

An Introduction to Financial Statements

Imagine that you're a banker, and you have to determine which companies to lend to and on what terms. Or you're an investor who wants to know which companies are likely to outperform the market averages over the next year or two. In short, where should you invest your capital? To answer this question, investors turn to corporate financial statements.

Financial statements exist to provide useful information on businesses to people who have, or may have, an economic stake in those businesses. These statements should help:

- *investors*, to make more intelligent decisions on where to put their scarce capital;
- *bankers*, to determine whether or not a company will be able to service its debts;
- *suppliers*, to assess whether or not a potential customer is a good credit risk;
- *customers*, to determine whether or not the company is strong enough financially to deliver on long-term promises of service and warranty coverage;
- *tax authorities*, to determine whether or not a company is paying its fair share of taxes;
- *trade union representatives*, in forming their negotiating positions with management;
- *competitors*, to benchmark their performance;
- *courts of law*, to measure, for example, the damage caused by one firm to another as a result of alleged unfair trade practices;
- *antitrust regulators*, to measure market share and profits relative to competitors;
- *prospective employees*, to determine whether the company is worth pursuing as a long-term employer.

You may notice one important constituency missing from this list of financial statement users: corporate management. Financial statements are the responsibility of management, but are not designed to meet their own informational needs. Financial statements are a means for company managers to communicate the financial strength and profitability of their businesses to investors and other groups, but are not really intended for internal management use. To understand why, let's take a brief look at the financial statements (shown in Exhibits 1.1–1.3) of Taiwan Semiconductor Manufacturing Company (TSMC), one of the world's largest manufacturers of integrated circuits and semiconductors. Based in Taiwan, they supply components for a variety of consumer and industrial electronic devices.

The three principal financial statements – the balance sheet, the income statement, and the statement of cash flows – are highly aggregated documents: masses of detail accumulated in a small number of line items. Without this aggregation, the statements would be unreadable; however, a lot of details are missing. While this lack of detail might be appropriate for potential investors, who have to compare financial data across many different companies, the information

found in these financial statements is not sufficiently detailed to be of any practical use to managers in corporate decision-making.

This is not to say that managers shouldn't care about the financial statements. Managers must understand their financial statements because these are the most important sources of information used by the investing community to determine where to invest capital. Managers who don't understand the signals that their financial statements are sending to investors are not in a position to compete effectively in the global capital markets. However, internal decision-making and management control require data that are far more detailed (by product line, region, cost categories, etc.) than the data found in annual reports.

In addition, financial statements are mainly historical. The balance sheet reflects the financial position at a precise moment in the recent past. The income statement shows profits over a period of time in the recent past – for example, the year just completed. Similarly, the statement of cash flows reports on the sources and uses of cash over a period of time already past. But while appreciating the insights of these statements is critical to managers in understanding their business and its competitiveness in the capital markets, they need information systems that are forward-looking in nature. Managers plan, budget, and forecast – and they therefore need systems that help them to perform these critical functions.

Another problem with financial accounting from a management perspective is that accounting rules that are designed to measure costs or value assets can result in misleading figures, even when calculated in good faith by managers. For example, when a manufacturing company measures the cost of its inventory, it must include not only direct costs of production, such as labor and materials, but also manufacturing overhead (such as depreciation on equipment, power and electricity, and maintenance costs). In contrast with direct costs, overhead cannot be directly traced to individual units of production. Instead, they are assigned to individual products (and to inventory accounts) using an arbitrary allocation technique. The resulting inventory figures may be acceptable for the broad overview that an investor wants from the financial statements, but can be seriously misleading if management intends to use them to calculate product-line profitability, to set pricing policy, or to make product-mix decisions. In short, managers need cost-accounting systems that provide more detailed, and more accurate, costing data.

The Three Principal Financial Statements

The corporate financial reporting process focuses on the three principal financial statements – the balance sheet, the income statement, and the statement of cash flows.

The Balance Sheet¹

Take glance at TSMC's balance sheet (Exhibit 1.1). One of the first things you should notice is that the balance sheet reports on the company's financial position at a moment in time, in this case the end of 2015 and 2016. In other words, it's a snapshot, taken at the end of each period, of the assets owned by the company and the financing for those assets. Assets are economic resources with the ability or potential to provide future benefits to a business, such as profits or cash flow.

The financing of assets occurs in two basic forms: liabilities and shareholders' equity. Liabilities are the company's debts or obligations. They are the claims on the assets held by a firm's creditors. Shareholders' equity shows the amount of financing provided by owners of the business, both in the form of direct investment (when shareholders contribute cash in exchange for shares) and indirect investment (when profits are reinvested in the firm).

Exhibit 1-1 TSMC Consolidated Balance Sheet (in NT\$ millions)

	December 31	
	2016	2015
CURRENT ASSETS		
Cash and equivalents	541,254	562,689
Financial assets	94,957	27,779
Notes and accounts receivable, net	128,335	85,060
Inventories	48,682	67,052
Other	4,502	4,164
Total current assets	817,730	746,744
NONCURRENT ASSETS		
Financial assets	26,411	10,902
Investments accounted for using the equity method	19,585	23,971
Property, Plant and Equipment	997,778	853,470
Intangible assets	14,615	14,066
Deferred income tax assets	8,271	6,385
Other	1,908	1,860
Total noncurrent assets	1,068,568	910,654
TOTAL ASSETS	1,886,298	1,657,398
CURRENT LIABILITIES		
Short term loans and financial liabilities	58,149	39,547
Accounts payable	26,062	18,575
Salaries, bonus, and profit sharing payables	36,576	32,661
Payables to contractors and suppliers	63,155	26,012
Income tax payable	70,353	60,445
Provisions	18,038	10,164
Long-term liabilities - current portion	38,110	23,518
Accrued expenses and other	37,844	28,851
Total Current Liabilities	348,287	239,773
NONCURRENT LIABILITIES		
Bonds payable and long term bank loans	153,116	191,998
Deferred income tax liabilities	141	31
Net defined benefit liability	8,551	7,448
Guarantee deposits	14,670	21,565
Other	1,687	1,613
Total Noncurrent Liabilities	178,165	222,655
TOTAL LIABILITIES	526,452	462,428

(Continued)

Exhibit 1-1 (Continued)

	December 31	
	2016	2015
SHAREHOLDERS' EQUITY		
Capital stock	259,304	259,304
Capital surplus	56,272	56,300
Retained earnings	1,041,811	866,630
Other	1,664	11,774
Noncontrolling interests	795	962
TOTAL SHAREHOLDERS' EQUITY	1,359,846	1,194,970
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	1,886,298	1,657,398

The accompanying notes are an integral part of these consolidated financial statements.

The organization of the balance sheet can thus be summarized like this:

$$\text{Assets} = \text{Liabilities} + \text{Shareholders' Equity}$$

The term “balance sheet” is derived from this equation. It simply reminds us that the right side and the left side must always equal, for all companies, in all industries, in all countries, without exception. Simply put, the balance sheet must balance. The reason why this is can be seen from the right side of the equation. Liabilities and shareholders’ equity don’t just represent financing, they also represent claims on the assets from the left side. In the event of liquidation (i.e., when a company goes out of business), the first claim on resources belongs to creditors. The claims held by shareholders are residual in nature, which means that they are entitled to whatever is left over after the creditors have been paid off. Because shareholders’ equity represents a residual claim on the assets, it will be whatever size it needs to be in order to ensure that the two sides of the balance sheet are equal.

TSMC’s balance sheet confirms this equality. Total assets at the end of 2016 of NT\$1,886 billion equal the sum of liabilities, NT\$526 billion, and shareholders’ equity, NT\$1,360 billion.

The Income Statement

The income statement reports on a company’s profits, or revenues less expenses, during the accounting period. Unlike the balance sheet, it’s not a snapshot, but rather reflects what a firm has accomplished over a period of time. In the case of TSMC, the income statement (Exhibit 1.2) reports on the company’s performance for the years 2014, 2015, and 2016. Notice that the accounting year (sometimes called the “fiscal year”) is the same as the calendar year (1 January–31 December). This is not required, however. For example, most major retailers in the United States have accounting years that end between late January and the end of March. This is done to avoid having to close the books and prepare financial statements at the busiest time of the year.

The top line of the income statement, *revenues* (also called “sales” or “sales revenues”), represents the monetary value of goods or services sold to customers. Expenses represent the cost of resources used by the company to earn revenues during the period.

Exhibit 1-2

TSMC Consolidated Income Statements (in NT\$ millions)

	Year Ended December 31		
	2016	2015	2014
Revenue	947,938	843,497	762,807
Cost of revenue	473,106	433,103	385,084
Gross profit	474,832	410,394	377,723
Research and development	71,208	65,546	56,829
General and administrative	19,796	17,257	18,933
Marketing	5,901	5,665	5,087
Other operating expenses (income)	(30)	1,881	1,002
Income from operations	377,957	320,045	295,872
Share of profits of associates and joint ventures	3,458	4,196	3,920
Finance costs	(3,306)	(3,190)	(3,236)
Foreign exchange gain	1,161	2,481	2,111
Other income	6,651	26,943	3,408
Income before income tax	385,921	350,475	302,075
Income tax expense	54,124	47,645	47,890
Net income	331,797	302,830	254,185

The accompanying notes are an integral part of these consolidated financial statements.

Profit (also known as “earnings” or “income”) is shown in several ways on an income statement. For example, gross profit, sometimes called “gross margin,” measures revenues, net of manufacturing costs. For a nonmanufacturing company, such as a retailer or distributor, gross profit equals revenues net of the cost of merchandise sold during the year.

Operating income equals sales net of all operating expenses, excluding taxes. It measures how well the company has done in a given period from its normal, recurring, day-to-day activities of producing and selling its products. For TSMC, gross profit and operating income in 2016 were NT\$475 billion and NT\$378 billion, respectively.

When taxes and the nonoperating sources of income and expense are added or subtracted from operating income, as appropriate, the result is net income, the “bottom line” of the income statement. For 2016, TSMC reports net income of NT\$332 billion. Note that companies have discretion in how they categorize these costs. This discretion, otherwise known as accounting choice, is a theme we will return to throughout the book. In the case of TSMC, there are significant income items listed as “nonoperating” that might be classified as operating by other companies. Such choices can have significant effects. In this case, for example, TSMC’s nonoperating income was nearly 10% of income before tax in 2015.

The Statement of Cash Flows

The statement of cash flows summarizes the inflows and outflows of cash that arise from the three primary activities of a typical business: operations, investing, and financing. For TSMC, operating activities refer mainly (but not exclusively) to the routine, recurring actions involved in the design, manufacture, and distribution of semiconductors and integrated circuits. Investing

activities involve the buying and selling of long-term assets such as machinery and equipment, companies or parts of companies, and financial securities such as government bonds. Financing activities refer mainly to actions involving the capital markets such as borrowing, paying off loans, issuing shares, share buybacks, and the payment of dividends.

The statement is structured in such a way that the net cash flows during the period for all three activities must equal the change in cash. In other words, the net cash flows from operating, investing, and financing activities must equal the net increase or decrease in the cash balance for the year. You can easily confirm this reconciliation in TSMC's statement of cash flows.

What makes this statement so interesting is not just that it summarizes cash flows, and in so doing reconciles beginning and ending cash, but that it also reveals the sort of activities that gave rise to those cash flows. In short, the statement reveals where a company's cash came from during the year, and what the company did with it.

For example, TSMC's statement of cash flows (Exhibit 1.3) shows operating cash flow of nearly NT\$540 billion in 2016. Much of this cash generated from TSMC's day-to-day operations was reinvested in the company. We know this is true because of the negative cash flows from investing activities (shown in parentheses). Of those investments, most (NT\$329 billion) was committed to property, plant, and equipment. From the financing section, we see that TSMC returned significant amounts of cash to its shareholders in the form of dividends (NT\$155.5 billion in 2016).

Exhibit 1-3
TSMC Consolidated Statements of Cash Flows
(in NT\$ millions)

	Year Ended December 31		
	2016	2015	2014
Cash flows from operating activities			
Income before income tax	385,921	350,475	302,075
Adjustments for:			
Depreciation expense	220,085	219,303	197,645
Amortization expense	3,743	3,202	2,606
Finance costs	3,306	3,190	3,236
Share of profits of associates and joint venture	(3,458)	(4,196)	(3,920)
Interest income	(6,318)	(4,129)	(2,731)
Gain on disposal of property, plant and equipment, net	(47)	(434)	(15)
Asset impairments	122	2,759	1,187
Loss (gain) on financial assets	(2,707)	(19,585)	3,742
Loss (gain) on disposal of equity method investments and subsidiaries	325	(2,369)	(2,084)
Dividend income	(137)	(622)	(650)
Changes in operating assets and liabilities:			
Financial instruments at fair value through profit and loss, and other financial assets	(6,368)	492	(2,269)
Notes and accounts receivable, net	(49,828)	26,491	(43,128)
Inventories	18,370	(655)	(28,872)
Other assets	(251)	265	(743)

Exhibit 1-3 (Continued)

	Year Ended December 31		
	2016	2015	2014
Accounts payable	7,295	(2,693)	6,634
Accrued expenses and other current liabilities	3,833	(4,147)	8,238
Salary, bonus and profit sharing payables	3,913	3,805	7,595
Provisions	7,932	(383)	2,837
Net defined benefit liability	46	53	60
Cash generated from operations	585,778	570,822	451,442
Income taxes paid	(45,943)	(40,943)	(29,918)
Net cash generated by operating activities	539,835	529,879	421,524
Cash flows from investing activities			
Acquisitions of:			
Financial assets	(117,435)	(44,656)	(6,518)
Property, plant and equipment	(328,851)	(257,517)	(288,540)
Intangible assets	(4,243)	(4,284)	(3,860)
Proceeds from disposal or redemption of:			
Financial assets	40,753	74,665	4,139
Investments accounted for using equity method	0	5,172	3,472
Property, plant and equipment	98	817	200
Interest received	6,353	3,642	2,579
Proceeds from government grants	1,537	0	0
Net cash flow from disposal and acquisition of subsidiaries	0	549	0
Dividends received from investments using equity method	5,479	3,407	3,223
Other dividends received	137	617	646
Refundable deposits refunded (paid)	732	342	2,239
Net cash used in investing activities	(395,440)	(217,246)	(282,421)
Cash flows from financing activities			
Increase in short-term loans	18,969	3,139	18,564
Repayment of bonds, long-term bank loans, and finance leases	(23,480)	(29)	(28)
Interest paid	(3,302)	(3,156)	(3,193)
Guarantee deposits received net refunds	5,831	12	30,135
Cash dividends	(155,582)	(116,684)	(77,786)
Proceeds from exercise of stock options	0	34	47
Decrease in noncontrolling interests	(236)	(50)	(67)
Net cash used in financing activities	(157,800)	(116,734)	(32,328)

(Continued)

Exhibit 1-3 (Continued)

	Year Ended December 31		
	2016	2015	2014
Effect of exchange rates on cash and equivalents	(8,030)	8,259	9,060
Net increase (decrease) in cash and equivalents	(21,435)	204,158	115,836
Cash and cash equivalents included in other noncurrent assets, beginning of year	0	82	0
Cash and equivalents beginning of year	562,689	358,449	242,695
Cash and equivalents end of year	541,254	562,689	358,531
Cash and cash equivalents included in other noncurrent assets	0	0	(82)
Cash and equivalents per the balance sheet	541,254	562,689	358,449

The accompanying notes are an integral part of these consolidated financial statements.

How the Financial Statements Relate to Each Other

Although each statement is a separate, discrete entity, it is also linked with the other two. For example, the net income from the income statement (e.g., NT\$332 billion in 2016 for TSMC Group) is reflected in both retained earnings (from the shareholders' equity section of the balance sheet) and in the operations section of the statement of cash flows. Also, the net cash flows from the statement of cash flows (see final line) plus beginning cash (on the balance sheet) must equal ending cash. These relationships should come as no surprise because, logically, we would expect a company's performance, as reflected in its income statement, to influence its cash flows, and for both profit and cash flows to influence its financial position (i.e., the balance sheet).

To illustrate these relationships, let's take another look at TSMC's financial statements. Net income in 2016 was NT\$332 billion. As revealed in the statement of cash flows, the company paid NT\$156 billion in dividends that year. Retained earnings (on the balance sheet in the shareholders' equity section) represent all of the net income a company has ever earned in its history that has not yet been paid to shareholders as a dividend. In other words, it measures all of the profits retained by the business for reinvestment. We would expect retained earnings to change each year by an amount equal to the year's net income, less any dividends paid in that year. In the case of Taiwan Semiconductor, we should see an increase of NT\$332 billion minus NT\$156 billion, or NT\$176 billion. And that is very close to the amount by which the company's retained earnings increased from the end of 2015 to the end of 2016 NT\$1,042 billion - NT\$867 billion, i.e., NT\$175 billion.

Note also that cash flows from operating, investing and financing activities (plus effect of foreign exchange rates on cash and cash equivalent in 2016, i.e., -NT\$8 billion) result in a net decrease in cash of NT\$21 billion, which is equal to the difference between the cash balance at the end of 2016 (NT\$541 billion) at the end of 2015 (NT\$562 billion).

Other Items in the Annual Report

As mentioned earlier, the balance sheet, income statement, and statement of cash flows are highly condensed. For this reason, firms are required to provide supplemental information in the form of supporting schedules and notes. An opinion on the accuracy of the financial statements from a firm of independent public accountants must also be furnished. Depending on its country of origin, a company may also include a “management discussion and analysis” of recent performance and future prospects.

The Statement of Changes in Shareholders’ Equity

There is, in fact, a fourth financial statement presented in many annual reports, although it functions more like a supporting schedule, and thus is not usually accorded the same status as the other three. This schedule, called the statement of changes in **shareholders’ equity** (although it sometimes goes under different names), explains changes to all accounts in the shareholders’ equity section of the balance sheet.

The Notes

In addition to the principal financial statements, companies must also provide extensive supplemental disclosures known as “notes” or “footnotes.” You will see these at the back of any annual report. The importance of these notes can be seen from the statement at the bottom of each of TSMC’s financial statements: “The accompanying notes are an integral part of the consolidated financial statements.” This reminds us that the financial statements cannot be fully understood without reading the notes. In fact, the term “footnotes” is somewhat misleading, though widely used, because it may lead you to think that they serve the same function as footnotes in a book. This is not true because footnotes in the annual report are an indispensable part of the story. The story doesn’t really hold together without them.

Most notes fall into either of two categories:

- The first type describes the accounting policies used by the company to prepare its financial statements. For example, the first note in most annual reports is a summary of key accounting principles and policies.
- The second type of note presents additional, clarifying detail about one or more financial statement line items. Examples of this type include notes that elaborate on debt balances, investments, pensions, and taxes. Companies are also expected to provide financial details on major business segments either broken down by industry or geography. TSMC reports that it operates in a single industry segment that includes integrated circuits and semiconductors. However, in its segment note, TSMC breaks down its revenues by geographic region. In 2016, the United States accounted for 64% of its revenues, followed by Asia excluding Taiwan (15%), Taiwan (13%), and the rest of the world (8%). Interestingly, in the same segment note, TSMC reveals that its two largest customers account for 28% of its sales in 2016. However, for competitive reasons, it does not identify these customers by name.

The Auditor’s Opinion

Annual reports must include an opinion from an independent public accounting firm, attesting to whether or not the financial statements were correctly prepared and can therefore be relied on by investors and other parties in making decisions regarding the business. The opinion shown in Exhibit 1.4 follows a standard format, with occasional variations.

*Exhibit 1-4***Independent Auditor's Report****REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Shareholders of
Taiwan Semiconductor Manufacturing Company Limited

We have audited the accompanying consolidated statements of financial position of Taiwan Semiconductor Manufacturing Company Limited (a Republic of China corporation) and subsidiaries (the "Company") as of December 31, 2015 and 2016, and the related consolidated statements of profit or loss and other comprehensive income, changes in equity, and cash flows for each of the three years in the period ended December 31, 2016 (all expressed in New Taiwan dollars). These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Taiwan Semiconductor Manufacturing Company Limited and subsidiaries as of December 31, 2015 and 2016, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Our audits also comprehended the translation of New Taiwan dollar amounts into U.S. dollar amounts and, in our opinion, such translation has been made in conformity with the basis stated in Note 3 to the consolidated financial statements. Such U.S. dollar amounts are presented solely for the convenience of the readers outside the Republic of China.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2016, based on the criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated April 13, 2017 expressed an unqualified opinion on the Company's internal control over financial reporting.

/s/ Deloitte & Touche
Taipei, Taiwan
The Republic of China

April 13, 2017

The first paragraph indicates the scope of the opinion and also states that the responsibility for the financial statements rests with management. This responsibility has been reinforced by legislation in the United States (known as Sarbanes–Oxley) that requires chief executive officers and chief financial officers to certify, under oath, the truthfulness of their companies' financial statements. This means that while auditors attest to the reliability of the accounts, the ultimate responsibility rests with senior managers.² TSMC produces a similar declaration, signed by the two co-CEOs and the CFO that includes, among other language, the following:

Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report.

The second paragraph affirms that the auditor followed generally accepted auditing principles. In other words, the audit was conducted according to the standards of the auditing profession. In the case of TSMC, because its shares are traded on the New York Stock Exchange, they state that they followed auditing standards from the United States. The auditor then expresses the opinion in the third paragraph. It is here that the auditor states that the financial statements “present fairly in all material respects” the company’s financial position, and results of operations for each of the years presented in the annual report. Audit standards outside the United States often use the terminology that the financial statements provide a “true and fair view” of the company.

Most opinions are unqualified, or “clean,” which means that there are no exceptions, reservations, or qualifications. In effect, the auditor is telling you, the reader, that the financial statements can be trusted in making investment and other decisions related to this business. But while the overwhelming majority of audit opinions are clean, there are some exceptions.

A qualified opinion may arise because of serious uncertainties regarding the realization or valuation of assets (which can sometimes occur when companies are financially distressed), outstanding litigation, or tax liabilities that might compromise the firm’s financial health. Inconsistencies between periods caused by changes in accounting rules or policy can also result in a qualified opinion.

An auditor may also disclaim an opinion (i.e., issue no opinion at all) or even issue an adverse opinion. Disclaimers may arise, for example, because of pending bankruptcy. The uncertainties regarding the truthfulness of financial statement numbers are so profound, the auditor is reluctant to issue any opinion on the financial statements. This happened to Parmalat, the Italian dairy company, after it was embroiled in a massive financial scandal. Adverse opinions are rare, because an auditor is likely to resign or be fired by a client before an adverse opinion would ever appear in a published annual report. The opinion provided by TSMC’s auditor was indeed “clean” and thus fairly limited in content. This “boilerplate” approach to audit opinions has long been criticized as being too generic and not alerting users to the more subjective parts of the financial statements. Recently, global audit standards have been changed that compel the auditor to state the items in the financial statements that required more of their attention and how they designed procedures to reach their conclusion. In the United States (which governs TSMC’s audits), the changes take effect in 2019, while in the United Kingdom and Ireland, they have been in effect since 2013; in much of the rest of the world, these changes took effect in 2016.

Management Discussion and Analysis

Most annual reports include a management discussion and analysis section, often called the MD&A or “review of operations”. This section is an extended letter from the firm’s management that summarizes the significant factors affecting the firm’s operating results, financial strength, and cash flows for the past three years. It also contains an extensive discussion of business risks and forward-looking statements regarding the company’s expectations for future operations, earnings, and prospects.

The review in TSMC’s 2016 financial statements consists of detailed explanations for the company’s performance and financial condition, with emphasis on changes from the previous year. Important events from 2016 are also discussed, including acquisitions and product development. Management contrasts financial figures from 2016 with 2015, explaining why these numbers improved or worsened. For example, management reveals that of the 12.4% growth in revenue, 9.6% is due to increased product shipments while the remainder is largely due to the depreciation of the NT\$ against the currencies in which it sells its semiconductors. It also discusses the specific product where volumes increased the most (i.e., the “12-inch equivalent wafer”). Considerable attention is also given to liquidity, which is defined here as the ability of the company to obtain the cash resources it needs for growth and debt repayment.

Generally Accepted Accounting Principles: The Rules of the Game

When auditors declare that financial statements “present fairly” a company’s financial condition, profitability, and cash flows, what they really mean is that the statements were prepared in accordance with Generally Accepted Accounting Principles (hereafter, GAAP). GAAP comprises the rules and principles that guide managers in the preparation of their companies’ accounts. These rules provide the filter through which potentially millions of data points pass to produce the highly summarized financial statements we see in corporate annual reports.

GAAP sets the “rules of the game” under which financial statements are prepared. When these rules are implemented in good faith, the chances are high, though far from assured, that the resulting financial statements can be relied on by users to make important economic decisions regarding the business.

Here, we focus on two GAAP regimes: the one that prevails in the United States, otherwise known as US GAAP, and International Financial Reporting Standards (IFRS). Although many other accounting regimes exist around the world, capital markets have come to be dominated by these two approaches. Important differences exist between the two, but their primary objectives are the same. Moreover, there was a serious ongoing effort at convergence that would have led to a single set of global financial accounting standards. But as of this writing, that effort has stalled, meaning that for the foreseeable future, we are left with two dominant regimes instead of one.

US GAAP comes from a variety of sources, but the dominant player is the Financial Accounting Standards Board (FASB), based in Norwalk, Connecticut. The FASB is a private-sector body that is tasked with determining the appropriate financial reporting responses to an ever-changing business climate. Its official pronouncements are called “Financial Accounting Standards.” In some cases, these standards are supplemented by “Interpretations” that augment or clarify key aspects of the standards.

IFRS is the product of the International Accounting Standards Boards (IASB), based in London. Since 2005, compliance with IFRS has been required for all publicly traded companies based in the European Union. It is also widely used in Asia. Today, 135 countries either require or allow the use of IFRS.

The Barriers to Understanding Financial Statements

Businesses can be complex, and if annual reports are to capture economic reality, they too must be complex. Analyzing and interpreting financial statements can be highly rewarding for readers who take the time to understand this complexity and the nature of the problems they are likely to encounter. The following discussion introduces the major barriers you can expect to face in trying to make sense of corporate financial reports.

The Volume of Data

The most obvious problem encountered by the reader of financial statements is the sheer volume of information available, especially for businesses traded on a major stock exchange. In addition to the principal financial statements, footnotes, management discussion and analysis, and auditors’ reports, there are also financial filings with stock exchange and regulatory authorities (such as the Securities and Exchange Commission in the United States). The result can be a veritable mountain of information. Although capital markets run on information, the risk is that a reader can be easily overwhelmed.

A variety of analytical tools, such as financial statement ratios, exist to help readers overcome this problem. These tools are discussed in detail in later chapters.

Accounting Choice

Although GAAP and IFRS prescribe a set of rules and guidelines for preparing financial statements, they also afford corporate executives a broad range of choice. From the viewpoint of the financial statement reader, accounting choice adds greatly to the complexity of the task at hand. To some extent, this choice is a logical outcome of the diversity we observe in the business world. What might be an appropriate accounting treatment for a steel company might not be appropriate for a biotechnology firm or an Internet service provider. GAAP/IFRS must be flexible enough to accommodate all sorts of businesses and all types of business models. But even within the same industry, significant differences across companies in their accounting policies are often observed. For example, Coca-Cola's approach to translating the financial statements of its foreign subsidiaries into US dollars is different from that of PepsiCo, its major industry competitor.

To get a flavor for the nature of accounting choice, consider the following example. A machine with an expected, but still uncertain, life of five years is purchased for \$500,000. For long-term assets like this, we must decide on a depreciation method. Depreciation is the process by which the cost of an asset is allocated to the future periods that will benefit from its use. The most common method is called "straight-line." Under this approach, each of the next five years (the periods expected to benefit from the use of the asset) will be assigned \$100,000 of depreciation ($\$500,000 \div 5$). This means that in the first year, the income statement will include \$100,000 of depreciation expense. The balance sheet will show machinery with a net book value of \$400,000 at the end of the year, the acquisition cost net of the depreciation charge.

But suppose we elect to use another depreciation method, as GAAP and IFRS allow us to do. For example, we may choose the "double-declining balance" method, in which depreciation is charged to the income statement in an accelerated fashion. Under this approach, we take the straight-line rate of 20% (the annual rate of depreciation on the asset) and multiply it by 2. The resulting figure, 40%, is then multiplied by the net book value of the asset at the beginning of each year to determine that year's depreciation expense. This means that depreciation in the first year is \$200,000, instead of the \$100,000 recognized under the straight-line method. Therefore, as a result of choosing double declining balance, depreciation expense in the first year would be \$100,000 higher, and operating income \$100,000 lower. In addition, the net book value of the asset at the end of the first year would be \$300,000, instead of \$400,000.

What this example shows is that the simple choice of one depreciation method over another can have a profound impact on both the balance sheet and the income statement. Which set of numbers is better? It's hard to say. Under some conditions, the straight-line approach may be better, but under other conditions it might not be. What's important to recognize is that both methods are allowed. Indeed, other methods are allowed too. Now imagine having to decide how all of the company's long-term assets are to be depreciated. Further, note that the useful lives are not known with certainty, and thus are another management estimate (five years in the example above). Also, management must assess if it will sell the asset when it is done using it (say a new airplane by a premium airline that is eventually sold to a low cost airline). In this case management estimates a "salvage value" and does not depreciate the asset below this amount. Now imagine the range of choices offered to corporate executives in how they measure other balance sheet items – or how they measure any transaction that arises in the normal course of their business.

Quite simply, differences in accounting choice can yield huge differences in financial statement numbers. One of the ways that a reader copes with this challenge is by carefully scrutinizing the notes to the financial statements.

In most annual reports, the first note summarizes the significant principles and policies chosen by the company's managers, helping the reader to understand the context under which the financial statements were prepared and key transactions measured. These disclosures allow analysts and other interested parties to compare a company's accounting policies with industry competitors and to make judgments on the quality of the numbers produced in the annual report.

Earnings Management

Accounting choice doesn't just make financial statements more complicated. It also provides a powerful weapon for managers who wish to mislead the capital markets, for whatever motive. Accounting policy requires judgment, and whenever there is scope for judgment, there is also scope for manipulation.

"Earnings management" is the term commonly used to describe efforts by corporate managers to distort or bias their companies' reported results. "Creative accounting" is also used. Both terms imply a conscious effort by managers to mislead readers of financial statements.

Although the opportunities for earnings management are practically limitless, the most serious efforts fall into either of two categories: faulty revenue recognition, and the improper recognition of losses and expenses. The Enron fiasco brought to light another area prone to mischief: off-balance-sheet financing. This accounting game also featured prominently in the global financial meltdown of 2008.

Incompleteness

TSMC was one of the world's first large-scale manufacturers that specialized in only making semiconductors. As a consumer, you may not have the awareness of their branded products. Yet equipment manufacturers, such as Apple, and other semiconductor companies, such as Intel, certainly are. These companies are two customers of TSMC. But while their products and customer relationships obviously carry great value for TSMC, you won't see them in the company's balance sheet. This fact may seem odd given that these products and customers may be the most valuable resources the company has.

The above example shows that important attributes of a business, attributes with potentially profound effects on financial performance, may not always find their way into corporate balance sheets, at least not directly.

Reliability is a key characteristic of financial statements. To be reliable, financial statements should be verifiable: auditors must be able to check the numbers to ensure an acceptable degree of accuracy. This is not to say that all numbers have to be perfectly accurate; such a standard is not feasible. But it does require at least some degree of objectivity, otherwise there is little for the auditors to observe and verify. In the example of TSMC, the company's products are well known by the electronics companies it sells to, and it has a significant market share. Yet such brand recognition will not be reported as an asset - unless it has been purchased via the acquisition of an entire company or an individual product line. In other words, intangibles acquired from other companies are included, but internally generated intangibles are not.

Sophisticated readers of financial statements are fully aware of this inconsistency, and of the need to cast a wide net when gathering information about a company. In short, they understand that not everything you need to know about a company in order to value its shares or to assess its creditworthiness is revealed in the accounts.

KEY LESSONS FROM THE CHAPTER

- There are many users of financial statements including: investors, bankers, suppliers, customers, tax authorities, trade unions, competitors, courts of law, government regulators, and prospective employees. Capital providers (i.e., shareholders, bankers, bondholders, and prospective investors) are arguably the most important constituencies.
- Although financial accounting is not targeted to the needs of corporate managers per se, financial statements are the outside

world's "window" on the company. Therefore, managers need to know what signals are being sent to investors about their companies and how those signals are interpreted. Otherwise, their companies will be at a competitive disadvantage in the global capital markets.

- The notes at the back of the annual report complement the three principal financial statements – the balance sheet, the income statement, and the statement of cash flows – and provide extensive supplemental disclosures. The notes describe the accounting policies used by the company and present additional clarifying detail about financial statement line items.
- Annual reports must include an opinion from an independent public accounting firm, attesting to whether or not the financial statements were correctly prepared.
- US companies prepare their financial statements in accordance with Generally Accepted Accounting Principles (GAAP). GAAP sets the "rules of the game" under which financial statements are prepared. Most non-US companies prepare their financial statements in accordance with International Financial Reporting Standards (IFRS).
- A serious effort to achieve convergence between US GAAP and IFRS made some progress, but has recently. Convergence between the two financial reporting regimes is not imminent.

KEY TERMS AND CONCEPTS FROM THE CHAPTER

Investors	Statement of cash flows	Audit opinions	Generally Accepted	International Financial
Creditors	Shareholders' equity	Management	Accounting	Reporting Standards
Balance sheet	Notes to the financial	discussion and	Principles (GAAP)	(IFRS)
Income statement	statements	analysis		Earnings management

QUESTIONS

1. The balance sheet (or statement of financial position) is often referred to as a "snapshot." Why?
2. If the balance sheet is a snapshot, how would you describe the income statement and the statement of cash flows?
3. Why must the statement of financial position (i.e., the balance sheet) balance?
4. What is the purpose of the auditor's opinion?
5. What is Sarbanes–Oxley, and how has it affected corporate financial reporting?
6. Describe the limitations of the financial reporting process.
7. Financial accounting = Economic truth + error + manipulation. Explain.
8. Can you think of instances in which the creation of bias or error in the financial statements might be justified?
9. Describe how the three principal financial statements are linked.
10. What role is played by the notes in the financial reporting process?
11. What is the primary purpose of the statement of changes in shareholders' equity?
12. What is meant by the term "accounting choice," and why is the concept so important in financial accounting?
13. What is meant by the term "earnings management?"

PROBLEMS

1.1 Balance Sheet Terminology

Below is the statement of financial position (balance sheet) for the global brewing company, AB InBev. Identify the major differences in format and terminology between this balance sheet and the one introduced in this chapter for TSMC.

Consolidated Statement of Financial Position

As at 31 December Million US dollar	2011	2010
Assets		
Noncurrent assets		
Property, plant and equipment	16,022	15,893

As at 31 December Million US dollar	2011	2010
Goodwill	51,302	52,493
Intangible assets	23,818	23,359
Investments in associates	6,696	7,295
Investment securities	244	243
Deferred tax assets	673	744
Employee benefits	10	13
Trade and other receivables	1,339	1,700
	100,04	101,745
Current assets		
Investment securities	103	641
Inventories	2,466	2,409
Income tax receivable	312	366
Trade and other receivables	4,121	4,638
Cash and cash equivalents	5,320	4,511
Assets held for sale	1	32
	12,323	12,597
Total assets	112,427	114,342
Equity and Liabilities		
Equity	1,734	1,733
Issued capital	17,557	17,535
Share premium	381	2,335
Reserves	17,820	13,656
Retained earnings	37,492	35,259
Equity attributable to equity holders of AB InBev	3,552	3,540
Noncontrolling interest	41,044	38,799
Noncurrent liabilities	34,598	41,961
Interest-bearing loans and borrowings	3,440	2,746
Employee benefits	11,279	11,909
Deferred tax liabilities	1,548	2,295
Trade and other payables	874	912
Provisions	51,739	59,823
Current liabilities	8	14
Bank overdrafts	5,559	2,919
Interest-bearing loans and borrowings	449	478
Income tax payable	13,337	12,071
Trade and other payables	241	238
Provisions	19,644	15,720
Total equity and liabilities	112,427	114,342

1.2 Understanding Balance Sheet Relationships

Stora Enso is a large pulp and paper company headquartered in Finland. The company uses IFRS and reports its results in millions of euros (€). Compute the missing balance sheet amounts for each of the three years.

	2011	2010	2009
Current assets	€4,610	€4,494	? ^b
Noncurrent assets	?	8,543	?
Total liabilities	?	?	?
Total assets	?	?	€11,593
Current liabilities	2,786	2,569	2,619
Noncurrent liabilities	4,253	?	?
Total shareholders' equity	?	?	5,183
Share capital	?	3,150	?
Retained earnings	3,301	? ^a	1,200
Total liabilities and shareholders' equity	12,999	?	?

^a Net income for 2010 is €766 and dividends are €158.

^b Current assets – Current liabilities = €1144.

1.3 Interpreting an Auditor's Opinion

Excerpts are provided below from the auditor's opinion in the 2011 Annual Report of Creative Technology, Ltd., a Singapore-based consumer electronics company.

Required

- Describe the audit opinion rendered by PwC. Is this opinion "unqualified" or "qualified?"
- What is meant by the term "true and fair?"
- What is the economic significance of this opinion for investors and other interested parties?
- In what ways does management's responsibility for the financial statements differ from that of the auditor's?

We have audited the accompanying financial statements of Creative Technology Ltd. (the "Company") and its subsidiaries (the "Group") ... which comprise the consolidated balance sheet of the Group and the balance sheet of the Company as at 30 June 2011, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows of the Group for the financial year then ended, and a summary of significant accounting policies and other explanatory information.

Management's responsibility for the financial statements

Management is responsible for the preparation of financial statements that give a true and fair view in accordance with the provisions of the Singapore Companies Act (the "Act") and Singapore Financial Reporting Standards, and for devising and maintaining a system of internal accounting controls sufficient to provide a reasonable assurance that assets are safeguarded against loss from unauthorized use or disposition, that transactions are properly authorized and that they are recorded as necessary to permit the preparation of true and fair profit and loss accounts and balance sheets and to maintain accountability of assets.

Auditor's responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Singapore Standards on Auditing. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of

the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal controls relevant to the entity's preparation of financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal controls. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements of the Group and the balance sheet of the Company are properly drawn up in accordance with the provisions of the Act and Singapore Financial Reporting Standards so as to give a true and fair view of the state of affairs of the Group and of the Company as at 30 June 2011, and the results, changes in equity and cash flows of the Group for the financial year ended on that date.

PricewaterhouseCoopers LLP

Public Accountants and Certified Public Accountants
Singapore

Case Study

1-1 Apple: An Introduction to Financial Statement Analysis

Apple is a global leader in the computing industry, with an emphasis on personal computing, mobile communication devices, and portable digital music players. It designs, manufactures, and markets both hardware and software. At the time of this writing (autumn 2012), Apple is the largest company in history in terms of market capitalization (i.e., the market value of the company's equity).

As recently as the late 1990s, however, Apple was perceived as mainly a niche player in the personal computer business, where the emphasis was on commoditized, low-margin products. The return of Steve Jobs, ousted in the 1980s from the company he cofounded, is now legendary in corporate history. He is credited for refocusing the company on the customer experience with products that emphasize not only performance and technology, but also aesthetics.

The excerpts from the company's financial statements included in this case will give you a summary view of recent financial performance. As you review these disclosures, think

about what information is *excluded*, and how the absence of this information affects the reports' ability to communicate the true value of Apple.

Required

Balance sheet

- What was the magnitude and direction of the change to total assets for 2010?
- What was the magnitude and direction of the change to total liabilities for 2010?
- What was the magnitude and direction of the change to total shareholders' equity for 2010?
- Verify that the sum of your answers to (b) and (c) equals your answer to (a).
- What specific accounts explain most of the change to total assets?
- Based on your own experience, think about what makes Apple a valuable company. Does this "asset" that you've imagined appear on Apple's balance sheet? Are you

(Continued)

satisfied that the balance sheet accurately reflects this value? Why or why not?

Income statement ("consolidated statement of operations")

- What was the magnitude and direction of the change to net sales?
- What was the magnitude and direction of the change to net income?
- Do the changes above seem consistent with the changes in total assets you calculated previously?
- Based on your own experience, think about the various product lines that generate these revenues (i.e., "sales") for Apple. Do you see the revenue from the individual product lines on the statement? Are you satisfied that the income statement accurately reflects these revenues? Why or why not?

Statement of cash flows

- What are the names of the three subsections that present the different sources of cash flow for the year?
- Note that net income is the first figure used in calculating cash generated by operating activities. How does net income compare to cash generated by operating activities?
- What does Apple appear to be doing with the cash that it generates from its day-to-day operations? (Hint: review investing activities.)
- Does Apple appear to have significant financing activities to report?

The auditor's opinion

- Describe Ernst & Young's role as Apple's external auditor?
- How useful is this opinion in helping an investor to value Apple's shares?

Apple's financial statements: Consolidated statements of operations (in millions, except share amounts which are reflected in thousands and per share amounts), three years ended September 25, 2010

	2010	2009	2008
Net sales	\$65,225	\$42,905	\$37,491
Cost of sales	<u>39,541</u>	<u>25,683</u>	<u>24,294</u>
Gross margin	<u>25,684</u>	<u>17,222</u>	<u>13,197</u>

	2010	2009	2008
Operating expenses			
Research and development	1,782	1,333	1,109
Selling, general and administrative	<u>5,517</u>	<u>4,149</u>	<u>3,761</u>
Total operating expenses	<u>7,299</u>	<u>5,482</u>	<u>4,870</u>
Operating income	18,385	11,740	8,327
Other income and expense	<u>155</u>	<u>326</u>	<u>620</u>
Income before provision for income taxes	18,540	12,066	8,947
Provision for income taxes	<u>4,527</u>	<u>3,831</u>	<u>2,828</u>
Net income	<u>\$14,013</u>	<u>\$8,235</u>	<u>\$6,119</u>
Earnings per common share			
Basic	\$15.41	\$9.22	\$6.94
Diluted	\$15.15	\$9.08	\$6.78
Shares used in computing earnings per share			
Basic	909,461	893,016	881,592
Diluted	924,712	907,005	902,139

Consolidated balance sheets (in millions, except share amounts)

	September 25, 2010	September 26, 2009
Assets		
Current assets		
Cash and cash equivalents	\$11,261	\$5,263
Short-term marketable securities	14,359	18,201
Accounts receivable, less allowances of \$55 and \$52, respectively	5,510	3,361
Inventories	1,051	455
Deferred tax assets	1,636	1,135

	September 25, 2010	September 26, 2009	Consolidated statements of cash flows (in millions), three years ended September 25, 2010			
			2010	2009	2008	
Vendor nontrade receivables	4,414	1,696				
Other current assets	<u>3,447</u>	<u>1,444</u>	Cash and cash equivalents, beginning of the year	<u>\$5,263</u>	<u>\$11,875</u>	<u>\$9,352</u>
Total current assets	41,678	31,555	Operating activities:			
Long-term marketable securities	25,391	10,528	Net income	14,013	8,235	6,119
Property, plant, and equipment, net	4,768	2,954	Adjustments to reconcile net income to cash generated by operating activities:			
Goodwill	741	206	Depreciation, amortization, and accretion	1,027	734	496
Acquired intangible assets, net	342	247	Stock-based compensation expense	879	710	516
Other assets	<u>2,263</u>	<u>2,011</u>	Deferred income tax expense	1,440	1,040	398
Total assets	<u>\$75,183</u>	<u>\$47,501</u>	Loss on disposition of property, plant and equipment	24	26	22
Liabilities and Shareholders' Equity			Changes in operating assets and liabilities:			
Current liabilities			Accounts receivable, net	(2,142)	(939)	(785)
Accounts payable	\$12,015	\$5,601	Inventories	(596)	54	(163)
Accrued expenses	5,723	3,852	Vendor non-trade receivables	(2,718)	586	110
Deferred revenue	<u>2,984</u>	<u>2,053</u>	Other current assets	(1,514)	163	(384)
Total current liabilities	20,722	11,506	Other assets	(120)	(902)	289
Deferred revenue – noncurrent	1,139	853	Accounts payable	6,307	92	596
Other noncurrent liabilities	<u>5,531</u>	<u>3,502</u>	Deferred revenue	1,217	521	718
Total liabilities	<u>27,392</u>	<u>15,861</u>	Other liabilities	<u>778</u>	<u>(161)</u>	<u>1,664</u>
Commitments and contingencies			Cash generated by operating activities	<u>18,595</u>	<u>10,159</u>	<u>9,596</u>
Shareholders' equity:			Investing activities:			
Common stock, no par value; 1 800 000 000 shares authorized; 915 970 050 and 899 805 500 shares issued and outstanding, respectively	10,668	8,210	Purchases of marketable securities	(57,793)	(46,724)	(22,965)
Retained earnings	37,169	23,353	Proceeds from maturities of marketable securities	24,930	19,790	11,804
Accumulated other comprehensive (loss)/ income	<u>(46)</u>	<u>77</u>	Proceeds from sales of marketable securities	21,788	10,888	4,439
Total shareholders' equity	<u>47,791</u>	<u>31,640</u>	Purchases of other long-term investments	(18)	(101)	(38)
Total liabilities and shareholders' equity	<u>\$75,183</u>	<u>\$47,501</u>	Payments made in connection with business acquisitions, net of cash acquired	(638)	0	(220)

(Continued)

	2010	2009	2008
Payments for acquisition of property, plant, and equipment	(2,005)	(1,144)	(1,091)
Payments for acquisition of intangible assets	(116)	(69)	(108)
Other	(2)	(74)	(10)
Cash used in investing activities	<u>(13,854)</u>	<u>(17,434)</u>	<u>(8,189)</u>
Financing activities:			
Proceeds from issuance of common stock	912	475	483
Excess tax benefits from stock-based compensation	751	270	757
Taxes paid related to net share settlement of equity awards	(406)	(82)	(124)
Cash generated by financing activities	<u>1,257</u>	<u>663</u>	<u>1,116</u>
Increase/(decrease) in cash and cash equivalents	<u>5,998</u>	<u>(6,612)</u>	<u>2,523</u>
Cash and cash equivalents, end of the year	<u>\$11,261</u>	<u>\$5,263</u>	<u>\$11,875</u>
Supplemental cash flow disclosure:			
Cash paid for income taxes, net	\$2,697	\$2,997	\$1,267

Report of Ernst & Young LLP, Independent Registered Public Accounting Firm

The Board of Directors and Shareholders of Apple Inc.

We have audited the accompanying consolidated balance sheets of Apple Inc. as of September 25, 2010 and September

26, 2009, and the consolidated statements of operations, shareholders' equity and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Apple Inc. at September 25, 2010 and September 26, 2009, and the consolidated results of its operations and its cash flows for the years then ended, in conformity with US generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Apple Inc.'s internal control over financial reporting as of September 25, 2010, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated October 27, 2010 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

San Jose, California
October 27, 2010

Case Study

1-2 PepsiCo: Communicating Financial Performance*

The Chairman's letter to the shareholders from PepsiCo's 2007 Annual Report is presented below.

Delivering Performance with Purpose in 2007

Dear Shareholders:

We have titled this year's annual report "Performance with Purpose: The Journey Continues." That's because in

2007 PepsiCo made great progress toward the long-term corporate objectives we set for ourselves last year: To achieve business and financial success while leaving a positive imprint on society.

Once more, our extraordinary associates around the world delivered terrific performance, and I am delighted to share with you the following 2007 financial results:

- Net revenue grew 12%, roughly three times the rate of global GDP growth.

*Source: 2007 PepsiCo Annual Report

- Division operating profit grew 10%.
- Earnings per share grew 13%.
- Total return to shareholders was 26%.
- Return on invested capital was 29%.
- Cash flow from operations was \$6.9 billion.

In 2007 PepsiCo took important steps to support future growth.

What makes me particularly proud is that our 2007 performance was strong – not just measured by these short-term metrics – but also with the long-term equally in mind:

- We increased capital expenditures in plant and equipment worldwide to enable growth of core brands and expand into new platforms such as baked and crisp-bread snacks and non-carbonated beverages.
- We added several tuck-in acquisitions in key markets and segments, and we further expanded our successful coffee and tea joint ventures.
- We created the Chief Scientific Officer position to ensure our technical capabilities keep pace with increasingly sophisticated consumer demand; and we funded incremental investment to explore breakthrough R&D opportunities.
- We maintained focus on building next-generation IT capabilities with Project One Up, to support our long-term growth prospects worldwide.

Our brands once again demonstrated competitive strength.

On the ground, in cities and towns around the world, good brand strategies were implemented with operational excellence. I'd like to share a few notable examples of the big marketplace wins we enjoyed in 2007:

- Our carbonated soft drink and savory snack brands gained market share in the United States and in many of our top international markets.
- In the United Kingdom, Baked Walkers crisps was named “New Product of the Year” by *Marketing Week* magazine.
- SunChips snacks delivered double-digit growth in the United States as a result of great, innovative marketing and in-store execution.
- 7UP H2Oh! was our fastest-growing brand in value and volume share in Brazil in its launch year.
- Pepsi Max came of age as a global brand, with outstanding performance in the United States as Diet Pepsi Max, after successes in Northern Europe and Australia and 2007 launches across Asia.

- PepsiCo beverage brands crossed the \$1 billion mark in Russia retail sales.
- We posted double-digit volume growth in China beverages and high-single-digit beverage volume growth in India.

And we did all of this while battling increased commodity inflation and more macroeconomic volatility than in previous years.

Required

In her review of PepsiCo's performance in 2007, Indra Nooyi, PepsiCo's Chairman and CEO, claims that, “Net revenue grew by 12%, roughly three times the rate of global GDP growth.” What message is she trying to convey in this statement? After reviewing the disclosure “Results of Operation – Division Review,” which is found in the notes to the financial statements, do you agree with Mrs. Nooyi's assertions about PepsiCo's growth?

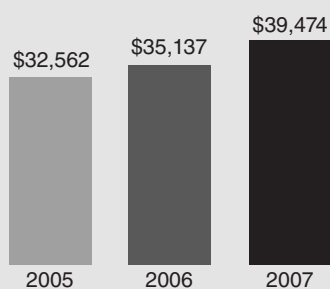
Consolidated Statement of Income

PepsiCo, Inc. and Subsidiaries: Fiscal years ended December 29, 2007, December 30, 2006, and December 31, 2005

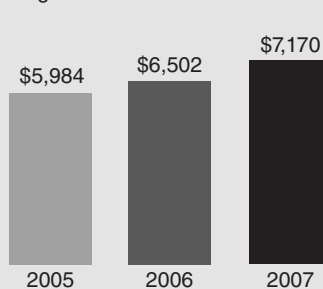
(in millions except per share amounts)	2007	2006	2005
Net Revenue	\$39,474	\$35,137	\$32,562
Cost of sales	18,038	15,762	14,176
Selling, general and administrative expenses	14,208	12,711	12,252
Amortization of intangible assets	58	162	150
Operating Profit	7,170	6,502	5,984
Bottling equity income	560	553	495
Interest expense	(224)	(239)	(256)
Interest income	125	173	159
Income before Income Taxes	7,631	6,989	6,382
Provision for Income Taxes	1,973	1,347	2,304
Net Income	\$5,658	\$5,642	\$4,078
Net Income per Common Share			
Basic	\$3.48	\$3.42	\$2.43
Diluted	\$3.41	\$3.34	\$2.39

(Continued)

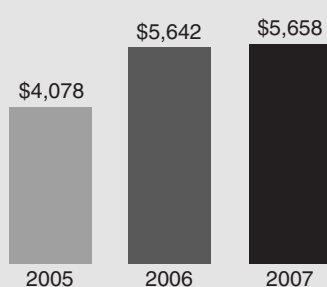
Net Revenue



Operating Profit



Net Income



Net Income per Common Share



Results of Operations—Division Review

The results and discussions below are based on how our Chief Executive Officer monitors the performance of our divisions.

	FLNA	PBNA	PI	QFNA	Total
Net Revenue, 2007	\$11,586	\$10,230	\$15,798	\$1,860	\$39,474
Net Revenue, 2006	\$10,844	\$9,565	\$12,959	\$1,769	\$35,137
% Impact of:					
Volume ^(a)	3%	(2)%	7%	2%	3%
Effective net pricing ^(b)	4	6	3.5	3	4
Foreign exchange	0.5	–	6	1	2
Acquisitions/divestitures	–	2	6	–	3
% Change ^(c)	7%	7%	22%	5%	12%
Net Revenue, 2006	\$10,844	\$9,565	\$12,959	\$1,769	\$35,137
Net Revenue, 2005	\$10,322	\$9,146	\$11,376	\$1,718	\$32,562
% Impact of:					
Volume ^(a)	1%	3%	6%	1%	3%
Effective net pricing ^(b)	3	1	4	2	3
Foreign exchange	0.5	–	1	1	1
Acquisitions/divestitures	0.5	–	3	–	1
% Change ^(c)	5%	5%	14%	3%	8%

(a) Excludes the impact of acquisitions and divestitures. For PBNA and PI, volume growth varies from the amounts disclosed in the following divisional discussions due primarily to non-consolidated joint venture volume and temporary timing differences between BCS and CSE. Our net revenue for PBNA and PI excludes non-consolidated joint venture volume and is based on CSE.

(b) Include the year-over-year impact of discrete pricing actions, sales incentive activities and mix resulting from selling varying products in different package sizes and in different countries.

(c) Amounts may not sum due to rounding.

NOTES

1. The balance sheet is also known as the statement of financial position. Although the latter is the official term, business people everywhere continue to use the term “balance sheet.” We will do likewise in this book.
2. In some countries, such as the United Kingdom, principal responsibility for the financial statements rests with the board of directors.