Module 1

Financial Accounting for MBAs

***Learning Objectives** identify the key learning goals of the module.*

Learning Objectives

LO1 Explain and assess the four main business activities. (p.1-3)

LO2 Identify and discuss the users and suppliers of financial statement information. (p. 1-5)

LO3 Describe and examine the four financial statements, and define the accounting equation. (p. 1-10)

LO4 Explain and apply basic profitability analysis. (p. 1-19)

LO5 Assess business operations within the context of a competitive environment. (p. 1-22)

LO6 Access reports filed with the SEC (Appendix 1A). (p. 1-27)

LO7 Describe the accounting principles and regulations that frame financial statements (Appendix 1B). (p. 1-29)

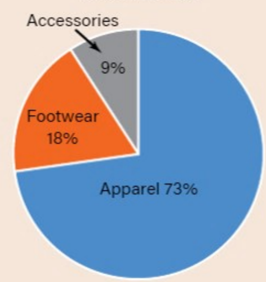
*A **Focus Company** introduces each module and illustrates the relevance of financial accounting in everyday business.*

UA
Market cap: $16,490 mil
Total assets: $2,869 mil
Revenues: $3,963 mil
Net income: $232 mil

Under Armour Inc. develops, markets, and distributes its branded performance apparel, footwear, and accessories for men, women, and youth. A distinctive element of its marketing and promotion strategy is the direct sales to high-performing athletes and teams at all levels. As a result, Under Armour products have enormous visibility on the Internet and television as well as in magazines and at live sporting events. This exposure helps establish "on-field authenticity" for the brand as consumers see Under Armour products worn by athletes in a wide range of sports.

Over the past three years, Under Armour's revenues have increased by 70% and its profits by 43%. It reported nearly $3 billion in assets, and it financed 58% of its assets with stockholder investment and the other 42% with borrowed money—a conservative financing strategy. Under Armour has used the cash it generates to ramp up inventories; invest in property, plant, and equipment; and acquire other companies that are central to its strategy.

Product Sales



The financial information Under Armour reports is critical to a diverse set of users, including the company's own management team, stockholders, lenders, suppliers, government regulators, and others. Understanding the information contained in these financial statements is central to effective decision-making by these parties.

This module introduces the financial statements that companies such as Under Armour disclose. It also presents basic tools to analyze financial information. We begin with an overview of the information environment companies face, and we discuss the demand for and supply of financial information. We then review financial statements and explain what information they convey. Profitability is described and is used as a focus of much of our application of accounting information. We conclude the module with an introduction to business analysis, which is an important part of drawing inferences from financial statements. The appendix discusses the regulatory environment that defines current financial reporting for companies. [Source: *Under Armour*, 2015 10-K report.]

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Road Map

Road Maps *visually organize the topics, eLecture videos, Guided Example videos, and assignments by Learning Objective.*

LO	Learning Objective | Topics	Page	eLecture	Guided Example	Assignments
1-1	**Explain and assess the four main business activities.** Planning :: Operating :: Investing :: Financing	1-3	e1-1	Review 1-1	1, 21, 59
1-2	**Identify and discuss the users and suppliers of financial statement information.** Information Demand :: Information Supply :: Global Setting	1-5	e1-2	Review 1-2	8, 9, 13, 17,18, 22, 35, 39, 61
1-3	**Describe and examine the four financial statements, and define the accounting equation.** Balance Sheet :: Income Statement :: Statement of Stockholders' Equity :: Statement of Cash Flows	1-10	e1-3	Review 1-3	2, 3, 4, 5, 6, 7, 23, 24, 25, 26, 27, 28, 33, 34, 36, 42, 43, 44, 45, 46, 56, 59, 60
1-4	**Explain and apply basic profitability analysis.** Return on Assets :: Return on Equity :: Relevance of Financial Statements	1-19	e1-4	Review 1-4	19, 20, 31, 37, 38, 40, 41, 42, 43, 44, 47, 48, 49, 50, 51, 55, 57, 58, 60
1-5	**Assess business operations within the context of a competitive environment.** Competitive Environment :: Business Environment :: Competitive Advantage	1-22	e1-5	Review 1-5	10, 11, 30
1-6	**Access reports filed with the SEC (Appendix 1A).** www.SEC.gov :: 10-K :: Interactive Data :: Excel Usage	1-27	e1-6		12, 26, 27, 31
1-7	**Describe the accounting principles and regulations that frame financial statements (Appendix 1B).** Accounting Environment :: Auditing :: Regulatory and Legal	1-29	e1-7		14, 15, 16, 29, 32, 52, 53, 54, 62, 63

Module Organization

Module Organization *Charts visually depict the key topics and their sequence within the module.*

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Module Organization Charts visually depict the key topics and their sequence within the module.

Financial Accounting for MBAs

Information Environment	Financial Statements	Profitability Analysis	Broader Business Environment	Regulatory and Legal Environment
■ Reporting on Business Activities ■ Demand for Information ■ Supply of Information	■ Balance Sheet ■ Income Statement ■ Statement of Stockholders' Equity ■ Statement of Cash Flows	■ Measuring Return on Assets ■ Disaggregating Return on Assets ■ Relevance of Accounting	■ Competitive Analysis ■ Business Analysis ■ Analyzing Competitive Advantage	■ Financial Accounting Environment ■ Audits and Governance ■ SEC and the Courts

Reporting on Business Activities

eLectures MBC **LO1** Explain and assess the four main business activities.

***eLecture** icons identify topics for which there are instructional videos in **myBusinessCourse** (MBC). See the Preface for more information on MBC.*

Financial accounting information serves many purposes. To understand this, imagine that we are a specific user of accounting information. For example, imagine we are a:

- Stock investor—how might we use accounting information to identify a stock to buy?
- Bond trader—how might we use accounting information to assess a company's ability to repay its debt?
- Manager—how might we use accounting information to decide whether to acquire another company or divest a current division?
- Equity and/or credit analyst—how might we use accounting information to prepare an investment appraisal or credit report?

This book explains the concepts, preparation, and application of financial accounting information and, importantly, how decision makers use such information.

- Managers use financial accounting information for planning purposes and to make operating, investing, and financing decisions.
- Investors and analysts use financial accounting information to help decide whether to buy or sell stock.
- Lenders and rating agencies use accounting information to help decide a company's creditworthiness and lending terms.
- Regulators use accounting information to enact social and economic policies and to monitor compliance with laws.
- Legal institutions use accounting information to assess fines and reparations in litigation.
- Other decision makers rely on accounting information for purposes ranging from determining demands in labor union negotiations to levying damages for environmental abuses.

Business Activities To effectively analyze and use accounting information, we must consider the business context in which the information is created—see Exhibit 1.1. All companies engage in four types of activities: they *plan* business activities, *finance* those activities, *invest* in those activities, and then engage in *operating* activities. Companies conduct all these activities while confronting *business forces*, including market constraints and competitive pressures. Prior financial statements provide crucial input for strategic planning. Current financial statements provide information about the relative

success of those plans, which can be used to take corrective action or make new operating, investing, and financing decisions.

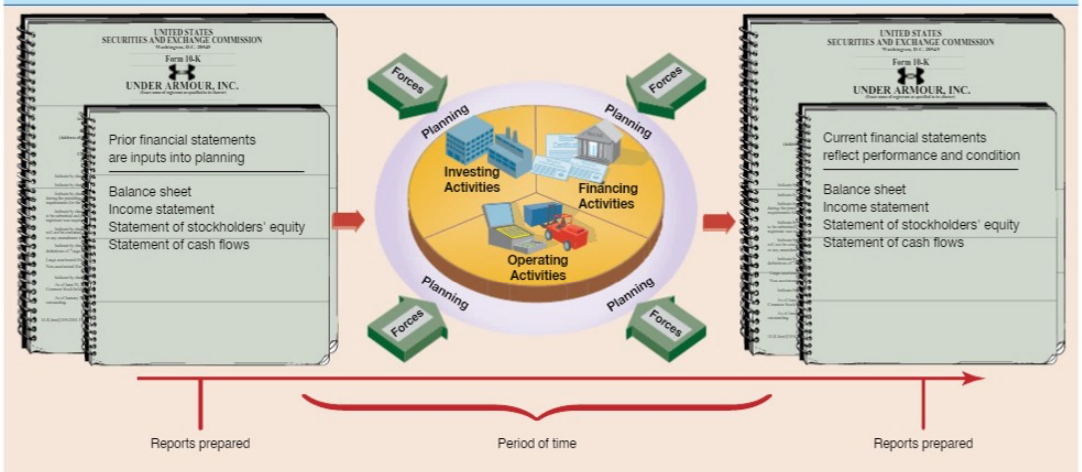
Exhibit 1.1 depicts the four business activities for a typical company. The outer (purplish) ring is the planning process that reflects the overarching goals and objectives of the company within which strategic decisions are made. Those strategic decisions involve company financing, asset investment success of those plans, which can be used to take corrective action or make new operating, investing, and financing decisions.

Exhibit 1.1 depicts the four business activities for a typical company. The outer (purplish) ring is the planning process that reflects the overarching goals and objectives of the company within which strategic decisions are made. Those strategic decisions involve company financing, asset investment and management, and daily operations. **Under Armour**, the focus company for this module, provides the following description of its business strategy in its annual report.

Excerpts from recent financial statements are used to illustrate and reinforce concepts.

> Our principal business activities are the development, marketing and distribution of branded performance apparel, footwear and accessories for men, women and youth...Our Connected Fitness strategy is focused on connecting with our consumers and increasing awareness and sales of our existing product offerings through our global wholesale and direct to consumer channels. We plan to engage and grow this community by developing innovative applications, services and other digital solutions to impact how athletes and fitness-minded individuals train, perform and live. Our marketing and promotion strategy begins with providing and selling our products to high-performing athletes and teams on the high school, collegiate and professional levels. We execute this strategy through outfitting agreements, professional and collegiate sponsorships, individual athlete agreements and by providing and selling our products directly to team equipment managers and to individual athletes.

Exhibit 1.1 **Business Activities**



Infographics are used to convey concepts and procedures.

Business Strategy A company's *strategic* (or *business*) *plan* reflects how it plans to achieve its goals and objectives. A plan's success depends on an effective analysis of market demand and supply. Specifically, a company must assess demand for its products and services and assess the supply of its inputs (both labor and capital). The plan must also include competitive analyses, opportunity assessments, and consideration of business threats. We discuss competitive forces later in the module.

Historical financial statements provide insight into the success of a company's strategic plan and are an important input to the planning process. These statements highlight portions of the strategic plan that proved profitable and, thus, warrant additional capital investment. They also reveal areas that are less effective and provide information to help managers develop remedial action.

Once strategic adjustments are planned and implemented, the current period financial statements provide input into the planning process for the next year, and this process begins again. Understanding a company's strategic plan helps focus our analysis of financial statements by placing them in proper context.

Review 1-1 LO1

Guided Examples MBC

Which of the following statements are true?

_____ *a.* Historical financial statements provide important relevant information that allows managers to effectively plan their company's business for the upcoming year.

_____ *b.* To properly analyze the information contained in financial statements, it is important to under-

Review 1-1 LO1

Guided Examples MBC

Which of the following statements are true?

_____ *a.* Historical financial statements provide important relevant information that allows managers to effectively plan their company's business for the upcoming year.

_____ *b.* To properly analyze the information contained in financial statements, it is important to understand the business context in which the information is created.

_____ *c.* Financial statements provide substantial information that is used in all phases of the planning process, including the way in which the company is financed and which investments are pursued.

_____ *d.* Financial statements provide important input into the evaluation of the company's success in carrying out its strategic plan.

Solution on p. 1-46.

Financial Statements: Demand and Supply

eLectures MBC **LO2** Identify and discuss the users and suppliers of financial statement information.

Learning Objectives *are highlighted at the start of the section covering that topic.*

Demand for financial statements has existed for centuries as a means to facilitate efficient contracting and risk-sharing. Decision makers and other stakeholders demand information on a company's past and prospective returns and risks. Supply of financial statements is driven by companies' wish to lower financing costs and other costs such as political, contracting, and labor. Managers decide how much financial information to supply by weighing the costs of disclosure against the benefits of disclosure. Regulatory agencies intervene in this process with various disclosure requirements that establish a minimum supply of information.

Demand for Information

The following broad classes of users demand financial accounting information.

- Managers and employees
- Investment analysts and information intermediaries
- Creditors and suppliers
- Stockholders and directors
- Customers and strategic partners
- Regulators and tax agencies
- Voters and their representatives

Managers and Employees

Managers and employees are interested in the company's current and future financial health. This leads to a demand for accounting information on the financial condition, profitability, and prospects of their companies as well as comparative financial information on competing companies and business opportunities. This permits them to benchmark their company's performance and condition. Managers and employees also demand financial accounting information for use in compensation and bonus contracts that are tied to such numbers. The popularity of employee profit sharing and stock ownership plans has further increased demand for financial information. Other sources of demand include union contracts that link wage negotiations to accounting numbers and pension and benefit plans whose solvency depends on company performance. Financial statements provide useful information to company managers to address the following types of questions.

- What product lines, geographic areas, or other segments are performing well compared with our peer companies and our own benchmarks?
- Have we reached the level of profitability necessary to pay bonuses or profit-sharing payments to employees?
- Should we consider expanding or contracting our business?

Investment Analysts and Information Intermediaries

Investment analysts and other information intermediaries, such as financial press writers and business commentators, are interested in predicting companies' future performance. Expectations about future profitability and the ability to generate cash impact stock price and a company's ability to borrow

money at favorable terms. Financial reports reflect information about past performance and current resources available to companies. These reports also provide information about claims on those resources, including claims by suppliers, creditors, lenders, and stockholders. This information allows analysts to make informed assessments about future financial performance and condition so they can provide stock recommendations or write commentaries. Financial statements provide useful informamoney at favorable terms. Financial reports reflect information about past performance and current resources available to companies. These reports also provide information about claims on those resources, including claims by suppliers, creditors, lenders, and stockholders. This information allows analysts to make informed assessments about future financial performance and condition so they can provide stock recommendations or write commentaries. Financial statements provide useful information to investment analysts to address the following types of questions.

- What are the expected future profit, cash flows, and dividends to use as input into stock-price models?
- Is the company financially solvent and able to meet its financial obligations?
- How do our expectations about the economy, interest rates and the competitive environment affect the company?

Analysts use financial information to prepare research reports similar to the one issued in 2016 by **Morgan Stanley** on Under Armour (below). Analysts use balance sheet numbers, including debt and equity ("eqty") along with income statement numbers, including revenue, earnings per share (EPS), and earnings before interest, tax, depreciation, and amortization (EBITDA) to compute ratios that inform their price target ($64) and their stock rating (underweight). We will discuss analysts and their activities in more depth later. For now, you should know that accounting information is a bedrock for equity analysis.

Excerpts *of reports from Morgan Stanley, Moody's, and Deutsche Bank are incorporated to illustrate how accounting information is used by financial services.*

Morgan Stanley

Under Armour Inc. | March 3, 2016

MORGAN STANLEY RESEARCH

March 3, 2016

Under Armour Inc.

Priced for Perfection, but We See 5 Concerning Data Points; Reiterate UW

Industry View	Stock Rating	Price Target
In-Line	**Underweight**	**$64.00**

UA trades at 65x FY16 EPS and has a PEG of 3x, which compares to a group of high-growth retailers averaging 23x and 1.8x for PEG. Based on our deep-dive work, we see data points suggesting some of UA's growth levers are dissipating and represent risks not priced in.

We've done a deep dive into UA's business: We believe that Under Armour is a terrific company with exceptional management and much growth ahead of it. However, the question is whether UA's growth will justify the stock's 65x P/E. We don't think so. Dissecting UA's business is tricky because of its complex mix of channels, geographies, product categories, and limited disclosure. Our work tries to dig down a level to look at trends in organic store growth, distribution partnerships, and working capital movements and shows growth may be harder to come by in future quarters than many appreciate.

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Under Armour Inc. (UA.N, UA US)

Branded Apparel & Footwear / United States of America

Stock Rating	**Underweight**
Industry View	**In-Line**
Price target	**$64.00**
Shr price, close (Mar 2, 2016)	$83.93
Mkt cap, curr (mm)	$18,508
52-Week Range	$105.89-63.24

Fiscal Year Ending	**12/15**	**12/16e**	**12/17e**	**12/18e**
EPS ($)**	**1.05**	**1.29**	**1.60**	**2.05**
Prior EPS ($)**	-	-	-	-
Consensus EPS ($)§	1.04	1.31	1.68	2.17
P/E, consensus§	77.5	64.1	49.9	38.6
EV/EBITDA**	35.9	31.0	24.8	19.3
Div yld (%)	0.0	0.0	0.0	0.0
Revenue, net ($mm)	3,963	4,965	6,197	7,527
EBIT margin (%)**	10.3	10.1	10.0	10.2
Return on avg eqty (%)**	15.8	16.5	17.1	18.3
Net debt/EBITDA**	0.8	1.2	1.2	1.0

Creditors and Suppliers

Banks and other lenders demand financial accounting information to help determine loan terms, loan amounts, interest rates, and required collateral. Loan agreements often include contractual requirements, called **covenants**, that restrict the borrower's behavior in some fashion. For example, loan covenants might require the loan recipient to maintain minimum levels of working capital, retained earnings, and interest coverage to safeguard lenders. Covenant violations can yield technical default, enabling the creditor to demand early payment or other compensation. Suppliers demand financial information to establish credit terms and to determine their long-term commitment to supply-chain relations. Both creditors and suppliers use financial information to monitor and adjust their contracts

and commitments with a company. Financial statements provide useful information to creditors and suppliers to address the following types of questions.

- Should we extend credit to this company in the form of a loan or line of credit for inventory purchases?

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- Should we extend credit to this company in the form of a loan or line of credit for inventory purchases?
- What interest rate is reasonable given the company's current debt load and overall risk profile?
- Is the company in compliance with the existing loan covenants (loan conditions that restrict the borrower's behavior in some fashion, such as minimum levels of working capital, retained earnings, and cash flow, which safeguard lenders)?

Following is Under Armour's disclosure of loan covenants on its credit facility (a line of credit) from a recent annual report.

> **Under Armour Credit Facility** In May 2014, the Company entered into a new unsecured $650.0 million credit facility. . . . These additional borrowings were used to fund, in part, the acquisition of MFP. . . . The credit agreement contains covenants that, subject to significant exceptions, limit the ability of the Company and its subsidiaries to, among other things, incur additional indebtedness, make restricted payments, pledge their assets as security, make investments, loans, advances, guarantees and acquisitions, undergo fundamental changes and enter into transactions with affiliates. The Company is also required to maintain a ratio of consolidated EBITDA, as defined in the credit agreement, to consolidated interest expense of not less than 3.50 to 1.00 and is not permitted to allow the ratio of consolidated total indebtedness to consolidated EBITDA to be greater than 3.25 to 1.00 ("consolidated leverage ratio"). As of March 31, 2015, the Company was in compliance with these ratios.

Stockholders and Directors

Stockholders and directors and others (such as investment analysts, brokers, and potential investors) demand financial accounting information to assess the profitability and risks of companies and other information useful in their investment decisions. **Fundamental analysis** uses financial information to estimate company value and to form buy-sell stock strategies. Both directors and stockholders use accounting information to evaluate managerial performance. Managers similarly use such information to request an increase in compensation and managerial power from directors. Outside directors are crucial to determining who runs the company, and these directors use accounting information to help make leadership decisions. Financial statements provide useful information to stockholders and directors to address the following questions.

- Is company management demonstrating good stewardship of the resources that have been entrusted to it?
- Do we have the information we need to critically evaluate strategic initiatives that management proposes?

Customers and Strategic Partners

Customers (both current and potential) demand accounting information to assess a company's ability to provide products or services and to assess the company's staying power and reliability. Strategic partners wish to estimate the company's profitability to assess the fairness of returns on mutual transactions and strategic alliances. Financial statements provide useful information to customers and strategic partners to address the following questions.

- Will the company be a reliable supplier?
- Is the strategic partnership providing reasonable returns to both parties?

Regulators and Tax Agencies

Regulators (such as the Securities and Exchange Commission [SEC], the Federal Trade Commission, and the Federal Reserve Bank) and tax agencies demand accounting information for antitrust assessments, public protection, setting prices, import-export analyses, and setting tax policies. Timely and

reliable information is crucial to effective regulatory policy, and accounting information is often central to social and economic policies. For example, governments often grant monopoly rights to electric and gas companies serving specific areas in exchange for regulation over prices charged to consumers. These prices are mainly determined from accounting measures.

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Voters and Their Representatives

Voters and their representatives to national, state, and local governments demand accounting information for policy decisions. The decisions can involve economic, social, taxation, and other initiatives. Voters and their representatives also use accounting information to monitor government spending. We have all heard of the $1,000 hammer type stories that government watchdog groups uncovered while sifting through accounting data. Contributors to nonprofit organizations also demand accounting information to assess the impact of their donations.

Supply of Information

In general, the quantity and quality of accounting information that companies supply are determined by managers' assessment of the benefits and costs of disclosure. Managers release information provided the benefits of disclosing that information outweigh the costs of doing so. Both *regulation* and *bargaining power* affect disclosure costs and benefits and thus play roles in determining the supply of accounting information. Most areas of the world regulate the minimum levels of accounting disclosures. In the United States, publicly traded firms must file financial accounting information with the SEC. There are two main compulsory SEC filings.

- Form **10-K**: the audited annual report that includes the four financial statements, discussed below, with explanatory notes and the management's discussion and analysis (MD&A) of financial results.
- Form **10-Q**: the unaudited quarterly report that includes summary versions of the four financial statements and limited additional disclosures.

Forms 10-K (which must be filed within 60 [90] days of the year-end for larger [smaller] companies) and 10-Q (which must be filed within 40 [45] days of the quarter-end for larger [smaller] companies, except for the fourth quarter, when it is part of the 10-K) are available electronically from the SEC website (see Appendix 1A). The minimum, regulated level of information is not the standard. Both the quantity and quality of information differ across companies and over time. We need only look at several annual reports to see considerable variance in the amount and type of accounting information supplied. For example, differences abound on disclosures for segment operations, product performance reports, and financing activities. Further, some stakeholders possess ample bargaining power to obtain accounting information for themselves. These typically include private lenders and major suppliers and customers.

Benefits of Disclosure

The benefits of supplying accounting information extend to a company's capital, labor, input, and output markets. Companies must compete in these markets. For example, capital markets provide debt and equity financing; the better a company's prospects, the lower is its cost of capital (as reflected in lower interest rates or higher stock prices). The same holds for a company's recruiting efforts in labor markets and its ability to establish superior supplier-customer relations in the input and output markets.

A company's performance in these markets depends on success with its business activities *and* the market's awareness of that success. Companies reap the benefits of disclosure with good news about their products, processes, management, and so forth. That is, there are real economic incentives for companies to disclose reliable (audited) accounting information, enabling them to better compete in capital, labor, input, and output markets.

What inhibits companies from providing false or misleading good news? There are several constraints. An important constraint imposed by stakeholders is that of audit requirements and legal repercussions associated with inaccurate accounting information. Another relates to reputation effects from disclosures as subsequent events either support or refute earlier news.

Costs of Disclosure

The costs of supplying accounting information include its preparation and dissemination, competitive disadvantages, litigation potential, and political costs. Preparation and dissemination costs can be substantial, but companies have often already incurred those costs because managers need similar information for their own business decisions. The potential for information to yield competitive disadvantages is high. Compa-

Costs of Disclosure

The costs of supplying accounting information include its preparation and dissemination, competitive disadvantages, litigation potential, and political costs. Preparation and dissemination costs can be substantial, but companies have often already incurred those costs because managers need similar information for their own business decisions. The potential for information to yield competitive disadvantages is high. Companies are concerned that disclosures of activities such as product or segment successes, strategic alliances or pursuits, technological or system innovations, and product or process quality improvements will harm their competitive advantages. Also, companies are frequently sued when disclosures create expectations that are not met. Highly visible companies often face political and public pressure, which creates "political costs." These companies often try to appear as though they do not generate excess profits. For example, government defense contractors, large software conglomerates, and oil companies are favorite targets of public scrutiny. Disclosure costs are higher for companies facing political costs.

The SEC adopted Regulation Fair Disclosure (FD), or Reg FD for short, to curb the practice of selective disclosure by public companies (called *issuers* by the SEC) to certain stockholders and financial analysts. In the past, many companies disclosed important information in meetings and conference calls that excluded individual stockholders. The goal of this rule is to level the playing field for all investors. Reg FD reads as follows: "Whenever an issuer discloses any material nonpublic information regarding that issuer, the issuer shall make public disclosure of that information . . . simultaneously, in the case of an intentional disclosure; and . . . promptly, in the case of a non-intentional disclosure." Reg FD increased the cost of voluntary financial disclosure and led some companies to curtail the supply of financial information to all users.

International Accounting Standards

IFRS

Companies in more than 120 countries, including the European Union, the United Kingdom, Canada, and Japan use International Financial Reporting Standards (IFRS) for their financial reports. Headquartered in London, the International Accounting Standards Board (IASB) oversees the development of IFRS. While the IASB and the Financial Accounting Standards Board (FASB) operate as independent standard-setting bodies, the two boards work together cooperatively, often undertaking joint projects. Consequently, IFRS and U.S. GAAP (generally accepted accounting principles) are generally more alike than different for most transactions.

Currently, there is no formal plan for the U.S. to transition to IFRS or for the IASB and FASB to converge or conform standards. Indeed, there is considerable pushback on complete conformity or convergence from U.S. companies, investors, and the SEC. While conformity is likely not attainable, both boards believe comparable global accounting standards are desirable because comparability would:

- Improve the quality of financial reports.
- Benefit investors, companies, and other market participants who make global investment decisions.
- Reduce costs for both users and preparers of financial statements.
- Make worldwide capital markets more efficient.

Evidence of increasing "comparability" of the two standards includes the following.

- Since 2007, the SEC has permitted foreign companies to file IFRS financial statements without requiring reconciliation to U.S. GAAP. Currently, more than 500 companies with a cumulative market capitalization of trillions of dollars, report to the SEC using IFRS.
- In late 2015, the SEC announced it is considering the possibility of allowing U.S. public companies to provide IFRS-based information as a supplement to U.S. GAAP financial statements.
- The FASB participates actively in the development of IFRS, providing input on IASB projects through the IASB's Accounting Standards Advisory Forum (ASAF).
- Recent joint projects between the two boards relate to leases, financial instruments, revenue recognition, and insurance contracts.

We might ask: are financial statements prepared under IFRS substantially different from those prepared under U.S. GAAP? At a broad level, the answer is no. Both are prepared using accrual accounting and utilize similar conceptual frameworks. Both require the same set of financial statements: a balance sheet, an income statement, a statement of cash flows, a statement of stockholders' equity, and a set of explanatory

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At the end of each module, we summarize key differences between U.S. GAAP and IFRS. Also, there are a variety of sources that provide more detailed and technical analysis of similarities and differences between U.S. GAAP and IFRS. The FASB, the IASB, and each of the "Big 4" accounting firms also maintain websites devoted to this issue. Search under IFRS and PwC, KPMG, EY and Deloitte. The two standard-setting bodies also provide useful information. See: FASB (**www.fasb.org/intl/**) and IASB (**www.ifrs.org**).

Review Problems are self-study tools that require the application of the accounting topics covered in each section. To aid learning, solutions are provided at the end of the module.

LO2 **Review 1-2**

Required

1. Match the users of financial statement information with the types of questions they would typically ask and answer using accounting data.

_____ I. Managers and employees	*a.* Is company management demonstrating good stewardship of the resources that have been entrusted to it?
_____ II. Investment analysts and information intermediaries	*b.* What product lines have performed well compared with competitors?
_____ III. Creditors and suppliers	*c.* What regulated price is appropriate given the company's financial condition?
_____ IV. Stockholders and directors	*d.* Is the strategic partnership providing reasonable returns to both parties?
_____ V. Customers and strategic partners	*e.* What expectations about the company's future profit and cash flow should we use as input into the pricing of its stock?
_____ VI. Regulators and tax agencies	*f.* Is the company in compliance with the contractual terms of its existing loan covenants?

2. How would having comparable IFRS and U.S. GAAP standards reduce the cost of preparing financial statements for a multinational firm?

GuidedExamples MBC

Guided Examples icons denote the availability of a demonstration video in ***myBusinessCourse*** *(MBC) for each Review Problem—see the Preface for more on MBC.*

Solution on p. 1-46.

Structure of Financial Statements

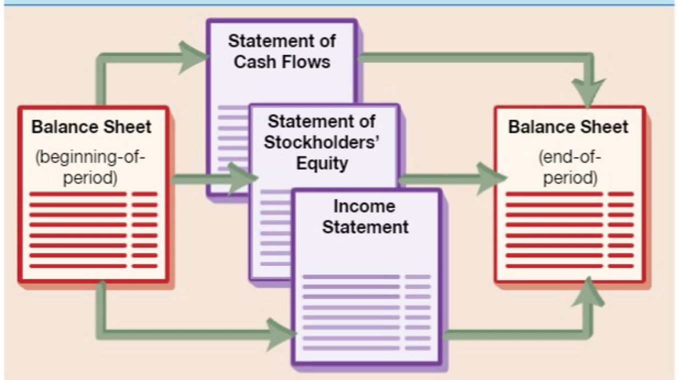
eLectures MBC **LO3** Describe and examine the four financial statements, and define the accounting equation.

Companies use four financial statements to periodically report on business activities. These statements are the balance sheet, income statement, statement of stockholders' equity, and statement of cash flows. Exhibit 1.2 shows how these statements are linked across time. A balance sheet reports on a company's financial position at a *point in time*. The income statement, statement of stockholders' equity, and the statement of cash flows report on performance over a *period of time*. The three statements in the middle of Exhibit 1.2 (period-of-time statements) link the balance sheet from the beginning to the end of a period.

A one-year, or annual, reporting period is common and is called the *accounting*, or *fiscal, year.* Of course, firms prepare financial statements more frequently; semiannual, quarterly, and monthly financial statements are common. *Calendar-year* companies have reporting periods beginning on January 1 and ending on December 31. **Under Armour** is a calendar-year company. Some companies choose a fiscal year ending on a date other than December 31, such as when sales and inventory are low. For example, **Target**'s fiscal year ends on the Saturday nearest January 31, after the busy holiday season.

Exhibit 1.2 ■ Financial Statement Links across Time

Exhibit 1.2 ■ **Financial Statement Links across Time**



Balance Sheet

A balance sheet reports a company's financial position at a point in time. The balance sheet reports the company's *resources* (*assets*), namely, what the company owns. The balance sheet also reports the *sources* of asset financing. There are two ways a company can finance its assets. It can raise money from stockholders; this is *owner financing*. It can also raise money from banks or other creditors and suppliers; this is *nonowner financing*. This means both owners and nonowners hold claims on company assets. Owner claims on assets are referred to as *equity,* and nonowner claims are referred to as *liabilities* (or debt). Since all financing must be invested in something, we obtain the following basic relation: *investing equals financing*. This equality is called the **accounting equation**, which follows.

Investing	=	Nonowner Financing	□	Owner Financing
Assets	=	Liabilities	□	Equity

Real Companies *and Institutions are highlighted in bold, blue font.*

The accounting equation works for all companies at all points in time.

The balance sheet for **Under Armour** is in Exhibit 1.3 (condensed). Refer to this balance sheet to verify the following amounts: assets = $2,868.9 million; liabilities = $1,200.7 million; and equity = $1,668.2 million. Assets equal liabilities plus equity, which reflects the accounting equation: investing equals financing.

Investing Activities

Balance sheets are organized like the accounting equation. Investing activities are represented by the company's assets. These assets are financed by a combination of nonowner financing (liabilities) and owner financing (equity).

For simplicity, UnderArmour's balance sheet in Exhibit 1.3 categorizes assets into short-term and long-term assets (Module 2 explains the composition of assets in more detail). Assets are listed on the balance sheet in order of their nearness to cash, with short-term assets (also called current assets) expected to generate cash within one year from the balance sheet date. For example, the first short-term asset listed is cash, then accounts receivable (amounts owed to Under Armour by its customers that will be collected in cash in the near future), and then inventories (goods available for sale that must first be sold before cash can be collected). Land, buildings, and equipment (often referred to as property, plant, and equipment or just PPE) will generate cash over a long period of time and are, therefore, classified as long-term assets.

Real financial data *for focus companies illustrate key concepts of each module.*

Exhibit 1.3 ■ **Balance Sheet ($ millions)**

UNDER ARMOUR
Consolidated Balance Sheet*
December 31, 2015

Report amounts at a point in time

Real financial data for focus companies illustrate key concepts of each module.

Exhibit 1.3 ■ Balance Sheet ($ millions)

UNDER ARMOUR
Consolidated Balance Sheet*
December 31, 2015

Assets	
Short-term assets	$1,498.8
Long-term assets	1,370.1
Total assets	$2,868.9
Liabilities	
Short-term liabilities	$ 478.8
Long-term liabilities	721.9
Total liabilities	1,200.7
Stockholders' Equity	
Contributed capital	636.7
Retained earnings	1,076.5
Other equity	(45.0)
Total stockholders' equity†	1,668.2
Total liabilities and equity	$2,868.9

Report amounts at a point in time

Investing

Total resources

Financing

Nonowner financing

Owner financing

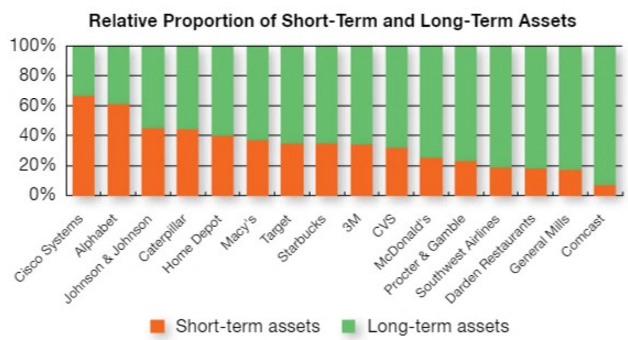
Total financing of resources

* Financial statement titles often begin with the word *consolidated*. This means the financial statement includes a parent company and one or more subsidiaries, which are companies the parent company controls.
† Components of equity are explained as part of Exhibit 1.5.

Annotations are used to aid learning.

The relative proportion of short- and long-term assets is largely determined by a company's industry and business model. This is evident in the graph to the side that depicts the relative proportion of short- and long-term assets for a number of well-known companies.

- Technology companies like **Cisco Systems** and **Alphabet** (formerly known as Google), often carry large investments in marketable securities that are classified as short-term assets because they can be sold quickly in financial markets.
- Manufacturers and retailers such as **Johnson & Johnson**, **Caterpillar**, **Home Depot**, and **Macy's**, require more investment in property, plant, and equipment in addition to large investments in inventories and accounts receivable from customers. As a result, their balance sheets report a more equal mix of short- and long-term assets.



- At the other end of the spectrum are transportation companies like **Southwest Airlines** and communications companies like **Comcast** whose business models require large investment in long-term PPE assets.

Although managers can influence the relative amounts and proportion of assets, their flexibility is somewhat limited by the nature of their industries.

Financing Activities

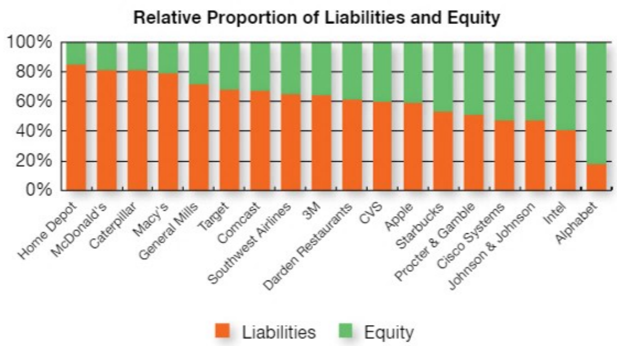
To pay for assets, companies use a combination of owner (or equity) and nonowner financing (liabilities or debt). Owner financing has two components: resources (mostly cash, but sometimes non-cash assets) contributed to the company by its owners, and profits retained by the company. Nonowner financing is borrowed money. We distinguish between these two financing sources for a reason:

borrowed money must be repaid, and failure to do so can result in severe consequences for the borrower. Equity financing entails no such obligation for repayment.

The relative proportion of nonowner and owner financing is largely determined by a company's industry and business model. This is evident in the graph to the side.

borrowed money must be repaid, and failure to do so can result in severe consequences for the borrower. Equity financing entails no such obligation for repayment.

The relative proportion of nonowner and owner financing is largely determined by a company's industry and business model. This is evident in the graph to the side.



- Companies with relatively stable cash flows can operate more comfortably with a higher level of debt. **Home Depot**, **McDonald's**, **Macy's** and **Target** fall into this category.
- **Caterpillar** sells much of its equipment on lease and the predictability of lease payments allows CAT to carry more debt.
- **Intel** and **Alphabet**, like most technology companies, have higher levels of business risk. To offset the higher business risk, these companies reduce the level of financial risk by substituting equity capital for borrowed funds.

Most public companies tend to use slightly more debt than equity in their capital structures.

Our discussion of investing and financing activities uses many terms and concepts that we explain later in the book. Our desire here is to provide a sneak preview into the interplay among financial statements, manager behavior, and economics. Some questions we might have at this early stage regarding the balance sheet follow.

- Alphabet reports $73.1 billion of cash on its 2015 balance sheet, nearly half of its total assets. Many high-tech companies carry high levels of cash. Why is that? Is there a cost to holding too much cash? Is it costly to carry too little cash?
- The relative proportion of short- and long-term assets is largely dictated by companies' business models. Why is this the case? Why is the composition of assets on balance sheets for companies in the same industry similar? By what degree can a company's asset composition safely deviate from industry norms?
- What are the trade-offs in financing a company by owner versus nonowner financing? If nonowner financing is less costly, why don't we see companies financed entirely with borrowed money?
- How do stockholders influence the strategic direction of a company? How can long-term creditors influence strategic direction?
- Most assets and liabilities are reported on the balance sheet at their acquisition price, called *historical cost*. Would reporting assets and liabilities at fair values be more informative? What problems might fair-value reporting cause?

IFRS Insights *examine issues related to similarities and differences in accounting practices of the U.S. and other countries.*

Review the Under Armour balance sheet summarized in Exhibit 1.3, and think about these questions. We provide answers for each of these questions as we progress through the book.

IFRS

IFRS Insight ■ **Balance Sheet Presentation and IFRS**

Balance sheets prepared under IFRS often classify accounts in reverse order of liquidity (lack of nearness to cash), which is the opposite of what U.S. companies do. For example, intangible assets are typically listed first, and cash is listed last among assets. Also, equity is often listed before liabilities, where liabilities are again listed in order of decreasing liquidity. These choices reflect convention and *not* IFRS requirements.

Income Statement

An **income statement** reports on a company's performance over a period of time and lists amounts for its *top line* revenues (also called sales) and its expenses. Revenues less expenses equals the *bottom-line*

net income amount (also called *profit* or *earnings*). Under Armour, as is typical of companies that sell products, reports two basic kinds of operating expenses.

- **Cost of goods sold** (COGS, also called cost of sales). While revenues represent the retail selling price of the goods sold to customers, cost of goods sold is the amount Under Armour paid to net income amount (also called *profit* or *earnings*). Under Armour, as is typical of companies that sell products, reports two basic kinds of operating expenses.

- **Cost of goods sold** (COGS, also called cost of sales). While revenues represent the retail selling price of the goods sold to customers, cost of goods sold is the amount Under Armour paid to purchase or manufacture the goods (inventories) that it sold. Manufacturing and merchandising companies typically include a subtotal called *gross profit*, which is revenues less cost of goods sold. For example, if it costs a company $7 to purchase or manufacture an item of inventory and the item sells for $10, the income statement reports revenues of $10, cost of goods sold of $7, and a gross profit of $3. We use the term gross to mean the profit available to cover all other expenses.
- **Selling, general, and administrative expenses (SG&A).** This is Under Armour's overhead and includes salaries, marketing costs, occupancy costs, HR and IT costs, and all the other operating expenses the company incurs other than the cost of purchasing or manufacturing inventory (which is included in cost of goods sold).

Under Armour's income statement is in Exhibit 1.4. Refer to the income statement to verify the following: revenues of $3,963.3 million, cost of goods sold of $2,057.8 million, and SG&A expenses of $1,497.0 million. After interest expense and income taxes, the company reports net income of $232.6 million. Net income reflects the profit (or earnings) to the company's shareholders for the period.

Exhibit 1.4 ■ **Income Statement ($ millions)**

UNDER ARMOUR
Income Statement
For Year Ended December 31, 2015 — Report amounts over a period of time

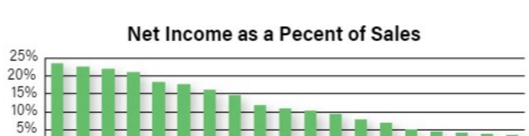
Net revenues	$3,963.3	Sales to customers
Cost of goods sold	2,057.8	Cost to purchase or manufacture the inventory sold
Gross profit	1,905.5	
Selling, general and administrative expenses	1,497.0	Company overhead
Income from operations	408.5	
Interest expense	21.9	Interest on borrowed money
Income before taxes	386.7*	
Provision for income taxes	154.1	Income taxes on profit earned
Net income	$ 232.6	Remaining profit available to shareholders

* Rounding difference: Under Armour reports its financial statements in thousands, which we converted to millions.

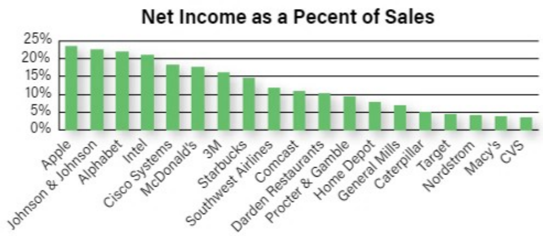
To generate net income, companies engage in operating activities that use company resources to produce, promote, and sell products and services. These activities extend from input markets involving suppliers of materials and labor to a company's output markets, involving customers of products and services. Input markets generate most *expenses* (or *costs*) such as inventory, salaries, materials, and logistics. Output markets generate *revenues* (or *sales*) to customers. Output markets also generate some expenses such as marketing and distributing products and services to customers. Net income arises when revenues exceed expenses. A net loss occurs when expenses exceed revenues.

Relative profitability (net income as a percent of sales) differs widely across industries and even among companies in the same industry. Although effective managers can increase their company's profitability, business models play a large part in determining profit levels. These differences are illustrated in the graph (below) of net income as a percent of sales for several companies.

- **Apple**, **Johnson & Johnson**, **Alphabet**, and **Intel** are dominant in their industries, with products and intellectual property that are protected by patent laws—it could be argued that they operate like monopolies. Consequently, their profit levels are high.



- Retailers such as **Target**, **Nordstrom**, **Macy's**, and **CVS** operate in a mature industry and have difficulty differentiating their products. Hence, their net income as a percent of sales is low.



- Retailers such as **Target**, **Nordstrom**, **Macy's**, and **CVS** operate in a mature industry and have difficulty differentiating their products. Hence, their net income as a percent of sales is low.

The ability of companies to create barriers to competitive pressure, either by patent protection, effective marketing, or otherwise, is a key factor in determining their level of profitability. Those that compete in highly competitive markets with little product differentiation must concentrate on controlling operating expenses to offset lower gross margins.

As a sneak preview, we might consider the following questions regarding the income statement.

- Assume a company sells a product to a customer who promises to pay in 30 days. Should the seller recognize the sale when it is made or when cash is collected?
- When a company purchases a long-term asset such as a building, its cost is reported on the balance sheet as an asset. Should a company, instead, record the cost of that building as an expense when it is acquired? If not, how should a company report the cost of that asset over the course of its useful life?
- Manufacturers and merchandisers report the cost of a product as an expense when the product sale is recorded. How might we measure the costs of a product that is sold by a merchandiser? By a manufacturer?
- If an asset, such as a building, increases in value, that increase is not reported as income until the building is sold, if ever. What concerns arise if we record increases in asset values as part of income when measurement of that increase is based on appraised values?
- Employees commonly earn wages that are yet to be paid at the end of a particular period. Should their wages be recognized as an expense in the period the work is performed or when the wages are paid?
- Companies are not allowed to report profit on transactions relating to their own stock. That is, they don't report income when stock is sold, nor do they report an expense when dividends are paid to stockholders. Why is this the case?

Review the Under Armour income statement summarized in Exhibit 1.4, and think about these questions. We provide answers for each of these questions as we progress through the book.

Statement of Stockholders' Equity

The **statement of stockholders' equity** reports on year-over-year changes in the equity accounts that are reported on the balance sheet. For each type of equity, the statement reports the beginning balance, a summary of the activity in the account during the year, and the ending balance. **Under Armour**'s statement of stockholders' equity is in Exhibit 1.5. During the recent period, its equity changed due to share issuances and the retention of profit. Under Armour classifies these changes into three categories.

- *Contributed capital*, the stockholders' net contributions to the company.
- *Retained earnings*, net income over the life of the company minus all dividends ever paid.
- *Other equity*, consists of amounts we explain later in the book.

Exhibit 1.5 reconciles the activity in each of the equity accounts from the balance sheet in Exhibit 1.3. We briefly discuss the two larger accounts here and explain the accounts in depth in Module 8.

- **Contributed capital** represents assets the company received from issuing stock to stockholders (also called shareholders). The balance of this account at the beginning of the year was $508.4 million. During the year, Under Armour sold additional shares for $22 million and recorded miscellaneous adjustments of $106.3 million to yield a year-end balance of $636.7 million.

- **Retained earnings** (also called *earned capital* or *reinvested capital*) represent the cumulative total amount of income the company has earned and that has been retained in the business; that is, not distributed to stockholders in the form of dividends. The change in retained earnings links consecutive balance sheets via the income statement: Ending retained earnings = Beginning retained earnings + Net income for the period − Dividends for the period. Under Armour's re-

- **Retained earnings** (also called *earned capital* or *reinvested capital*) represent the cumulative total amount of income the company has earned and that has been retained in the business; that is, not distributed to stockholders in the form of dividends. The change in retained earnings links consecutive balance sheets via the income statement: Ending retained earnings = Beginning retained earnings + Net income for the period − Dividends for the period. Under Armour's retained earnings increased from $856.7 million to $1,076.6 million. This increase is explained by its net income of $232.6 million less other adjustments of $12.7 million. Under Armour paid no dividends in 2015.

Exhibit 1.5 ■ **Statement of Equity ($ millions)**

UNDER ARMOUR
Statement of Stockholders' Equity
For Year Ended December 31, 2015

	Contributed Capital	Retained Earnings	Other Equity	Total
December 31, 2014	$508.4	$ 856.7	$(14.8)	$1,350.3
Net income		232.6		232.6
Stock issuance	22.0			22.0
Dividends		0.0		0.0
Other	106.3	(12.7)	(30.2)	63.3*
December 31, 2015	$636.7	$1,076.6	$(45.0)	$1,668.2

* Rounding difference: Under Armour reports its financial statements in thousands, which we converted to millions.

Report amounts over a period of time

Beginning period amounts

Change in balances during the period

Ending period amounts

Statement of Cash Flows

The **statement of cash flows** reports the change (either an increase or a decrease) in a company's cash balance over a period of time. The statement reports cash inflows and outflows from operating, investing, and financing activities over a period of time. Under Armour's statement of cash flows is shown in Exhibit 1.6. Its cash balance decreased by $463.3 million in 2015: operating activities used $44.1 million cash, investing activities reduced cash by $847.5 million, and financing activities yielded a cash inflow of $428.3 million.

Exhibit 1.6 ■ **Statement of Cash Flows ($ millions)**

UNDER ARMOUR
Statement of Cash Flows
For Year Ended December 31, 2015

Operating cash flows	$ (44.1)
Investing cash flows	(847.5)
Financing cash flows	428.3*
Net decrease in cash	(463.3)
Cash, December 31, 2014	593.2
Cash, December 31, 2015	$129.9

* Includes $(11.8) mil. in foreign currency exchange rate changes.

Report amounts over a period of time

Cash amounts per balance sheet

We summarized Under Armour's Statement of Cash Flow in Exhibit 1.6 to simplify the discussion. To give us a feel for the business activity underlying the numbers, during 2015, Under Armour's outflow of cash for operating activities of $44.1 million is primarily the result of building up inventories in advance of expected sales increases. The cash outflow of $847.5 million for investing activities included the purchase of new PPE and the acquisition of **MyFitnessPal Inc.** (a digital nutrition and connected fitness company), to expand the Under Armour Connected Fitness community. These outflows were financed with a combination of existing cash and an increase in borrowed funds.

Under Armour's negative operating cash flow of $44.1 million does not equal its $232.6 million net income. Generally, a company's net cash flow for a period does *not* equal its net income for the period. This is due to timing differences between when revenue and expense items are recognized on the income statement and when cash is received and paid. (We discuss this concept further in subsequent modules.)

Under Armour's negative operating cash flow of $44.1 million does not equal its $232.6 million net income. Generally, a company's net cash flow for a period does *not* equal its net income for the period. This is due to timing differences between when revenue and expense items are recognized on the income statement and when cash is received and paid. (We discuss this concept further in subsequent modules.)

Both cash flow and net income numbers are important for business decisions. Each is used in security valuation models, and both help users of accounting reports understand and assess a company's past, present, and future business activities. As a sneak preview, we might consider the following questions regarding the statement of cash flows.

- What is the usefulness of the statement of cash flows? Do the balance sheet and income statement provide sufficient cash flow information?
- What types of information are disclosed in the statement of cash flows and why are they important?
- What kinds of activities are reported in each of the operating, investing, and financing sections of the statement of cash flows? How is this information useful?
- Is it important for a company to report net cash inflows (positive amounts) relating to operating activities over the longer term? What are the implications if operating cash flows are negative for an extended period of time?
- Why is it important to know the composition of a company's investment activities? What kind of information might we look for? Are positive investing cash flows favorable?
- Is it important to know the sources of a company's financing activities? What questions might that information help us answer?
- How might the composition of operating, investing, and financing cash flows change over a company's life cycle?
- Is the bottom-line increase in cash flow the key number? Why or why not?

Review the Under Armour statement of cash flows summarized in Exhibit 1.6, and think about these questions. We provide answers for each of these questions as we progress through the book.

Information Beyond Financial Statements

Important financial information about a company is communicated to various decision makers through means other than the four financial statements. These include the following.

- Management Discussion and Analysis (MD&A)
- Independent auditor report
- Financial statement footnotes
- Regulatory filings, including proxy statements and other SEC filings

We describe and explain the usefulness of these additional information sources throughout the book.

Managerial Decision ■ **You Are the Product Manager**

There is often friction between investors' need for information and a company's desire to safeguard competitive advantages. Assume you are a key-product manager at your company. Your department has test-marketed a potentially lucrative new product, which it plans to further finance. You are asked for advice on the extent of information to disclose about the new product in the MD&A section of the company's upcoming annual report. What advice do you provide and why? [Answer, p. 1-34]

Managerial Decisions *require you to assume various roles within a business and use your accounting knowledge to address an issue. Solutions are provided at the end of the module.*

Managerial Choices in Financial Accounting

Some people mistakenly assume financial accounting is an exact discipline—that is, companies select the one proper accounting method to account for a transaction, and then follow the rules. The reality is that GAAP allows companies choices in preparing financial statements. The choice of methods can

Managerial Choices in Financial Accounting

Some people mistakenly assume financial accounting is an exact discipline—that is, companies select the one proper accounting method to account for a transaction, and then follow the rules. The reality is that GAAP allows companies choices in preparing financial statements. The choice of methods can yield financial statements that are markedly different from one another in terms of reported income, assets, liabilities, and equity amounts.

People often are surprised that financial statements comprise numerous estimates. For example, companies must estimate the amounts that will eventually be collected from customers, the length of time that buildings and equipment will be productive, the value impairments of assets, the future costs of warranty claims, the eventual payouts on pension plans, and numerous other estimates.

Historically, the FASB has promulgated standards that were quite complicated and replete with guidelines. In recent years, the pendulum has begun to swing away from such rigidity. Now, once financial statements are prepared, company management is required to step back from the details and make a judgment on whether the statements taken as a whole "fairly present" the financial condition of the company as is asserted in the company's audit report (see below).

Moreover, since the enactment of the *Sarbanes-Oxley Act* (SOX), the SEC requires the chief executive officer (CEO) of the company and its chief financial officer (CFO) to personally sign a statement attesting to the accuracy and completeness of the financial statements. This requirement is an important step in maintaining confidence in the integrity of financial accounting. The statements signed by both the CEO and CFO contain the following declarations.

- Both the CEO and CFO have personally reviewed the annual report.
- There are no untrue statements of a material fact that would make the statements misleading.
- Financial statements fairly present in all material respects the financial condition of the company.
- All material facts are disclosed to the company's auditors and board of directors.
- No changes to its system of internal controls are made unless properly communicated.

SOX also imposed fines and potential jail time for executives for untrue statements or omissions of important facts. Presumably, the prospect of personal losses is designed to make these executives more vigilant in monitoring the financial accounting system. More recently, Congress passed the *Wall Street Reform and Consumer Protection Act* of 2010 (or the Dodd-Frank Act). Among the provisions of the act are rules that strengthened SOX by augmenting "claw-back" provisions for executives' ill-gotten gains.

Research Insight ■ Quality of Earnings

A recent study conducted a survey of nearly 400 CFOs on the definition and drivers of earnings quality, with an emphasis on the prevalence and detection of earnings misrepresentation. The CFOs cited the hallmarks of earnings quality as sustainability, absence of one-time items, and backing by actual cash flows. However, they also believe that, in any given period, a remarkable 20% of companies intentionally distort earnings, even while adhering to GAAP. The magnitude of the average misrepresentation is large: 10% of reported earnings.

What are the lessons for us? We can become informed and critical readers of financial reports by first understanding how reports are constructed and the types of assumptions and estimates that are used in their preparation. Much of this information is contained in the footnotes to the financial statements. This textbook will help you acquire the knowledge you need to become an informed and critical reader of financial reports.

Source: Ilia Dichev, John Graham, Campbell R. Harvey, and Shiva Rajgopal. 2016. "The Misrepresentation of Earnings" by *Financial Analyst Journal*, vol. 72, num. 1.

Research Insights *introduce relevant research findings on the topics presented.*

Review 1-3 LO3

Guided Examples MBC

The following financial information is from Nike, a competitor of Under Armour, for May 31, 2015 ($ millions).

Short-term liabilities	$□6,334	Cost of goods sold	$16,534

Review 1-3 LO3

Guided Examples MBC

The following financial information is from Nike, a competitor of Under Armour, for May 31, 2015 ($ millions).

Short-term liabilities	$6,334	Cost of goods sold	$16,534
Cash flows from financing	(2,873)	Cash, beginning-year	2,220
Revenues	30,601	Tax expense	932
Stockholders' equity	12,707	Short-term assets	15,976
Cash flows from operations	4,680	Interest income	30
SG&A expenses	9,892	Long-term liabilities	2,559
Long-term assets	5,624	Cash, ending-year	3,852
Cash flows from investing	(175)		

Required

1. Prepare an income statement and statement of cash flows for Nike for the year ended May 31, 2015. Prepare Nike's balance sheet as of May 31, 2015.
2. Compare the balance sheet and income statement of Nike with those of Under Armour in Exhibits 1.3 and 1.4. What differences do we observe?

Solution on p. 1-46.

Analysis of Financial Statements

eLectures MBC **LO4** Explain and apply basic profitability analysis.

This section previews the analysis framework of this book. This framework is used extensively by market professionals who analyze financial reports to evaluate company management and value the company's debt and equity securities. Analysis of financial performance is crucial in assessing prior strategic decisions and evaluating strategic alternatives.

Return on Assets

Suppose we learn that a company reports a profit of $10 million. Does the $10 million profit indicate the company is performing well? Knowing a company reports a profit is certainly positive as it indicates customers value its goods or services, and its revenues exceed expenses. However, we cannot assess how well it is performing without considering the context. To explain, suppose we learn this company has $500 million in assets. We now assess the $10 million profit as low because, relative to the size of its asset investment, the company earned a paltry 2% return, computed as $10 million divided by $500 million. A 2% return on assets is what a lower-risk investment in government-backed bonds might yield. The important point is that a company's profitability must be assessed with respect to the size of its investment. This is done with a common metric: the *return on assets* (ROA)—defined as net income for that period divided by the average total assets during that period.

Components of Return on Assets

To further isolate components that are driving return on assets, we can separate ROA into two components: profitability and productivity.

- **Profitability relates profit to sales.** This ratio is called the *profit margin* (PM), and it reflects the net income (profit after tax) earned on each sales dollar. Management wants to earn as much profit as possible from sales.
- **Productivity relates sales to assets.** This component, called *asset turnover* (AT), reflects sales generated by each dollar of assets. Management wants to maximize asset productivity to achieve the highest possible sales level for a given level of assets (or to achieve a given level of sales with the smallest level of assets).

Exhibit 1.7 depicts the disaggregation of ROA into these two components. Profitability (PM) and productivity (AT) are multiplied to yield the ROA. Average assets are commonly defined as (beginning-year assets + ending-year assets)/2.

Exhibit 1.7 Return on Assets Disaggregation

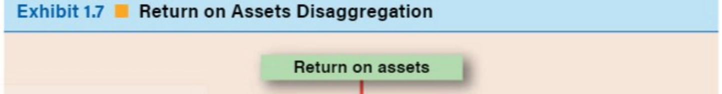
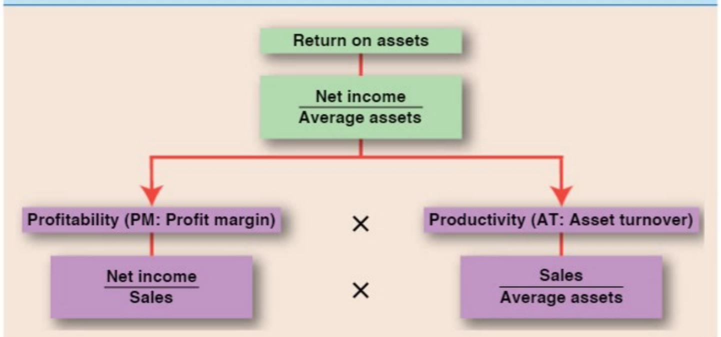
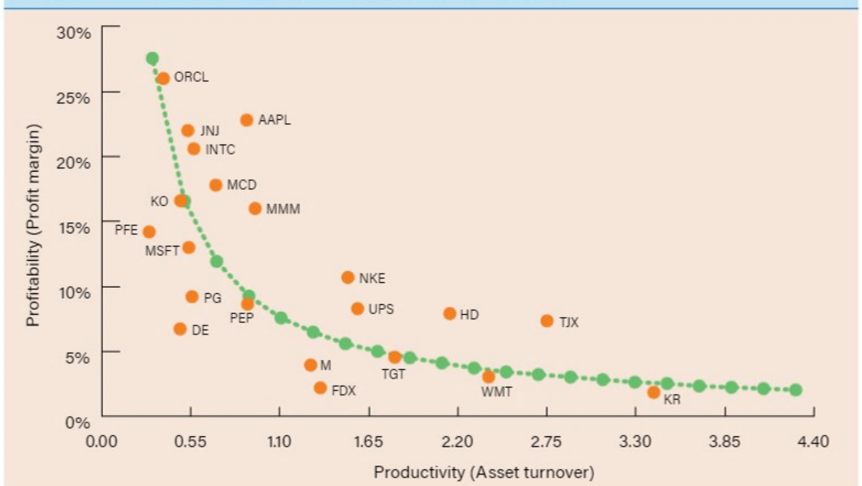


Exhibit 1.7 ■ **Return on Assets Disaggregation**



There are an infinite number of combinations of PM and AT that yield the same ROA. To illustrate, Exhibit 1.8 graphs actual combinations of these two components for companies we highlight in this book (each is identified by its ticker symbol). The graph's green line is the 8% median ROA for the highlighted companies. This is higher than the 5.2% median ROA for all of the Standard & Poor's (S&P) 500 companies in the same year. Companies operating above the median are earning above-average returns on their assets. Technology companies like **Oracle** (ORCL), **Johnson & Johnson** (JNJ), **Apple** (AAPL), and **Intel** (INTC) are characterized by high net profit margins resulting from patent protection that increase barriers to entry and reduce competition. These companies also report substantial assets, typically in the form of marketable securities and intangible assets. Because these investments do not generate "sales," the productivity ratio (AT) is decreased by the inflated assets in the denominator. At the other end of the spectrum, retailers like **Kroger** (KR), **Walmart** (WMT), **TJX Companies** (TJX), and **Target** (TGT) find it difficult to differentiate their products. This open competition keeps prices down, which yields lower profit margins. These retailing companies must focus on increasing AT in order to maintain an acceptable ROA. To do this, they watch inventory and PPE assets carefully and rarely have accounts receivable because most of their trade is cash-and-carry.

Exhibit 1.8 ■ **Profitability and Productivity Across Companies**



Return on Equity

Another important analysis measure is return on equity (ROE), which is defined as net income divided by average stockholders' equity, where average equity is commonly defined as (beginning-year equity + ending-year equity)/2. In this case, company earnings are compared to the level of stockholder

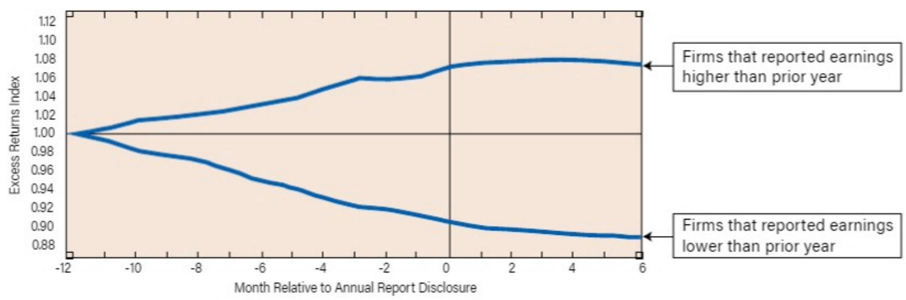
Return on Equity

Another important analysis measure is return on equity (ROE), which is defined as net income divided by average stockholders' equity, where average equity is commonly defined as (beginning-year equity + ending-year equity)/2. In this case, company earnings are compared to the level of stockholder investment. ROE reflects the return to stockholders, which is different from the return for the entire company (ROA). We return to ROE in more detail in Module 4.

Are Financial Statements Relevant?

Accounting, finance, and economic researchers have long investigated the role of financial statement data in capital markets.

Relation between Earnings and Stock Prices Early research focused on whether and how reported earnings are related to stock prices. There is a natural positive relation between expected earnings and stock prices, because stockholders expect dividends, which are paid out of earnings. Early research by Ball and Brown confirmed this expected relation, and the study produced the seminal graph shown here.[1] It shows stock returns trending up during the year for companies that subsequently reported higher earnings (as compared with the prior year) and trending down for companies that subsequently reported lower earnings.



Subsequent research would show that persistent core earnings have the highest predictive ability for future earnings and cash flows. Rigorous financial statement analysis seeks to uncover a company's persistent core operating earnings and cash flows. In a later module, we consider how to forecast future earnings and cash flows using current financial statement information. We also consider financial statement analysis in more depth and conclude that rigorous analysis seeks to uncover the underlying economic and company-specific factors that drive profit margins and productivity ratios we observe. Once we understand the underlying dynamics of the business, we are better able to forecast its future earnings and cash flows.

Relation between Financial Ratios and Credit Ratings Financial markets also use forecasts to price a company's debt and to determine interest rates. As we will discuss in the module on debt financing, credit ratings are determined by a number of financial ratios based on balance sheet, income statement, and cash flow information. For example, Moody's Investors Service, one of the primary credit rating companies for corporate and municipal bonds, uses ratios such as that shown in the table below to evaluate a borrower's ability to repay its debt. Ratings are progressively riskier as we move from left to right in the following table.[2]

[1] Ball, R., and P. Brown. 1968. "An empirical evaluation of accounting income numbers." *Journal of Accounting Research* (Autumn): 159–178.

[2] Moody's Investors Service, Rating Methodology: Global Telecommunications Industry.

Moody's Financial Ratios	Aaa	Aa	A	Baa	Ba	B	Caa
Debt/EBITDA	<0.5	0.5–1.0	1.0–2.0	2.0–2.75	2.75–3.75	3.75–6.0	>6.0
FCF/Debt	≥25%	15%–25%	10%–15%	8%–10%	6%–8%	4%–6%	<4%
(EBITDA-CAPEX)/Gross Int. Exp. . .	≥8.0%	6.5–8.0	5.0–6.5	3.5–5.0	2%–3.5%	1.0–2.0	<1

Moody's Financial Ratios	Aaa	Aa	A	Baa	Ba	B	Caa
Debt/EBITDA	<0.5	0.5–1.0	1.0–2.0	2.0–2.75	2.75–3.75	3.75–6.0	>6.0
FCF/Debt	≥25%	15%–25%	10%–15%	8%–10%	6%–8%	4%–6%	<4%
(EBITDA-CAPEX)/Gross Int. Exp.	≥8.0%	6.5–8.0	5.0–6.5	3.5–5.0	2%–3.5%	1.0–2.0	<1

These ratios use debt, EBITDA (earnings before interest, taxes, depreciation and amortization expense), FCF (free cash flow), and CAPEX (capital expenditures, which are purchases of PPE). The table indicates that as the company credit ratings decline (Aaa, Aa, A, Baa, etc.), each ratio becomes progressively "weaker." So, to answer the question: Are financial statements, relevant? Yes. They provide critical input into the pricing of equity and debt securities and, therefore, the creation of shareholder wealth. For that reason, they are also essential in the development and monitoring of corporate strategy.

Managerial Decision ■ You Are the Chief Financial Officer

You are reviewing your company's financial performance for the first six months of the year and are unsatisfied with the results. How can you disaggregate ROA to identify areas for improvement? [Answer, p. 1-34]

LO4 **Review 1-4**

GuidedExample MBC

Following are selected data from Nike's 2015 10-K.

$ millions	2015
Sales	$30,601
Net income	3,273
Average assets	20,097
Average stockholders' equity	11,766

Required

a. Compute Nike's ROA. Disaggregate the ROA into its profitability and productivity components.

b. Compute Nike's ROE.

Solution on p. 1-47.

Financial Statements and Business Analysis

eLectures MBC **LO5** Assess business operations within the context of a competitive environment.

Analysis and interpretation of financial statements must consider the broader business context in which a company operates. This section describes how to systematically consider those broader business forces to enhance our analysis and interpretation. This business analysis can sharpen our insights and help us better estimate future performance and company value.

Analyzing the Competitive Environment

Financial statements are influenced by five important forces that determine competitive intensity: (A) industry competition, (B) buyer power, (C) supplier power, (D) product substitutes, and (E) threat of entry (for further discussion, see Porter, *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, 1980 and 1998).

These five forces are depicted graphically in Exhibit 1.9 and are key determinants of profitability.

(A) **Industry competition** Competition and rivalry raise the cost of doing business as companies must hire and train competitive workers, advertise products, research and develop products, and engage in other related activities.

Exhibit 1.9 ■ Competitive Forces within the Broader Business Environment

Exhibit 1.9 ■ **Competitive Forces within the Broader Business Environment**

Ⓑ **Bargaining power of buyers** Buyers with strong bargaining power can extract price concessions and demand a higher level of service and delayed payment terms; this force reduces both profits from sales and the operating cash flows to sellers.

Ⓒ **Bargaining power of suppliers** Suppliers with strong bargaining power can demand higher prices and earlier payments, yielding adverse effects on profits and cash flows to buyers.

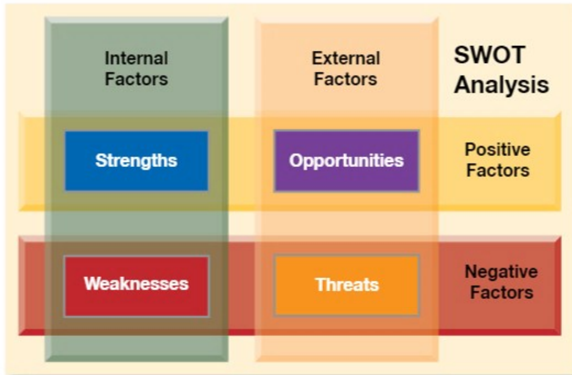
Ⓓ **Threat of substitution** As the number of product substitutes increases, sellers have less power to raise prices and/or pass on costs to buyers; accordingly, threat of substitution places downward pressure on profits of sellers.

Ⓔ **Threat of entry** New market entrants increase competition; to mitigate that threat, companies expend monies on activities such as new technologies, promotion, and human development to erect *barriers to entry* and to create *economies of scale*.

The relative strength of companies within their industries, and vis-à-vis suppliers and customers, is an important determinant of both their profitability and the structure of their balance sheets. As competition intensifies, profitability likely declines, and the amount of assets companies need to carry on their balance sheet likely increases in an effort to generate more profit. Such changes are revealed in the income statement and the balance sheet.

SWOT Analysis of the Business Environment

As an alternative to Porter-based competitive analysis, some prefer a SWOT analysis of a company. SWOT is an acronym that stands for strengths, weaknesses, opportunities and threats. This analysis can be applied to almost any organization. This approach is universally applicable and easy to apply, and it can be graphically portrayed as follows:



SWOT analysis has two parts.

- Looking internally, we review a company's strengths and weaknesses, while for external purposes, we review the opportunities of and threats to the company. SWOT analysis tries to understand particular strengths and weaknesses that give rise to specific opportunities (to exploit the strengths) and threats (caused by the weaknesses).
- When used as part of an overall strategic analysis, SWOT can provide a good review of strategic options.

However, SWOT is sometimes criticized as too subjective. Two individuals can identify entirely different factors from a SWOT analysis of the same company. This is partly because SWOT is intuitive and allows varying opinions on the relevant factors.

Following is an example of a SWOT analysis on Under Armour.

Competitive Analysis »

Under Armour, Inc. (UA)—Financial and Strategic SWOT Analysis

Strengths	Weaknesses
Brand Line	Product Recalls
Diversified Distribution Channels	
Opportunities	**Threats**
Strong Growth in Footwear Market	Intense Competition
Strategic Acquisition	Rising Counterfeit Goods Market

Analyzing Competitive Advantage

The goal of our analysis is to identify sustainable operating income and cash flow. This is true whether our analysis is focused on valuation of equity securities as a current or prospective investor or on a company's ability to repay its debt as a current or prospective creditor or on trying to grow company value as part of management. This analysis is much deeper than merely eliminating transitory (nonrecurring) items from financial statements. It is an exploration of the following two lines of thought.

1. Does the company have a competitive advantage, and, if so, what factors explain it? Further, is the competitive advantage sustainable?
2. If the company has no competitive advantage, does its management have a plan to develop a sustainable competitive advantage that can be implemented in an acceptable period of time and with a reasonable amount of investment?

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2. If the company has no competitive advantage, does its management have a plan to develop a sustainable competitive advantage that can be implemented in an acceptable period of time and with a reasonable amount of investment?

Answers to these questions impact forecasts of the company's future performance.

Patents and other protections of intellectual property create **barriers to entry** that allow a company to achieve a competitive advantage and charge higher prices for their products or services and thereby earn excess returns. These legal barriers typically have a finite life, however, and a company must maintain a pipeline of innovations to replace intellectual property that loses patent protection.

Product differentiation also allows companies to earn excess returns. Typically, differentiation is achieved from technological innovation that produces products and services with attributes valued by customers and not easily replicated by competitors. Differentiation along the dimensions of product design, marketing, distribution, and after-sale customer support are examples. Such differentiation has costs such as research and development, advertising, and other marketing expenses.

Another approach to achieve excess returns is to become a **cost leader**. Cost leadership can result from a number of factors, including access to low-cost raw materials or labor (while maintaining quality), manufacturing or service efficiency in the form of cost-efficient processes and manufacturing scale efficiencies, greater bargaining power with suppliers, sophisticated IT systems that permit timely collection of key information, and other avenues.

In the absence of a competitive advantage, our analysis focuses on the likelihood that a company develops such an advantage. Management often discusses strategy with stockholders and equity analysts, which are recorded in conference calls that are readily available or reported in the financial press. In the case of a turnaround situation, our focus is on viability of the plan; that is, can it be achieved at an acceptable cost given the current state of the industry? Moreover, our focus is long term. Companies can often achieve short-term gains at long-term cost, such as by selling profitable segments. Such actions do not create long-term value.

Creating a sustainable competitive advantage that yields excess returns is difficult, and we are wary of forecasted excess returns for an extended period. Through a critical and thorough investigation of financial statements, its footnotes, the MD&A, and all publicly available information, we can identify drivers of a company's competitive advantage. We then test the sustainability and validity of those drivers. This is an important step in assessing competitive advantage.

Review 1-5 LO5

GuidedExamples MBC

Required

1. Match each of the following statements *a* through *f* with the category to which it relates.

I. Analyzing the competitive environment	____ *a.*	Internal factors include a company's strengths and weaknesses.
II. SWOT analysis of the business environment	____ *b.*	Buyers with strong bargaining power can extract price concessions and demand a higher level of service and delayed payment terms; this force reduces both profits and operating cash flows to sellers.
III. Analyzing competitive advantage	____ *c.*	The goal of our analysis is to identify sustainable operating income and cash flow.
	____ *d.*	New market entrants increase competition; to mitigate that threat, companies expend monies on activities such as new technologies, promotion, and human development to erect barriers to entry and to create economies of scale.
	____ *e.*	External factors include opportunities and threats.
	____ *f.*	If the company has no competitive advantage, does its management have a plan to develop a sustainable competitive advantage that can be implemented in an acceptable period of time and with a reasonable amount of investment?

continued

2. Consider "Industry Competition," one of Porter's Five Forces. Who are Under Armour's three closest competitors? To answer this, use an online investment site such as Yahoo! Finance.
3. Does Under Armour have a competitive advantage? If so, what might explain that advantage?
4. For each competitor, determine total assets, revenue, and net income. Compute 2015 ROA and the two components for PM and AT. Do the ratios support your answer to part 2? (*Hint:* adidas AG has the ticker

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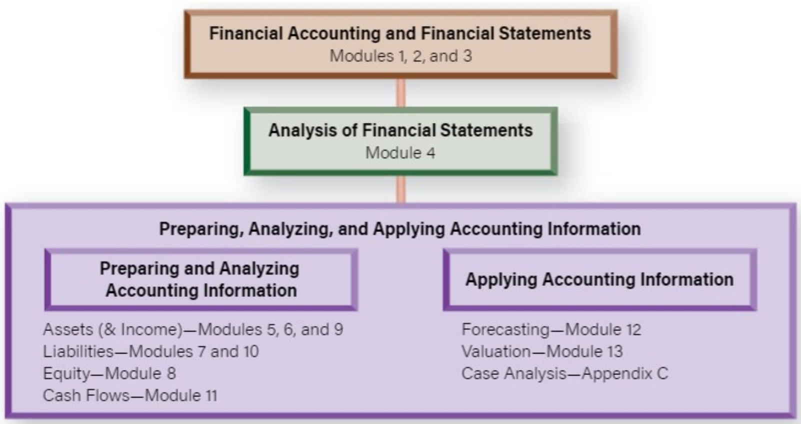
4. For each competitor, determine total assets, revenue, and net income. Compute 2015 ROA and the two components for PM and AT. Do the ratios support your answer to part 2? (*Hint:* adidas AG has the ticker symbol ADS.DE)

Solution on p. 1-48.

Book Road Map

The book can be broken into four parts—see figure below.

- **Part 1** consists of Modules 1, 2, and 3 and offers an introduction of accounting fundamentals and the business environment.
- **Part 2** consists of Module 4, which introduces analysis of financial statements. Analysis of financial statements is aided by an understanding of how those statements are prepared.
- **Part 3**, which consists of Modules 5 through 11, describes the accounting for assets, liabilities, and equity; this includes accounting for cash flows.
- **Part 4** consists of Modules 12 and 13, which explain the forecasting of financial statements and the valuation of equity. Appendix C is a comprehensive case, which applies many of the analysis tools introduced in this book.



Global Accounting

As we discussed earlier, the United States is among only a few economically developed countries that do not use IFRS. While laws and enforcement mechanisms vary across countries, the demand and supply of accounting information are governed by global economic forces. Thus, it is not surprising that IFRS and U.S. GAAP both prescribe the same set of financial statements. While account titles and note details differ, the underlying principles are the same. That is, U.S. GAAP and IFRS both capture, aggregate, summarize, and report economic activities on an accrual basis.

Given the global economy and liquid transnational capital markets, along with the fact that many non-U.S. companies file IFRS financial statements with the SEC, it is critical that we be

Global Accounting *sections summarize notable difference between IFRS and U.S. GAAP for topics covered in the module.*

conversant with both U.S. GAAP and IFRS. For this purpose, the final section of each module includes a summary of notable differences between these two systems of accounting for topics covered in that module. Also, each module has assignments that examine IFRS companies and their financial statements. By using a wide array of financial information, we will speak the language of accounting in at least two dialects.

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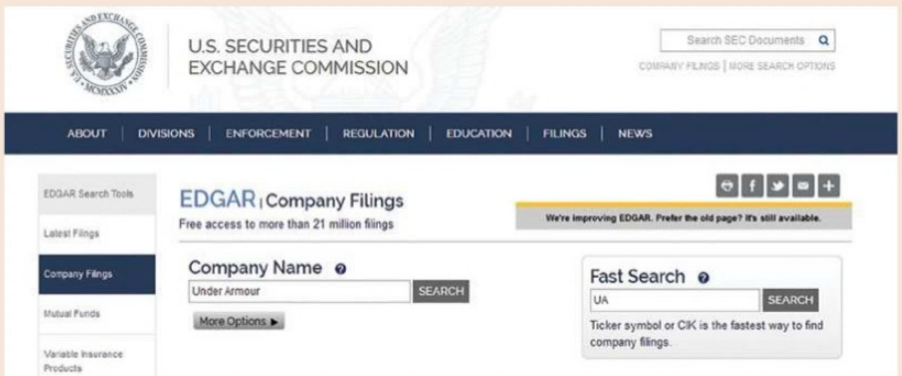
Appendix 1A: Accessing SEC Filings

eLectures MBC **LO6** Access reports filed with the SEC.

As noted in the chapter, all publicly traded companies are required to file various reports with the SEC, two of which are the 10-Q (quarterly financial statements) and the 10-K (annual financial statements). Following is a brief tutorial to access these electronic filings. The SEC's website is **https://www.sec.gov/edgar/searchedgar/companysearch.html**.

1. In the **Company name** box, type in the name of the company we are looking for. In this case, we are searching for Under Armour. Then click search.



2. Enter the form number under "filing type" we want to access. Click the Search button. In this case, we are looking for the 10-K.

3. Click on the document link for the year we want to access. The filing date listed (2016-02-22 for Under Armour) is about 60 days after the fiscal year end.

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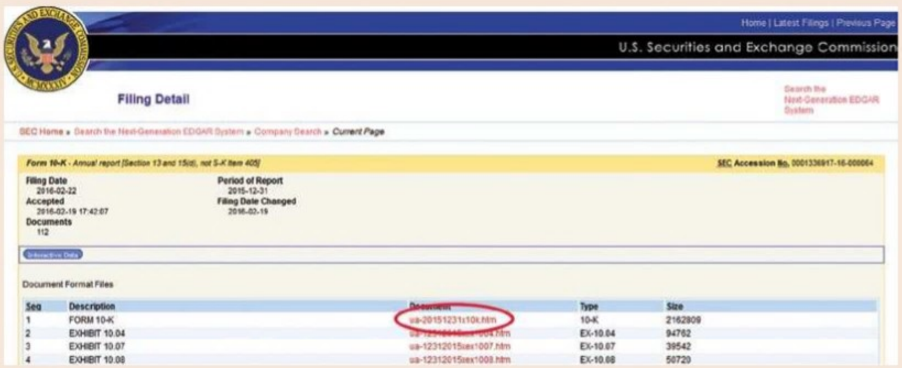
4. Exhibits relating to Under Armour's 10-K filing appear; click on the 10-K document.



5. The Under Armour 10-K will open; the file is searchable.

6. An alternative is to download an Excel file of the financial statement data. From the Search Results page, click on "Interactive Data."

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7. Click on "View Excel Document" to view or download as a spreadsheet. Or, to quickly view the financial statements or notes, use the links in the yellow box on the left.

Appendix 1B: Accounting Principles and Governance

eLectures MBC **LO7** Describe the accounting principles and regulations that frame financial statements.

Financial Accounting Environment

Information in financial statements is crucial to valuing a company's debt and equity securities. Financial statement information can affect the price the market is willing to pay for the company's equity securities and interest rates attached to its debt securities.

The importance of financial statements means their reliability is paramount. This includes the crucial role of ethics. To the extent that financial performance and condition are accurately communicated to business decision makers, debt and equity securities are more accurately priced. When securities are mispriced, resources can be inefficiently allocated both within and across economies. Accurate, reliable financial statements are also important for the effective functioning of many other markets, such as labor, input, and output markets.

To illustrate, recall the consequences of a breakdown in the integrity of the financial accounting system at **Enron**. Once it became clear Enron had not faithfully and accurately reported its financial condition and performance, the market became unwilling to purchase Enron's securities. The value of its debt and equity securities dropped precipitously, and the company was unable to obtain cash needed for operating activities. Within months of the disclosure of its financial accounting irregularities, Enron, with revenues of more than $100 billion and total company value of more than $60 billion, the fifth largest U.S. company, was bankrupt!

Further historical evidence of the importance of financial accounting is provided by the Great Depression of the twentieth century. This depression was caused, in part, by the failure of companies to faithfully report their financial condition and performance.

Oversight of Financial Accounting

The stock market crash of 1929 and the ensuing Great Depression led Congress to pass the 1933 Securities Act. This act had two main objectives: (1) to require disclosure of financial and other information about securities being offered for public sale; and (2) to prohibit deceit, misrepresentations, and other fraud in the sale of securities. This act also required that companies register all securities proposed for public sale and disclose information

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Congress also passed the 1934 Securities Exchange Act, which created the **Securities and Exchange Commission** (SEC) and gave it broad powers to regulate the issuance and trading of securities. The act also provides that companies with more than $10 million in assets and whose securities are held by more than 500 owners must file annual and other periodic reports, including financial statements that are available for download from the SEC's database (**www.sec.gov**).

The SEC has ultimate authority over U.S. financial reporting, including setting accounting standards for preparing financial statements. Since 1939, however, the SEC has looked primarily to the private sector to set accounting standards. One such private sector organization is the American Institute of Certified Public Accountants (AICPA), whose two committees, the Committee on Accounting Procedure (1939–59) and the Accounting Principles Board (1959–73), authored the initial body of accounting standards.

The **Financial Accounting Standards Board (FASB)** sets U.S. financial accounting standards. The FASB is an independent body overseen by a foundation whose members include public accounting firms, investment managers, academics, and corporate managers. The FASB has published about 200 accounting standards governing the preparation of financial reports. This is in addition to more than 40 standards that were written by predecessor organizations to the FASB, numerous bulletins and interpretations, Emerging Issues Task Force (EITF) statements, AICPA statements of position (SOP), and direct SEC guidance, along with speeches made by high-ranking SEC personnel, all of which form the body of accounting standards governing financial statements. Collectively, these pronouncements, rules, and guidance create what is called **Generally Accepted Accounting Principles (GAAP)**. In 2009, the FASB rolled out the Accounting Standards Codification, a means to simplifying user access to all authoritative U.S. GAAP. The Codification changed the structure of how GAAP are organized, from a standards-based model (with thousands of individual standards) to a topically based model (with roughly 90 topics). The Codification streamlined GAAP research for auditors, analysts, company managers, and students alike.

The standard-setting process is arduous, often lasting up to a decade and involving extensive comment by the public, public officials, accountants, academics, investors, analysts, and corporate preparers of financial reports. The reason for this involved process is that amendments to existing standards or the creation of new standards affect the reported financial performance and condition of companies. Consequently, given the widespread impact of financial accounting, there are considerable economic consequences as a result of accounting changes. To influence the standard-setting process, special interest groups often lobby members of Congress to pressure the SEC and, ultimately, the FASB, on issues about which constituents feel strongly.

Audits and Corporate Governance

Even though key executives must personally attest to the completeness and accuracy of company financial statements, markets demand further assurances from outside parties to achieve the level of confidence necessary to warrant investment, credit, and other business decisions. To that end, companies engage external auditors to provide an opinion about financial statements. Further, companies implement a system of checks and balances that monitor managers' actions, which is called *corporate governance*.

Audit Report

Financial statements for each publicly traded company must be audited by an independent audit firm. There are a number of large auditing firms that are authorized by the SEC to provide auditing services for companies that issue securities to the public: **PwC**, **EY**, **KPMG**, **Deloitte**, **BDO**, and **RSM**, to name a few. These firms provide opinions about financial statements for the large majority of publicly traded U.S. companies. A company's board of directors hires the auditors to review and express an opinion on its financial statements. The audit opinion expressed by PricewaterhouseCoopers, LLP, on the financial statements of **Under Armour** is reproduced in Exhibit 1.10.

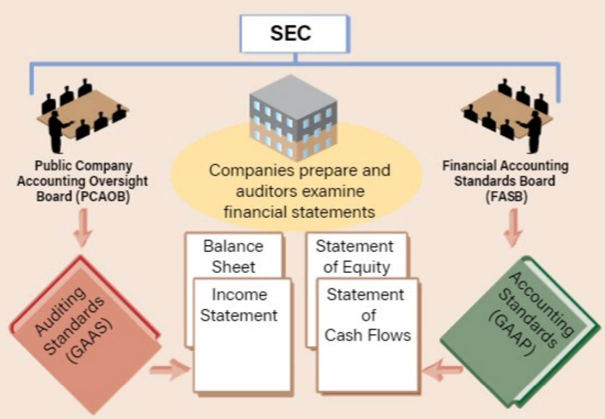


Exhibit 1.10 Audit Report for Under Armour

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Under Armour Inc.

Exhibit 1.10 ■ **Audit Report for Under Armour**

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Under Armour Inc.

In our opinion, the accompanying consolidated financial statements listed in the index appearing under Item 15(a)(1) present fairly, in all material respects, the financial position of Under Armour Inc. and its subsidiaries at December 31, 2015 and 2014, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2015, in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(a)(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2015, based on criteria established in ***Internal Control—Integrated Framework*** issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in 2013. The Company's management is responsible for these financial statements and financial statement schedule, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Report of Management on Internal Control over Financial Reporting. Our responsibility is to express opinions on these financial statements, on the financial statement schedule, and on the Company's internal control over financial reporting based on our integrated 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 audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for the classification of deferred income tax balances in 2015.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

/s/ PricewaterhouseCoopers LLP

Baltimore, Maryland
February 19, 2016

The basic "clean" audit report is consistent across companies and includes these assertions.

- Financial statements are management's responsibility. Auditor responsibility is to express an *opinion* on those statements.
- Auditing involves a sampling of transactions, not investigation of each transaction.
- Audit opinion provides *reasonable assurance* the statements are free of *material* misstatements, not a guarantee.
- Auditors review accounting policies used by management and the estimates used in preparing the statements.
- Financial statements *present fairly, in all material respects* a company's financial condition, in conformity with GAAP.

If the auditor cannot make all of these assertions, the auditor cannot issue a clean opinion. Instead, the auditor issues a "qualified" opinion and states the reasons a clean opinion cannot be issued. Financial report readers should scrutinize with care both the qualified audit opinion and the financial statements themselves.

The audit opinion is not based on a test of each transaction. Instead, auditors usually develop statistical samples to make inferences about the larger set of transactions. The audit report is not a guarantee that no misstatements

If the auditor cannot make all of these assertions, the auditor cannot issue a clean opinion. Instead, the auditor issues a "qualified" opinion and states the reasons a clean opinion cannot be issued. Financial report readers should scrutinize with care both the qualified audit opinion and the financial statements themselves.

The audit opinion is not based on a test of each transaction. Instead, auditors usually develop statistical samples to make inferences about the larger set of transactions. The audit report is not a guarantee that no misstatements exist. Auditors only provide reasonable assurance that the statements are free of material misstatements. Their use of the word *reasonable* is deliberate, as they do not want to be held to an absolute standard should problems be subsequently uncovered. The word *material* is used in the sense that an item must be of sufficient magnitude to change the perceptions or decisions of the financial statement user (such as a decision to purchase stock or extend credit).

The requirement of auditor independence is the cornerstone of effective auditing and is subject to debate because the company pays the auditor's fees. Regulators have questioned the perceived lack of independence of auditing firms and the degree to which declining independence compromises the ability of auditing firms to challenge a client's dubious accounting.

SOX contains several provisions designed to encourage auditor independence.

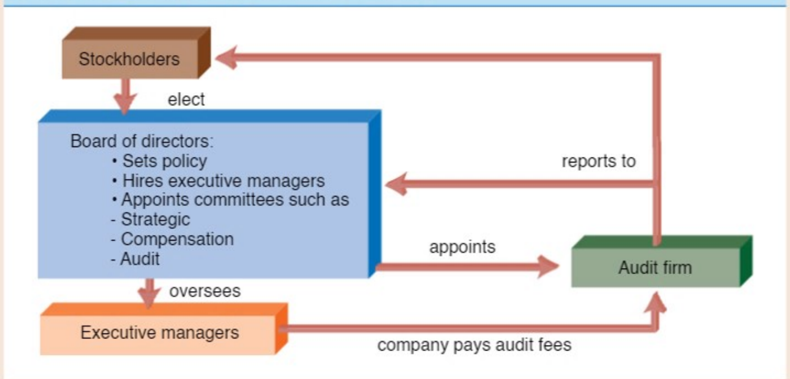
1. It established the **Public Company Accounting Oversight Board** (PCAOB) to oversee the development of audit standards and to monitor the effectiveness of auditors.
2. It prohibits auditors from offering certain types of consulting services, and requires audit partners to rotate clients every five years.
3. It requires audit committees to consist of independent members.

Audit Committee

Law requires each publicly traded company to have a board of directors where stockholders elect each director. This board represents the company owners and oversees management. The board also hires the company's executive management and regularly reviews company operations.

The board of directors usually establishes several subcommittees to focus on particular governance tasks, such as compensation, strategic plans, and financial management. Governance committees are commonplace. One of these, the audit committee, oversees the financial accounting system. Exhibit 1.11 illustrates a typical organization of a company's governance structure.

Exhibit 1.11 ■ **Corporate Governance Structure**



The audit committee must consist solely of outside directors, and cannot include the CEO. As part of its oversight of the financial accounting system, the audit committee focuses on **internal controls**, which are the policies and procedures used to protect assets, ensure reliable accounting, promote efficient operations, and urge adherence to company policies.

Regulatory and Legal Environment

The regulatory and legal environment provides further assurance financial statements are complete and accurate.

SEC Enforcement Actions

Companies whose securities are issued to the public must file reports with the SEC (see **www.sec.gov**). One of these reports is the 10-K, which includes the annual financial statements (quarterly statements are filed on report 10-Q). The 10-K report provides more information than the company's glossy annual report, which is partly a marketing document (although the basic financial statements are identical). We prefer to use the 10-K because

SEC Enforcement Actions

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The SEC critically reviews all the financial reports companies submit. If irregularities are found, the SEC has the authority to bring enforcement actions against companies it believes are misrepresenting their financial condition (remember the phrase in the audit opinion that requires companies to "present fairly, in all material respects, the financial position of . . ."). One such action was brought against **Stein Mart Inc.** and its executives. Following are excerpts from the SEC's press release 2015-200.

SEC Charges Retailer for Improper Valuation and Inadequate Internal Accounting Controls

Washington D.C., Sept. 22, 2015—The Securities and Exchange Commission today charged Stein Mart Inc. for materially misstating its pre-tax income due to improper valuation of inventory subject to price discounts and for having inadequate internal accounting controls.

An SEC investigation found that the Jacksonville, Florida-based retailer often offered its merchandise to customers at retail price reductions referred to as Perm POS markdowns and that merchandise subject to such a markdown never reverted back to its original retail price. Stein Mart reduced the value of inventory subject to these markdowns at the time the item was sold rather than immediately at the time the markdown was applied. As a result, Stein Mart materially misstated its pre-tax income in certain quarterly public filings with the SEC, including an overstatement of almost 30 percent in the first quarter of 2012.

Stein Mart agreed to settle the SEC's charges by paying an $800,000 penalty.

According to the SEC's order instituting a settled administrative proceeding, Stein Mart's internal accounting controls over Perm POS markdowns were inadequate. For example—until at least the middle of 2011–the decision to characterize a markdown as Perm POS resided solely with Stein Mart's merchandising department, which did not understand the impact that Stein Mart's markdowns could have on inventory valuation accounting.

As a reflection of the company's inadequate internal accounting controls surrounding Perm POS markdowns, Stein Mart's chief financial officer, who was hired in 2009, did not learn of Stein Mart's treatment of Perm POS markdowns until the summer of 2011. After consulting with others, the CFO concluded that Stein Mart's Perm POS accounting was acceptable under U.S. generally accepted accounting practices, or GAAP.

In the fall of 2012, Stein Mart raised its accounting treatment of Perm POS markdowns with its external auditor, and the external auditor informed Stein Mart that its accounting for Perm POS markdowns was not acceptable under GAAP. In May 2013, Stein Mart restated its financial results for the first quarter of 2012, all reporting periods in fiscal year 2011, and its annual reporting period in fiscal year 2010. According to the SEC's order, Stein Mart also had inadequate internal accounting controls in the areas of software assets, credit card liabilities, and other inventory-related issues.

In agreeing to settle the charges without admitting or denying the SEC's findings, Stein Mart consented to the SEC's order imposing an $800,000 penalty and requiring the company to cease and desist from committing or causing any violations or any future violations of the reporting, books and records, and internal controls provisions of the federal securities laws.

Courts

Courts provide remedies to individuals and companies that suffer damages as a result of material misstatements in financial statements. Typical court actions involve stockholders who sue the company and its auditors, alleging the company disclosed, and the auditors attested to, false and misleading financial statements. Stockholder lawsuits are chronically in the news, although the number of such suits has declined in recent years. Stanford Law School's Securities Class Action Clearinghouse commented, "Two factors are likely responsible for the decline. First, lawsuits arising from the dramatic boom and bust of U.S. equities in the late 1990s and early 2000s are now largely behind us. Second, improved corporate governance in the wake of the **Enron** and **WorldCom** frauds likely reduced the actual incidence of fraud." Nevertheless, courts continue to wield considerable power.

Business Insight ■ **Warren Buffett on Audit Committees**

"Audit committees can't audit. Only a company's outside auditor can determine whether the earnings that a management purports to have made are suspect. Reforms that ignore this reality and that instead focus on the structure and charter of the audit committee will accomplish little. As we've discussed, far too many manag-

Business Insight ■ Warren Buffett on Audit Committees

"Audit committees can't audit. Only a company's outside auditor can determine whether the earnings that a management purports to have made are suspect. Reforms that ignore this reality and that instead focus on the structure and charter of the audit committee will accomplish little. As we've discussed, far too many managers have fudged their company's numbers in recent years, using both accounting and operational techniques that are typically legal but that nevertheless materially mislead investors. Frequently, auditors knew about these deceptions. Too often, however, they remained silent. The key job of the audit committee is simply to get the auditors to divulge what they know. To do this job, the committee must make sure that the auditors worry more about misleading its members than about offending management. In recent years auditors have not felt that way. They have instead generally viewed the CEO, rather than the shareholders or directors, as their client. That has been a natural result of day-to-day working relationships and also of the auditors' understanding that, no matter what the book says, the CEO and CFO pay their fees and determine whether they are retained for both auditing and other work. The rules that have been recently instituted won't materially change this reality. What will break this cozy relationship is audit committees unequivocally putting auditors on the spot, making them understand they will become liable for major monetary penalties if they don't come forth with what they know or suspect."

—Warren Buffett, Berkshire Hathaway Annual Report

Business Insights *offer recent examples from the business news and popular press.*

Guidance Answers

You Are the Product Manager

Pg. 1-17 As a manager, you must balance two conflicting objectives—namely, mandatory disclosure requirements and your company's need to protect its competitive advantages. You must comply with all minimum required disclosure rules. The extent to which you offer additional disclosures depends on the sensitivity of the information; that is, how beneficial it is to your existing and potential competitors. Another consideration is how the information disclosed will impact your existing and potential investors. Disclosures such as these can be beneficial in that they inform investors and others about your company's successful investments. Still, there are many stakeholders impacted by your disclosure decision, and each must be given due consideration.

You Are the Chief Financial Officer

Pg. 1-22 Financial performance is often measured by ROA, which can be disaggregated into the profit margin (profit after tax/sales) and AT (sales/average assets). This disaggregation might lead you to review factors affecting profitability (gross margins and expense control) and to assess how effectively your company is utilizing its assets (the turnover rates). Finding ways to increase profitability for a given level of investment or to reduce the amount of invested capital while not adversely impacting profitability contributes to improved financial performance.

Superscript $^{A(B)}$ denotes assignments based on Appendix 1A (1B).

Questions

Q1-1. Firms engage in four basic types of activities. List the activities. Describe how financial statements can provide useful information for each activity. How can subsequent financial statements be used to evaluate the success of each of the activities?

Q1-2. The accounting equation (Assets = Liabilities + Equity) is a fundamental business concept. Explain what this equation reveals about a company's sources and uses of funds and the claims on company resources.

Q1-3. Companies prepare four primary financial statements. What are those financial statements, and what information is typically conveyed by each?

Q1-4. Does a balance sheet report on a period of time or at a point in time? Explain the information conveyed in the balance sheet.

Q1-5. Does an income statement report on a period of time or at a point in time? Explain the information conveyed in the income statement.

Q1-6. Does a statement of cash flows report on a period of time or at a point in time? Explain the information and activities conveyed in the statement of cash flows.

Q1-7. Explain how a company's four primary financial statements are linked.

Q1-8. Financial statements are used by several interested stakeholders. List three or more potential external users of financial statements. Explain how each constituent on your list might use financial statement information in their decision-making process.

Q1-7. Explain how a company's four primary financial statements are linked.

Q1-8. Financial statements are used by several interested stakeholders. List three or more potential external users of financial statements. Explain how each constituent on your list might use financial statement information in their decision-making process.

Q1-9. What ethical issues might managers face in dealing with confidential information?

Q1-10 What are the five important forces that confront the company and determine its competitive intensity?

Q1-11 What are the components of a SWOT analysis? For each component, indicate whether it is an internal or external environmental factor.

Procter & Gamble (PG)

Q1-12.[A] Access the 2015 10-K for **Procter & Gamble** at the SEC's database of financial reports (**www.sec.gov**). Who is P&G's auditor? What specific language does the auditor use in expressing its opinion, and what responsibilities does it assume?

Q1-13. Business decision makers external to the company increasingly demand more financial information from the company. Discuss the reasons why companies have traditionally opposed the efforts of regulatory agencies like the SEC to require more disclosure.

Q1-14.[B] What are generally accepted accounting principles, and what organizations presently establish them?

Enron

Q1-15.[B] Corporate governance has received considerable attention since the collapse of **Enron** and other accounting-related scandals. What is meant by corporate governance? What are the primary means by which sound corporate governance is achieved?

Q1-16.[B] What is the primary function of the auditor? In your own words, describe what an audit opinion says.

Q1-17. Describe a decision that requires financial statement information, other than a stock investment decision. How is financial statement information useful in making this decision?

Q1-18. Users of financial statement information are vitally concerned with the company's strategic direction. Despite their understanding of this need for information, companies are reluctant to supply it. Why? In particular, what costs are companies concerned about?

Q1-19. One of Warren Buffett's acquisition criteria is to invest in businesses "earning good return on equity." The ROE formula uses both net income and stockholders' equity. Why is it important to relate net income to stockholders' equity? Why isn't it sufficient to merely concentrate on companies with the highest net income?

Q1-20. One of Buffett's acquisition criteria is to invest in businesses "earning good return on equity while employing little or no debt." Why is Buffett concerned about debt?

Assignments with the MBC logo in the margin are available in myBusinessCourse.
See the Preface of the book for details.

Mini Exercises

LO1 AT&T (T)

M1-21. Understanding How the Four Business Activities Are Related
In its January 2016 press release, **AT&T** revealed that CAPEX for fiscal 2016 (capital expenditures for additional property, plant and equipment) was expected to be in the $22 billion range. How will this planned expenditure affect the other three types of business activities in 2016?

LO2

Homework MBC

Homework *icons indicate which assignments are available in* **myBusinessCourse** *(MBC). This feature is only available when the instructor incorporates MBC in the course.*

M1-22. Understanding What Information Financial Statement Users Demand
Match each of the financial statement users listed to the question they are most likely to ask.

Financial Statement User	Questions
_____ A. Current shareholders	1. What is the expected net income for next quarter?
_____ B. Company CEO	2. Will the company have enough cash to pay dividends?
_____ C. Banker	3. Has the company paid for inventory purchases promptly in the past?
_____ D. Equity analyst	4. Will there be sufficient profits and cash flow to pay bonuses?
_____ E. Supplier	5. Will the company have enough cash to repay its loans?

LO3 Microsoft (MSFT)

M1-23. Relating Financing and Investing Activities
In a recent year, the total assets of **Microsoft Corporation** equal $193,694 million, and its equity is $71,997 million.

Required

a. What is the amount of its liabilities?

LOs *link assignments to the Learning Objectives of each*

M1-23. Relating Financing and Investing Activities — LO3 — Microsoft (MSFT)

In a recent year, the total assets of **Microsoft Corporation** equal $193,694 million, and its equity is $71,997 million.

LOs link assignments to the Learning Objectives of each module.

Required

a. What is the amount of its liabilities?
b. Does Microsoft receive more financing from its owners or nonowners?
c. What percentage of financing is provided by Microsoft's owners?

M1-24. Relating Financing and Investing Activities — LO3 — Best Buy (BBY)

In a recent year, the total assets of **Best Buy** equal $13,519 million, and its liabilities equal $9,141 million.

Required

a. What is the amount of Best Buy's equity?
b. Does Best Buy receive more financing from its owners or nonowners?
c. What percentage of financing is provided by its owners?

M1-25. Applying the Accounting Equation and Computing Financing Proportions — LO3

Use the accounting equation to compute the missing financial amounts (a), (b), and (c). Which of these companies is more owner-financed? Which of these companies is more nonowner-financed? Discuss why the proportion of owner financing might differ across these three businesses.

$ millions	Assets	=	Liabilities	□	Equity
Hewlett-Packard	$106,882	=	$78,731	+	$□□□□(a)
General Mills	$□21,712	=	$□□□□(b)	+	$□5,307
Target	$□□□□□(c)	=	$27,305	+	$12,957

Hewlett-Packard (HPQ)
General Mills (GIS)
Target (TGT)

M1-26. Identifying Key Numbers from Financial Statements — LO3, 6 — Starbucks (SBUX)

Access the September 25, 2015, 10-K for **Starbucks Corporation** at the SEC's database for financial reports (www.sec.gov).

Required

a. What did Starbucks report for total assets, liabilities, and equity at September 25, 2015? Confirm the accounting equation holds.
b. What percent of Starbucks' assets is financed by nonowners?

M1-27. Verifying Linkages Between Financial Statements — LO3, 6 — E. I. DuPont de Nemours (DD)

Access the 2015 10-K for **DuPont** at the SEC's database of financial reports (www.sec.gov). Using its December 31, 2015, consolidated statement of stockholders' equity, prepare a table to reconcile the opening and ending balances of its retained (reinvested) earnings for 2015 by showing the activity in the account during the year.

M1-28. Identifying Financial Statement Line Items and Accounts — LO3

Several line items and account titles are listed below. For each, indicate in which of the following financial statement(s) we would likely find the item or account: income statement (IS), balance sheet (BS), statement of stockholders' equity (SE), or statement of cash flows (SCF).

a. Cash asset	*d.* Contributed capital	*g.* Cash inflow for stock issued
b. Expenses	*e.* Cash outflow for capital expenditures	*h.* Cash outflow for dividends
c. Noncash assets	*f.* Retained earnings	*i.* Net income

M1-29. Identifying Ethical Issues and Accounting Choices — LO7

Assume you are a technology services provider and you must decide on whether to record revenue from the installation of computer software for one of your clients. Your contract calls for acceptance of the software by the client within six months of installation. According to the contract, you will be paid only when the client "accepts" the installation. Although you have not yet received your client's formal acceptance, you are confident it is forthcoming. Failure to record these revenues will cause your company to miss Wall Street's earnings estimates. What stakeholders will be affected by your decision, and how might they be affected?

LO5 **M1-30. Assessing the Competitive Environment**

For each of the following companies, briefly explain what type of competitive advantage(s) they have, if any. Select from: barriers to entry, product differentiation, cost leader, or buyer power.

a. Apple	*c.* Pfizer	*e.* American Airlines	*g.* McDonald's

LO5 **M1-30. Assessing the Competitive Environment**

For each of the following companies, briefly explain what type of competitive advantage(s) they have, if any. Select from: barriers to entry, product differentiation, cost leader, or buyer power.

a. Apple	*c.* Pfizer	*e.* American Airlines	*g.* McDonald's
b. Walmart	*d.* Uber	*f.* UPS	

LO4, 6
Pfizer (PFE)
Merck (MRK)
Homework MBC

M1-31. Accessing SEC reports and Calculating Ratios

Access the 2015 financial reports at the SEC website for **Pfizer Inc.** and **Merck & Co.**, two close competitors in the pharmaceutical industry.

a. Use data from the companies' balance sheets and income statements to complete the following table.

$ millions	Pfizer	Merck
Total assets	______	______
Revenue	______	______
Net income	______	______

b. Compute the ROA and the components for profit margin and asset turnover for each company. How do the ratios compare?

LO7 **M1-32. Understanding Internal Controls and Their Importance**

SOX legislation requires companies to report on the effectiveness of their internal controls. The SEC administers SOX, and defines internal controls as follows.

> A process designed by, or under the supervision of, the registrant's principal executive and principal financial officers . . . 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.

Why would Congress believe internal controls are such an important area to monitor and report on?

Exercises

LO3
Target (TGT)

Ticker symbols are provided for companies so one can easily obtain additional information.

E1-33. Composition of Accounts on the Balance Sheet

Answer the following questions about the **Target** balance sheet.

a. Briefly describe the types of assets Target is likely to include in its inventory.
b. What kinds of assets would Target likely include in its property and equipment?
c. Target reports about two-thirds of its total assets as long term. Given Target's business model, why do we see it report a relatively high proportion of long-term assets?

LO3
Intel (INTC)
JetBlue (JBLU)
Homework MBC

E1-34. Applying the Accounting Equation and Assessing Financial Statement Linkages

Answer the following questions. (*Hint*: Apply the accounting equation.)

a. **Intel** had assets equal to $103,065 million and liabilities equal to $41,980 million for a recent year-end. What was Intel's total equity at year-end? Why would we expect a company like Intel to report a relatively high proportion of equity vis-à-vis liabilities?
b. At the beginning of a recent year, **JetBlue**'s assets were $7,839 million, and its equity was $2,529 million. During the year, assets increased $821 million, and liabilities increased $140 million. What was JetBlue's equity at the end of the year?
c. What balance sheet account provides the link between the balance sheet and the income statement? Briefly describe how this linkage works.

LO2 **E1-35. Specifying Financial Information Users and Uses**

Financial statements have a wide audience of interested stakeholders. Identify two or more financial statement users who are external to the company. For each user on your list, specify two questions that could be addressed with financial statement information.

E1-36. Applying Financial Statement Relations to Compute Dividends

LO3
Colgate-Palmolive (CL)
Homework MBC

Colgate-Palmolive reports the following dollar balances in its retained earnings account.

$ millions	2015	2014

E1-36. Applying Financial Statement Relations to Compute Dividends

LO3 Colgate-Palmolive (CL) Homework MBC

Colgate-Palmolive reports the following dollar balances in its retained earnings account.

$ millions	2015	2014
Retained earnings.	$18,861	$18,832

During 2015, Colgate-Palmolive reported net income of $1,384 million.

Required

a. What amount of dividends, if any, did Colgate-Palmolive pay to its stockholders in 2015?
b. What percent of its net income did Colgate-Palmolive pay out as dividends in 2015?

E1-37. Computing and Interpreting Financial Statement Ratios

LO4 Colgate-Palmolive (CL) Homework MBC

Following are selected ratios of Colgate-Palmolive for 2015 and 2014.

Return on Assets (ROA) Component	2015	2014
Profitability (Net income/Sales).	8.60%	12.60%
Productivity (Sales/Average assets).	1.36	1.27

a. Was the company profitable in 2015? What evidence do you have of this?
b. Is the change in productivity (asset turnover) a positive development? Explain.
c. Compute the company's ROA for 2015 (show computations).

E1-38. Computing Return on Assets and Applying the Accounting Equation

LO4 Nordstrom Inc. (JWN) Homework MBC

Nordstrom Inc. reports net income of $600 million for its fiscal year ended January 2016. At the beginning of that fiscal year, Nordstrom had $9,245 million in total assets. By fiscal year ended January 2016, total assets had decreased to $7,698 million. What is Nordstrom's ROA?

E1-39. Assessing the Role of Financial Statements in Society

LO2

Financial statement information plays an important role in modern society and business.

a. Identify two or more external stakeholders who are interested in a company's financial statements and what their particular interests are.
b. What are *generally accepted accounting principles*? What organizations have primary responsibility for the formulation of GAAP?
c. What role does financial statement information play in the allocation of society's financial resources?
d. What are three aspects of the accounting environment that can create ethical pressure on management?

E1-40. Computing Return on Equity

LO4 Starbucks (SBUX) Homework MBC

Starbucks reports net income for 2015 of $2,757.4 million. Its stockholders' equity is $5,272 million and $5,818 million for 2014 and 2015, respectively.

a. Compute its return on equity for 2015.
b. Starbucks repurchased over $1.4 billion of its common stock in 2015. How did this repurchase affect Starbucks' ROE?
c. Why do you think a company like Starbucks repurchases its own stock?

Problems

P1-41. Computing Return on Equity and Return on Assets

LO4 Wal-Mart Stores Inc. (WMT) Homework MBC

The following table contains financial statement information for Walmart Stores Inc.

$ millions	Total Assets	Net Income	Sales	Equity
2015.	$199,581	$14,694	$478,614	$80,546
2014.	203,490	16,363	482,229	81,394
2013.	204,751	16,022	473,076	76,255

Required

a. Compute the return on equity (ROE) for 2014 and 2015. What trend, if any, is evident? How does Walmart's ROE compare with the approximately 18.9% median ROE for companies in the Dow Jones Industrial average for 2015?
b. Compute the return on assets (ROA) for 2014 and 2015. What trends, if any, are evident? How does

Required

a. Compute the return on equity (ROE) for 2014 and 2015. What trend, if any, is evident? How does Walmart's ROE compare with the approximately 18.9% median ROE for companies in the Dow Jones Industrial average for 2015?

b. Compute the return on assets (ROA) for 2014 and 2015. What trends, if any, are evident? How does Walmart's ROA compare with the approximate 7.1% median ROA for companies in the Dow Jones Industrial average for 2015?

c. What factors might allow a company like Walmart to reap above-average returns?

LO3, 4
General Mills Inc. (GIS)

P1-42. Formulating Financial Statements from Raw Data

Following is selected financial information from **General Mills Inc.** for its fiscal year ended May 29, 2016 ($ millions).

Revenue	$16,563.1	Cost of goods sold	$10,733.6
Cash from operating activities	2,629.8	Cash, ending year	763.7
Cash, beginning year	334.2	Total liabilities	16,405.2
Stockholders' equity	5,307.1	Cash from investing activities	93.4
Noncash assets	20,948.6	Total expenses (other than cost of goods sold)	4,092.7
Cash from financing activities*	(2,293.7)		

* Cash from financing activities includes the effects of foreign exchange rate fluctuations.

Required

a. Prepare the income statement, the balance sheet, and the statement of cash flows for General Mills for the fiscal year ended May 29, 2016.

b. Does the negative amount for cash from financing activities concern us? Explain.

c. Using the statements prepared for part *a*, compute the following ratios (for this part only, use the year-end balance instead of the average for assets and stockholders' equity):

i. Profit margin
ii. Asset turnover
iii. Return on assets
iv. Return on equity

LO3, 4
Abercrombie & Fitch (ANF)

P1-43. Formulating Financial Statements from Raw Data

Following is selected financial information from **Abercrombie & Fitch** for its fiscal year ended January 30, 2016 ($ thousands).

Noncash assets	$1,844,461	Cash from operating activities	$ 309,941
Cash from investing activities	(122,567)	Cash from financing activities*	(119,504)
Cash, ending year	588,578	Cost of goods sold	1,361,137
Revenue	3,518,680	Cash, beginning year	520,708
Total liabilities	1,137,317	Total expenses (other than cost of goods sold)	2,118,984
Stockholders' equity	1,295,722		

* Cash from financing activities includes the effects of foreign exchange rate fluctuations.

Required

a. Prepare the income statement, the balance sheet, and the statement of cash flows for Abercrombie & Fitch for the fiscal year ended January 30, 2016.

b. Do the negative amounts for cash from investing activities and cash from financing activities concern us? Explain.

c. Using the statements prepared for part *a*, compute the following ratios (for this part only, use the year-end balance instead of the average for assets and stockholders' equity):

i. Profit margin
ii. Asset turnover
iii. Return on assets
iv. Return on equity

P1-44. Formulating Financial Statements from Raw Data

LO3, 4
Cisco Systems Inc. (CSCO)

Following is selected financial information from **Cisco Systems Inc.** for the year ended July 30, 2016 ($ millions).

Cash, ending year	$ 7,631	Total liabilities	$ 58,067

P1-44. Formulating Financial Statements from Raw Data

LO3, 4

Cisco Systems Inc. (CSCO)

Homework MBC

Following is selected financial information from **Cisco Systems Inc.** for the year ended July 30, 2016 ($ millions).

Cash, ending year	$ 7,631	Total liabilities	$ 58,067
Cash from operating activities	13,570	Cash from financing activities	(4,699)
Sales	49,247	Noncash assets	114,021
Stockholders' equity	63,585	Cash from investing activities	(8,117)
Cost of goods sold	18,287	Net income	10,739
Total expenses (other than cost of goods sold)	20,221	Cash, beginning year	6,877

Required

a. Prepare the income statement, the balance sheet, and the statement of cash flows for Cisco Systems for the fiscal year ended July 30, 2016.

b. Do the negative amounts for cash from investing activities and cash from financing activities concern us? Explain.

c. Using the statements prepared for part *a*, compute the following ratios (for this part only, use the year-end balance instead of the average for assets and stockholders' equity):

i. Profit margin
ii. Asset turnover
iii. Return on assets
iv. Return on equity

P1-45. Formulating a Statement of Stockholders' Equity from Raw Data

LO3

Crocker Corporation began calendar-year 2016 with stockholders' equity of $150,000, consisting of contributed capital of $120,000 and retained earnings of $30,000. During 2016, it issued additional stock for total cash proceeds of $30,000. It also reported $50,000 of net income and paid $25,000 as a cash dividend to stockholders.

Required

Prepare the 2016 statement of stockholders' equity for Crocker Corporation.

P1-46. Formulating a Statement of Stockholders' Equity from Raw Data

LO3

Winnebago Industries Inc. (WGO)

Homework MBC

Winnebago Industries Inc. reports the following selected information in its 2016 Form 10-K ($ thousands).

Contributed capital, August 29, 2015	$ 57,906
Treasury stock, August 29, 2015	(420,610)
Retained earnings, August 29, 2015	585,941
Accumulated other comprehensive income, August 29, 2015	(2,274)

During fiscal year 2016, Winnebago reported the following.

1. Issuance of stock . . . . . $ 699
2. Repurchase of stock 1,157
3. Net income 45,496
4. Cash dividends 10,891
5. Other comprehensive income (loss) 13,249

Required

Use this information to prepare the statement of stockholders' equity for Winnebago's fiscal year ended August 27, 2016.

LO4

Medtronic, plc (MDT)

P1-47. Computing, Analyzing, and Interpreting Return on Equity and Return on Assets

Following are summary financial statement data for **Medtronic, plc** for 2014 through 2016.

$ millions	2016	2015	2014
Sales	$28,833	$ 20,261	$17,005

LO4 Medtronic, plc (MDT)

P1-47. Computing, Analyzing, and Interpreting Return on Equity and Return on Assets
Following are summary financial statement data for **Medtronic, plc** for 2014 through 2016.

$ millions	2016	2015	2014
Sales	$28,833	$□20,261	$17,005
Net income	3,538	2,675	3,065
Total assets	99,782	106,685	37,943
Equity	52,063	53,230	19,443

Required

a. Compute the return on assets and return on equity for 2016 and 2015 (use average assets and average equity), together with the components of ROA (profit margin and asset turnover). What trends do we observe?

b. Which component appears to be driving the change in ROA over this time period?

c. Recompute the ROA and ROE for 2015 using year-end balances instead of averages. Use your results to explain why we typically use averages to compute ratios.

d. Medtronic repurchased a large amount of its common shares in 2016 at a cost of almost $2.83 billion. How did this repurchase affect its return on equity?

LO4 Nordstrom Inc. (JWN)

P1-48. Computing, Analyzing, and Interpreting Return on Equity and Return on Assets
Following are summary financial statement data for **Nordstrom Inc.** for fiscal years ended 2014 through 2016.

$ millions	2016	2015	2014
Sales	$14,095	$13,110	$12,166
Net income	600	720	734
Total assets	7,698	9,245	8,574
Equity	871	2,440	2,080

Required

a. Compute return on assets and return on equity for fiscal years ended 2015 and 2016 (use average assets and average equity), together with the components of ROA (profit margin and asset turnover). What trends, if any, do we observe?

b. Which component, if any, appears to be driving the change in ROA over this time period?

LO4 Abercrombie & Fitch (ANF) TJX Companies (TJX)

Homework MBC

P1-49. Comparing Abercrombie & Fitch and TJX Companies
Following are selected financial statement data from **Abercrombie & Fitch** (ANF—upscale clothing retailer) and **TJX Companies** (TJX—value-priced clothing retailer, including TJ Maxx).

$ thousands	Company	Total Assets	Net Income	Sales
2015	TJX Companies Inc.	$10,988,750	—	—
2016	TJX Companies Inc.	11,499,482	$2,277,658	$30,944,938
2015	Abercrombie & Fitch	2,505,167	—	—
2016	Abercrombie & Fitch	2,443,039	35,576	3,518,680

Required

a. Compute the return on assets for both companies for the year ended 2016.

b. Disaggregate the ROAs for both companies into the profit margin and asset turnover.

c. What differences are observed? Evaluate these differences in light of the two companies' business models. Which company has better financial performance?

LO4 McDonald's (MCD)

P1-50. Computing and Interpreting Return on Assets and Its Components
McDonald's Corporation (MCD) reported the following balance sheet and income statement data for 2013 through 2015.

$ millions	Total Assets	Net Income	Sales
2013	$36,626.3	—	—
2014	34,227.4	$4,757.8	$18,169.3
2015	37,938.7	4,529.3	16,488.3

Required

a. What is MCD's return on assets for 2014 and 2015? Disaggregate MCD's ROA into its net profit margin and its asset turnover.

b. What factor is mainly responsible for the change in MCD's ROA over this period?

Required

a. What is MCD's return on assets for 2014 and 2015? Disaggregate MCD's ROA into its net profit margin and its asset turnover.

b. What factor is mainly responsible for the change in MCD's ROA over this period?

P1-51. Disaggregating Return on Assets over Multiple Periods

LO4 3M Company (MMM)

Following are selected financial statement data from 3M Company for 2012 through 2015.

$ millions	Total Assets	Net Income	Sales
2012	$33,876	$4,444	$29,904
2013	33,550	4,659	30,871
2014	31,209	4,956	31,281
2015	32,718	4,833	30,274

Required

a. Compute3M Company's return on assets for 2013 through 2015. Disaggregate the ROA into the profit margin and asset turnover for 2013 through 2015. What trends do we observe?

b. Which ROA component appears to be driving the trend observed in part *a*? Explain.

P1-52.A Reading and Interpreting Audit Opinions

LO7 Apple (AAPL)

Homework MBC

Apple Inc.'s 2016 financial statements include the following audit report from Ernst & Young LLP.

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 24, 2016 and September 26, 2015, and the related consolidated statements of operations, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended September 24, 2016. 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 24, 2016 and September 26, 2015, and the consolidated results of its operations and its cash flows for each of the three years in the period ended September 24, 2016, in conformity with U.S. 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 24, 2016, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated October 26, 2016 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP
San Jose, California
October 26, 2016

Required

a. To whom is the report addressed? Why?

b. In your own words, briefly describe the audit process. What steps do auditors take to determine whether a company's financial statements are free from material misstatement?

c. What is the nature of Ernst & Young's opinion? What do you believe the word *fairly* means? Is Ernst & Young providing a guarantee to Apple's financial statement users?

d. What other opinion is Ernst & Young rendering? Why is this opinion important?

LO7 **P1-53. Reading and Interpreting CEO Certifications**

c. What is the nature of Ernst & Young's opinion? What do you believe the word *fairly* means? Is Ernst & Young providing a guarantee to Apple's financial statement users?
d. What other opinion is Ernst & Young rendering? Why is this opinion important?

LO7
Apple Inc. (AAPL)

P1-53. Reading and Interpreting CEO Certifications
Following is the CEO certification required by the Sarbanes-Oxley Act and signed by **Apple** CEO Timothy D. Cook. Apple's Chief Financial Officer signed a similar form.

CERTIFICATIONS

I, Timothy D. Cook, certify that:

1. I have reviewed this annual report on Form 10-K of Apple Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. 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 Registrant as of, and for, the periods presented in this report;
4. The Registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Registrant and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
   (c) Evaluated the effectiveness of the Registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the Registrant's internal control over financial reporting that occurred during the Registrant's most recent fiscal quarter (the Registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting; and
5. The Registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of the Registrant's board of directors (or persons performing the equivalent functions):
   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Registrant's ability to record, process, summarize, and report financial information; and
   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal control over financial reporting.

Date: October 26, 2016
By: /s/ Timothy D. Cook
Timothy D. Cook
Chief Executive Officer

Required

a. Summarize the assertions that Timothy D. Cook made in this certification.
b. Why did Congress feel it important that CEOs and CFOs sign such certifications?
c. What potential liability do you believe the CEO and CFO are assuming by signing such certifications?

P1-54. Assessing Corporate Governance and Its Effects

LO7
General Electric (GE)

Review the corporate governance section of **General Electric**'s website (http://www.ge.com). Find and click on "investor relations"; then, find and click on "governance," and open the "Governance Principles" PDF.

Required

P1-54. Assessing Corporate Governance and Its Effects — LO7, General Electric (GE)

Review the corporate governance section of **General Electric**'s website (http://www.ge.com). Find and click on "investor relations"; then, find and click on "governance," and open the "Governance Principles" PDF.

Required

a. In your words, briefly describe General Electric's governance structure.
b. What is the main purpose of its governance structure?

IFRS Applications

I1-55. Computing, Analyzing, and Interpreting Return on Equity — LO4, Canadian Tire Corporation, Limited

Canadian Tire Corporation, Limited operates retail stores in Canada that sell general merchandise, clothing, and sporting goods. Total stockholders' equity for Canadian Tire (in millions of Canadian dollars) is $4,994.2 in 2015 and $4,855.5 in 2014. In 2015, Canadian Tire reported net income of $659.4 on sales of $12,279.6.

Required

a. What is Canadian Tire's return on equity for 2015?
b. What are total expenses for Canadian Tire for 2015?
c. Canadian Tire used cash to repurchase a large amount of its common stock during the period. What motivations might Canadian Tire have for repurchasing its common stock?

I1-56. Applying the Accounting Equation and Computing Financing Proportions — LO3

The following table contains fiscal 2015 information for three companies that use IFRS. Apply the accounting equation to compute the missing financial amounts (a), (b), and (c). Which of these companies is more owner-financed? Which of these companies is more nonowner-financed? Discuss why the proportion of owner financing might differ across these three companies.

In millions	Assets	=	Liabilities	□	Equity
OMV Group (Austria)	€ 32,664		€18,366		(a)
Ericsson (Sweden)	SEK 284,363		(b)		SEK 147,366
BAE Systems (UK)	(c)		£20,083		£3,002

OMV Group
Ericsson
BAE Systems

I1-57. Computing Return on Equity and Return on Assets — LO4, AstraZeneca

The following table contains financial statement information for **AstraZeneca**, which is a global biopharmaceutical company focused on discovery, development, manufacturing, and commercialization of medicines and is headquartered in London.

$ millions	Total Assets	Net Income	Sales	AstraZeneca Equity
2013	$55,899	$2,571	$25,806	$23,253
2014	58,595	1,235	26,547	19,646
2015	60,124	2,826	24,708	18,509

Required

a. Compute the return on equity (ROE) for 2014 and 2015. What trend, if any, is evident? How does AstraZeneca's ROE compare with the approximately 18.9% median ROE for companies in the Dow Jones Industrial average for 2015?
b. Compute the return on assets (ROA) for 2014 and 2015. What trends, if any, are evident? How does AstraZeneca's ROA compare with the approximate 7.1% median ROA for companies in the Dow Jones Industrial average for 2015?
c. What factors might explain AstraZeneca's below-average returns?

I1-58. Computing and Interpreting Return on Assets and Its Components — LO4, Tesco PLC

Tesco PLC, which is one of the world's largest retailers and is headquartered in Cheshunt, U.K., reported the following balance sheet and income statement data for 2014 through 2016.

£ millions	Total Assets	Net Income	Sales
2014	£50,164	£□ 974	£63,557
2015	44,214	(5,741)	56,925
2016	43,904	138	54,433

£ millions	Total Assets	Net Income	Sales
2014	£50,164	£ 974	£63,557
2015	44,214	(5,741)	56,925
2016	43,904	138	54,433

Required

a. What is Tesco's return on assets for 2015 and 2016?
b. Disaggregate Tesco's ROA metrics from part *a* into profit margin and asset turnover.
c. What factor is mainly responsible for the change in Tesco's ROA over this period?

Management Applications

LO1, 3 **MA1-59. Strategic Financing**
You and your management team are working to develop the strategic direction of your company for the next three years. One issue you are discussing is how to finance the projected increases in operating assets. Your options are to rely more heavily on operating creditors, borrow the funds, or to sell additional stock in your company. Discuss the pros and cons of each source of financing.

LO3, 4 **MA1-60. Statement Analysis**
You are evaluating your company's recent operating performance and are trying to decide on the relative weights you should put on the income statement, the balance sheet, and the statement of cash flows. Discuss the information each of these statements provides and its role in evaluating operating performance.

LO2 **MA1-61. Analyst Relations**
Your investor relations department reports to you that stockholders and financial analysts evaluate the quality of a company's financial reports based on their "transparency," namely, the clarity and completeness of the company's financial disclosures. Discuss the trade-offs of providing more or less transparent financial reports.

LO7 **MA1-62. Ethics and Governance: Management Communications**
Many companies publicly describe their performance using terms such as *EBITDA* or *earnings purged of various expenses* because they believe these terms more effectively reflect their companies' performance than GAAP-defined terms such as *net income*. What ethical issues might arise from the use of such terms, and what challenges does their use present for the governance of a company by stockholders and directors?

LO7 **MA1-63. Ethics and Governance: Auditor Independence**
The SEC has been concerned with the "independence" of external auditing firms. It is especially concerned about how large non-audit (such as consulting) fees might impact how aggressively auditing firms pursue accounting issues they uncover in their audits. Congress passed legislation that prohibits accounting firms from providing both consulting and auditing services to the same client. How might consulting fees affect auditor independence? What other conflicts of interest might exist for auditors? How do these conflicts impact the governance process?

Ongoing Project

An important part of learning is application. To learn accounting, we must practice the skills taught and apply those skills to real world problems. To that end, we have designed a project to reinforce the lessons in each module and apply them to real companies. The goal of this project is to complete a comprehensive analysis of two (or more) companies in the same industry. We will then create a set of forecasted financial statements and a valuation of the companies' equity. This is essentially what financial analysts and many creditors do. We might not aspire to be an analyst or creditor, but by completing a project of this magnitude, we will have mastered financial reporting at a sufficient level to be able to step into any role in an organization. The goal of Module 1's assignment is to obtain and begin to explore the financial reports for two publicly traded companies that compete with each other.

- Select two publicly traded companies that compete with each other. They must be publicly traded, as private company financial statements will not be publicly available. While the two companies do not need to be head-to-head competitors, their main lines of business should broadly overlap.

- Download the annual reports for each company, and peruse them. At this stage, choose companies that are profitable (net income is positive) and that have positive retained earnings and stockholders' equity. Select companies whose financial statements are not overly complicated. (Probably avoid the automotive, banking, insurance, and financial services industries. Automotive companies have large financial services subsidiaries that act like banks for customers, which complicates the analysis. Banking, insurance, and financial services

- Download the annual reports for each company, and peruse them. At this stage, choose companies that are profitable (net income is positive) and that have positive retained earnings and stockholders' equity. Select companies whose financial statements are not overly complicated. (Probably avoid the automotive, banking, insurance, and financial services industries. Automotive companies have large financial services subsidiaries that act like banks for customers, which complicates the analysis. Banking, insurance, and financial services have operations that differ drastically from the usual industrial companies common in practice. While these companies can be analyzed, they present challenges for the beginning analyst.)
- Use the SEC EDGAR Website to locate the recent Form 10-K (or other annual report such as 20-F or 40-F) (www.sec.gov). Download a spreadsheet version of financial statements. Use Appendix 1A as a guide.
- Use the annual report and the financial statements, along with any websites, to assess the companies' business environment. Use Porter's Five Forces or a SWOT analysis to briefly analyze the competitive landscape for the two companies. The aim is to understand the competitive position of each company so we can assess their financial statements in a broader business context.
- Explore the financial statements, and familiarize yourself with the company basics. The following give an indication of some questions that guide us as we look for answers.
  - What accounting standards are used, U.S. GAAP, IFRS, or other?
  - What is the date of the most recent fiscal year-end?
  - Determine the relative proportion of short- and long-term assets.
  - Determine the relative proportion of liabilities and equity.
  - Calculate the return on assets (ROA) for the most recent year.
  - Disaggregate ROA into the two component parts as shown in Exhibit 1.7. Compare the numbers/ratios for each company.
  - Find the companies' audit reports. Who are the auditors? Are any concerns raised in the reports?
  - Do the audit reports differ significantly from the one for Under Armour in this module?

Solutions to Review Problems

Review 1-1—Solution

All of the statements a, b, c, and d are true.

Review 1-2—Solution

1. I. b
   II. e
   III. f
   IV. a
   V. d
   VI. c

2. The cost of preparing financial statements includes both internal and external costs. Multinational companies that have subsidiaries operating in IFRS jurisdictions must prepare two sets of financial statements and have staff who are familiar with both. This adds labor costs. Auditors bill by the hour, so auditing two sets of financial statements would require more hours and therefore would be costlier for the firm. If the two sets of standards were comparable, both types of costs would decrease.

Review 1-3—Solution

1.

NIKE INC.
Income Statement ($ millions)

Review 1-3—Solution

1.

NIKE INC. **Income Statement ($ millions)** **For Year Ended May 31, 2015**	
Revenues	$30,601
Cost of goods sold	16,534
Gross profit	14,067
SG&A expenses	9,892
Income from operations	4,175
Interest income	30
Income before taxes	4,205
Provision for income taxes	932
Net income	$□3,273

NIKE INC. **Balance Sheet ($ millions)** **May 31, 2015**			
Short-term assets	$15,976	Short-term liabilities	$□6,334
Long-term assets	□5,624	Long-term liabilities	2,559
		Stockholders' equity	□12,707
Total assets	$21,600	Total liabilities and equity	$21,600

NIKE INC. **Statement of Cash Flows ($ millions)** **For Year Ended May 31, 2015**	
Cash flows from operations	$4,680
Cash flows from investing	(175)
Cash flows from financing	(2,873)
Net increase (decrease) in cash	1,632
Cash, beginning year	2,220
Cash, ending year	$3,852

2. Nike is a much larger company than Under Armour; with total assets of $21,600 million compared to Under Armour's assets of $2,868.9 million. Nike is about 10 times larger. The income statements of the two companies are markedly different as well. Nike reports nearly eight times as much revenue ($30,601 million compared with $3,963.3 million). The difference in net income is also large. Nike earned $3,273 million whereas Under Armour reported net income of only $232.5 million.

Review 1-4—Solution

a. ROA = Net income/Average assets = $3,273/$20,097 = 16.3%.
The profitability component is Net income/Sales = $3,273/$30,601 = 10.7%, and the productivity component is Sales/Average assets = $30,601/$20,097 = 1.52. Notice that 10.7% × 1.52 = 16.3%. Thus, the two components, when multiplied, yield ROA.

b. ROE = Net income/Average stockholders' equity = $3,273/$11,766 = 27.8%.

Review 1-5—Solution

1. *a.* II
   b. I
   c. III
   d. I

Review 1-5—Solution

1. *a.* II
   b. I
   c. III
   d. I
   e. II
   f. III
2. According to Yahoo! Finance, Under Armour's competitors include Nike, Columbia Sportswear, and adidas AG.
3. Under Armour does have a competitive advantage created by the technical nature of its apparel. The company has patented technology including Coldback and MagZip. The company has immense brand loyalty and a strong reputation for product innovation.
4.

$ millions	Under Armour	Nike	Columbia	adidas
Total assets.	$2,869	$21,600	$1,846	$13,343
Revenue.	$3,963	$30,601	$2,326	$16,915
Net income	$□ 233	$□3,273	$□ 174	$□□ 634
ROA.	8.12%	15.15%	9.43%	4.75%
Profit margin (PM)	5.88%	10.70%	7.48%	3.75%
Asset turnover (AT)	1.38	1.42	1.26	1.27

The Under Armour ROA and profit margin are smaller than most of the competitors which is surprising given the company's ability to premium price its products. It might be the case that costs are high for R&D, along with marketing and celebrity promotions.

Module 2

Introducing Financial