CHAPTER 17

Accounting and Financial Information

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Chapter 17 Accounting and Financial Information

Learning Objectives

- Define accounting and explain the differences between managerial accounting and financial accounting.
- Identify some of the users of accounting information and explain how they use it.
- Explain the function of the income statement.
- Explain the function of the balance sheet.
- Calculate a break-even point given the necessary information.
- Evaluate a company's performance using financial statements and ratio analysis.

Apple Inc. is the most valuable company in the world. This statement is based on market value, which in August 2020 was roughly $1.9 trillion.[1] Although markets can fluctuate, sometimes wildly, if you are reading this chapter for a course only months later, it is unclear whether Apple will have retained or ceded its leadership position to Microsoft, which has taken the leadership position multiple times since 2018.

You may wonder what kind of information is used to make these determinations. How does the market know that Apple should be valued more than $400 billion higher than Microsoft, for example?[2] Do investors just make their decisions on instinct? Well, some do, but it's not a formula for sustained success. In most cases, in deciding how much to pay for a company, investors rely on published accounting and financial information released by publicly-traded companies. This chapter will introduce you to the subject of accounting and financial information so you can begin to get an understanding for how the valuation process works.

Figure 17.1: Amazon's Headquarters in Seattle, Washington

The Role of Accounting

Accounting is often called "the language of business" because it communicates so much of the information that owners, managers, and investors need to evaluate a company's financial performance. These people are stakeholders in the business—they're interested in its activities because they're affected by them. The financial futures of owners and other investors may depend heavily on strong financial performance from the business, and when performance is poor, managers may be replaced or laid off in a downsizing. In fact, a key purpose of accounting is to help stakeholders make better business decisions by providing them with financial information. You shouldn't try to run an organization or make investment decisions without accurate and timely financial information, and it is the accountant who prepares this information. More importantly, accountants make sure that stakeholders understand the meaning of financial information, and they work with both individuals and organizations to help them use financial information to deal with business problems. Actually, collecting all the numbers is the easy part. The hard part is analyzing, interpreting, and communicating the information. Of course, you also have to present everything clearly while effectively interacting with people from every business discipline. In any case, we're now ready to define **accounting** as the process of measuring and summarizing business activities, interpreting financial information, and communicating the results to management and other decision makers.

Fields of Accounting

Accountants typically work in one of two major fields. **Management accountants** provide information and analysis to decision makers inside the organization in order to help them run it. **Financial accountants** furnish information to individuals and groups both inside and outside the organization in order to help them assess its financial performance. Their primary focus, however, is on external parties. In other words, management accounting helps you keep your business running while financial accounting tells the outside world how well you're running it.

Management Accounting

Management accounting, also known as managerial accounting, plays a key role in helping managers carry out their responsibilities. Because the information that it provides is intended for use by people who perform a wide variety of jobs, the format for reporting information is flexible. Reports are tailored to the needs of individual managers, and the purpose of such reports is to supply relevant, accurate, timely information that will aid managers in making decisions. In preparing, analyzing, and communicating such information, accountants work with individuals from all the functional areas of the organization—human resources, operations, marketing, etc.

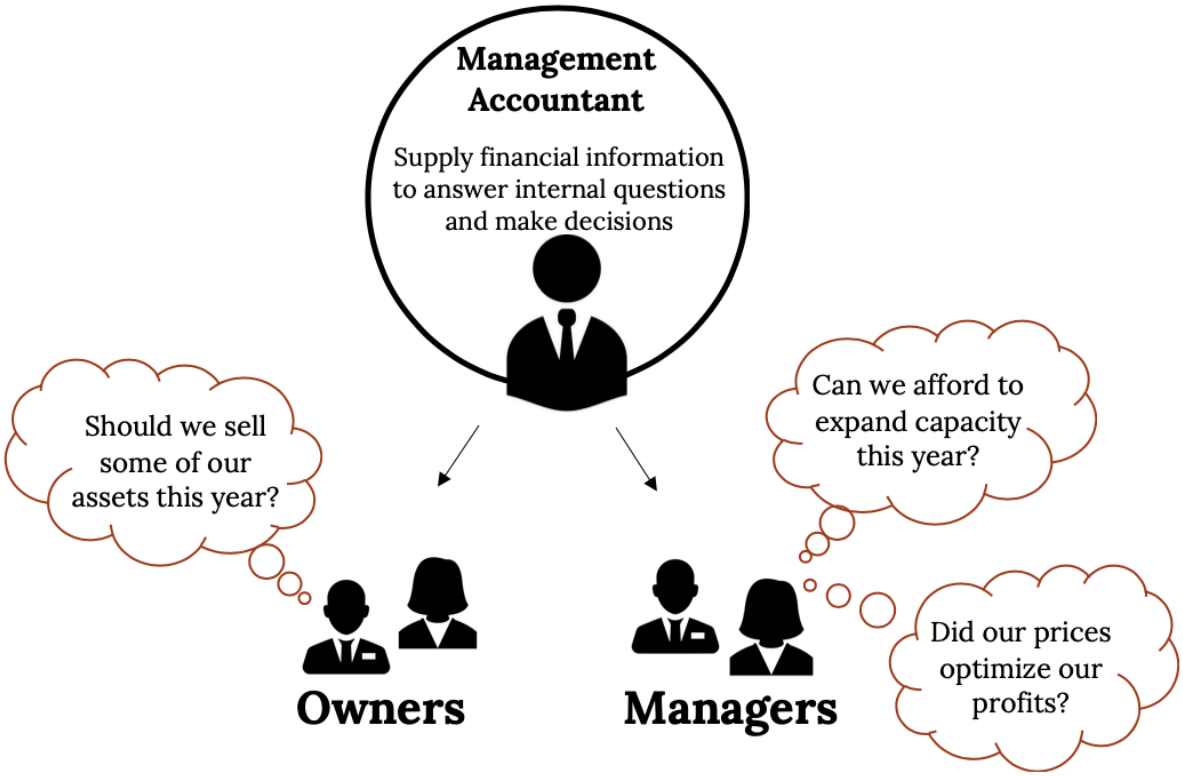

Figure 17.2: The Role of Managerial Accounting

Financial Accounting

Financial accounting is responsible for preparing the organization's **financial statements**—including the **income statement**, the **statement of owner's equity**, the **balance sheet**, and the **statement of cash flows**—that summarize a company's past performance and evaluate its current financial condition. If a company is traded publicly on a stock market such as the NASDAQ, these financial statements must be made public, which is not true of the internal reports produced by management accountants. In preparing financial statements, financial accountants adhere to a uniform set of rules called **generally accepted accounting principles** (GAAP)—the basic principles for financial reporting issued by an independent agency called the **Financial Accounting Standards Board** (FASB). Users want to be sure that financial statements have been prepared according to GAAP because they want to be sure that the information reported in them is accurate. They also know that when financial statements have been prepared by the same rules, they can be compared from one company to another.

While companies headquartered in the United States follow US-based GAAP, many companies located outside the United States follow a different set of accounting principles called **International Financial Reporting Standards** (IFRS). These multinational standards, which are issued by the International Accounting Standards Board (IASB), differ from US GAAP in a number of important ways, but we're not at the point yet of

exploring these sometimes fine distinctions. Bear in mind, however, that, according to most experts, a single set of worldwide standards will eventually emerge to govern the accounting practices of both US and non-US companies.

Who Uses Financial Accounting Information?

The users of managerial accounting information are pretty easy to identify—basically, they're a firm's managers. We need to look a little more closely, however, at the users of financial accounting information, and we also need to know a little more about what they do with the information that accountants provide them.

Owners and Managers

In summarizing the outcomes of a company's financial activities over a specified period of time, financial statements are, in effect, report cards for owners and managers. They show, for example, whether the company did or didn't make a profit and furnish other information about the firm's financial condition. They also provide some information that managers and owners can use in order to take corrective action, though reports produced by management accountants offer a much greater level of depth.

Investors and Creditors

Investors and **creditors** furnish the money that a company needs to operate, and not surprisingly, they want to know how that business is performing. Because they know that it's impossible to make smart investment and loan decisions without accurate reports on an organization's financial health, they study financial statements to assess a company's performance and to make decisions about continued investment.

According to the world's most successful investor, Warren Buffett, the best way to prepare yourself to be an investor is to learn all the accounting you can. Buffet, chairman and CEO of Berkshire Hathaway, a company that invests in other companies, turned an original investment of $10,000 into a net worth of $66 billion[3] in four decades, and he did it, in large part, by paying close attention to financial accounting reports.

Figure 17.3: Warren Buffet, Presidential Medal of Freedom recipient in 2011

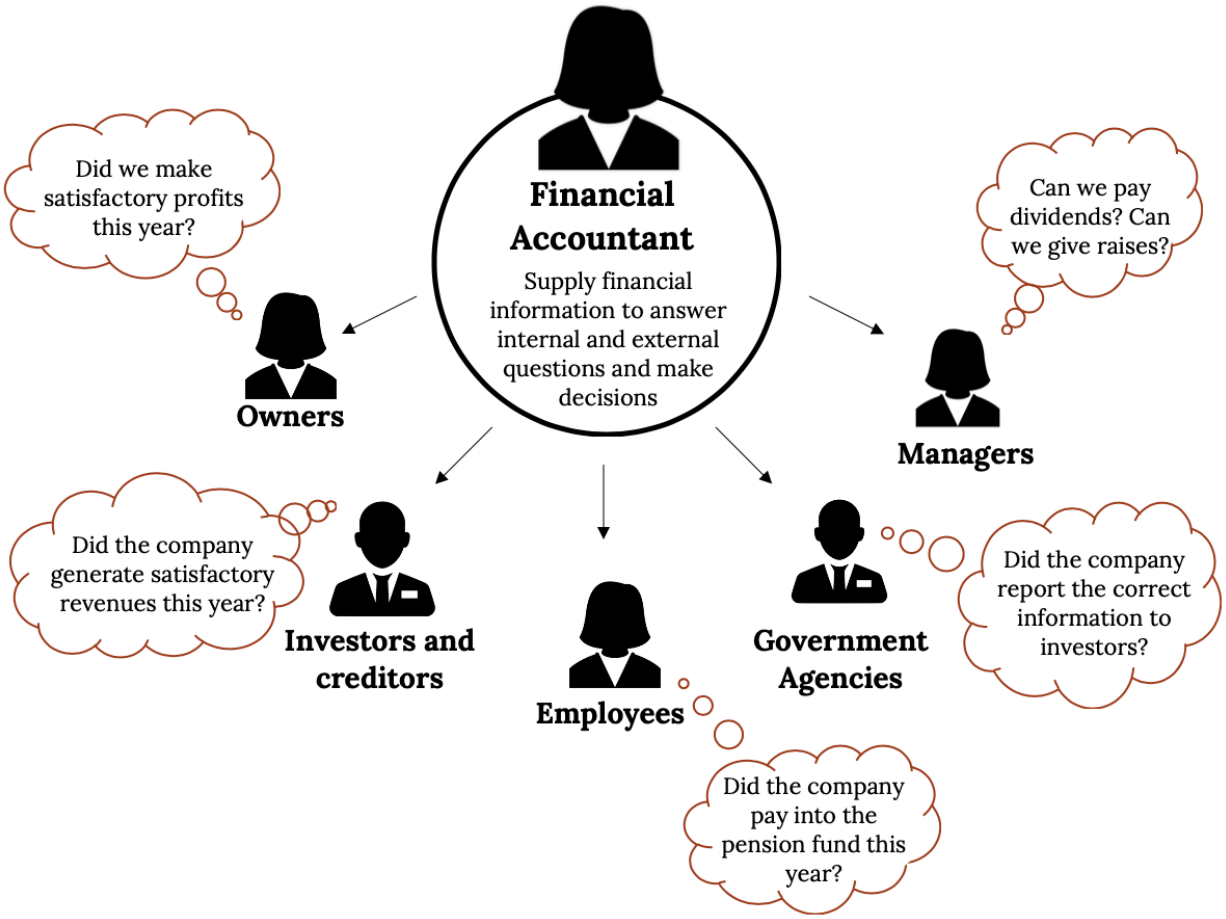

Figure 17.4: The Role of Financial Accounting

Government Agencies

Businesses are required to furnish financial information to a number of government agencies. Publicly-owned companies, for example—the ones whose shares are traded on a stock exchange—must provide annual financial reports to the **Securities and Exchange Commission** (SEC), a federal agency that regulates stock trades and which is charged with ensuring that companies tell the truth with respect to their financial positions. Companies must also provide financial information to local, state, and federal taxing agencies, including the Internal Revenue Service (IRS).

Other Users

A number of other external users have an interest in a company's financial statements. Suppliers, for example, need to know if the company to which they sell their goods is having trouble paying its bills or may even be at risk of going under. Employees and labor unions are interested because salaries and other forms of compensation are dependent on an employer's performance.

Figures 17.2 and 17.4 illustrate the main users of management and financial accounting and the types of information produced by accountants in the two areas. In the rest of this chapter, we'll learn how to prepare a set of financial statements and how to interpret them. We'll also discuss issues of ethics in the accounting communities and career opportunities in the accounting profession.

Check Your Understanding with an Online Quiz

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Understanding Financial Statements

We hope that, so far, at least one thing is clear: If you're in business, you need to understand financial statements. The law no longer allows high-ranking executives to plead ignorance or fall back on delegation of authority when it comes to responsibility for a firm's financial reporting. In a business environment tainted by episodes of fraudulent financial reporting and other corporate misdeeds, top managers are now being held responsible for the financial statements issued by the people who report to them. Top managers need to know how well the company is performing. Financial information helps managers identify signs of impending trouble before it is too late.

The Function of Financial Statements

Put yourself in the place of Connie in Figure 17.5 on the next page, who runs Connie's Confections out of her home. She loves what she does, and she feels that she's doing pretty well. In fact, she has an opportunity to take over a nearby store at very reasonable rent, and she can expand by getting a modest bank loan and investing some more of her own money. So it's decision time for Connie: She knows that the survival rate for start-ups isn't very good, and before taking the next step, she'd like to get a better idea of whether she's actually doing well enough to justify the risk. The basic financial statements will give her some answers.

Since this book is for an introductory course, we will focus our attention on the income statement and balance sheet only, even though we mentioned other financial statements earlier in the chapter.

Toying with a Business Idea

To bring this concept closer to home, let's assume that you need to earn money while you're in college and that you've decided to start a small business. Your business will involve selling stuff to other college students, and to keep things simple, we'll assume that you're going to operate on a "cash" basis: you'll pay for everything with cash, and everyone who buys something from you will pay in cash.

You may have at least a little cash on you right now—some currency, or paper money, and coins. In accounting, however, the term **cash** refers to more than just paper money and coins. It also refers to the money that you have in checking and savings accounts and includes items that you can deposit in these accounts, such as money orders and different types of checks.

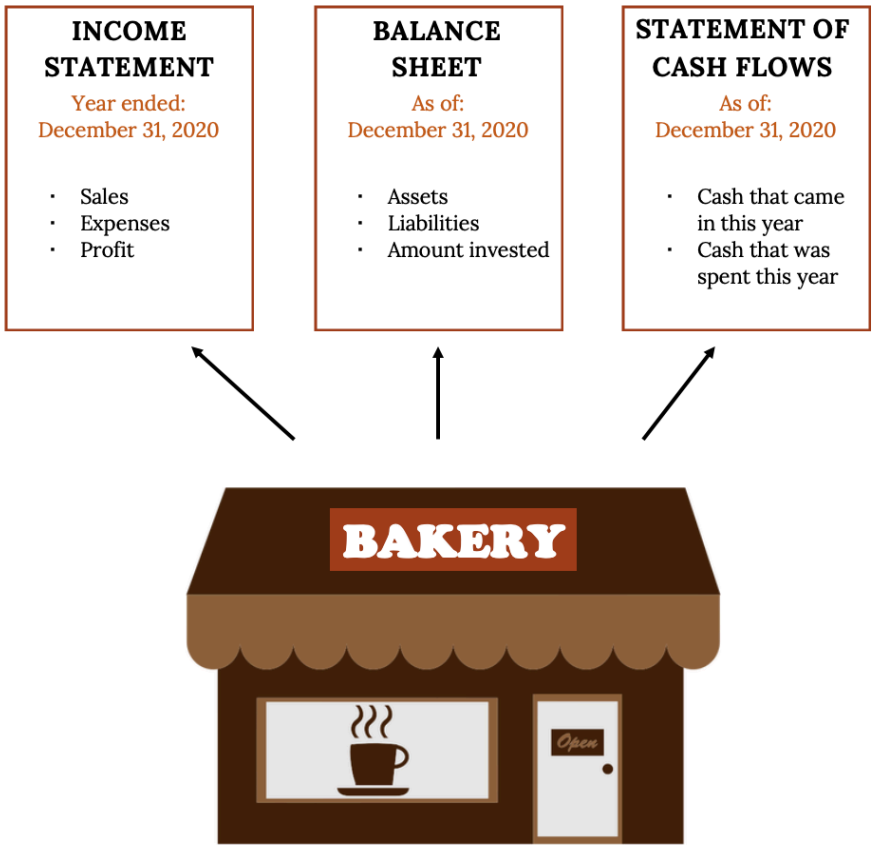

Figure 17.5: Three Financial Statements That Can Help Business Owners Keep Track of Sales, Assets, Cash Flow, and Many Other Things

Your first task is to decide exactly what you're going to sell. You've noticed that with homework, exams, social commitments, and the hectic lifestyle of the average college student, you and most of the people you know always seem to be under a lot of stress. Sometimes you wish you could just lie back between meals and bounce a ball off the wall. And that's when the idea hits you: Maybe you could make some money by selling a

product called the "Stress-Buster Play Pack." Here's what you have in mind: you'll buy small toys and other fun stuff—instant stress relievers—at a local dollar store and pack them in a rainbow-colored plastic treasure chest labeled "Stress-Buster."

The Accounting Equation

To begin keeping track of your company financially, you'll first need to understand the fundamental accounting equation:

Assets = Liabilities + Owner's Equity

Think of assets as things *owned* by your business—cash in the bank, product inventory, etc. And think of liabilities as the amounts *owed*—perhaps you've had a job where your pay check came a couple of weeks after you did the work; during that unpaid window, the amount due to you was a liability to your employer. *Owner's equity* represents the value of the firm according to your financial statements; obviously it is good to own more than you owe.

This simple but important equation highlights the fact that a company's **assets** came from somewhere: either from investments made by the owners (**owner's equity**) or from loans (**liabilities**). This means that the asset section of the balance sheet on the one hand and the liability and owner's-equity section on the other must be equal, or **balance**.

Let's say you have $200 in cash and borrow $400 from your parents and plan to buy a month's worth of plastic treasure chests and toys. After that, you'll use the cash generated from sales of Stress-Buster Play Packs to replenish your supply. You open a bank account for your new business and create your opening financial statement—the **balance sheet.**

The Balance Sheet

A **balance sheet** reports the following information:

- **Assets**: the resources from which it expects to gain some future benefit
- **Liabilities**: the debts that it owes to outside individuals or organizations
- **Owner's equity**: the investment in the business

At the time you open the account, your balance sheet would look like this:

Figure 17.6: Stress-Buster's Balance Sheet as of September 1, 2020

Stress-Buster Company Balance Sheet As of September 1, 2020	
Assets	
Cash	**$600**
Liabilities and Owner's Equity	
Liabilities	$400
Owner's Equity	$200
Total Liabilities and Owner's Equity	**$600**

The amount you owe your parents is a liability to you, and your own investment of $200 in the business is represented by your owner's equity.

Now it is time to start buying toys, repackaging them, and selling your Stress-Busters. Each plastic chest will cost $1.00, and you'll fill each one with a variety of five simple toys, all of which you can buy for $1.00 each.

You plan to sell each Stress-Buster Play Pack for $10 from a rented table stationed outside a major dining hall. Renting the table will cost you $20 a month. In order to make sure you can complete your school work, you decide to hire fellow students to staff the table at peak traffic periods. They'll be on duty from noon until 2:00 p.m. each weekday except Fridays, and you'll pay them a generous $7.50 an hour. Wages, therefore, will cost you $240 a month (2 hours × 4 days × 4 weeks = 32 hours × $7.50). Finally, you'll run ads in the college newspaper at a monthly cost of $40. Thus your total monthly costs will amount to $300 ($20 $240 $40).

The Income Statement

Let's say that during your first month, you sell 100 play packs. Not bad, you say to yourself, but did I make a profit? To find out, you prepare an income statement showing **revenues**, or sales, and **expenses**—the costs of doing business. You divide your expenses into two categories:

- **Cost of goods sold**: the total cost of the goods that you've sold
- **Operating expenses**: the costs of operating your business except for the costs of things that you've sold.

Now you need to do some subtracting:

- The difference between sales revenue and cost of goods sold is your **gross profit**, also known as **gross margin**.

- The difference between gross profit and operating expenses is your **net income** or **profit**, which is the proverbial "bottom line." Note we've assumed you're making money, but businesses can also have a net loss.

Figure 17.7 is your income statement for the first month. (Remember that we've made things simpler by handling everything in cash.)

Figure 17.7: Stress-Buster's Income Statement for September 2020

Stress-Buster Company Income Statement Month Ended September 30, 2020		
Sales (100 x $10.00)		$1,000
Less cost of goods sold (100 x $6)		$600
Gross profit (100 x ($10 -$6))		$400
Less operating expenses		
Salaries	$240	
Advertising	$40	
Table rental	$20	
	$300	
Net income (Profit) ($400-$300)		**$100**

Did You Make Any Money?

What does your income statement tell you? It has provided you with four pieces of valuable information: You sold 100 units at $10 each, bringing in **revenues** or **sales** of $1,000.

Each unit that you sold cost you $6–$1 for the treasure chest plus 5 toys costing $1 each. So your **cost of goods sold** is $600 (100 units × $6 per unit).

Your **gross profit**–the amount left after subtracting cost of goods sold from sales–is $400 (100 units × $4 each).

After subtracting **operating expenses** of $300–the costs of doing business other than the cost of products sold–you generated a positive **net income** or **profit** of $100.

Whereas your **balance sheet** tells you what you have *at a specific point in time*, your **income statement** tells you how much income you earned *over some period of time*, in this case, the month of September.

Check Your Understanding with an Online Quiz

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Companies prepare financial statements on at least a 12-month basis—that is, for a **fiscal year** which ends on December 31 or some other logical date, such as June 30 or September 30. Fiscal years can vary because companies generally pick a fiscal-year end date that coincides with the end of a peak selling period; thus a crabmeat processor might end its fiscal year in October, when the crab supply has dwindled. Most companies also produce financial statements on a quarterly or monthly basis. For Stress-Buster, you'll want to prepare them monthly to stay on top of how your new business is doing. Let's prepare a new balance sheet to how things have changed by the end of the month.

Recall that Stress-Buster earned $100 during the month of September and that you decided to leave these earnings in the business. This $100 profit increases two items on your balance sheet: the assets of the company (its cash) and your investment in it (its owner's equity). Figure 17.8 shows what your balance sheet will look like on September 30. You now have $700 in cash: $400 that you borrowed plus $300 that you've invested in the business (your original $200 investment plus the $100 profit from the first month of operations, which you've kept in the business).

Figure 17.8: Stress-Buster's Balance Sheet at the End of September 2020

Stress-Buster Company Balance Sheet As of September 30, 2020	
Assets	
Cash (original $600 plus $100 earned)	**$700**
Liabilities and Owner's Equity	
Liabilities	$400
Owner's Equity ($200 invested by owner plus $100 profits retained)	$300
Total Liabilities and Owner's Equity	**$700**

A Quick Word about Credit

Because the money you borrowed came from your trusting parents, they loaned it to you on the basis of you signing a simple note promising to pay it back. Such a loan is considered *unsecured credit.* But what if you had

borrowed the money from a bank? The banker would probably have required *collateral*, which is property or some other asset that would become the property of the lender if you failed to pay. If you know someone who had a car loan, you probably know that if the loan went unpaid, the bank could repossess the car. This type of loan is called *secured credit*, because the bank makes it with the security that if the borrower cannot or will not pay, they can take possession of the collateral, sell it, and recover their money that way.

Breakeven Analysis

Let's take a short detour to see how Stress Buster's financial information might be put to use. As you look at your first financial statements, you might ask yourself: is there some way to figure out the level of sales you need to avoid losing money—to "break even"? This can be done using **breakeven analysis**. To break even (have no profit or loss), your total sales revenue must exactly equal all your expenses (both variable and fixed). **Variable costs** depend on the quantity produced and sold; for example, each Stress-Buster includes the treasure chest and the toys inside. **Fixed costs** don't change as the quantity sold changes; for example, you'll pay for your advertising whether you sell Stress-Busters or not. The balance between revenue and expenses will occur when gross profit equals all other (fixed) costs. To determine the level of sales at which this will occur, you need to do the following (using data from the previous example):

1. Determine your total fixed costs:
    - Fixed costs = $240 salaries $40 advertising $20 table = $300
2. Identify your variable costs on a per-unit basis:
    - Variable cost per unit = $6 ($1 for the treasure chest and $5 for the toys)
3. Determine your **contribution margin** per unit: selling price per unit—variable cost per unit:
    - Contribution margin = $10 selling price—$6 variable cost per unit = $4
4. Calculate your breakeven point in units: fixed costs / contribution margin per unit:
    - Breakeven in units = $300 fixed costs / $4 contribution margin per unit = 75 units

Your calculation means that if you sell 75 units, you'll end up with zero profit (or loss) and will exactly break even. To test your calculation, you can prepare a what-if income statement for
75 units in sales (your breakeven number). The resulting statement is shown in Figure 17.9.

Of course you want to do better than just break even, so you could modify this analysis to a targeted level of profit by adding that amount to your fixed costs and repeating the calculation. Breakeven analysis is rather handy. It enables you to determine the level of sales that you must reach to avoid losing money and the level of sales that you have to reach to earn a certain profit. Such information will be vital to planning your business.

Figure 17.9: Stress-Buster's Breakeven Income Statement

Stress-Buster Company Income Statement Month Ended September 30, 2020 (at break even level of sales=75 units)		
Sales (75 x $10.00)		$750
Less cost of goods sold (75 x $6)		$450
Gross profit ($75x ($10 – $6))		$300
Less operating expenses		
Salaries	$240	
Advertising	$40	
Table rental	$20	
	$300	
Net income (Profit) ($300-$300)		**$0**

Financial Statement Analysis

Now that you know a bit about financial statements, we'll spend a little time talking about they're used to help owners, managers, investors, and creditors assess a firm's performance and financial strength. You can glean a wealth of information from financial statements, but first you need to learn a few basic principles for "unlocking" it.

Types of Financing Used by Companies

Before we go any further, let's outline two basic forms of financing—i.e., how do companies get the money they need in order to operate? One way is to borrow the money, which is known as *debt financing*. A business might take a loan from a commercial bank, or it might issue bonds which pay a particular rate of interest over a set period of time. At the end of the life of the bond, the borrower would repay the *principal*, i.e., the amount borrowed, to the holders of those bonds. Another form of financing would be to sell an ownership stake in the company, which is known as *equity financing*. Many business owners are reluctant to part with an ownership

stake in the company because they then have to share the profits with those who have purchased a share of the company. However, lenders will only provide so much financing before they begin to get concerned about the borrower's ability to repay, so in practice, most businesses use some combination of debt and equity financing to fund the operations of the company.

Trend Analysis from the Income Statement

Now let's look at some of the things we can learn from analyzing financial statements. Figure 17.10 is an abbreviated financial statement for Apple for 2014 taken directly from their website. You will note that instead of showing only the current year's results, the company has shown data for the prior two years as well.

From this relatively simple exhibit, considerable information about Apple's performance can be obtained. For example:

- Apple sales grew at 6.95 percent from 2013 to 2014, not bad for a company with such a large base of sales already, but certainly not the rapid-growth company it once was.
- Net income as a percent of sales (a ratio also known as return on sales) was 21.6 percent—or in other words, for every $5 in sales, Apple turned more than $1 of it into profit. That is substantial!

Many other calculations are possible from Apple's data, and we will look at a few more as we explore ratio analysis.

Figure 17.10: Apple Statement of Operations, 2019. **(In millions, except number of shares which are reflected in thousands and per share amounts)**

Year ended	September 30, 2017	September 29, 2018	September 28, 2019
Net sales	$229,234	$265,595	$260,174
Cost of sales	$141,048	$163,756	$161,782
Gross margin	$88,186	$101,839	$98,392
Operating expenses:			
Research and development	$11,581	$14,236	$16,217
Selling, general and administrative	$15,261	$16,705	$18,245
Total operating expenses	$26,842	$30,941	$34,462
Operating income	$61,344	$70,898	$63,930
Other income/(expense), net	$2,745	$2,005	$1,807
Income before provision for income:			
Taxes	$64,089	$72,903	$65,737
Provision for income taxes	$15,738	$13,372	$10,481
Net income	$48,351	$59,531	$55,256
Earnings per share:			
Basic	$9.27	$12.01	$11.97
Diluted	$9.21	$11.91	$11.89
Shares used in computing earnings per share:			
Basic	$5,217,242	$4,955,377	$4,617,834
Diluted	$5,251,692	$5,000,109	$4,648,913
Cash dividends declared per common share:	$2.4	$2.72	$3.0

Ratio Analysis

How do you compare Apple's financial results with those of other companies in your industry or with the other companies whose stock is available to investors? And what about your balance sheet? Are there relationships on this statement that also warrant investigation? These issues can be explored by using **ratio analysis**, a technique for evaluating a company's financial performance.

Remember that a ratio is just one number divided by another, with the result expressing the relationship between the two numbers. It's hard to learn much from just one ratio, or even a number of ratios covering the same period. Rather, the deeper value in ratio analysis lies in looking at the trend of ratios over time and in comparing the ratios for several time periods with those of other companies. There are a number of different ways to categorize financial ratios.

Here's one set of categories:

- **Profitability ratios** tell you how much profit is made relative to the amount invested (return on investment) or the amount sold (return on sales).
- **Liquidity ratios** tell you how well positioned a company is to pay its bills in the near term. Liquidity refers to how quickly an asset can be turned into cash. For example, share of stock is substantially more liquid than a building or a machine.
- **Debt ratios** look at how much borrowing a company has done in order to finance the operations of the business. The more borrowing, the more risk a company has taken on, and so the less likely it would be for new lenders to approve loan applications.
- **Efficiency ratios** tell you how well your assets are being managed.

We could employ many different ratios, but we'll focus on a few key examples.

Profitability Ratios

Earlier we looked at the **return on sales** for Apple. Another profitability ratio on which the financial markets focus is **earnings per share**, also known as EPS. This ratio divides net income by the number of shares of stock outstanding. According to the earlier exhibit, Apple increased its EPS from $5.72 in 2013 to $6.49 in 2014, which indicates growth of about 13 percent—excellent for a company that is already among the world's largest. Well-paid analysts will spend hours to understand how these results were achieved every time Apple issues new financial statements.

Liquidity Ratios

Liquidity ratios are one element of measuring the financial strength of a company. They assess its ability to pay its current bills. A key liquidity ratio is called the **current ratio**. It simply examines the relationship between a company's **current assets** and its **current liabilities**. On September 27, 2014 (remember that balance sheets reflect a point in time), Apple had $68.5 billion in current assets and $63.4 billion in current liabilities. Simply, what this means is that Apple has more money on hand than they need to pay their bills. When a company has a current ratio greater than one, they are in good shape to pay their bills; companies selling to Apple on credit would not need to worry that it is likely to run out of money.

Figure 17.11: Apple Balance Sheet, 2019. **(In millions, except number of shares which are reflected in thousands and par value)**

Year Ended	September 29, 2018	September 28, 2019
	ASSETS	
Current Assets:		
Cash and cash equivalents	25,913	48,844
Marketable securities	40,388	51,713
Accounts receivable, net	23,186	22,926
Inventories	3,956	4,106
Vendor non-trade receivables	25,809	22,878
Other current assets	12,087	12,352
Total current assets	131,339	162,819
Non-current Assets:		
Marketable securities	170,799	105,341
Property, plant and equipment, net	41,304	37,378
Other non-current assets	22,283	32,978
Total non-current assets	234,386	175,697
Total assets	**365,725**	**338,516**

Figure 17.11 (continued): Apple Balance Sheet, 2019. **(In millions, except number of shares which are reflected in thousands and par value)**

Year Ended	September 29, 2018	September 28, 2019
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable	55,888	46,236
Other current liabilities	33,327	37,720
Deferred revenue	5,966	5,522
Commercial paper	11,964	5,980
Term debt	8,784	10,260
Total current liabilities	115,929	105,718
Non-current liabilities:		
Term debt	93,735	91,807
Other non-current liabilities	48,914	50,503
Total non-current liabilities	142,649	142,310
Total liabilities	258,578	248,028
Commitments and contingencies		
Shareholders' equity		
Common stock and additional paid-in capital, $0.00001 par value: 12,600,000 shares authorized; 4,443,236 and 4,754,986 shares issued and outstanding, respectively	40,201	45,174
Retained earnings	70,400	45,898
Accumulated other comprehensive income/(loss)	(3,454)	(584)
Total shareholders' equity	107,147	90,488
Total liabilities and shareholders' equity	**365,725**	**338,516**

Apple's current ratio:

$$\frac{\$68.5\text{Billion}}{\$63.4\text{Billion}} = 1.08 > 1$$

Now, let's look quickly at something that is not part of the ratio; look down one line on the balance sheet to long-term marketable securities and see that Apple owns $130.2 billion. While they are long term and so not part of the current ratio, these securities are still easily convertible to cash. So Apple has far more cushion than the current ratio reflects, even though it reflected a healthy financial position already.

Debt Ratios

Apple's debt to equity ratio:

$$\frac{\$120.3\text{Billion}}{\$111.5\text{Billion}} = 1.08$$

A key debt ratio, which tells us how the company is financed, is the **debt-to-equity ratio**, which calculates the relationship between funds acquired from creditors (**debt**) and funds invested by owners (**equity**). For this ratio calculation, we use Apple's *total liabilities*, not just the line on the balance sheet that says long-term debt, because in effect, Apple is borrowing from those who it owes but has not yet paid. Apple's total liabilities at the end of its 2014 fiscal year were $120.3 billion versus owner's equity of $111.5 billion, a ratio of 1.08, which means Apple has borrowed more than it has invested in the business.

To some investors, that high level of debt might seem alarming. But remember that Apple has $130.2 billion invested in marketable securities. If it wished to do so, Apple could sell some of those securities and pay down its debts, thus improving its ratio. It's likely that anyone thinking about lending money to Apple and seeing these figures would be confident that Apple has the ability to pay back what they borrow.

Efficiency and Effectiveness Ratios

There are many more ratios which we could apply to Apple to more completely understand its performance. Yet going deeper into ratios would be beyond the scope of an introductory business course. If you continue your study of business, you will get ample exposure to these ratios in your accounting and finance courses. So we'll leave the rest for another day.

Check Your Understanding with an Online Quiz

https://pressbooks.lib.vt.edu/fundamentalsofbusiness3e/?p=174

Key Takeaways

- **Accounting** is the process of measuring and summarizing business activities, interpreting financial information, and communicating the results to management and other decision makers.
- **Managerial accounting** deals with information produced for internal users, while **financial accounting** deals with external reporting.

- The **income statement** captures sales and expenses over a period of time and shows how much a firm made or lost in that period.
- The **balance sheet** reflects the financial position of a firm at a given point in time, including its assets, liabilities, and owner's equity. It is based on the following equation: assets – liabilities = owner's equity.
- **Breakeven analysis** is a technique used to determine the level of sales needed to break even—to operate at a sales level at which you have neither profit nor loss.
- **Ratio analysis** is used to assess a company's performance and financial condition over time and to compare one company to similar companies or to an overall industry.
- Categories of ratios include **profitability ratios**, **liquidity ratios**, **debt ratios**, and **efficiency and effectiveness ratios**.

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Figure 17.1: طاها. "Amazon Towers 1-3." Wikimedia Commons. CC BY-AS 4.0. Retrieved from: https://commons.wikimedia.org/wiki/File:AmazonTowers1-3.jpg

Figure 17.2: Verry. "Female." Noun Project Inc. CC BY 4.0. Retrieved from: https://thenounproject.com/term/female/2788855; Chrystina Angeline. "Manager." Noun Project Inc. CC BY 4.0. Retrieved from: https://thenounproject.com/search/?q=manager&i=1813155

Figure 17.3: Medill DC (2011). "Medal of Freedom Ceremony." Flickr. CC BY 2.0. Retrieved and adapted from: https://www.flickr.com/photos/medilldc/5448739443/in/photostream/

Figure 17.4: Verry. "Female." Noun Project Inc. CC BY 4.0. Retrieved from: https://thenounproject.com/term/female/2788855; Chrystina Angeline. "Manager." Noun Project Inc. CC BY 4.0. Retrieved from: https://thenounproject.com/search/?q=manager&i=2392337

Figure 17.5: GDJ (2015). "Coffee Shop Storefront." Openclipart. Public Domain. Retrieved from: https://openclipart.org/detail/226162/coffee-shop-storefront

Figure 17.10: "Apple Statement of Operations, 2019." Data Retrieved from: https://s2.q4cdn.com/470004039/files/doc_financials/2019/ar/_10-K-2019-(As-Filed).pdf

Figure 17.11: "Apple Balance Sheet, 2019." Data Retrieved from: https://s2.q4cdn.com/470004039/files/doc_financials/2019/ar/_10-K-2019-(As-Filed).pdf

Notes

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