Consider the Parmalat affair, representing the largest fraud in European financial history. In this case, at least $13 billion in missing assets of Italy's fastest growing dairy group could not be accounted for, resulting in huge losses for the company's investors and creditors alike. Commentators attribute this financial debacle to several causes. Foreign investors reportedly invested in a company that did not provide complete or credible disclosures. They did not know much about the business environment in which they were investing and participated in a market in which financial reporting rules were not strictly enforced.[8]

ACCOUNTING ANALYSIS

The purpose of accounting analysis is to assess the extent to which a firm's reported results reflect economic reality. The analyst needs to evaluate the firm's accounting policies and estimates, and assess the nature and extent of a firm's accounting flexibility. The latter refers to management's discretion in choosing which accounting policies and estimates to apply to a particular accounting event. To reach reliable conclusions, the analyst must adjust reported accounting amounts to remove distortions caused by the use of accounting methods the analyst deems inappropriate. Examples might include marking trading assets to market and not recording the gains or losses in income but in an allowance account, prematurely recognizing revenues, or reversing estimated liability accruals to smooth earnings.

Corporate managers are allowed to make many accounting-related judgments because they know the most about their firm's operations and financial condition. Flexibility in financial reporting is important because it allows managers to use accounting measurements that best reflect the company's particular operating circumstances.

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[7] For example, PricewaterhouseCoopers LLC publishes International Briefings every month, which reports on notable business, political, and economic developments worldwide.

[8] Gail Edmondson, David Fairlamb, and Nanette Byrnes, "The Milk Just Keeps on Spilling," *BusinessWeek* (January 26, 2004): 54, 55, 58.

However, managers have incentives to distort operating reality by using their accounting discretion to distort reported profits. One reason is that reported earnings are often used to evaluate their managerial performance.[9]

Healy and colleagues suggest the following process for evaluating a firm's accounting quality:

1. Identify key accounting policies
2. Assess accounting flexibility
3. Evaluate accounting strategy
4. Evaluate the quality of disclosure
5. Identify potential red flags (e.g., unusually large asset write-offs, unexplained transactions that boost profits, or an increasing gap between a company's reported income and its cash flow from operations)
6. Adjust for accounting distortions

To illustrate this process, consider the accounting quality of WorldCom, a large U.S. company whose accounting policies resulted in a major Wall Street scandal. In formally indicting the company on its faulty accounting practices, the following questions might be asked: (1) How did WorldCom account for its major operating expenditures? (2) What options does U.S. GAAP allow for such expenditures? (3) Did WorldCom adopt an overly aggressive or conservative approach to accounting for these expenditures? (4) Did WorldCom capitalize an expenditure that should have been expensed to manage its earnings? (5) Did WorldCom disclose sufficient information for investors to undo the company's aggressive accounting treatment? (6) Would reversal of WorldCom's selected accounting posture have a significant depressing effect on reported earnings?

In this case, WorldCom chose to capitalize what were in effect operating expenses. While this practice is in clear violation of U.S. GAAP, management chose to conceal this information from investors by disguising operating expenses as capital expenditures. The financial statement effects of capitalizing versus expensing its major expenditures had a significant effect on reported earnings as the amounts involved approached $2 billion!

Two major issues confront those doing accounting analysis in an international setting. The first is cross-country variation in accounting measurement quality, disclosure quality, and audit quality; the second concerns the difficulty in obtaining information needed to conduct accounting analysis.

Cross-country variation in quality of accounting measurement, disclosure, and auditing is dramatic. National characteristics that cause this variation include required and generally accepted practices, monitoring and enforcement, and extent of managerial discretion in financial reporting.[10] Chapters 3 and 4 of this text present summaries of significant accounting practices in five European countries and five countries of the

[9] Additional influences on corporate managers' accounting decisions include: (1) accounting-based debt covenants; (2) management compensation; (3) corporate control contests; (4) tax considerations; (5) regulatory considerations; (6) capital market considerations; (7) stakeholder considerations; and (8) competitive considerations. Palepu, Bernard, and Healy, op. cit.

[10] While faulty application of accounting principles is frequently touted as the leading cause of low accounting quality, some argue that the application of faulty accounting principles is the root cause. See Paul Rosenfield, "What Drives Earnings Management?" *Journal of Accountancy* [October 2000]: 5.

Americas and Asia, respectively. These chapters, which summarize only a subset of major accounting topics, show that significant managerial discretion may be used in many countries, including France, Germany, and China.

Consider accounting practices in Germany. As discussed in Chapter 3, German financial accounting is closely aligned with tax reporting. Creditor protection is a second goal of financial reporting. As a result, financial reports are prepared with a creditor focus rather than an investor focus. The resulting conservative reporting bias may generate accounting amounts that do not reflect actual operating performance. German managers have great discretion in their use of reserves and in implementing many accounting policies. Even where specific procedures are mandated, monitoring and enforcement of compliance with reporting requirements is far short of what investors can expect in the United States.

Disclosure quality and the level of audit assurances must also be closely scrutinized when analyzing the financial statements of a German company. Footnote disclosure of accounting policies is quite limited in some German annual reports. Identifying the components of large financial statement items (such as reserve accounts) can be difficult. Auditing issues are so important that we discuss international auditing in a separate section of this chapter.

Financial reporting in China provides a second example of how accounting measurement, disclosure, and audit quality can vary dramatically from accounting practices in Anglo-American countries. Although China is implementing major accounting reform as part of its transition from a planned economy to a controlled market economy, until recently it did not have financial reporting and external auditing in forms that would be familiar to Westerners.[11] Private investors and creditors were virtually nonexistent for three decades after the People's Republic was founded in 1948, and The Accounting Law, which sets forth accounting and reporting requirements, was adopted only in 1985. Accounting Standards for Business Enterprises, which specifies that such basic accounting practices as double-entry bookkeeping and the accrual basis should be used, became effective in 1993. The auditing profession is also very new in China.

Suggestions for the Analyst

Especially when analyzing companies in emerging market countries, the analyst should meet often with management to evaluate their financial reporting incentives and accounting policies. Many companies in emerging market countries are closely held, and managers may not have strong incentives for full and credible disclosure. Accounting policies in some countries may be similar or identical to IAS (or other widely accepted standards), but managers often have great discretion in how those policies are applied. Finally, as noted earlier, new communications technology (including the World Wide Web) is having a great impact on all stages of financial research. Many companies and countries now have Web sites that make it much easier for anyone interested to gather information. Refer to the section entitled "Information Access" later in this chapter for a discussion of useful information sources for accounting analysis.

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[11] For further discussion, see Chapter 4; Ajay Adhikari and Shawn Z.Wang, "Accounting for China," *Management Accounting* (April 1995): 27–32.

INTERNATIONAL FINANCIAL ANALYSIS

The goal of financial analysis is to evaluate a firm's current and past performance, and to judge whether its performance can be sustained. Ratio analysis and cash flow analysis are important tools in financial analysis. Ratio analysis involves comparison of ratios between the firm and other firms in the same industry, comparison of a firm's ratios across years or other fiscal periods, and/or comparison of ratios to some absolute benchmark. It provides insights into the comparative and relative significance of financial statement items and can help evaluate the effectiveness of managements' operating, investing, financing, and earnings retention policies. A summary of commonly used financial ratios appears in Exhibit 9-2.

Cash flow analysis focuses on the cash flow statement, which provides information about a firm's cash inflows and outflows, classified among operating, investing, and financing activities, and disclosures about periodic noncash investing and financing activities. Analysts can use cash flow analysis to address many questions about the firm's performance and management. For example, has the firm generated positive cash flows from operations? How have cash flow components changed across time in relation to changes in income statement components, sales, and cost of sales in particular? What have been the cash flow consequences of management decisions about financial policy, dividend policy, and investment? When used in conjunction with the income statement, cash flow information also informs analysts about the validity of the going concern assumption, a firm's liquidity, and management's use of measurement options to manage earnings.

Ratio Analysis

Two issues must be addressed in analyzing ratios in an international setting. First, do cross-country differences in accounting principles cause significant variation in financial statement amounts of companies from different countries? Second, how do differences in local culture and economic and competitive conditions affect the interpretation of accounting measures and financial ratios, even if accounting measurements from different countries are restated to achieve "accounting comparability"?

Extensive evidence reveals substantial cross-country differences in profitability, leverage, and other financial statement ratios and amounts that result from both accounting and nonaccounting factors. (The next section discusses cross-country differences in two valuation ratios, the price-to-earnings and price-to-book ratios.) In one study, sales revenue, net income, and leverage (total debt/shareholders' equity) were compared among firms domiciled in France, Germany, Japan, the United Kingdom, and the United States.[12] The five 80-firm country samples were matched according to size (market value of equity), with all firms belonging to the manufacturing industry group (SIC codes 20 through 39). All three financial measures varied substantially among the country samples. For example, median net income was

[12] Carol A. Frost, "Characteristics and Information Value of Corporate Disclosures of Forward-Looking Information in Global Equity Markets," Dartmouth College Working Paper, July 2002.

EXHIBIT 9-2 Summary of Financial Ratios

Ratio	Formula for Computation
I. Liquidity	
1. Current ratio	Current assets / Current liabilities
2. Quick or acid-test ratio	Cash, marketable securities, and receivables / Current liabilities
3. Current cash debt ratio	Net cash provided by operating activities / Average current liabilities
II. Efficiency	
4. Receivables turnover	Net sales / Average trade receivables (net)
5. Inventory turnover	Cost of goods sold / Average inventory
6. Asset turnover	Net sales / Average total assets
III. Profitability	
7. Profit margin on sales	Net income / Net sales
8. Rate of return on assets	EBIT[1] / Average total assets
9. Rate of return on common stock equity	Net income minus preferred dividends / Average common stockholders' equity
10. Earnings per share	Net income minus preferred dividends / Weighted common shares outstanding
11. Payout ratio	Cash dividents / Net income
IV. Coverage	
12. Debt to total assets ratio	Debt / Total assets or equities
13. Times interest earned	Income before interest charges and taxes / Interest charges
14. Cash debt coverage ratio	Net cash provided by operating activities / Average total liabilities
15. Book value per share	Common stockholders' equity / Outstanding common shares

[1] *EBIT = earnings before interest and taxes. Some analysts prefer to use EBITDA, which also includes depreciation and amortization charges in the numerator.*

much greater in the United Kingdom and the United States than in Germany and Japan. Variation in net income was partially explained by accounting principle differences because financial reporting is generally less conservative in the United Kingdom and the United States than in Germany and Japan. Nonaccounting factors also affected reported net income. For example, the creditor focus in France, Germany, and Japan accounted for lower net income than in the United States and the United Kingdom as there is less pressure on managers in those countries to report steadily increasing net income.

In the foregoing study, Frost found median leverage in the United Kingdom and the United States to be lower than in Germany and Japan. This is partially attributed to the fact that conservative accounting in Germany and Japan results in lower reported shareholders' equity than in the United Kingdom and the United States. Higher leverage in Germany, Japan, and France is also attributed to higher debt in capital structures, reflecting the heavy dependence on bank financing in those countries.

How large are the differences in financial statement items caused by differences among national accounting principles? Although no longer required,[13] hundreds of non-U.S. companies listed on U.S. stock exchanges provided footnote reconciliation disclosures that provide evidence on this question, at least in the context of differences between U.S. GAAP-based and non-U.S. GAAP-based accounting amounts.

An earlier survey of financial statement reconciliations by foreign registrants prepared by the U.S. SEC is informative.[14] Approximately one-half of the 528 non-U.S. registrants surveyed disclosed material differences between net income as reported in their financial statements and U.S. GAAP-based net income. The five types of financial statement differences disclosed by the largest number of registrants were (in descending order): (1) depreciation and amortization, (2) deferred or capitalized costs, (3) deferred taxes, (4) pensions, and (5) foreign currency translation.

The study also shows that more than two-thirds of the registrants that disclosed material differences in net income reported that income under U.S. GAAP was lower than under non-U.S. GAAP. Nearly half of them reported income differences greater than 25 percent. Twenty-five of the 87 registrants that reported that income under U.S. GAAP was greater than under non-U.S. GAAP reported differences greater than 25 percent. Similar results were found for reconciliations of shareholders' equity. Overall, the evidence in the SEC study shows that financial statement differences under U.S. versus non-U.S. GAAP are highly material for many companies.

Evidence from SEC registrants' reconciliation disclosures therefore indicates that GAAP differences can cause significant variation in financial statement numbers. Even as the world marches toward adoption of IFRS issued by the IASB, measurement options permitted by IFRS, differences in national enforcement policies and differences in flavors of IFRS (see Chapter 8), suggest that measurement and disclosure differences will not disappear. Accordingly, an analyst will often choose to make financial statements more comparable by making accounting principle adjustments to the financial statements being analyzed. Appendix 9-1 illustrates the restatement of an income and balance sheet

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[13] The U.S. Securities and Exchange Commission relaxed its U.S. GAAP reconciliation requirements for non-U.S. registrants in 2007.

[14] U.S. Securities and Exchange Commission, Division of Corporation Finance, Survey of Financial Statement Reconciliations by Foreign Registrants, May 1, 1993.

from Japanese GAAP to U.S. GAAP. Even after financial statement amounts are made reasonably comparable (by adjusting for accounting principle differences), interpretation of those amounts must consider cross-country differences in economic, competitive, and other institutional differences. Analysis of Japanese companies provides a good illustration. Brown and Stickney argue that the relation between financial and tax reporting, the importance in Japan of operating through corporate groups (keiretsu), and the tolerance in Japan for heavy use of short-term financial leverage must all be considered when analyzing the profitability and risk of Japanese companies.[15] For example, Japanese-reported earnings tend to be lower than earnings reported in Anglo-American countries, even after adjusting for GAAP differences. The close linkage between tax and financial reporting gives Japanese companies an incentive to be conservative in determining their income. Also, because high intercorporate stock holdings reduce the percentage of shares held by outsiders, Japanese companies are under less pressure to report ever-increasing earnings than are companies in the United States and other Anglo-American countries.[16] Refer to Appendix 9-2 for further detailed discussion of international ratio analysis. The appendix focuses on comparison of Japanese and U.S. financial ratios and their interpretation.

Cash Flow Analysis

As discussed earlier, cash flow analysis provides insights into a company's cash flows and management. Highly detailed cash flow statements are required under U.S. GAAP, U.K. GAAP, IFRS, and accounting standards in a growing number of other countries. Cash flow–related measures are especially useful in international analysis because they are less affected by accounting principle differences than are earnings-based measures. When cash flow statements are not presented, it is often difficult to compute cash flows from operations and other cash flow measures by adjusting accrual-based earnings. Many companies simply do not disclose the information needed to make the adjustments. As one example, German balance sheets often contain surprisingly large reserve accounts that reflect many different types of accrual. Few (if any) details are presented that might allow the financial statement user to assess the implications for operating, investment, and financing cash flows.

Coping Mechanisms

How do financial statement users cope with cross-country accounting principle differences? Several approaches are used. Some analysts restate foreign accounting measures to an internationally recognized set of principles, or to some other common basis. Others develop a detailed understanding of accounting practices in a limited set of countries and restrict their analysis to firms located in those countries.

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[15] Paul R. Brown and Clyde P. Stickney, "Instructional Case: Tanaguchi Corporation," *Issues in Accounting Education* 7 (Spring 1992): 57–68.

[16] Jill L. McKinnon, "Application of Anglo-American Principles of Consolidation to Corporate Financial Disclosure in Japan," *ABACUS* 20 (1984): 16–33 provides further detail on corporate groups in Japan versus those in Anglo-American countries. She argues that the Anglo-American consolidation methods adopted by Japan in 1977 may reflect international pressure for accounting conformity more than the inherent desirability of those methods. She implies that as a result, Japanese consolidated financial statements are less useful than they might be. The McKinnon study provides an important illustration that knowing what accounting principles are used is only the first step in interpreting financial statements from different countries.

Brown, Soybel, and Stickney illustrate the use of a restatement algorithm to enhance cross-border comparisons of financial performance.[17] They restate the operating performance of U.S. and Japanese companies to a similar reporting basis. Rather than convert U.S. data to a Japanese financial reporting basis, or Japanese data to a U.S. financial reporting basis, they adjust (as necessary) both U.S. and Japanese data to achieve uniform accounting principles.

Appendix 9-1 illustrates another approach, in which the financial statements of a hypothetical Japanese business (Toyoza Enterprises) are restated from a Japanese GAAP basis to a U.S. GAAP basis. The restatement algorithm used in Appendix 9-1 involves a detailed analysis of numerous financial statement items.

Relatively simple restatement algorithms can be effective. One approach is to focus on a few of the most material financial statement differences for which enough information is available to make reliable adjustments. For example, Brown and colleagues, mentioned above, summarize many differences between Japan and U.S. GAAP, but their restatement algorithm focuses on only four accounting principle differences: (1) inventory cost assumptions, (2) depreciation method, (3) bonuses to directors and statutory auditors, and (4) deferred taxes and special tax reserves.

INTERNATIONAL PROSPECTIVE ANALYSIS

Prospective analysis involves two steps: forecasting and valuation. In forecasting, analysts make explicit forecasts of a firm's prospects based on its business strategy, accounting, and financial analysis. It addresses questions such as, How will a company's change in business strategy affect future sales volume and profits? Has the company recently adopted new accounting policies that will make current earnings appear stronger, perhaps at the cost of lower earnings next year? Will financial relationships evidenced in an analyst's ratio analysis continue?

In valuation, analysts convert quantitative forecasts into an estimate of a firm's value. Valuation is used implicitly or explicitly in many business decisions. For example, valuation is the basis of equity analysts' investment recommendations. In analyzing a possible merger, the potential acquirer will estimate the value of the target firm. Many different valuation approaches are used in practice, ranging from discounted cash flow analysis to simpler techniques based on price-based multiples.[18] Experts in international valuation give this warning to those doing international prospective analysis: "Any rules you've learned in your home country will fall apart overseas." Exchange rate fluctuations, accounting differences, different business practices and customs, capital market differences, and many other factors will have major effects on international forecasting and valuation.

For example, discounted cash flow analysis values a business as the present value of its expected cash flows, discounted at a rate that reflects the riskiness of those cash flows. While this valuation principle is no different for developed and

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[17] See Paul R. Brown, Virginia E. Soybel, and Clyde P. Stickney, "Achieving Comparability of U.S. and Japanese Price-Earnings Ratios," in Frederick D. S., Choi, ed., *International Accounting and Finance Handbook*, 2nd ed., New York: John Wiley & Sons, 1997, pp. 7.1–7.18.

[18] See Aswath Damodaran, *Investment Valuation*, 2nd ed., New York: John Wiley & Sons, 2000.

emerging markets alike, many of the inputs taken for granted in the former may not be as accessible in emerging economies.[19] For example, the government bond rate, often used as a surrogate for the risk-free rate, assumes that governments do not default, at least on local borrowing. This is often not the case internationally. Other inputs including risk parameters and premiums are typically more difficult to estimate owing to the paucity of historical data. And earnings forecasts, as a basis for estimating future cash flows, are less reliable. Hope attributes this to several factors.[20] One factor is the greater choice that managers have in choosing among accounting methods. Greater choice makes it more difficult to do cross-section analyses and makes it easier for managers to distort economic reality in reporting firm performance. Forecast accuracy is also positively related to the extent to which accrual accounting is prescribed in a country. Accruals provide a better measure of a firm's future cash generating ability than cash receipts and disbursements and irons out discontinuities in reported revenues and expenses. Finally, the accuracy of analysts' earnings forecasts are positively related to the strength of a country's enforcement standards. This is attributed to the notion that enforcement narrows the range of permitted accounting choices. This, in turn, reduces analysts' uncertainty about the degree of firms' reporting discretion.[21]

Consider next the use of price-based (valuation) multiples in an international setting. Valuation multiples such as price-to-earnings (P/E) and price-to-book (P/B) ratios are often used to estimate a firm's value. One common approach is to calculate the desired multiple for a group of comparable firms (such as other firms in the same industry), and then apply that multiple to the firm being valued to get a reasonable price. For example, if the price-to-earnings ratio of the industry group is 15, and the firm's earnings are forecast to be $1.80/share, then $27.00 per share is a reasonable price for the firm being analyzed. One might use the valuation multiples approach to determine the bid price for an acquisition candidate. If the candidate is a European company, comparable firms might be chosen from selected European countries.

Reliance on valuation multiples assumes that market prices reflect future prospects and that pricing of firms with similar operating and financial characteristics (such as firms in the same industry) is applicable to the firm being analyzed because of its similarity to those firms. Application of price multiples in a cross-border setting is challenging because it requires that the determinants of each multiple, and reasons why multiples vary across firms, be thoroughly understood.

Exhibit 9-3 displays mean price to earnings ratios for stock indexes in 17 countries at the end of 2007.

Exhibit 9-3 shows that P/E ratios vary across countries. At the end of 2007 P/E multiples ranged from 9.5 in South Africa to 41.2 for firms listed on the stock exchange in China. But what accounts for these variations across national boundaries?

National differences in accounting principles are one potential source of cross-country ratio variations. Such differences, for example, cause P/E ratios in Japan to be generally higher than those in the United States (recall that reported earnings in Japan

[19] Aswath Damodaran, "Valuation in Emerging Markets," in Frederick D. S. Choi, ed., International Finance and Accounting Handbook, 3rd ed., New York: John Wiley & Sons, 2003, p. 9.3.
[20] Hope, op. cit., pp. 21–39.
[21] Hope, op. cit., p. 23.

EXHIBIT 9-3 International Price/Earnings Ratios

Country	Index	P/E
Canada	SPTSX	17.8
China (PRC)	SHCOMP	41.2
France	CAC	16.8
Hong Kong	HIS	15.74
India	SENSEX	22.97
Italy	MIB30	15.3
Japan	NKY	37.7
Mexico	MEXBOL	19.1
Netherlands	AEX	11.9
Russia	RTSI$	11.1
Singapore	STI	14.4
South Africa	TOP40	9.5
Spain	IBEX	14.8
Sweden	OMX	14.9
Switzerland	SMI	15.5
UK	UKX	13.6
US	SPX	17.7

Source: "Global P/E Ratios, Ticker Sense Blogger," Birinyi Associates, Inc., July 20–24, 2009.

are lower than in the United States for comparable companies with similar financial performance). However, even after adjusting for accounting differences, P/E ratios in Japan are still much higher than in the United States.

French and Poterba examined disparities between Japanese and U.S. P/E ratios and the steep increase in Japanese P/E ratios during the late 1980s.[22] They made several accounting adjustments to the Japanese data and found that their adjustments reduced but did not eliminate the difference between Japanese and U.S. P/E ratios. French and Poterba concluded that accounting differences explain about half of the long-term differences between U.S. and Japanese P/E ratios.

Brown, Soybel, and Stickney also investigated why Japanese P/E ratios are higher than U.S. P/E ratios.[23] They found that adjusting for different accounting principles explains only a small part of the difference. A comparison of their study with French and Poterba's shows how different approaches and assumptions can lead to very different conclusions about valuation ratios.

The substantial variation in valuation ratios shown in Exhibit 9-3 reflects changes in financial performance and in market prices across time and countries. As discussed

[22] Kenneth R., French and James M. Poterba, "Were Japanese Stock Prices Too High?" Journal of Financial Economics 29 (1991): 337–362.

[23] See Paul R. Brown, Virginia E., Soybel, and Clyde P. Stickney, "Achieving Comparability of U.S. and Japanese Price-Earnings Ratios," op. cit., for a review of comparative analyses of Japanese and U.S. P/E ratios. For further comparative evidence on cross-country differences in P/E and P/B ratios, see Peter Joos and Mark Lang, "The Effects of Accounting Diversity: Evidence from the European Union," Journal of Accounting Research 32 (Suppl., 1994): 141–175.

previously, even French and Poterba's rigorous analysis of the changes in P/E ratios in Japan during the late 1980s yielded only partial answers. Thus, accounting offers only a partial explanation for differences among P/E ratios in different countries and over time. An understanding of additional environmental considerations (see Appendix 9-2) is necessary for meaningful analysis and interpretation.

FURTHER ISSUES

All four stages of business analysis (business strategy, accounting, financial, and prospective analysis) may be affected by the following factors: (1) information access, (2) timeliness of information, (3) language and terminology barriers, (4) foreign currency issues, and (5) differences in types and formats of financial statements.

Information Access

Information about thousands of companies from around the world has become more widely available in recent years. Countless information sources are appearing on the World Wide Web. Companies around the world now have Web sites, and their annual reports are available free of charge from various Internet and other sources. Refer to Exhibit 9-4 for Web sites that provide information highly relevant for company research.

Many companies also respond to written and telephone requests for their annual reports and other financial documents. However, the amount of company information available varies considerably from country to country.

Many commercial databases provide access to financial and stock market data for tens of thousands of companies around the world. Companies covered by commercial databases tend to be large companies that are of most interest to financial statement users and investors. It is striking that even in emerging market countries such as China and the Czech Republic, data for many firms are now available.

Other valuable information sources include (1) government publications, (2) economic research organizations, (3) international organizations such as the United Nations, and (4) accounting, auditing, and securities market organizations. Web site addresses appear throughout this text and are only a starting point for gathering information.

TIMELINESS OF INFORMATION The timeliness of financial statements, annual reports, regulatory filings, and accounting-related press releases varies dramatically by country. Whereas quarterly financial reporting is a generally accepted practice in the United States, this is not always the case elsewhere.[24] Financial reporting lags can also be estimated by comparing a company's fiscal year-end with its audit report date. The latter is often considered a reasonable indication of when corporate financial information first becomes publicly available. For Brazil, Canada, Chile, Colombia, Mexico, the Philippines, South Korea, Taiwan, Thailand, and the United States, this reporting lag reportedly averaged between 30–60 days. It averaged 61–90 days in Argentina, Australia, Denmark, Finland, Ireland, Israel, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, South Africa, Spain, Sweden, Switzerland, the United

[24] An informal survey of many world-class company Web sites suggests that more and more companies are voluntarily choosing to provide quarterly reports owing to capital market pressures to do so.

EXHIBIT 9-4 **Freely Available Web Sites for Company Research (all Web sites begin with the prefix http://www)**

Name of Web Site	Web Site Address	What It Provides
Annual Reports Library	zpub.com/sf/arl/	Alphabetical listing of U.S. corporations with links to home pages and annual reports that can be downloaded free of charge with Adobe Acrobat Reader.
Asian Business Watch	asianbusinesswatch.com	Company and stock market news for Japan and Asia.
Babel	babel.altavista.com	Translates text files; only does first few pages of long documents.
Bank of England	bank of england.co.uk/	United Kingdom monetary and financial statistics, working papers, and other publications, information on the bank's structure and functions, and much more.
BFA-NET: Bureau of Financial Analysis Network	bfanet.com	South African company and stock market information; check out "Little Facts."
Bloomberg News Service	bloomberg.com/	Highlights from the Bloomberg news service.
Businessjeeves.com	businessjeeves.com	Good starting place; many links.
Business Week Online	businessweek.com	Current issue, archives, and an assortment of worthwhile data.
CAROL: Company Annual Reports Online	carolworld.com	Online annual reports for some European companies.
Cross Border Capital	liquidity.com/	Reports on equity, fixed income, and currency markets in over 70 developed and emerging markets. Reports over six months old available for free (with registration).
Daiwa Securities	dir.co.jp/Reception/research.html	Research reports and forecasts on the Japanese economy.
Edgar—U.S. Securities & Exchange Commission	sec.gov/edgar.shtml	Most SEC filings since 1996.
Emerging Markets Companion	emgmkts.com/	Many useful links and resources on Asia, Latin America, Africa, and Europe.
EnterWeb: The Enterprise Development Web site	enterweb.org/welcome.htm	Meta-index to business and finance globalization, and more. "The focus is on micro, small, and medium-sized enterprise development both in developed and developing countries."
Europages—European Business Directory	europages.com/	Lists 500,000 companies in 30 countries; includes some manufacturers' catalogs.
Financial Times of London	ft.com/	Online edition of the Financial Times; current articles, market information, and more.

(continued)

EXHIBIT 9-4 Freely Available Web Sites for Company Research (all Web sites begin with the prefix http://www) (Continued)

Name of Web Site	Web Site Address	What It Provides
FT Interactive Data	turboguide.com/data2/cdprod1/doc/cdrom frame/002/686.pub.FT.Excel.html	Good sampling from FT Excel databases; must register.
Hong Kong Securities and Futures Commission	hksfc.org.hk	Information on Hong Kong securities markets.
Hoover's Online	hoovers.com	Some information, such as press releases, is free. Links to company home pages and other information. Includes more than 800 of the most important non-U.S. companies.
INO Global Market	ino.com/	Information for traders in futures and options markets worldwide.
International Business (Michigan State University Center for International Business Education and Research)	ciber.bus.msu.edu/busres.htm	Links to good investment and macro sites.
International Monetary Fund	imf.org/	IMF news, publications, and more.
Internet Corruption Rankings	gwdg.de/~uwww/icr_serv.htm	Provides the TI-Corruption Perception Index, a comparative assessment of the integrity of many countries, along with many other links and services.
National Corporate Services, Inc. International Investing	natcorp.com/	Excellent start point; many links to sites providing free information.
NIRI Useful Investor Relations Sites	niri.org	Links to interesting Web sites.
Public Register's Annual Report, The companies.	prars.com	Annual reports, prospectuses, or 10-Ks on over 32,000 U.S. companies.
Rutgers Accounting Network (RAW)	rutgers.edu/Accounting/raw.html	Excellent starting place.
Stewart Mayhew's Directory of Worldwide Securities Exchanges	voltaire.is.tcu.edu/~vmihov/exchanges/xlinks.Htm	Links to official home pages of stock markets and derivatives exchanges around the world.
Stock City	stockcity.com	ADR profiles, organized by sector, region, and country. Profiles require Adobe Acrobat Reader.

(continued)

EXHIBIT 9-4 Freely Available Web Sites for Company Research (all Web sites begin with the prefix http://www) (Continued)

Name of Web Site	Web Site Address	What It Provides
Streetlink Investor Information Center	streetlink.com	Financial reports available online; U.S. companies only.
United Nations System	unsystem.org	Spotty coverage of companies and Accounting information; good information on communications and country background.
USA Today Money	usatoday.com/ money/ mfront.htm	Comprehensive assortment of news and data.
VIBES: Virtual International Business and Economic Sources	uncc.edu/lis/library/ reference/intbus/ vibehome.htm	Great for linking to regional sites; excellent starting place, especially good for macro data.
Wright Investor' Service	wisi.com	Can search alphabetically by country or by industry.
Yahoo! Finance	finance.yahoo.com	Extensive data, news, and stock quotes.

Kingdom, and Zimbabwe. In Austria, Belgium, France, Germany, Greece, Hong Kong, India, Italy, Malaysia, Nigeria, and Sri Lanka, information lags averaged 91–120 days. And for Pakistan, the average lag exceeded 120 days.[25]

Frost documents further international variations in the timeliness of earnings-related press releases.[26] She defined disclosure lags as the average number of days between a company's fiscal year-end and the date of the press release. These lags were 73 days for companies domiciled in France, 82 days for Germany, 46 days for Japan, 72 days for the United Kingdom, and 26 days for the United States.

Variability in the timeliness of accounting information places additional burdens on readers of foreign financial statements. This burden is especially pronounced for firms whose operating circumstances are changing over time. Meaningful valuations require constant updates of reported numbers using both conventional and unconventional means.

Foreign Currency Considerations

Accounts denominated in foreign currency present financial analysts with two types of problems. The first relates to reader convenience, the second to information content.

The vast majority of companies around the world denominate their financial accounts in the currency of their national domicile. To a U.S. reader accustomed to

[25] See International Accounting and Auditing Trends, 4th ed., Center for International Financial Analysis & Research, Princeton, NJ: CIFAR Publications, Inc., 1995.
[26] Carol A. Frost, "Characteristics and Information Value of Corporate Disclosures of Forward-Looking Information in Global Equity Markets," Dartmouth College Working Paper, February 1998.

dealing in dollars, analysis of accounts expressed in euros may be discomforting. A normal inclination is to translate foreign currency balances to domestic currency. However, foreign currency reports are, for the most part, troublesome in appearance only. Financial ratios that transform nominal (interval) measurements to percentage relationships are independent of currency. A current ratio computed from a Dutch balance sheet expressed in euros is the same as one computed from the same financial statement translated into dollars. Consider the following year-end balance sheet accounts of a British company.

	2009	2010	2011
Current assets	£12,500	£12,200	£12,800
Current liabilities	£8,333	£7,625	£8,000

Assuming year-end dollar/pound exchanges rates of $1.70, $1.80, and $1.60 for 2009, 2010, and 2011, respectively, the current ratio will be 1.5 to 1 for 2009, 1.6 to 1 for 2010, and 1.6 to 1 for 2011, whether expressed in British pounds or U.S. dollars. Local currency (e.g., pound) balances are especially appropriate when analyzing financial trends.

Readers who prefer a domestic currency framework when analyzing foreign currency accounts may apply a convenience translation using year-end exchange rates. One must be careful, however, when analyzing translated trend data. Use of convenience rates to translate foreign currency accounts can distort underlying financial patterns in local currency. To illustrate, assume the following three-year sales revenue patterns for our British concern.

	2009	2010	2011
Sales revenue	£23,500	£28,650	£33,160

Convenience translations using the year-end exchange rates employed earlier (i.e., $1.70 for 2009, $1.80 for 2010, and $1.60 for 2011) yield a U.S. dollar sales increase of 7.5 percent [($53,056–$39,950)/$39,950] over the three-year period. The sales gain in pounds, however, is 41 percent [(£33,160–£23,500)/£23,500].

An alternative approach is to translate foreign currency data to domestic currency using a single base year's exchange rate. But which base-year exchange rate should be used? In our example, should the sales figures be translated using the 2009 exchange rate, the 2010 exchange rate, or the 2011 exchange rate?

Although we prefer to analyze foreign statements in local currency, we favor the use of the most recent year's exchange rate as a convenience translator for readers who prefer domestic currency statistics. An exception is warranted, however, if the foreign currency financial statements have been adjusted for changes in the general purchasing power of the foreign currency unit (see Chapter 7 for a discussion of this treatment). If foreign currency balances are expressed in base-year purchasing power equivalents, year-end exchange rates associated with the given base year should be employed. In our example, if sales revenues were expressed in pounds of 2009 general purchasing power, the 2009 exchange rate would have been an appropriate translation rate.

While translated statements give readers the convenience of viewing foreign currency accounts in a familiar currency, they may give a distorted picture. Specifically, exchange rate changes and accounting procedures together often produce domestic currency equivalents that conflict with underlying events. We illustrate this problem using the statement of cash flows as an example.

Recall from Chapter 6 that consolidated financial statements allow a multinational company to report the results of its worldwide operations in a single currency. Also recall that a variety of currency translation methods are in use internationally. Regardless of the currency translation method employed, it is not always clear to readers of consolidated funds flow statements, whether reported fund sources or uses reflect the results of an operational decision or simply an exchange rate change.

To illustrate, the translated statements of earnings, financial position, and cash flows for the Norwegian affiliate of a U.S.-based multinational company appear in Exhibit 9-5. The parent company employs the current rate method and defines the krone as its functional currency for consolidation purposes. Assume that capital stock is translated at the historical rate.

A cursory examination of the translated statement of cash flows shows that major sources of cash were operations (net income plus depreciation), the issuance of long-term debt, and a translation adjustment. In turn, cash was used to increase the company's investment in fixed assets.

The pattern of cash flow shown in Exhibit 9-5 differs from that experienced by a purely domestic company due to the presence of an aggregate translation adjustment. However, examination of this component of the translated funds statement reveals that it does not really constitute a source or use of cash. The translation adjustment is calculated by multiplying the beginning foreign currency net asset balance by the change in the current rate during the period and, second, by multiplying the increase or decrease in net assets during the period by the difference between the average exchange rate and end-of-period exchange rate. This procedure, together with the dual nature of the accounting equation, suggests that most components of the translated funds statement are a mix of translation effects and actual cash flows. In our current example, a statement reader needs to figure out whether the increase of long-term debt in the amount of $1,584,000 is an indication of the Norwegian affiliate's financing activities or is largely an accounting adjustment. Similar considerations apply to the purported $2,695,000 investment in fixed assets.

Assume that the translated statements appearing in Exhibit 9-5 are based on the Norwegian krone balances appearing in Exhibit 9-6 and that the relevant exchange rate information is as stated.

A cash flow comparison between the functional currency (krone) and the reporting currency (dollars) yields some striking contrasts. While the cash flow statement generated from the translated balance sheet and income statement (Exhibit 9-5) shows long-term debt as a source of funds, the krone statement (Exhibit 9-6) suggests that this was not the case. Likewise, what appears to be an investment in fixed assets from a dollar perspective turns out to be a pure translation phenomenon.

Closer analysis provides insight into the magnitude of the translation effects. An analysis of the fixed asset account reveals that there was no purchase, sale, or retirement of fixed assets during the year. Thus, the year-end balance should have been the beginning book value, $11,050,000 (NOK85,000,000), less depreciation of $720,000

EXHIBIT 9-5 Translated Financial Statements of Norwegian Subsidiary

Translated Balance Sheets as of 12/31/10 and 12/31/11

	December 31	
	2010	**2011**
Assets (000's)		
Cash	$ 3,120	$ 5,190
Net fixed assets	11,050	13,840
Total assets	$14,170	$19,030
Liabilities and owners' equity		
U.S. $500 payable	$ 650	$ 650
Long-term franc debt	6,240	8,304
Capital stock	4,968	4,968
Retained earnings	2,312	2,636
Translation adjustment	—	2,472
Total liabilities and stockholders' equity	$14,170	$19,030

Translated Statement of Income for the Year 2011 (000's)

Sales		$ 1,728
Expenses		
Operating costs	$ 864	
Depreciation	720	
Foreign exchange gain	(180)	1,404
Net income		$ 324

Translated Statement of Cash Flows (000's)

Sources		
Net income	$ 324	
Depreciation	720	
Increase in long-term debt	2,064	
Translation adjustment	2,472	$ 5,580
Uses		
Increase in fixed assets		3,510
Net increase in cash		$ 2,070

(NOK5,000,000), or $10,330,000. The actual ending balance was $13,840,000, suggesting that the entire increase in fixed assets ($13,840,000 – 10,330,000) was due to an exchange rate effect. Similarly, there was no change in Norwegian krone long-term debt during the year. Because this monetary liability was translated by an exchange rate that revalued during the year, the entire increase in long-term debt ($8,304,000 – 6,240,000) also arose from a translation adjustment. Similar transactional analyses account for additional translation effects related to the Norwegian subsidiary's working capital accounts. These effects are summarized in Exhibit 9-7.

Note that the sum of all the translation effects appearing in Exhibit 9-6 equals the aggregate translation adjustment appearing in the shareholders' equity section of the translated balance sheet. An informed reader can better determine the influence of exchange rate changes from a firm's financing and investing activities using the foregoing analysis.

EXHIBIT 9-6 Financial Statements for Wholly-Owned Norwegian Subsidiary

Local Currency Balance Sheet as of 12/31/10 and 12/31/11

	December 31	
	2010	**2011**
Assets		
Cash	NOK 24,000	NOK 30,000
Net fixed assets	85,000	80,000
Total assets	NOK 109,000	NOK 110,000
Liabilities and owners' equity		
U.S. $500 payable	NOK 5,000	NOK 3,750
Long-term krona debt	48,000	48,000
Capital stock	46,000	46,000
Retained earnings	10,000	12,250
Total liabilities and owners' equity	NOK 109,000	NOK 110,000
Statement of Cash Flows		
Sources		
Net income		NOK 2,250
Depreciation		5,000
Less: Krone foreign-exchange gain		1,250
Uses:		
None		—
Net increase in cash		NOK 6,000
Relevant Exchange Rates		
December 31, 2010		NOK1 = $.130
Average during 2011		NOK1 = $.144
December 31, 2011		NOK1 = $.173

EXHIBIT 9-7 Analysis of Exchange Rate Effects

	Debit	**Credit**
Cash	$1,206	
Fixed assets	3,519	
Intercompany payable		$ 180
Long-term debt		2,064
	$4,716	$2,244
Aggregate translation adjustment		2,472
	$4,716	$4,716

Differences in Statement Format

Balance sheet and income statement formats vary from country to country. For example, in contrast to the United States, where most companies adopt the balance sheet account format with assets appearing on the left and equity claims on the right, the format is often the reverse in the United Kingdom. As a second example, in contrast to U.S. balance sheets, which display assets in decreasing order of liquidity and liabilities in increasing order of maturity, in many countries the most liquid assets and the shortest term liabilities appear at the foot of the balance sheet.

Classification differences also abound internationally. For example, accumulated depreciation is reported as a contra-asset account in the United States. In Germany, depreciable assets are usually reported net of accumulated depreciation, but all current period changes in long-term asset accounts are shown directly in the balance sheet. In most countries, the distinction between a current and noncurrent liability is one year. In Germany it is often four years. Handbooks like *Transactional Accounting*[27] may be consulted for a detailed treatment of other classification differences prevailing in individual countries.

Financial statement format differences, while troublesome, are seldom critical because the underlying structure of financial statements is quite similar around the world. Accordingly, most format differences can usually be reconciled with a little effort.

Language and Terminology Barriers

Language differences among countries can present information barriers to financial statement users. Most companies domiciled in non-English-speaking countries publish their annual reports in the home country language. However, growing numbers of the relatively large companies in developed economies provide English-language versions of their annual reports.

Accounting terminology differences can also cause difficulty.[28] For example, U.S. readers associate the term stock with certificates of corporate ownership. Readers in the United Kingdom, on the other hand, associate the term with a firm's inventory of unsold goods. Other examples of terminology differences between the United Kingdom and the United States include turnover (sales revenue), and debtors and creditors (accounts receivable and payable).

In summary, many substantial issues confront the user of international financial statements. Perhaps the most difficult issues concern foreign currency and the availability and credibility of financial information. Difficulties with foreign currency will probably have a pervasive influence on international accounting for some time. In contrast, problems related to information availability and credibility are gradually decreasing as more and more companies, regulatory authorities, and stock exchanges recognize the the importance of improving investors' access to timely and credible information.

FINANCIAL STATEMENT ANALYSIS AND AUDITING

In our earlier section on accounting analysis, we noted the importance of assessing the quality of the information contained in a firm's published accounts. Thoughtful readers must judge the adequacy of accounting measurements employed and remove distortions caused by the use of accounting methods deemed inappropriate. A corollary of this quality assessment is an assessment of the credibility of the information provided,

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[27] Dieter Ordelheide and KPMG, Transactional Accounting, 2nd ed., Hampshire, U.K.: Palgrave, 2001.

[28] Lisa Evans, "Language, Translation and the Problem of International Accounting Communication," *Accounting, Auditing and Accountability Journal*, Vol. 17, no. 2 (2004): 248.

irrespective of the measurement rules employed. In addition to questions of information quality and quantity, financial analysts must be relatively free from undue risk due to fraud or deception on the part of those making the financial representations. We now discuss the attest or audit function and the role it plays in international financial statement analysis.

The Attest Function

Independent auditors perform the attest function in financial reporting. As competent outside experts they review financial information provided by a firm's management and then attest to its reliability, fairness, and other aspects of quality. This process establishes and maintains the integrity of financial information.

While auditing processes are rooted in antiquity, the growth of auditing as a separate and distinct profession during the nineteenth century was encouraged by the enactment in the United Kingdom, circa 1845, of a requirement that companies keep accounts which had to be audited by persons other than directors. The earliest accounting body was the Society of Accountants in Edinburgh.

Investors and other readers of financial statements have a big stake in the attestation of professional auditors. They can make decisions with better expected outcomes if they have relatively better information available. The public is also better served. Incomplete, unreliable, or even misleading financial information may well have a negative effect on capital formation processes within an economy. Moreover, scarce resources may be misdirected to socially less desirable channels or wasted through excessive rates of bankruptcy. Sensitivity to the importance of the attest function is probably higher in multinational settings than it is in single-country situations.

Aside from decision and public interest effects, independent audits introduce efficiency into the financial reporting process. If users of financial information had to obtain firm information on their own and verify this information item by item and user by user, an immensely costly process would ensue. In this regard, division of responsibilities produces net benefits. Management has a comparative advantage in preparing and offering financial information needed by outsiders. Auditors, in turn, have a comparative advantage in ensuring that management's financial representations are relatively free of bias. Their independent attestations enable statement readers around the world to discriminate among generally acceptable and unacceptable accounting practices and to assess the overall quality of financial reports at a lower cost than would otherwise be the case.

The Audit Report

The auditors' attestation is typically communicated to financial statement readers by way of an audit report. This report either follows, or in some cases, precedes the firm's principal financial statements appearing in its annual report. But, what is included in such a report? Do auditors in all countries employ identical reporting formats? Exhibit 9-8 contains a taxonomy of audit reporting requirements in a sample of countries.[29]

[29] Exhibit 9-8 and subsequent exhibits on various facets of international auditing practice draw on an excellent survey conducted by Belverd Needles. For greater detail, see his chapter "Taxonomy of Auditing Standards," in Frederick D.S. Choi, *International Finance and Accounting Handbook,* 3rd ed., New York: John Wiley & Sons, 2003.

EXHIBIT 9-8 Selected Reporting Requirements for Audit Reports

United Kingdom

The auditor's report discloses the responsibilities of company directors and the scope of the audit; basis of opinion and statement of opinion. The balance sheet, income statement, and related notes must be covered by statute; auditing standards extend this coverage to the cash flow statement. The auditors' opinion must state whether the financial statements give a true and fair view and that the statements comply with statutory requirements. Auditors must state that they have read other information contained in the audit report, including the corporate governance statement, and describe implications for the audit report if the auditors become aware of any inconsistencies. The scope section also explains the auditor's responsibilities in relation to the separate directors' report, the accounting records, information and explanations required, and rules regarding the disclosure of directors' remuneration.

United States

A standard three paragraph report identifies the company and the principal financial statements being audited (scope) and states the responsibilities of management and the auditor. The auditor must indicate whether or not the audit complied with generally accepted auditing standards. The auditor must express an opinion as to whether the financial statements are presented fairly in accordance with GAAP and whether GAAP has been consistently observed in relation to reports in previous years. If an opinion cannot be expressed this must be stated.

Sweden

The Swedish Companies Act requires the auditor statements about:

1. The preparation of the annual report is in accordance with the Act.
2. The adoption of the balance sheet and income statement.
3. The proposal included in the administration report for disposition of the unappropriated earnings or deficit.
4. The discharge from the liability of members of the board of directors and the managing director.

Germany

The German Commercial Code specifies that the auditor's report contain a description of the process and result of the audit, including management's report, a forecast of future developments, a statement of compliance with legal regulation, and a statement describing the company's risk management system. The auditor must provide a summary of the content, type, and volume of the audit in the Bestaetigungsvmerk, an evaluation of the audit results, and statements as to whether or not the financial statements and management's report present a true and fair view.

Based on the sample data provided in Exhibit 9-8, it should be evident that auditors reports vary internationally in terms of the information they contain. Both the U.K. and U.S. audit reports identify the scope of the audit, identify the auditing and accounting standards adhered to, and set forth the auditor's opinion. The German report expands the information set to include information on future developments as well as description of the company's risk management system, both useful pieces of information for statement readers. The reports differ most markedly in terms of the opinions that are expressed. Exhibit 9-9 focuses on the wording of auditor opinions selected randomly from company annual reports in the United Kingdom, United States, Sweden, Switzerland, and Norway.

In documenting the diversity of audit opinions internationally, Exhibit 9-9 raises information issues for analysts. U.K. auditors state that the financial statements they audit give a true and fair view of a company's affairs. In this instance, does the term *true* mean "the truth, the whole truth and nothing but the truth?" Does inclusion of the term "fair" imply that the truth has somehow been compromised? U.S. auditors take a less absolute stance and state that the audited statements present fairly and in accordance with a set of U.S. measurement rules. Does this wording connote the same meaning as true and fair? The Swedish opinion is more informative than the requirements set forth in Exhibit 9-8 where Swedish auditors are allowed to opine to nothing. However, are Swedish GAAP and the Annual Accounts Act synonymous? The wording in Exhibit 9-9 seems to suggest this. If so, does this imply that Swedish GAAP is legally based, which normally differs from standards promulgated by private professional groups? Or, does it mean that the Companies Act prescribes adherence to

EXHIBIT 9-9 Diversity of Audit Opinions

United Kingdom

In our opinion, the financial statements give a **true** and **fair** view of the state of affairs of the company and of the group as at December 31 and of the profit and cash flows of the group for the year then ended and have been properly prepared in accordance with the Companies Act 1985.

United States

In our opinion, the financial statements referred to above present **fairly,** in all material respects, the consolidated financial position of the company at December 31, 2009 and, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31 in conformity with U.S. GAAP.

Sweden

The annual accounts and the consolidated accounts have been prepared in accordance with the Annual Accounts Act and, thereby, give a true and fair view of the Company's and the Group's financial position and results of operations in accordance with generally accepted accounting principles in Sweden.

Switzerland

In our opinion, the accounting records and financial statements and the proposed appropriation of available earnings comply with **Swiss law** and the company's **articles of incorporation**.

Norway

The parent company's financial statements are prepared in accordance with law and regulations and give a true and fair view of the financial position of the Company as of December 31, and the results of its operations and its cash flows for the year then ended, in accordance with generally accepted accounting principles in Norway. The financial statements of the group are prepared in accordance with law and regulations and give a true and fair view of the financial position of the group as of December 31 and the results of its operations, its cash flows, and changes in equity for the year then ended in accordance with International Financial Reporting Standards as adopted by the EU.

generally accepted auditing stndards promulgated by the Swedish accounting profession? If it means the former, does compliance with the law (also read the Swiss opinion) assure that the statements provide a true and fair view of a company's affairs? Finally, observe that the Norwegian example provides two audit reports; one for the parent company, the other for the group. Do duel audit opinions suggest that one set of measurement principles is somehow superior to the other? This question is especially germane for those relying on parent company financials for their analysis as the latter are normally the basis for taxation which has real cash flow effects.

Auditing and Credibility

The credibility of the audit report rests on several platforms. These include, but are not limited to, the source of auditing standards, their enforcement, and the professionalism of the individual or individuals performing the audit.

Exhibit 9-7 suggests that auditing standards emante from national legislation such as Companies Acts and/or private professional accounting associations. In many cases it is a matter of degree. Auditing standards are primarily promulgated by private professional groups in most countries. Notable exceptions are Austria, Germany, and Switzerland, where auditng standards are largely influenced by legislation. Countries such as France, Japan, Korea, Kenya, Sweden, and the United Kingdom rely on a combination of legal and professional standards.[30] In some cases, standards promulgated by private professional groups are much more rigorous than those crafted by the government; in other cases, just the opposite may be true. Accordingly, credibility of the attest function is also a function of enforcement mechanisms and the extent of auditor liability.

Enforcement of auditing standards and auditing lapses has proved difficult at the international level. Professionally developed standards generally lack the force of law, the possibility of economic sanction, and, more generally, international political and diplomatic recognition. Hence, enforcement of standards is by and large left to the profession itself. Insistence upon strict or tightening auditing standards invariably produces adverse economic consequences for clients (i.e., increased audit service fees) which, in turn, leads to competitive pressures among independent auditors. At the national level, the effectiveness of enforcing auditing and ethical standards varies from country to country. In most of the countries he surveyed, Needles finds that an auditor who violates auditing standards may be disciplined either by law or by professional sanctions. Penalties include reprimands, fines, and in some cases expulsion from the professional bodies of which the auditor or audit firm is a member. Professional bodies in the United Kingdom have experienced difficulty in obtaining evidencce of wrong doing as they lack subpeona power. In the United States, an expelled member from a state society of accountants or the American Institute of CPA's does not necessarily prevent the expelled member from conducting audits. Only individual states, operating through their state boards of accounting, have the authority to revoke a license to practice. Press coverage often reveals that boards often fail to impose sanctions or to follow up on imposed sanctions. Governments in countries such as France, Japan, Germany, Kenya, and the Netherlands often take a formal role in enforcement actions. Hence, enforcement at the national level has proved uneven.

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[30] Needles, ibid.

Auditor liability to third parties for wrongful acts represents a form of market enforcement. Here too, market practices vary. At one end of the spectrum, in countries such as Germany and the United States, simple negligence on the part of the auditor is usually insufficient for aggrieved third parties to previal in their litigation claims. In countries such as Hong Kong, Japan, Kenya, Saudi Arabia, Sweden, and the United Kingdom, just the opposite may be the case. In most countries, auditors can be held liable for gross negligence or fraud.

In the final analysis, the credibility of auditing is a function of who is doing the audit. Here, statement readers must distinguish between two classes of accountants. Assume you are examining the annual report of a French firm as a basis for an investment decision. Being removed from the local scene, one of the first things you would now do would be to look to see if the annual report contains an audit report by an independent account. You find the report and it is signed by the Commissaires aux Comptes. Can you conclude that managements financial representations have been subject a rigorous independent audit? Not necessarily. The Commissaires is a statutory auditor, whose appointment is mandatory under French commercial law. Statutory auditors in France are required to oversee in very general terms a company's bookkeeping and accounting and then to report annually to the stockholders' meeting. The law does not specify any professional qualifications for the Commissaires which may range from very minimal to substantial. Often one or several stockholders serve in this capacity. Consequently, a statement of an opinion by a Commissaire has a completely different meaning and premise from a possibly similar statement or opinion by an Expert des Comptable. The latter is a well-trained professional accountant who is comparable in stature to a U.K. chartered accountant or an American certified public accountant. Exhibit 9-10 contains examples of auditor distinctions in selected countries.

EXHIBIT 9-10 **Differing Auditor Status in Selected Countries**

France
- Commissaires aux Compte
- Expert des Comptable

Japan
- Statutory Auditor
- Accounting Auditor

Unites Kingdom
- Certified Accountant
- Chartered Accountant

United States
- Public Accountant
- Certified Public Accountant

Mexico
- Comisario
- Contador Publico

Then there is the issue of auditor qualifications and licensure. Educational requirements for professional qualification are modest in the United Kingdom and fairly substantial in the United States. Indeed, most countries require academic training and candidates applying for auditor certification must meet various licensing requirements, including passing comprehensive professional exams. On the other hand, practical experience requirements for professional qualification are substantial in Germany and the Netherlands but are no longer required at all in some jurisdictions of the United States. Once certified as a professional auditor, continuing education to keep an auditor abreast of current business and professional developments are required in Australia, Japan, Korea, Mexico, the Netherlands, the United Kingdom, and the United States. This is seldom the case elsewhere.

Ultimately, the value of an auditor lies in his or her independence from the firm he or she is auditing. Most would agree that CPA's in the United States are subject to the most stringent independence standards that exist internationally. In some countries, such as Hong Kong, auditors may sit on corporate boards of directors, or as is the case in South Korea, may own small financial interests in companies their firms audit. On the European Continent, many large audit firms are owned, at least in part, by large banks that they may very well audit. This does not mean that European auditors are necessarily dependent in fact or in appearance. Rather, it means that a thoroughly different organization of the independent auditing profession prevails. While a non-U.S. person may hold that an audit firm performing management advisory services and tax advocacy for a client cannot possibly be independent, U.S. auditors whose activities in these areas have recently been constrained would argue that bank equity ownership of an audit firm (although separated from audit operations) impairs independence. Who is right?

The auditor independence question often raises operational problems in multinational engagements. Auditor independence is a concept not only entrenched in professional ethics codes in the United States but also anchored in administrative SEC regulations such as their basic Regulation SX and Accounting Series Release No. 126. Therefore, international affiliates of publicly held U.S. parent companies are all audited by persons who meet U.S. definitions of auditor independence. This is not always a simple matter when audits abroad are conducted by associated or correspondent firms rather than by an audit firm's own branch offices. The situation may be even more vexing in those countries where local rules require that independent audits be performed only by local nationals.

Coping Mechanisms

We have now seen that audit reports internationally are varied in their information content. We have also documented variations in the platforms that help to give the attest function credibility. These differences support the case for strong international harmonization efforts in auditing. A leading organization that has as its mission the harmonization of global auditing standards is the International Federation of Accountants (IFAC).[31] A description of this organization and its activities are described

[31] Additional information on IFAC is available at www.ifac.org. Also see, Anne Loft, Christopher Humphrey, and Stuart Turley, "In Pursuit of Global Regulation: Changing Governance and Accountability Structures at the International Federation of Accountants (IFAC)," *Accounting, Auditing and Accountability Journal*, Vol. 19, no. 3 (2006), p. 451.

in Chapter 8. At the same time, differences in audit conditions described in the previous sections, especially in the area of independence standards and audit standards that are anchored to legal systems, suggest that global harmonization efforts will not be easy.

The European Community is also pursuing harmonization of audit standards at the regional level. This effort, however, is complicated by the diversity that characterizes organizational structures of the accounting profession in various EU countries. For example, the United Kingdom currently has six accounting bodies four of which have ministerial approval to serve as statutory auditors. France has two accountancy bodies while Germany has three. This diverse range of acounting structures makes it very difficult to secure agreement in the audit area. Suffice it to say that tangible progress toward harmonized auditing standards in Europe has been slow.[32]

In the absence of harmonized audit standards, financial analysts must make it a point to understand the audit conditions that exist in the country that hosts the business entity whose financial statements are under scrutiny. Failing this, restricting financial analyses to those companies whose statements have been audited by reputable audit firms known for their professional expertise and integrity is one coping option. If the stakes are sufficiently high, as they are for institutional investors, insisting on or paying for a second audit opinion by a world-class international audit firm is another.

Internal Auditing

A sound external audit of a reporting entity's financial statements is a *necessary* condition to assure the credibility of managements communications with external parties. However, it is not *sufficient*. The effectiveness of a firm's internal control system is equally important as it provides a more timely system of "checks and balances" than can be provided by a firm's outside auditors. The service activity that crafts and monitors a firm's internal control system is the internal audit function.

Many explanations have been advanced concerning the recent rise of internal auditing. One is the phenomenal growth of audit committees of corporate boards of directors. These audit committees, which play an active role in corporate governance, often rely on internal audit functions as their direct instrumentality. This has enhanced the stature of internal auditors as well as given them direct access to top management.

Another contributing factor to the growing importance of internal auditing is the unprecedented growth in corporate control needs. For example, at the leading French bank, Societe Generale, a rogue trader took unauthorized positions resulting in a stunning $7.2 billion loss for the firm.[33] The question of illicit payments by MNC's has ushered in yet another generation of specific tasks for internal auditing. A case in point is the recent corporate governance scandal surrounding 160-year-old German conglomerate Siemens, involving the common and highly organized payment of bribes to prospective customers.[34]

In the United States, the importance of internal auditing was highlighted by the spate of corporate scandals which began during the late 1990s. The roots of these scandals are

[32] See Peter Walton, "European Harmonization," in Frederick D.S. Choi, *International Finance and Accounting Handbook*, 3rd ed., New York: John Wiley & Sons, 2003.

[33] Elizabeth Charnock, "Holistic Compliance: The Future of Financial Risk Management," *Financial Executive*, April 2009, pp. 55–57.

[34] Dionne Searcey, "In Antibribery Law, Some Fear Inadvertent Chill on Business," *Wall Street Journal*, August 6, 2009, p. A9.

directly attributed to lax corporate governance sytems in which management placed their personal interests above the interests of their shareholders.[35] To bolster investor confidence, the U.S. Congress enacted the Sarbanes-Oxley Act (SOX). This act puts the onus on both management and their auditors to create an operating environment that (1) minimizes conflicts of interest, (2) fosters greater corporate transparency, reliability, and accuracy in financial reporting, and (3) increases the independence among management, the board of directors, and the auditors, key players in any system of corporate governance. Regarding the latter, sections 205 and 301 of the the Act highlight key roles for audit committees, a subset of a company's board of directors. First, audit committees must oversee the accounting and financial reporting processes and the financial statement audits of the companies they serve. Second, they must appoint, compensate, and evaluate the effectiveness of the external auditor. Third, they must establish procedures for the receipt and follow-up of complaints regarding questionable accounting or auditing procedures. SOX also increases the enforcment tools available to market regulators and attempts to minimze conflict of interest inherent in securities market transactions (i.e., putting investor interests ahead of transactions-driven behavior of investment advisors and investment banks).[36]

Two sections of SOX that merit special note are sections 303 and 404. Section 303 states that both the CFO and CEO must personally sign off on all required financial statements, attesting that the statements are complete and accurate and comply with all relevant regulations and accounting standards. Section 404 mandates that management include a written statement assuring the reader that they have designed and tested adequate internal controls and that these controls are working. These controls must be audited by the company's outside auditors, thus formalizing the relationship between a firm's external and internal auditors. SOX also created the Public Company Accounting Oversight Board (PCAOB) which, among other things, provides guidance for auditing a company's internal controls and establishes the content of the auditor's report.

To show how the Sarbanes-Oxley Act has been operationalized, we provide excerpts from the annual report of the world's recognized soft drink provider, Coca-Cola. Exhibit 9-11 reproduces the additional paragraph that is now included in U.S. audit reports. This paragraph follows the paragraphs describing audit scope, audit standards, and the audit opinion. The Committee of Sponsoring Organizations

EXHIBIT 9-11 Coca-Cola's Enhanced Audit Report

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of The Coca-Cola Company's internal control over financial reporting as of December 31, 2008, based on criteria established in *Internal Control-Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 24, 2009, expressed an unqualified opinion thereon.

Ernst & Young LLP

[35] This is known in agency theory as asymmetric behavior whereby the agent (management) maximizes its own personal interest at the expense of the principal (shareholders) to whom they owe their primary fiduciary responsibility.

[36] R. Trent Gazzaway, "Audit Committees: Expanded Roles, Responsibilities and Focus," *Financial Executive*, July/August, 2008, pp. 22–25.

(COSO) mentioned in Coke's audit report is an organization that was established in the 1970s to study how to combat fraudulent financial reporting. Its sponsoring organizations include the American Accounting Association, American Institute of Certified Public Accountants, Financial Executives Institute, the Institute of Internal Auditors, and the Institute of Management Accountants.[37] Exhibit 9-12 contains management's responsibility report for the firm's internal controls and Exhibit 9-13 illustrates the new internal control responsibilities of the company's external auditors.

Additional factors that help to explain the growth and recognition and importance of internal auditing include:

1. Ever-increasing corporate management accountability
2. Increasing organizatinal complexities, especially in multinational enterprises
3. Growth of corporate mergers, acquisitions, and restructurings
4. Growing use of electronic funds remittances and other transfers for illicit purposes (i.e., money laundering)
5. Increased reliance on internal auditing by external auditors (i.e., greater reliance on the work of an internal auditor improves the economics of the attest function.)
6. Increase of regulatory requirements for the performance of internal audits the likes of Sarbanes-Oxley (SOX)

Evidence from Asia (e.g., Japan recently enacted its own version of SOX) and Europe also points to expansion of internal auditing within larger corporations worldwide.

Still another explanation is probably found in the world economic environment. The phenomenon of global competition, described in Chapter 1, has resulted in thinning corporate profit margins highlighting the importance of cost and expense controls. Internal auditing plays an important role in monitoring such controls.

Professional Organization

Professional focus for internal auditing is provided by the Institute of Internal Auditors (IIA), which is headquartered in the United States and has an international membership. Established in 1941, IIA is committed to:

- Providing, on an international scale, comprehensive professional development activities, standards for the practice of internal auditing, and certification
- Researching, disseminating, and promoting to its members and to the public throughout the world, knowledge and information concerning internal auditing, including internal control and related subjects
- Establishing meetings worldwide in order to educate members and others as to the practice of internal auditing as it exists in various countries throughout the world
- Bringing together internal auditors and promoting education in the field of internal auditing

The professional examination and certification activites of IIA leads to qualification as a Certified Internal Auditor (CIA). The CIA designation is the only globally accepted

[37] Major tenets of COSO's new guidance for monitoring internal control systems is reproduced in Edith Orenstein's, "COSO's New Guidance for Monitoring Internal Control," *Financial Executive*, January/February, 2009, p. 58. Details are available on COSO's website at www.coso.org.

EXHIBIT 9-12 **Report of Coca-Cola's Management on Internal Control**

Report of Management on Internal Control Over Financial Reporting

The Coca-Cola Company and Subsidiaries

Management of the Company is responsible for the preparation and integrity of the Consolidated Financial Statements appearing in our Annual Report on Form 10-K. The financial statements were prepared in conformity with generally accepted accounting principles appropriate in the circumstances and, accordingly, include certain amounts based on our best judgments and estimates. Financial information in this Annual Report on Form 10-K is consistent with that in the financial statements.

Management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting as such term is defined in Rules 13a-15(f) under the Securities and Exchange Act of 1934 ("Exchange Act"). The Company's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Consolidated Financial Statements. Our internal control over financial reporting is supported by a program of internal audits and appropriate reviews by management, written policies and guidelines, careful selection and training of qualified personnel and a written Code of Business Conduct adopted by our Company's Board of Directors, applicable to all Company Directors and all officers and employees of our Company and subsidiaries. In addition, our Company's Board of Directors adopted a written Code of Business Conduct for Non-Employee Directors which reflects the same principles and values as our Code of Business Conduct for officers and employees but focuses on matters of most relevance to non-employee Directors.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements and even when determined to be effective, can only provide reasonable assurance with respect to financial statement preparation and presentation. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The Audit Committee of our Company's Board of Directors, composed solely of Directors who are independent in accordance with the requirements of the New York Stock Exchange listing standards, the Exchange Act and the Company's Corporate Governance Guidelines, meets with the independent auditors, management and internal auditors periodically to discuss internal control over financial reporting and auditing and financial reporting matters. The Audit Committee reviews with the independent auditors the scope and results of the audit effort. The Audit Committee also meets periodically with the independent auditors and the chief internal auditor without management present to ensure that the independent auditors and the chief internal auditor have free access to the Audit Committee. Our Audit Committee's Report can be found in the Company's 2009 Proxy statement.

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control-Integrated Framework*. Based on our assessment, management believes that the Company maintained effective internal control over financial reporting as of December 31, 2008.

The Company's independent auditors, Ernst & Young LLP, a registered public accounting firm, are appointed by the Audit Committee of the Company's Board of Directors, subject to ratification by our Company's shareholders. Ernst & Young LLP has audited and reported on the Consolidated Financial Satements of the Coca-Cola Company and subsidiaries, and the Company's internal control over financial reporting. The reports of the independent auditors are contained in this annual report.

Muhtar Kent
President and Chief Executive Officer

Harry L. Anderson
Vice President and Controller

Gary P. Fayard
Executive Vice President and Chief Financial Officer

EXHIBIT 9-13 Report of Coca-Cola's Independent Auditors on Internal Control

Report of Independent Registered Public Accounting Firm on Internal Control over Financial Reporting Board of Directors and Shareholders

The Coca-Cola Company

We have audited the Coca-Cola Company's internal control over financial reporting as of December 31, 2008, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). The Coca-Cola Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United Sates). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, The Coca-Cola Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2008, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of The Coca-Cola Company and subsidiaries as of December 31, 2008 and 2007, and the related consolidated statements of income, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2008, and our report dated February 24, 2009, expressed an unqualified opinion thereon.

Ernst & Young LLP

certification for internal auditors. At present, the IIA boasts a membership approaching 130,000 from 165 countries.

Evolving Role of Internal Auditing

The role of internal auditors has evolved over time. Initial growth of internal auditing was initially evidenced in Europe where many countries enacted regulations specifically referring to internal audit functions and requirements. Early auditors adopted a "traffic cop" mentality in their work. They were largely concerned with ascertaing the extent of compliance with established policies, plans and procedures, verifying a firm's assets, and reconciling inventory and cash to accounting records. It is not suprising that management views of internal auditing were generally guarded, with internal auditors being regarded as necessary evils. Your authors have personally observed instances where managers were loathe to communicate with auditors. In turn, internal auditors were always trying to catch managers doing something wrong. This type of situation is wasteful and detrimental to the health of the organization and its stakeholders, including financial statement users.

In an environment of global competition, managers today are looking to internal auditors for expertise that transcends traditional control functions. The major international public accounting firm of PricewaterhouseCoopers offers 10 imperatives to internal auditors to improve their value to companies operating in a post-Enron world.[38] They are:

1. Sharpen dialog with top management and directors in order to clearly establish the value-added objectives of internal audit (i.e., strategic issues, risk management, and protection of company assets).
2. Realign to meet key stakeholders' expectations (stockholders, executive management, external auditors, and market regulators).
3. Think and act strategically.
4. Expand audit coverage to include "tone set at the top," the conduct of executive management in protecting the company.
5. Assess and strengthen expertise for complex business auditing.
6. Leverage technology in high-risk areas.
7. Focus on enterprise risk management capabilities.
8. Make the audit process dynamic.
9. Strengthen quality assurance processes.
10. Measure the enhanced performance against expectations of shareholders.

The idea here is that if the internal audit function is considered a mere policing function, management support will continue to be lukewarm as manifested by their continual questioning of internal audit costs. This will not serve the organization or its major constituents well. If auditors are viewed as contributing members of the management team and provide helpful managerial advice, for example, on how to control a firm's risk exposures, they will be valued and their costs deemed more than acceptable.

Being a valued advisor to management need not and should not compromise an auditor's independence. Compromising one's integrity does not earn management's respect. Doing so would increase the risk that management would violate their fiduciary

[38] Seymour Jones, "Internal Auditing," in Frederick D.S. Choi, *International Finance and Accounting Handbook*, 3rd ed., New York: John Wiley & Sons, 2003, p. 32.13.

responsibility to maintain a sound system of internal controls which is now mandated by law. Rather management would value and embrace auditors who (1) fulfill their responsibiltiies to their key constituents, that is, readers of the firm's financial reports and (2) are talented enough to offer advice that helps a firm to maintain its international competitiveness.

Appendix 9-1

Illustration of Restatement of Japanese GAAP Financial Statements to a U.S. GAAP Basis

In this appendix we show how GAAP restatements might be used to reduce the effects of accounting diversity that persist in a post-IASB world. Exhibit 9-14 contains the year-end financial statements of Toyoza Enterprises (Japan) and Lincoln Corporation (United States), with relevant notes.

Comparative financial ratios for Toyoza and Lincoln Enterprises are provided in Exhibit 9-15.

Based on this preliminary analysis, Toyoza appears less liquid, less efficient, less profitable, and financially less solvent than Lincoln Enterprises. But is it? A good analyst will attempt

EXHIBIT 9-14 Year-End Unadjusted Financial Statements and Related Notes

	Toyoza Enterprises (¥Thousands)	Lincoln Enterprises ($Thousands)
Income Statements		
Sales	¥1,400,000	$12,000
Operating expenses:		
Cost of sales	1,120,000	10,044
Selling and administrative	100,000	575
Other operating	114,200	319
Goodwill amortization		10
Operating income	¥ 65,800	$ 1,052
Gains (losses)		
Interest expenses	28,000	130
Income before taxes	37,800	922
Income taxes	23,800	258
Income after taxes	14,000	664
Equity in earnings of unconsolidated subsidiaries		116
Net income	¥ 14,000	$ 780
Balance Sheets		
Cash	¥ 124,500	$ 1,920
Accounts receivable, net	510,000	1,660
Marketable securities	45,000	500
Inventory	390,000	1,680
Investments	150,000	1,000
Plant and equipment, net	280,600	5,160

(continued)

EXHIBIT 9-14 Year-End Unadjusted Financial Statements and Related Notes (Continued)

	Toyoza Enterprises (¥Thousands)	Lincoln Enterprises ($Thousands)
Goodwill	—	80
Total assets	¥1,500,000	$12,000
Short-term payables	¥ 165,000	$ 1,800
Short-term debt	525,000	2,160
Deferred taxes	—	—
Other current liabilities	90,000	—
Long-term debt	520,000	2,400
Reserves	90,000	—
Capital stock	75,000	960
Retained earnings	35,000	4,680
Total liabilities and owners' equity	¥1,500,000	$12,000

Notes to Toyoza's Financial Statements:

1. The balance sheet and income statement were prepared in accordance with the Japanese Commercial Code and related regulations.
2. Investments in subsidiaries and affiliated companies are accounted for using the equity method.
3. Inventories are stated at average cost. Ending inventories restated to a FIFO basis would have been ¥198 million higher.
4. Plant and equipment are carried at cost. Depreciation, with minor exceptions, is computed by the sum-of-the-years-digits method. Plant and equipment, purchased 2 years ago, have an estimated life of 4 years.
5. Operating expenses include lease rental payments of ¥40 million. The average term of the lease contracts is 4 years. All leases transfer ownership to the lessor at the end of the least term. Lincoln Enterprises' cost of capital is estimated to be 8 percent.
6. A translation gain of ¥20 million relating to consolidation of foreign operations with a net monetary liability position is being deferred under long-term debt.
7. Purchased goodwill is amortized over 20 years. The current period's amortization expense is ¥12 million for the year and is included under other operating expenses. Under a U.S. GAAP impairments test, it would have been 10% of that amount.
8. Toyoza Enterprises is allowed to set up special-purpose reserves (i.e., government-sanctioned charges against earnings) equal to a certain percentage of total export revenues. This year's charge (including other operating expenses) was ¥26,400,000. Similarly, this year's addition to Toyoza's general-purpose reserves was ¥30,800,000.
9. The ¥/$ exchange rate at year-end was ¥110 = $1.
10. Toyoza Enterprise's marginal income tax rate is 35 percent.

Notes to Lincoln Enterprises' financial statements:

1. The balance sheet and income statement are based on U.S. GAAP.
2. Inventories are carried at FIFO cost.
3. Plant and equipment are depreciated in straight-line fashion.
4. Foreign operations are consolidated with those of the parent using the temporal method of currency translation as Lincoln adopts the U.S. dollar as its functional currency.

EXHIBIT 9-15 Comparative Financial Ratios Based on Unadjusted Data

	Toyoza	Lincoln
Liquidity		
Current ratio	1.37x	1.45x
Acid-test ratio	.87x	1.03x
Efficiency		
Receivables turnover	2.75x	7.23x
Inventory turnover	2.87x	5.98x
Asset turnover	.93x	1.00x
Profitability		
Profit margin	1.0%	6.5%
Return on assets	4.4%	9.7%
Return on equity	12.7%	13.8%
Coverage		
Debt to total assets	92.7%	53.0%
Times interest earned	2.4x	8.9x

to ascertain to what extent these observed differences are due to real economic differences versus differences in accounting measurements and other environmental influences.

To aid comparison with Lincoln, we restate Toyoza's statements to a U.S. GAAP basis. Based on the information provided and examining the notes in sequence, the following adjustments are required:

1. Inventories are adjusted to reflect differences in costing methods. Adjustments would increase inventories and decrease cost of sales by ¥198,000.
2. The difference between straight-line and sum-of-the-year's-digits depreciation for the current year yields an adjustment to cost of sales and net plant and equipment of ¥46,750. The difference in depreciation for the preceding year is ¥140,250. Based on a marginal tax rate of 35 percent, the ¥140,250 increase in reported pretax earnings would create ¥49,088 in deferred taxes with the balance credited to retained earnings.
3. Under U.S. GAAP the lease transaction would be capitalized. Discounting the stream of ¥40,000,000 rental payments for 5 years at 8 percent yields a present value of ¥159,600,000 attributed to both a leased asset and a lease obligation. Based on this amount, we can break down the ¥40,000,000 lease payment into an interest payment of ¥12,768,000 and a ¥27,232,000 reduction of the lease obligation. Straight-line depreciation would yield an expense of ¥31,920,000.
4. Under SFAS No. 52 the translation gain would be removed from long-term debt and included in income.
5. Compared to U.S. GAAP, the goodwill amortization expense is ¥10,800,000 larger. We would make an adjusting entry to recognize an asset and reduce operating expenses.
6. As the United States does not permit discretionary reserves, these reserves would be removed and included in income. Moreover, they would be reclassified as equity as opposed to debt.
7. These adjustments, which Exhibit 9-16 summarizes in spreadsheet form, increase Toyoza's restated earnings by ¥220,240,000. Of this, ¥20,000,000 relating to the translation gain is not recognized for tax purposes. This yields a tax expense of ¥107,822,000 and a balance of ¥107,822,000 currently payable.

Exhibit 9-17 shows a ratio comparison of Toyoza and Lincoln Enterprises based on data adjusted for accounting differences. As can be seen, adjusted ratios show a much improved profitability picture for Toyoza. However, liquidity and efficiency ratios have worsened. While solvency (coverage) ratios have improved, the debt to total assets ratio remains exceedingly high by U.S. standards.

If accounting principle differences were the only differences among countries, adjustments such as those illustrated above would be sufficient to enable anyone to analyze and interpret foreign financial statements without ambiguity. Unfortunately, institutional and cultural differences among countries are not constant. If these differences are major, further analysis is necessary to ensure proper analysis and understanding. Appendix 9-2 amplifies this important point.

EXHIBIT 9-16 Adjustment Spreadsheet

	Unadjusted	Adjustments	Adjusted	Dollars
Sales	¥1,400,000		¥1,400,000	$12,727
-Operating expenses:				
Cost of sales	1,120,000	1) (198,000)		
		2a) (46,750)		
		3) 31,920	907,170	8,247
Selling and administrative	100,000		100,000	909
Other operating	114,200	3) (40,000)		
		5) (10,800)		
		6) (26,400)		
		7) (30,800)	6,200	56
Losses (gains)	—	4) (20,000)	(20,000)	(182)
Interest	28,000	3) 12,768	40,768	371
Taxes	23,800	7) 107,822	131,622	1,197
Net income	¥ 14,000	8) 220,240	¥ 234,240	$ 2,129
Cash	¥ 124,500		¥ 124,500	$ 1,132
Accounts receivable	510,000		510,000	4,636
Marketable securities	45,000		45,000	409
Inventory	390,000	3) 198,000	588,000	5,345
Investments	150,000		150,000	1,364
Plant and equipment, net	280,500	2a) 46,750		
		2b)140,250		
		3) 127,680	595,180	5,411
Goodwill		7) 10,800	10,800	98
Total assets	¥1,500,000		¥2,023,480	$18,395
Short-term payables	¥ 165,000		¥ 165,000	$ 1,500
Short-term debt	525,000		525,000	4,773
Deferred taxes	—			
Other current liabilities	90,000	2b) 49,088		
		7) 107,822	246,910	2,244
Long-term debt	520,000	4) (20,000)		
		3) 132,368	632,368	5,749
Reserves	90,000	6) 26,400		
		6) 30,800	32,800	298
Capital stock	75,000		75,000	682
Retained earnings	35,000	2b) 91,162		
		8) 220,240	346,402	3,149
Total liabilities and owners' equity	¥1,500,000		¥2,023,480	$18,395

EXHIBIT 9-17 Comparative Financial Ratios Based on Adjusted Data

	Toyoza	Lincoln
Liquidity		
Current ratio	1.35x	1.45x
Acid-test ratio	.73x	1.03x
Efficiency		
Receivables turnover	2.75x	7.23x
Inventory turnover	1.54x	5.98x
Asset turnover	.69x	1.00x
Profitability		
Profit margin	16.7%	6.5%
Return on assets	20.1%	9.7%
Return on equity	51.5%	13.8%
Coverage		
Debt to total assets	77.6%	53.0%
Times interest earned	9.9x	8.9x

Appendix 9-2

International Ratio Analysis[39]

Financial ratio analysis is a well-established tool for financial performance evaluation, credit analysis, and security analysis. While financial ratios may correctly measure liquidity, efficiency, and profitability in within-country comparisons, they are often misused when applied to cross-border financial comparisons, due in part to accounting principle differences. A more serious problem is that investors may misinterpret these ratios because they do not understand a foreign environment, even when financial statements have been restated to a common set of accounting principles.

Consider Japan. An initial comparison of aggregate financial ratios for Japanese and U.S. firms reveals striking differences. Japanese companies generally appear less liquid, less solvent, less efficient, and less profitable than their U.S. counterparts. However, after Japanese ratios are adjusted for differences between Japanese and U.S. GAAP, they are still very different from ratios found in comparable U.S. companies.

Environmental Considerations

Japanese companies appear to have very high leverage. For example, an earlier study conducted by the SEC found that mean leverage (total debt/shareholders' equity) in their Japan sample was 2.032, compared to 0.514 in the U.S. sample. However, high debt ratios traditionally have not been major sources of concern in Japan. Part of the reason is historical.

When the Japanese government (under pressure from the United States) ended 200 years of

[39] The following discussion is taken from a three-nation study by collaborators in Japan, Korea, and the United States. Participants in that study were Messers. Hisaaki Hino of Morgan Guaranty Trust Company, Junichi Ujiie of Nomura Securities Company, Ltd., Professors Sang Kee Min and Sang Oh Nam of Seoul National University, and Professor Arthur I. Stonehill of Oregon State University and Frederick D.S. Choi of New York University.

isolation in the mid-19th century, it made rapid economic growth and development a major national goal. To achieve this goal, the government established an extensive banking infrastructure to supply industry with most of its financing. The dependence of industrial companies on the banking system increased after World War II. Large, new industrial groupings called keiretsu evolved with major commercial banks at their core. Linked through business and personal ties, banks and their associated companies are very close. When loans become delinquent, banks (often) extend the terms of repayment or (occasionally) refinance the loan. A bank might even install a key bank official as president or board member of a troubled company to help it out.

Other companies in the keiretsu can prepay receivables owed to the distressed firm and allow longer periods for that firm to repay its receivables. With this ability to manipulate and postpone interest and principal payments, long-term debt in Japan works more like equity in the United States.[40]

Because long-term debt in Japan has many of the characteristics of preferred stock, interest payments in Japan can be likened to dividends.

Accordingly, interest coverage ratios, which are generally much lower in Japan than in the United States, are not viewed with much concern. Earnings in Japan beyond those needed to make loan payments benefit the bank little. When loans are negotiated, the borrower makes (and seldom discloses) a general agreement to give the bank collateral or guarantees upon the bank's request. Also at the bank's request, borrowing companies must submit their year-end proposed appropriation of revenue (including dividends) to the bank before it can be submitted to shareholders for approval. Banks customarily insist on compensating balances even though they are illegal, with 20 to 50 percent of company borrowings reportedly kept with the bank as time (or other) deposits. Under these conditions, low interest coverage usually does not mean a high risk of default.

Institutional and cultural factors also affect liquidity ratios without necessarily changing the financial risk that the ratios are designed to measure. For example, an American reader who sees the relatively low current ratios of Japanese companies (resulting from relatively high short-term debt) might conclude that Japanese companies have a relatively lower ability to cover their short-term debt. In Japan, however, high short-term debt seldom indicates a lack of liquidity. Short-term debt is attractive to companies because short-term obligations typically have lower interest rates than long-term obligations. Moreover, short-term borrowings in Japan are seldom repaid but normally are renewed or rolled over. Banks are happy to renew these loans as this allows them to adjust their interest rates to changing market conditions. Thus, short-term debt in Japan works like long-term debt elsewhere. In fact, the use of short-term debt to finance long-term assets appears to be the rule, not the exception, in Japan.

Longer average collection periods also reflect differences in business customs. Purchases in Japan are rarely made in cash. Postdated checks with maturities ranging between 60 and 90 days are common. The Japanese tradition of lifetime employment has some influence on collection policies. Companies often go to great lengths to accommodate their commercial customers. During business downturns, companies extend repayment terms to avoid placing their customers in a financial bind that might force them to discharge employees. In return, continued patronage ensures stability in employment (and other respects) for the selling company. Inventory turnover numbers are similarly affected.

During slack periods, manufacturing companies prefer to continue production and build inventories rather than idle workers. Japanese managers are not as concerned with short-term profits as their U.S. counterparts. They have more job security than prevails in the United States. Equity shares in Japanese companies are largely held by related commercial banks, suppliers, and customers. These shareholders are more interested in maintaining their close business ties than in stock market gains, and will hold shares on a long-term basis regardless of short-term market performance.

Corporate managers in Japan believe that increased market share will ensure long-run profits. For this reason, sales growth is a main objective. Growing sales contribute to higher employment

[40] The gradual liberalization of Japan's financial system is increasing the exceptions to this practice.

and greater job security, and as such are consistent with the tradition of lifetime employment. Because all Japanese enterprises seek sales growth, price competition is intense, resulting in low profit margin and profitability statistics. This is especially so for large companies that usually sell heavily in extremely competitive export markets.

So, are Japanese companies truly more risky, less efficient, and less profitable than their U.S. counterparts? Not necessarily.

In Europe, national characteristics also appear to strongly influence profit measurement. Large companies in France and Germany tend to be more conservative in measuring profits than large companies in the United Kingdom. Also important are tax laws and reliance on lenders rather than investors for capital.

Thus, when analyzing foreign financial statements, readers must be careful to determine whether observed differences in firm performance result from: (a) accounting measurement differences; (b) economic, cultural, or institutional differences; or (c) real differences in the attributes being measured.

Discussion Questions

1. What are the four main steps in doing a business strategy analysis using financial statements? Why, at each step, is analysis in a cross-border context more difficult than a single-country analysis?
2. One interpretation of the popular efficient markets hypothesis is that the market fully impounds all public information as soon as it becomes available. Thus, it is supposedly not possible to beat the market if fundamental financial analysis techniques are applied to publicly available information such as a firm's published accounts. Why might this hypothesis be more tenable in the United States than in other international capital markets?
3. Describe the impact on accounting analysis of cross-country variations in accounting measurement and disclosure practices.
4. Investors can cope with accounting principles in different ways. Can you suggest two methods of coping and which of the two you find most appealing?
5. What are common pitfalls to avoid in conducting an international prospective analysis?
6. How does the translation of foreign currency financial statements differ from the foreign currency translation process described in Chapter 6?
7. If you were asked to provide the five most important recommendations you could think of to others analyzing nondomestic financial statements, what would they be?
8. ABC Company, a U.S.-based MNC, uses the temporal translation method (see Chapter 6) in consolidating the results of its foreign operations. Translation gains or losses incurred upon consolidation are reflected immediately in reported earnings. Company XYZ, a Dutch MNC, employs the current rate method with translation gains and losses going into owners' equity. What financial ratios are most likely to be affected by these different accounting principles, and what are the implications for security analysts?
9. What role does the attest function play in international financial statement analysis?
10. What is internal control, how do internal auditors relate to it, and how does this process relate to the analysis of financial statements?

Exercises

1. Condensed comparative income statements of Señorina Panchos, a Mexican restaurant chain, for the years 2009 through 2011 are presented in Exhibit 9-18 (000,000's pesos). You are interested in gauging the past trend in dividends paid by Señorina Panchos from a dollar perspective. The company's payout ratio (ratio of dividends paid to reported earnings) has averaged 30 percent. Foreign exchange rates during the three-year period are found in Exhibit 9-19.

EXHIBIT 9-18 Comparative Income Statements: Señorina Panchos

	2009	2010	2011
Sales	91,600	114,300	138,900
Gross margin	15,500	20,500	27,700
Net income	8,500	10,800	15,900

EXHIBIT 9-19 Foreign Exchange Rates

	2009	2010	2011
Year-end rates	\$1 = P 12.112	\$1 = P 12.640	\$1 = P 13.000

EXHIBIT 9-20 Statement of Cash Flow Worksheet

	Beginning Balance	Debit	Credit	Ending Balance
Balance sheet items (detailed)				
		Sources of funds	Uses of funds	
Net change in cash				

Required: Prepare a trend analysis of dividends paid by Señorina Panchos from a U.S. perspective assuming (a) there are no restrictions on the payment of dividends to U.S. investors and (b) Señorina Panchos' accounting practices are similar to those in the United States.

2. Based on the balance sheet and income statement data contained in Exhibit 9-5, and using the suggested worksheet format shown in Exhibit 9-20 or one of your own choosing, show how the statement of cash flows appearing in Exhibit 9-5 was derived.

3. Refer again to Exhibits 9-5 and 9-6. Show how you would modify the consolidated funds statement appearing in Exhibit 9-5 to enable an investor to get a better feel for the actual investing and financing activities of the Norwegian subsidiary.

4. Infosys Technologies, introduced in Chapter 1, regularly provides investors with a performance measure called *economic value-added* (EVA). Originally pioneered by GE, EVA measures the profitability of a company after deducting not just the cost of borrowing but also the firm's cost of equity capital. So EVA is the after-tax return *on* capital employed (adjusted for the tax shield on debt) less the cost *of* capital employed. Companies that earn a higher return on capital employed than its cost of capital create value for its shareholders. Those that do not destroy shareholder value.

Reproduced below is EVA calculations for Infosys for 2006.

Required:

1. Did Infosys create value for its shareholders?
2. Is EVA a useful performance metric relative to net income? (Compare PAT or profit after tax, and EVA to average capital employed.)

Cost of capital:	
Cost of risk-free debt (%)	7.50
Market premium	7.00
Beta variant	0.78
Cost of equity (%)	12.96
Average debt/Total capital (%)	—
Cost of debt – net of tax (%)	NA
Weighted average cost of capital (%)	12.96
Average capital employed	6,177
PAT as a percentage of average capital employed (%)	40.14
Economic Value Added:	
Operating profit (excluding extraordinary income)	2,654
Less: Taxes	313
Less: Cost of capital	801
EVA	1,540
Ratios:	
EVA as a percentage of average capital employed (%)	24.93

5. Read Appendix 9-1. Referring to Exhibit 9-14 and related notes, assume instead that Toyoza's inventories were costed using the FIFO method and that Lincoln Enterprises employed the LIFO method. Provide the adjusting journal entries to restate Toyoza's inventories to a LIFO basis, assuming that ending inventories would have been ¥250 million lower under the LIFO method.

6. The following sales revenue pattern for a British trading concern was cited earlier in the chapter:

	2009	2010	2011
Sales revenue	£23,500	£28,650	£33,160

Required:

a. Perform a convenience translation into U.S. dollars for each year given the following year-end exchange rates:

2009	£1 = $2.10
2010	£1 = $2.20
2011	£1 = $1.60

b. Compare the year-to-year percentage changes in sales revenues in pounds and in U.S. dollars. Do the two time series move in parallel fashion? Why or why not?

c. Suggest a method for minimizing the effect of exchange rate changes on foreign currency trend data.

7. Refer to Exhibit 9-3. This exhibit presents P/E ratios for public companies in various countries. What factors might explain the differences in P/E ratios that you observe?

8. Assume you are a member of an international policy setting committee and are responsible for harmonizing audit report requirements internationally. Examine Exhibit 9-8. Based on the varying requirments you observe, what minimum set of requirements would you advocate for on behalf of the international investing community? Your committee also includes delegates from Austria, Bahrain, France, Finland, Malaysia, Nigeria, Scotland, and Chile.

9. Examine Exhibit 9-9. On the basis of the information provided there, which opinion gives you the most comfort as an investor in nondomestic securities?

10. Identify three to four criteria that you would personally use to judge the merits of any corporate database. Use these criteria to rate the information content of any Web site appearing in exhibit 9-4 as excellent, fair, or poor.

CASES

Case 9-1

Sandvik

One of the accounting development patterns that was introduced in Chapter 2 was the macroeconomic development model. Under this framework accounting practices are designed to enhance national macroeconomic goals. A national policy advocating stable employment by avoiding major swings in business cycles would sanction accounting practices that smooth income. Similarly, national policies supporting growth in certain industries would sanction rapid write-offs of fixed assets to encourage capital formation. Sweden is a good example of this reporting pattern. Assets may be revalued upwards if they are deemed to have "enduring value," the tax law permits shorter asset lives, and ceiling tests for depreciation charges include the higher of 130 percent declining balance method or 20 percent straight line. Companies are also permitted to allocate a portion of pre-tax earnings to special tax equalization reserves which are not available for dividends until reversed.

Reproduced below are the parent company financial statements of Sandvik for the years 2006 and 2007 and selected notes. Sandvik is a global high technology company headquartered in Sweden, with advanced products and well-known brands. Its core areas of competence include high speed tools for metal working, machinery, tools and services for rock excavation, and specialty steels. The company states that it applies all IFRS and IFRIC interpretations approved by the EU to the extent possible within the framework of the Swedish Annual Accounts Act and considering the close tie between financial reporting and taxation. Examine the data presented and answer the following questions.

1. What advantages and disadvantages arise for firms that chose to employ the Swedish system of special reserves?
2. What are the potential benefits of the system of special reserves to the Swedish government?
3. In what way does the existence of the Swedish reserve system affect the ability of a financial analyst to evaluate a Swedish firm vis-à-vis a non-Swedish firm?
4. In what way does the use of "reserves" affect Sandvik's financial statements for the year 2007? How does this compare with the effect of reserves in the previous year?
5. Show the accounting entry used to create the 2007 *Appropriations* figure in the income statement.
6. If you were to unwind the effect of reserves for 2007, how would Sandvik's key profitability ratios, such as return on sales and return on assets change?

Parent Company Income Statement

Amounts in SEK M		**2007**	**2006**
Revenue	Note 2	20682	17932
Cost of sales and services		−16111	−13646
Gross profit		4571	4286
Selling expenses		−621	−577
Administrative expenses		−1982	−1719
Research and development costs	Note 4	−1019	−778
Other operating income	Note 5	488	455
Other operating expenses	Note 6	−916	−1344
Operating profit	Note 3, 7, 8	521	323
Income from shares in group companies	Note 9	5997	9264
Income from shares in associated companies	Note 9	5	1
Income from investments held as non-current assets	Note 9	—	0
Interest income and similar items	Note 9	638	657
Interest expenses and similar items	Note 9	−1165	−898
Profit after financial items		5996	9347
Appropriations	Note 10	3063	305
Income tax expense	Note 11	−745	−29
Profit for the year		8314	9623

Parent Company Balance Sheet

Amounts in SEK M		2007	2006
ASSETS			
Non-current assets			
Intangible assets			
Patents and similar rights	Note 14	26	51
Total		26	51
Property, plant and equipment			
Land and buildings	Note 14	484	473
Plant and machinery	Note 14	3624	3492
Equipment, tools and installations	Note 14	305	309
Construction in progress and advance payments	Note 14	1352	974
Total		5765	5248
Financial assets			
Shares in group companies	Note 15	13762	11723
Advances to group companies		48	34
Investmments in associated companies	Note 16	4	4
Advances to associated companies		—	0
Other investments		1	1
Non-current receivables	Note 18	20	23

(continued)

Parent Company Balance Sheet (Continued)

Amounts in SEK M		2007	2006
Deferred tax assets	Note 11	22	17
Total		13857	11802
Total non-current assets		19648	17101
Current assets			
Inventories	Note 19	6242	4599
Current receivables			
Trade receivables		1255	1150
Due from group companies		16311	15846
Due from associated companies		131	474
Income tax receivables	Note 11	393	16
Other receivables	Note 18	518	456
Prepaid expenses and accrued income		679	423
Total		19287	18365
Cash and cash equivalents		6	19
Total current assets		25535	22983
TOTAL ASSETS		45183	40084
EQUITY AND LIABILITIES			
Equity			
Non-distributable equity			
Share capital		1424	1424
Legal reserve		1611	1611
Total		3035	3035
Distributable equity			
Profit brought forward		1552	1637
Profit for the year		8314	9623
Total		9866	11260
Total equity	Note 20	12901	14295
Untaxed reserves			
Accelerated depreciation	Note 21	—	2430
Tax allocation reserves	Note 22	—	639
Other untaxed reserves	Note 22	19	15
Total		19	3084
Provisions			
Provisions for pensions and similar obligations	Note 23	108	106
Provisions for taxes	Note 11	55	42
Other provisions	Note 24	154	127
Total		317	275
Non-current interest-bearing liabilities			
Loans from financial institutions	Note 25	1718	1669
Loans from group companies	Note 25	30	3
Other liabilities	Note 25	10131	2511
Total		11879	4183

(continued)

Parent Company Balance Sheet (Continued)

Noncurrent non–interest-bearing liabilities			
Other liabilities		—	9
Total		—	9
Current interest-bearing liabilities			
Loans from group companies		10902	12766
Other liabilities		1080	1324
Total		11982	14090
Current noninterest-bearing liabilities			
Advance payments from customers		159	53
Accounts payable		1721	1734
Due to group companies		3655	27
Due to associated companies		82	125
Other liabilities		136	205
Accrued expenses and deferred income	Note 28	2332	2004
Total		8085	4148
TOTAL EQUITY AND LIABILITIES		45183	40084
Pledged assets	Note 29	—	—
Contingent liabilities	Note 29	16068	11929

Note 10. Appropriations

Parent Company	2007	2006
Accelerated depreciation	2429	−143
Changes in tax allocation reserves	638	437
Changes in other untaxed reserves	−4	11
Total	3063	305

Note 11. Income tax

Reported in Income Statement

	Group		Parent Company	
Income tax expense	2007	2006	2007	2006
Current tax	−4396	−3135	−829	−115
Adjustment of taxes attributable to prior years	229	−16	67	64
Total current tax expense	−4167	−3151	−762	−51
Deferred taxes relating to temporary differences and unused tax losses	763	145	17	22
Total tax expense	−3404	−3006	−745	−29

The Group's tax expense for the year was SEK 3,404 M (3.006) or 26.2% (27.0) of the profit after financial items.

The adjustment of taxes attributable to prior years mainly relates to favorable tax litigation resolutions and advance rulings in Sweden and reversal of tax provisions upon finalization of tax audits of foreign subsidiaries.

Reconciliation of the Group's tax expense The Group's weighted average tax based on the tax rates in each country, is 29. 6% (27.0). The nominal tax rate in Sweden is 28.0% (28.0).

Reconciliation of the Group's weighted average tax rate, based on the tax rates in each country, and the Group's actual tax expense:

Reconciliation of the Parent Company's tax expense The Parent Company's effective tax rate of 8.2% (0.8) is less than the nominal tax rate in Sweden, mainly due to tax-exempt dividend income from subsidiaries and associated companies:

	2007		2006	
Group	SEK M	%	SEK M	%
Profit after financial items	12997		11113	
Weighted average tax based on each country's tax rate	−3849	−29.6	−3001	−27.0
Tax effect of:				
Non-deductible expenses	−195	−1.5	−179	−1.6
Tax exempt income	199	1.5	244	2.2
Adjustments relating to prior year	229	1.8	−16	−0.1
Effects of unused tax losses, net	75	0.6	−22	−0.2
Other	137	1.1	−32	−0.3
Total reported tax expense	−3404	−26.2	−3006	−27.0

Reconciliation of the Parent Company's nominal tax rate and actual tax expense:

	2007		2006	
Parent Company	SEK M	%	SEK M	%
Profit before tax	9059		9652	
Tax based on the nominal tax rate for the Parent Company	−2537	−28.0	−2703	−28.0
Tax effects of:				
Non-deductible expenses	−33	−0.4	−59	−0.6
Tax-exempt income	1758	19.4	2669	27.6
Adjustments relating to prior years	67	0.7	64	0.7
Total reported tax expense	−745	−8.2	29	−0.3

Tax items recognized directly in equity

Group	2007	2006
Deferred tax relating to hedging reserve	31	34
Total	31	34
Parent Company	2007	2006
Current tax relating to taxable group contributions	843	–95
Total	843	–95

Reported in the balance sheet

Deferred tax assets and liabilities The deferred tax assets and liabilities reported in the balance sheet are attributable to the following assets and liabilities (liabilities shown with a minus sign):

	2007			2006		
Group	Deferred tax assets	Deferred tax liabilities	Net	Deferred tax assets	Deferred tax liabilities	Net
Intangible assets	34	–666	–632	39	–282	–243
Property, plant, and equipment	96	–965	–869	195	–1573	–1378
Financial non-current assets	58	–2	56	26	–31	–5
Inventories	1445	–62	1383	1034	–30	1004
Receivables	66	–335	–269	95	–237	–142
Interest-bearing liabilities	325	–263	62	549	–184	365
Noninterest-bearing liabilities	513	–761	–248	393	–444	–51

	2007			2006		
Group	Deferred tax assets	Deferred tax liabilities	Net	Deferred tax assets	Deferred tax liabilities	Net
Other	19	–49	–30	20	–261	241
Unused tax losses	84	—	84	—	—	—
Total	2640	–3103	–463	2351	–3042	–691
Offsetting within companies	–1317	1317	—	–1031	1013	—
Total deferred tax assets and liabilities	1323	–1786	–463	1338	–2029	–691
Parent Company						
Property, plant and equipment	—	–37	–37	—	–38	–38

Note 21. Parent Company's Accelerated Depreciation

	Land and buildings	Plant and machinery	Equipment, tools and installations	Patents and similar rights	Total
Balance at 1 January 2006	1	2075	182	29	2287
Accelerated depreciation for the year	0	127	13	3	143
Balance at 31 December 2006	1	2202	195	32	2430
Balance at 1 January 2007	1	2202	195	32	2430
Accelerated depreciation for the year	−1	−2202	−195	−32	−2430
Balance at December 2007	—	—	—	—	—

Note 22. Parent Company's Other Untaxed Reserves

	2007	2006
Tax allocation reserves		
Appropriated at 2002 tax assessment	—	435
Appropriated at 2004 tax assessment	—	204
Balance at 31 December	—	639
Other untaxed reserves	19	15

Case 9-2

Continental A.G.

Marissa Skye and Alexa Reichele, tire analysts for a global investment fund located in Manhattan, are examining the 20X0 earnings performance of two potential investment candidates. Reflecting the company's investment philosophy of picking the best stocks wherever they are located in the world, both junior analysts have adopted an approach of undertaking matched comparisons of leading firms in the tire industry. For starters, Dietrich and Marissa focused on Goodyear Tire & Rubber Company (United States) and Continental A.G. (Germany) as their first screen.

ALEXA: Well, what do you think, Marissa?

MARISSA: Looking at the income trends (see Exhibit 9-21), I sort of like Continental.

ALEXA: Yes, I agree. Goodyear's results are much more volatile.

MARISSA: I always look to see how a company has done in an off year. Owing to the continued consolidation of the tire industry, excess capacity created by reduced demand for autos and trucks, as well as reduced consumer spending for replacement tires in light of economic and political uncertainties, 20X0 was a disastrous year for every major company in the industry. Given that environment, Continental's performance was stellar!

ALEXA: Maybe we'd better check with Kazuo, our accountant, to see if we're reading the tea leaves correctly.

MARISSA: I'll give him a call.

(After a 5-minute conversation)

ALEXA: Well, what did he say?

MARISSA: He said, we're probably correct in our overall assessment (I think he's just being polite), but that we'd better check the company's accounting policies. He says German accounting principles tend to impart a conservative bias to corporate earnings. He'll send us an e-mail attachment summarizing some major GAAP differences between the United States and Germany very soon.

(The e-mail attachment is reproduced as Exhibit 9-22.)

MARISSA: (Having examined the attachment) Looks like there are some major differences in reporting rules between Germany and the United States.

ALEXA: Do you think we should attempt to restate Continental's accounts to a U.S. GAAP basis?

MARISSA: Why don't we try?

ALEXA: Where should we start?

MARISSA: Let's examine Continental's financial statements (see Exhibit 9-23) to see if we can detect any unusual accounting practices that may have a distorting effect on the company's reported performance. I notice that Continental follows the European practice of including both parent company (Consolidated A.G.) and consolidated numbers. Let's just focus on the consolidated figures for now.

ALEXA: Right. And if we find some disparities, maybe we should just attempt one or two adjustments, particularly those for which we have sufficient information.

If these adjustments have a significant earnings impact, then let's press the right buttons and see if we can't get the company to give us some additional information so that we can do a more comprehensive analysis.

MARISSA: Sounds good. Let's get started.

EXHIBIT 9-21 Comparative Performance Data Goodyear ($ millions)

	19X6	19X7	19X8	19X9	20X0
Sales	9,040	9,905	10,810	10,869	11,273
Net income (loss)	124	771	350	207	(38)
Continental (Euro millions)					
	19X6	19X7	19X8	19X9	20X0
Sales	4,969	5,098	7,906	8,382	8,551
Net income (loss)	115	139	195	228	93

EXHIBIT 9-22 Major Accounting Differences between Germany and the United States

	Germany	United States
Goodwill	Written off against reserves or amortized; commercial law prescribes four years; most companies amortize over 15 years for tax purposes.	Capitalized and amortized subject to an impairments test.
Long-term leases	Generally no lease capitalization.	Capitalization required when specific criteria met.
Depreciation	Highest rates allowable for tax purposes.	Generally straight-line over estimated useful lives.
Inventory	Costing must mirror physical flow of goods. Average costing is common.	LIFO costing method is common.
Reserves	Use of discretionary reserves to smooth earnings are not uncommon.	Use of discretionary reserves to smooth earnings are discouraged.

EXHIBIT 9-23 Continental's Financial Statements and Related Notes

Continental Aktiengesellschaft
Consolidated Balance Sheet at December 31, 20X0

Assets	**See Note No.**	**12/31/20X0 euro 000**	**12/31/19X9 euro 000**
Fixed assets and investments			
Intangible assets	(1)	430,920	11,944
Property, plant and equipment	(2)	2,196,724	1,797,125
Investments	(3)	225,729	189,428
		2,853,373	1,998,497
Current assets			
Inventories	(4)	1,611,566	1,506,771
Receivables and other assets	(5)	1,475,557	1,386,212
Marketable securities	(6)	51,426	339,219
Liquid assets	(7)	144,625	134,079
		3,283,174	3,366,281
Prepaid expenses	(8)	31,070	41,092
		6,167,617	5,405,870

Shareholders' equity and liabilities	**See Note No.**	**12/31/20X0 euro 000**	**12/31/19X9 euro 000**
Shareholders' equity			
Subscribed capital	(9)	439,097	435,022
Capital reserves	(10)	962,275	956,240
Retained earnings	(11)	137,788	133,770
Minority interests	(12)	94,286	46,692
Reserve for retirement benefits	(13)	2,861	3,691
Net income available for distribution		36,383	70,984
		1,672,690	
Special reserves	(14)	80,552	118,103
Provisions	(15)	1,733,440	1,386,799
Liabilities	(16)	2,680,935	2,254,569
		6,167,617	5,405,570

Continental Aktiengesellschaft
Consolidated Statement of Income for the period from January 1 to December 31, 20X0

	See Note No	**20X0 euro 000**	**19X9 euro 000**
Sales	(17)	8,551,015	8,381,880
Cost of sales*	(18)	6,490,128	6,256,858
Gross profit on sales		2,060,887	2,125,002
Selling expenses	(19)	1,255,474	1,174,268
Administrative expenses	(20)	504,277	474,932

(continued)

EXHIBIT 9-23 **Continental's Financial Statements and Related Notes** **(Continued)**

	See Note No	20X0 euro 000	19X9 euro 000
Other operating income	(21)	194,266	164,076
Other operating expenses	(22)	140,218	91,351
Net income from investments and financial activities	(23)	2138,777	2116,536

Continental Aktiengesellschaft

Consolidated Statement of Income for the period from January 1 to December 31, 20X0

	See Note No	20X0 euro 000	19X9 euro 000
Net income from regular business activities		216,407	431,991
Taxes	(24)	122,972	204,153
Net income for the year		93,435	227,838
Balance brought forward from previous year		1,380	1,199
Minority interests in earning	(25)	288	258
Withdrawal from the reserve for retirement benefits		+ 830	+ 544
Change in reserves		259,174	2158,539
Net income available for distribution		36,383	70,984

Based on an audit performed in accordance with our professional duties, the consolidated financial statements comply with the legal regulations. The consolidated financial statements present, in compliance with required accounting principles, a true and fair view of the net worth, financial position, and results of the corporation. The management report for the corporation is in agreement with the consolidated financial statements.

Berlin/Hanover, April 8,19X1

Accounting policies:

Assets

Acquired intangible assets are carried at acquisition cost and amortized by the straight-line method over their anticipated useful life. Capitalized goodwill resulting from the acquisition of companies is deducted in installments from retained earnings on the balance sheet, over periods estimated individually from 10 to 20 years.

Property, plant, and equipment is valued at acquisition or manufacturing costs, less scheduled depreciation.

Continental Aktiengesellschaft uses the declining balance method to depreciate movable fixed assets, while the straight-line method is used for all other fixed assets. We change over from the declining balance method to the straight-line method as soon as this leads to higher depreciation. In the financial statements of Continental Aktiengesellschaft, the special depreciation permitted by the tax laws is taken insofar as necessary in view of the fact that the commercial balance sheet is the basis for the balance sheet prepared in accordance with the tax regulations.

Since 1989, pursuant to internationally accepted accounting principles, additions have been depreciated exclusively by the straight-line method in the consolidated financial statements.

(continued)

EXHIBIT 9-23 Continental's Financial Statements and Related Notes (Continued)

The following table shows the useful life taken as a basis for depreciating the major categories of property, plant, and equipment:

Buildings up to 33 years
Additions from 1990 on, up to 25 years
Technical facilities and machinery, 10 years
Plant and office equipment, 4 to 7 years

Molds up to 4 years

Additions to movable assets made during the first 6 months of the year are depreciated at the full annual rate, and those made during the last 6 months at half the annual rate. Minor fixed assets are written off completely in the year of acquisition.

These depreciation rules are applied by each of the domestic and foreign companies as of the date it became part of the Corporation.

Interests in affiliates and other companies held as investments are valued at acquisition cost, less the necessary write-downs.

Interest-bearing loans granted are shown at face value; loans that bear little or no interest are discounted to their cash value.

Inventories are carried at the lower acquisition/manufacturing cost or market.

Manufacturing cost includes direct costs, as well as a proportional part of material and production overhead and depreciation. Appropriate adjustments are made for declines in value due to reduced usability or prolonged storage.

In valuing receivables and miscellaneous assets, we make reasonable allowances to cover all perceivable risks, as well as lump-sum deductions to cover the general credit risk.

Marketable securities are valued at the lower of cost or market.

Insofar as permissible, we have continued to take all the extraordinary depreciation and write-downs, as well as the depreciation and write-downs for tax purposes, which were taken in previous years on fixed assets, investments, and current assets.

Discounts and issue costs of loans and bonds are shown as prepaid expenses and amortized over the term of the individual loans and bonds.

Shareholders' Equity and Liabilities.

Provisions based on sound business judgment are set up for all perceivable risks, undetermined obligations, and impending losses.

At our German companies, the provisions for pension plans and similar obligations are set up at a 6% interest rate, on the basis of actuarial computations in accordance with the statutory method.

Pension commitments and similar obligations of foreign companies are also computed according to actuarial principles, discounted to the present value at the interest rates prevailing in the respective countries, and covered by appropriate provisions for pension plans or by pension funds. Employee claims for severance benefits under national laws have also been taken into account.

The pension obligations of American companies are valued according to the stricter valuation rules that have been in force in the U.S.A. since 1987. The provision made for this purpose in the balance sheet is slightly higher than if the corresponding German method of computation had been applied.

The obligations of General Tire Inc., Akron, Ohio, for post-retirement medical benefits are fully covered by provisions computed according to actuarial principles. New U.S. regulations (FASB

(continued)

EXHIBIT 9-23 Continental's Financial Statements and Related Notes (Continued)

No. 106) require that by no later than 1993, a provision must be established for not only the retirees and vested workforce, but also for the nonvested employees. Although this regulation allows a build-up of the provision over a 20-year period, we have already transferred the full additional amount required (DM270.7 million) to the provisions shown on the consolidated balance sheet. To balance this item, goodwill deducted from consolidated retained earnings at the time of the acquisition of General Tire has been capitalized in the same amount.

As a rule, provisions for repairs that have been postponed to the subsequent year are established in the amount of the probable cost.

When there are temporary differences between the values of the individual companies' assets and liabilities as determined according to the tax laws and those appearing in their balance sheets, which are prepared according to valuation principles that are uniform throughout the Corporation, deferred taxes may result. We show the latter only when they are reflected in provisions for future tax expenses. Liabilities are stated at the redemption amount.

Selected Notes:

(10) Capital reserves. This item includes amounts received upon the issuance of shares in excess of their par value totaling euro 724. 9 million, as well as the premium of euro 237.4 million paid upon the exercise of warrants attached to the bonds issued in 19X4, 19X6, and 19X7 and to the 19X8 convertible debentures. Capital reserves increased by euro 6.0 million due to the exercise of the conversion and option rights in 20X0.

(11) Retained earnings

euro 000	**Continental AG**	**Consolidated**
As of 12/31/19X9	141,699	133,770
Differences from translation	—	255,009
Other	—	2147
Allocation from net income	8,000	59,174
As of 12/31/20X0	149,699	137,788

(14) Special reserves

euro 000	**12/31/20X0**		**12/31/19X9**	
	Continental AG	**Consolidated**	**Continental AG**	**Consolidated**
Reserve per/3. Foreign Investment Act	59,766	15,000	84,312	38,265
Reserve per/6b, Income Tax Act	—	448	—	289
Reserve per/52 Par.8 Income Tax Act	705	1,069	940	1,425
Governmental capital investment subsidies	—	57,664	—	60,988
Other	2,533	6,371	4,137	17,136
	63,004	80,552	89,389	118,103

(continued)

EXHIBIT 9-23 **Continental's Financial Statements and Related Notes (Continued)**

The decrease in special reserves is due, in particular, to the elimination of the special reserve pursuant to /3. Foreign Investment Act, following the write-down made in connection with Semperit (Ireland) Ltd., Dublin, Ireland. The special reserves are divided into an equity portion of euro 69.5 million and a debt portion of euro 11.1 million, representing deferred taxes, which will be paid in due course, when the reserves are eliminated. Including the shareholders equity of euro 1,672.7 million shown on the balance sheet, the actual shareholders equity amounts to euro 1,742.2 million and the equity ratio to 28.2%.

(15) Provisions

euro 000	**12/31/20X0**		**12/31/19X9**	
	Continental AG	**Consolidated**	**Continental AG**	**Consolidated**
Provision for pensions	220,977	972,173	206,374	636,626
Provisions for taxes	31,937	72,210	53,144	92,265
Miscellaneous provisions	191,465	689,057	188,817	657,908
	444,379	1,733,440	448,335	1,386,799

The Corporation's provisions for pensions and similar obligations rose considerably. Apart from normal allocations, this increase was due, in particular, to an addition to cover claims for medical benefits which may be made by employees of General Tire Inc., Akron, Ohio, U.S.A., after their retirement.

At two of our retirement benefit organizations, there is a shortfall of euro 22.0 million in the coverage of pension obligations. The provisions at four other German companies have been funded only to the maximum amount permitted for tax purposes.

Lower tax liabilities permitted a reduction in provisions for taxes, which include amounts relating both to the current fiscal year and to previous years.

Provisions for deferred taxes in the individual financial statements, after deduction of the net prepaid taxes arising from consolidation procedures, amounted to euro 7.4 million.

Miscellaneous provisions cover all perceivable risks and other undetermined obligations. In addition to provisions for warranties, bonuses, and miscellaneous risks, they consist mainly of provisions for personnel and social welfare payments, deferred repairs, and service anniversaries.

(21) Other operating income

euro 000	**12/31/20X0**		**12/31/19X9**	
	Continental AG	**Consolidated**	**Continental AG**	**Consolidated**
Gains on the disposal of fixed assets and investments	6,179	33,423	2,435	10,733
Credit to income from the reversal of provisions	1,418	17,312	7,400	33,559
Credit to income from the reduction of the general bad debt reserve	—	1,101	—	2,014

(continued)

EXHIBIT 9-23 **Continental's Financial Statements and Related Notes (Continued)**

(21) Other operating income **(Continued)**

euro 000	**12/31/20X0**		**12/31/19X9**	
	Continental AG	**Consolidated**	**Continental AG**	**Consolidated**
Credit to income from the reversal of special reserves	26,385	38,824	12,645	32,456
Miscellaneous income	120,143	103,606	106,843	85,294
	154,125	194,266	129,323	164,076

In addition to current income from rentals, leasing, and miscellaneous sideline operations, other operating income includes indemnification paid by insurance companies and income attributable to other fiscal years.

For the parent company, this item consists mainly of cost apportionments received from other companies belonging to the Corporation.

(22) Other operating expenses

euro 000	**12/31/20X0**		**12/31/19X9**	
	Continental AG	**Consolidated**	**Continental AG**	**Consolidated**
Losses on the disposal of fixed assets and investments	2,015	6,694	306	4,315
Losses on the disposal of current assets	1,414	19,197	257	22,818
Allocation to special reserves	—	168	46,995	1,278
Miscellaneous expenses	111,504	114,161	89,374	62,940
	114,933	140,218	136,932	91,351

The miscellaneous expenses relate primarily to sideline operations and the establishment of necessary provisions; at the parent company, they include cost apportionments paid to other companies belonging to the Corporation.

(24) Taxes

euro 000	**12/31/20X0**		**12/31/19X9**	
	Continental AG	**Consolidated**	**Continental AG**	**Consolidated**
On income	45,747	59,884	75,612	141,476
Other taxes	14,186	63,088	17,527	62,877
	59,993	122,972	93,139	204,153