Financial Statements and Cash Flow 2

OPENING CASE

When a company announces a "write-off," that frequently means that the value of the company's assets has declined. For example, in July 2015, Microsoft announced that it would write off $7.6 billion related to its purchase of Nokia's phone business the previous year. What made the write-off interesting was that Microsoft had only paid $7.2 billion for the phone business. The oil business was also hit hard in 2015 as the five largest publicly traded oil companies working in Wyoming wrote off a combined $41 billion for the first nine months of the year. These write-offs were due to the declining value of oil production facilities in that state.

While Microsoft's write-off is large, the record holder is media giant Time Warner, which took a charge of $45.5 billion in the fourth quarter of 2002. This enormous write-off followed an earlier, even larger, charge of $54 billion.

So, did the stockholders in these companies lose billions of dollars when these assets were written off? Fortunately for them, the answer is probably not. Understanding why ultimately leads us to the main subject of this chapter, that all-important substance known as *cash flow.*

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2.1 THE BALANCE SHEET

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The **balance sheet** is an accountant's snapshot of the firm's accounting value on a particular date, as though the firm stood momentarily still. The balance sheet has two sides: On the left are the *assets* and on the right are the *liabilities* and *stockholders' equity.* The balance sheet states what the firm owns and how it is financed. The accounting definition that underlies the balance sheet and describes the balance is

$$\text{Assets} \equiv \text{Liabilities} + \text{Stockholders' equity} \qquad [2.1]$$

We have put a three-line equality in the balance equation to indicate that it must always hold, by definition. In fact, the stockholders' equity is *defined* to be the difference between the assets and the liabilities of the firm. In principle, equity is what the stockholders would have remaining after the firm discharged its obligations.

Table 2.1 gives the 2016 and 2017 balance sheets for the fictitious U.S. Composite Corporation. The assets in the balance sheet are listed in order by the length of time it normally would take an ongoing firm to convert them

to cash. The asset side depends on the nature of the business and how management chooses to conduct it. Management must make decisions about cash versus marketable securities, credit versus cash sales, whether

to make or buy commodities, whether to lease or purchase items, the types of business in which to engage, and so on.

Two excellent sources for company financial information are finance.yahoo.com and money.cnn.com.

TABLE 2.1 The Balance Sheet of the U.S. Composite Corporation

U.S. COMPOSITE CORPORATION
Balance Sheet
2016 and 2017
(in $ millions)

ASSETS	2016	2017	LIABILITIES (DEBT) AND STOCKHOLDERS' EQUITY	2016	2017
Current assets:			Current liabilities:		
Cash and equivalents	$ 157	$ 198	Accounts payable	$ 455	$ 486
Accounts receivable	270	294	Total current liabilities	$ 455	$ 486
Inventories	280	269			
Total current assets	$ 707	$ 761	Long-term liabilities:		
			Deferred taxes	$ 104	$ 117
Fixed assets:			Long-term debt*	458	471
Property, plant, and equipment	$ 1,274	$ 1,423	Total long-term liabilities	$ 562	$ 588
Less accumulated depreciation	460	550			
Net property, plant, and equipment	$ 814	$ 873	Stockholders' equity:		
Intangible assets and others	221	245	Preferred stock	$ 39	$ 39
Total fixed assets	$ 1,035	$ 1,118	Common stock ($1 par value)	32	55
			Capital surplus	327	347
			Accumulated retained earnings	347	390
			Less treasury stock†	20	26
			Total equity	$ 725	$ 805
Total assets	$ 1,742	$ 1,879	Total liabilities and stockholders' equity‡	$ 1,742	$ 1,879

* Long-term debt rose by $471 million − 458 million = $13 million. This is the difference between $86 million new debt and $73 million in retirement of old debt.

† Treasury stock rose by $6 million. This reflects the repurchase of $6 million of U.S. Composite's company stock.

‡ U.S. Composite reports $43 million in new equity. The company issued 23 million shares at a price of $1.87. The par value of common stock increased by $23 million, and capital surplus increased by $20 million.

The liabilities and stockholders' equity side reflects the types and proportions of financing, which depend on management's choice of capital structure, as between debt and equity and between current debt and long-term debt. The liabilities and the stockholders' equity are listed in the order in which they would typically be paid over time.

When analyzing a balance sheet, the financial manager should be aware of three concerns: accounting liquidity, debt versus equity, and value versus cost.

Accounting Liquidity

Accounting liquidity refers to the ease and quickness with which assets can be converted to cash. *Current assets* are the most liquid and include cash and those assets that will be turned into cash within a year from the date of the balance sheet. *Accounts receivable* are amounts not yet collected from customers for goods or services sold to them (after adjustment for potential bad debts). *Inventory* is composed of raw materials to be used in production, work in process, and finished goods. *Fixed assets* are the least liquid kind of assets. Tangible fixed assets include

property, plant, and equipment. These assets do not convert to cash from normal business activity, and they are not usually used to pay expenses such as payroll.

Annual and quarterly financial statements for most public U.S. corporations can be found in the EDGAR database at www.sec.gov.

EXAMPLE 2.1

Market Value versus Book Value

The Cooney Corporation has fixed assets with a book value of $700 and an appraised market value of about $1,000. Net working capital is $400 on the books, but approximately $600 would be realized if all the current accounts were liquidated. Cooney has $500 in long-term debt, both book value and market value. What is the book value of the equity? What is the market value?

We can construct two simplified balance sheets, one in accounting (book value) terms and one in economic (market value) terms:

COONEY CORPORATION
Balance Sheets
Market Value versus Book Value

	Assets		Liabilities and Shareholders' Equity		
	BOOK	MARKET		BOOK	MARKET
Net working capital	$ 400	$ 600	Long-term debt	$ 500	$ 500
Net fixed assets	700	1,000	Shareholders' equity	600	1,100
	$1,100	$1,600		$1,100	$1,600

In this example, shareholders' equity is actually worth almost twice as much as what is shown on the books. The distinction between book and market values is important precisely because book values can be so different from true economic value.

2.2 THE INCOME STATEMENT

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The **income statement** measures performance over a specific period of time, say, a year. The accounting definition of income is

$$\text{Revenue} - \text{Expenses} \equiv \text{Income} \quad [2.3]$$

If the balance sheet is like a snapshot, the income statement is like a video recording of what the firm did between two snapshots. Table 2.2 gives the income statement for the U.S. Composite Corporation for 2017.

The income statement usually includes several sections. The operations section reports the firm's revenues and expenses from principal operations. One number of particular importance is earnings before interest and taxes (EBIT), which summarizes earnings before taxes and financing costs. Among other things, the nonoperating section of the income statement includes all financing costs, such as interest expense. Usually a second section reports as a separate item the amount of taxes levied on income. The last item on the income statement is the bottom line, or net income. Net income is frequently expressed per share of common stock, that is, earnings per share.

When analyzing an income statement, the financial manager should keep in mind GAAP, noncash items, time, and costs.

Generally Accepted Accounting Principles

Revenue is recognized on an income statement when the earnings process is virtually completed and an exchange of goods or services has occurred. Therefore, the unrealized appreciation from owning property will not be recognized as income. This provides a device for smoothing income by selling appreciated property at convenient times. For example, if the firm owns a tree farm that has doubled in value, then, in a year when its earnings from other businesses are down, it can raise overall earnings by selling some trees.

estimate of the cost of equipment used up in the production process. For example, suppose an asset with a five-year life and no resale value is purchased for $1,000. According to accountants, the $1,000 cost must be expensed over the useful life of the asset. If straight-line depreciation is used, there will be five equal installments and $200 of depreciation expense will be incurred each year. From a finance perspective, the cost of the asset is the actual negative cash flow incurred when the asset is acquired (that is, $1,000, *not* the accountant's smoothed $200-per-year depreciation expense).

Another noncash expense is *deferred taxes.* Deferred taxes result from differences between accounting income and true taxable income.[4] Notice that the accounting tax shown on the income statement for the U.S. Composite Corporation is $84 million. It can be broken down as current taxes and deferred taxes. The current tax portion is actually sent to the tax authorities (for example, the Internal Revenue Service). The deferred tax portion is not. However, the theory is that if taxable income is less than accounting income in the

current year, it will be more than accounting income later on. Consequently, the taxes that are not paid today will have to be paid in the future, and they represent a liability of the firm. This shows up on the balance sheet as deferred tax liability. From the cash flow perspective, though, deferred tax is not a cash outflow.

In practice, the difference between cash flows and accounting income can be quite dramatic, so it is important to understand the difference. For example, in January 2016, United States Steel Corporation reported a loss of $1.5 billion for the 2015 year. That sounds bad, but U.S. Steel reported a *positive* cash flow of $359 million for the year! In large part, the loss was due to charges attributable to restructuring and other strategic actions.

Time and Costs

It is often useful to think of all of future time as having two distinct parts, the *short run* and the *long run.* The short run is that period of time in which certain equipment, resources, and commitments of the firm are fixed; but the time is long enough for the firm to vary its output by using more labor and raw materials. The short run is not a precise period of time that will be the same for all industries. However, all firms making decisions in the short run have some fixed costs, that is, costs that will not change because of fixed commitments. In real business activity, examples of fixed costs are bond interest, overhead, and property taxes. Costs that are not fixed are variable. Variable costs change as the output of the firm changes; some examples are raw materials and wages for laborers on the production line.

In the long run, all costs are variable. Financial accountants do not distinguish between variable costs and fixed costs. Instead, accounting costs usually fit into a classification that distinguishes product costs from period costs. Product costs are the total production costs incurred during a period—raw materials, direct labor, and manufacturing overhead—and are reported on the income statement as cost of goods sold. Both variable and fixed costs are included in product costs. Period costs are costs that are allocated to a time period; they are called *selling, general,* and *administrative expenses.* One period cost would be the company president's salary.

2.3 TAXES

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Taxes can be one of the largest cash outflows that a firm experiences. For example, for the fiscal year 2015, Walmart's earnings before taxes were about $24.8 billion. Its tax bill, including all taxes paid worldwide, was a whopping $7.99 billion, or about 30.2 percent of its pretax earnings. The size of the tax bill is determined through the tax code, an often amended set of rules. In this section, we examine corporate tax rates and how taxes are calculated.

If the various rules of taxation seem a little bizarre or convoluted to you, keep in mind that the tax code is the result of political, not economic, forces. As a result, there is no reason why it has to make economic sense.

Corporate Tax Rates

Corporate tax rates in effect for 2016 are shown in Table 2.3. A peculiar feature of taxation instituted by the Tax Reform Act of 1986 and expanded in the 1993 Omnibus Budget Reconciliation Act is that corporate tax rates are not strictly increasing. As shown, corporate tax rates rise from 15 percent to 39 percent, but they drop back to 34 percent on income over $335,000. They then rise to 38 percent and subsequently fall to 35 percent.

According to the originators of the current tax rules, there are only four corporate rates: 15 percent, 25 percent, 34 percent, and 35 percent. The 38 and 39 percent brackets arise because of "surcharges" applied on top of the 34 and 35 percent rates. A tax is a tax is a tax, however, so there are really six corporate tax brackets, as we have shown.

TABLE 2.3
Corporate Tax Rates

TAXABLE INCOME	TAX RATE
$ 0–50,000	15%
50,001–75,000	25
75,001–100,000	34
100,001–335,000	39
335,001–10,000,000	34
10,000,001–15,000,000	35
15,000,001–18,333,333	38
18,333,334+	35

Average versus Marginal Tax Rates

In making financial decisions, it is frequently important to distinguish between average and marginal tax rates. Your **average tax rate** is your tax bill divided by your taxable income, in other words, the percentage of your income that goes to pay taxes. Your **marginal tax rate** is the tax you would pay (in percent) if you earned one more dollar. The percentage tax rates shown in Table 2.3 are all marginal rates. Put another way, the tax rates apply to the part of income in the indicated range only, not all income.

The difference between average and marginal tax rates can best be illustrated with a simple example. Suppose our corporation has a taxable income of $200,000. What is the tax bill? Using Table 2.3, we can figure our tax bill as:

.15($ 50,000)			=	$ 7,500
.25($ 75,000	–	50,000)	=	6,250
.34($100,000	–	75,000)	=	8,500
.39($200,000	–	100,000)	=	39,000
				$ 61,250

Our total tax is thus $61,250.

In our example, what is the average tax rate? We had a taxable income of $200,000 and a tax bill of $61,250, so the average tax rate is $61,250/200,000 = 30.625%. What is the marginal tax rate? If we made one more dollar, the tax on that dollar would be 39 cents, so our marginal rate is 39 percent.

The IRS has a great website! (www.irs.gov)

EXAMPLE 2.2

Deep in the Heart of Taxes

Algernon, Inc., has a taxable income of $85,000. What is its tax bill? What is its average tax rate? Its marginal tax rate?

From Table 2.3, we see that the tax rate applied to the first $50,000 is 15 percent; the rate applied to the next $25,000 is 25 percent, and the rate applied after that up to $100,000 is 34 percent. So Algernon must pay .15 × $50,000 + .25 × 25,000 + .34 × (85,000 – 75,000) = $17,150. The average tax rate is thus $17,150/85,000 = 20.18%. The marginal rate is 34 percent because Algernon's taxes would rise by 34 cents if it had another dollar in taxable income.

Table 2.4 summarizes some different taxable incomes, marginal tax rates, and average tax rates for corporations. Notice how the average and marginal tax rates come together at 35 percent.

With a *flat-rate* tax, there is only one tax rate, so the rate is the same for all income levels. With such a tax, the marginal tax rate is always the same as the average tax rate. As

it stands now, corporate taxation in the United States is based on a modified flat-rate tax, which becomes a true flat rate for the highest incomes. page 26

TABLE 2.4
Corporate Taxes and Tax Rates

(1) TAXABLE INCOME	(2) MARGINAL TAX RATE	(3) TOTAL TAX	(3)/(1) AVERAGE TAX RATE
$ 45,000	15%	$ 6,750	15.00%
70,000	25	12,500	17.86
95,000	34	20,550	21.63
250,000	39	80,750	32.30
1,000,000	34	340,000	34.00
17,500,000	38	6,100,000	34.86
50,000,000	35	17,500,000	35.00
100,000,000	35	35,000,00	35.00

In looking at Table 2.4, notice that the more a corporation makes, the greater is the percentage of taxable income paid in taxes. Put another way, under current tax law, the average tax rate never goes down, even though the marginal tax rate does. As illustrated, for corporations, average tax rates begin at 15 percent and rise to a maximum of 35 percent.

It will normally be the marginal tax rate that is relevant for financial decision making. The reason is that any new cash flows will be taxed at that marginal rate. Because financial decisions usually involve new cash flows or changes in existing ones, this rate will tell us the marginal effect of a decision on our tax bill.

There is one last thing to notice about the tax code as it affects corporations. It's easy to verify that the corporate tax bill is just a flat 35 percent of taxable income if our taxable income is more than $18.33 million. Also, for the many midsize corporations with taxable incomes in the range of $335,000 to $10,000,000, the tax rate is a flat 34 percent. Because we will normally be talking about large corporations, you can assume that the average and marginal tax rates are 35 percent unless we explicitly say otherwise. We should note that the tax rates we have discussed in this section relate to federal taxes only. Overall tax rates can be higher once state, local, and any other taxes are considered.

With the increasing globalization of business, accounting standards need to be more globally similar. In recent years, U.S. accounting standards have increasingly become more closely tied to International Financial Reporting Standards (IFRS). In particular, the Financial Accounting Standards Board (in charge of U.S. GAAP) and the International Accounting Standards Board (IASB, the entity in charge of IFRS), had been working toward a convergence of policies, although it appears that the convergence has been tabled, at least for now.

We should note that we have simplified the U.S. tax code in our discussions. In reality, the tax code is much more complex, and it is riddled with various tax deductions and loopholes allowed for certain industries. As a result, the average corporate tax rate can be far from 35 percent for many companies. Table 2.5 displays average tax rates for various industries.

TABLE 2.5
Average Tax Rates in Various Industries

INDUSTRY	NUMBER OF COMPANIES	AVERAGE TAX RATE
Electric utilities (Eastern U.S.)	24	33.8%
Trucking	33	32.7

Railroad	15	27.4
Securities brokerage	30	20.5
Banking	481	17.5
Medical supplies	264	11.2
Internet	239	5.9
Pharmaceutical	337	5.6
Biotechnology	121	4.5

For more information about IFRS, check out the website www.ifrs.org.

FINANCE MATTERS

WHAT IS WARREN BUFFETT'S TAX RATE?

In 2011, famed investor Warren Buffett, one of the wealthiest individuals in the world, created a stir when he publicly stated that his tax rate was lower than the tax rate paid by his secretary. The previous year, Buffett's gross income was about $63 million, on which he paid only a 15 percent tax rate. His secretary (with a substantially lower income) had a 31 percent marginal tax rate. Also in 2011, when Republican presidential contender Mitt Romney released his income taxes, it was revealed that he too only paid an income tax rate of 15 percent on his $21 million annual income.

Why do Buffett's and Romney's tax rates appear so low? Currently, under the U.S. tax system, wage income is taxed at a much higher rate than dividends and long-term capital gains. In fact, in the highest tax bracket, wage income is taxed at 35 percent, while dividends and long-term capital gains are taxed at 15 percent. Most of Buffett's and Romney's annual income comes from their investments, not wages, hence the 15 percent rates.

So do rich guys get all the (tax) breaks? U.S. President Barack Obama seemed to think so. In his 2012 State of the Union address, with Buffett's secretary Debbie Bosanek joining First Lady Michelle Obama in her box as a special guest, he called for the creation of a "Buffett tax." As he described it, such a tax would be an extra tax paid by very high-income individuals. Maybe President Obama was angry about the fact that he and the First Lady paid $1.7 million in federal taxes on their joint income of $5.5 million in 2009, implying an average tax rate of 31 percent.

Of course, you know that income received from dividends is already taxed. Dividends are paid from corporate income, which is taxed at 35 percent for larger dividend-paying companies. Effectively, any tax on dividends is double taxation on that money. The tax code realizes this. The lower tax rate on dividends lowers the double tax rate. The same thing is true for capital gains; taxes are paid on the money before the investment is made.

In Buffett's case, most of his wealth stems from his approximately 30 percent ownership of Berkshire Hathaway Corporation. Based on its 23,000 (no typo!) page tax return, Berkshire's 2014 corporate tax bill was $7.9 billion on income of $28.1 billion, a 28 percent average rate. Buffett's share of Berkshire's tax bill therefore amounts to something on the order of $2.37 billion! If we include Berkshire's corporate taxes, Buffett's average tax rate is more like 28 + 15 = 43 percent.

To give another example, consider the situation described by N. Gregory Mankiw, the well-known economist and textbook author. Mankiw considers taking a writing job for $1,000. He figures that if he earns an 8 percent return and there are no taxes, he would be able to leave his children about $10,000 in 30 years when he passes on. However, because of federal, state, and Medicare taxes, he would only receive about $523 after taxes today. And because of corporate taxes and personal income taxes, his return on the same investment would only be about 4 percent, which will result in a balance of $1,700 in 30 years. When he dies, his account will be taxed using the marginal estate tax rate, which is as high as 55 percent. As a result, his children will receive only about $1,000, implying a tax rate of 90 percent!

As you can see, the average tax rate ranges from 33.8 percent for electric utilities to 4.5 percent for biotechnology firms. For a discussion of one of the complexities of the tax code, see the nearby *Finance Matters* box.

2.4 NET WORKING CAPITAL

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Net working capital is current assets minus current liabilities. Net working capital is positive when current assets are greater than current liabilities. This means the cash that will become available over the next 12 months will be greater than the cash that must be paid

out. The net working capital of the U.S. Composite Corporation is $275 million in 2017 and $252 million in 2016: page 28

	Current assets ($millons)	–	Current liabilities ($millons)	=	Net working capital ($millons)
2017	$761	–	$486	=	$275
2016	707	–	455	=	252

In addition to investing in fixed assets (i.e., capital spending), a firm can invest in net working capital. This is called the **change in net working capital**. The change in net working capital in 2017 is the difference between the net working capital in 2017 and 2016; that is, $275 million – 252 million = $23 million. The change in net working capital is usually positive in a growing firm.[5]

2.5 CASH FLOW OF THE FIRM

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Perhaps the most important item that can be extracted from financial statements is the actual **cash flow** of the firm. There is an official accounting statement called the *statement of cash flows.* This statement helps to explain the change in accounting cash and equivalents, which for U.S. Composite is $33 million in 2017. (See Section 2.6.) Notice in Table 2.1 that cash and equivalents increase from $157 million in 2016 to $198 million in 2017. However, we will look at cash flow from a different perspective, the perspective of finance. In finance, the value of the firm is its ability to generate cash flow. (We will talk more about cash flow in Chapter 8.)

The first point we should mention is that cash flow is not the same as net working capital. For example, increasing inventory requires using cash. Because both inventories and cash are current assets, this does not affect net working capital. In this case, an increase in a particular net working capital account, such as inventory, is associated with decreasing cash flow.

Just as we established that the value of a firm's assets is always equal to the sum of the value of the liabilities and the value of the equity, the cash flows generated from the firm's assets (that is, its operating activities), CF(A), must equal the cash flows it can distribute to the firm's creditors, CF(B), and equity investors, CF(S):

$$\text{CF}(A) = \text{CF}(B) + \text{CF}(S) \qquad [2.4]$$

The first step in determining the cash flow of the firm is to figure out the *operating cash flow.* As can be seen in Table 2.6, operating cash flow is the cash flow generated by business activities, including sales of goods and services. Operating cash flow reflects tax payments, but not financing, capital spending, or changes in net working capital.

	IN $ MILLIONS
Earnings before interest and taxes	$219
Depreciation	90
Current taxes	−71
Operating cash flow	$238

TABLE 2.6 Cash Flow of the U.S. Composite Corporation

U.S. COMPOSITE CORPORATION
Cash Flow 2017
(in $ millions)

Distributable Cash Flow of the Firm	
Operating cash flow	$ 238
(Earnings before interest and taxes plus depreciation minus taxes)	
Capital spending	−173
(Acquisitions of fixed assets minus sales of fixed assets)	
Additions to net working capital	−23
Total	$ 42
Cash Flow to Investors in the Firm	
Debt	$ 36
(Interest plus retirement of debt minus long-term debt financing)	
Equity	6
(Dividends plus repurchase of equity minus new equity financing)	
Total	$ 42

Another important component of cash flow involves *changes in fixed assets.* For example, when U.S. Composite sold its power systems subsidiary in 2017, it generated $25 million in cash flow. The net change in fixed assets equals the acquisition of fixed assets minus sales of fixed assets. The result is the cash flow used for capital spending:

Acquisition of fixed assets	$198	
Sales of fixed assets	−25	
Capital spending	$173	($149 + 24 = Increase in property, plant, and equipment + Increase in intangible assets)

We can also calculate capital spending as

$$\begin{aligned}\text{Capital spending} &= \text{Ending net fixed assets} - \text{Beginning net fixed assets} \\ &\quad + \text{Depreciation} \\ &= \$1{,}118 - 1{,}035 + 90 \\ &= \$173\end{aligned} \qquad \textbf{2.5}$$

Cash flows are also used for making investments in net working capital. In U.S. Composite Corporation in 2017, *additions to net working capital* are

Additions to net working capital	$23

Note that this $23 is the change in net working capital we previously calculated.

Total cash flows generated by the firm's assets are the sum of

Operating cash flow	$ 238
Capital spending	−173
Additions to net working capital	−23
Total distributable cash flow of the firm	$ 42

The total outgoing cash flow of the firm can be separated into cash flow distributed to creditors and cash flow distributed to stockholders. The cash flow distributed to creditors represents a regrouping of the data in Table 2.6 and an explicit recording of interest

expense. Creditors are paid an amount generally referred to as *debt service.* Debt service is interest payments plus repayments of principal (that is, retirement of debt). page 30

An important source of cash flow is the sale of new debt. U.S. Composite's long-term debt increased by $13 million (the difference between $86 million in new debt and $73 million in retirement of old debt).[6] Thus, an increase in long-term debt is the net effect of new borrowing and repayment of maturing obligations plus interest expense.

CASH FLOW PAID TO CREDITORS
(in $ millions)

Interest	$ 49
Retirement of debt	73
Debt service	122
Proceeds from long-term debt sales	−86
Total	$ 36

Cash flow distributed to creditors can also be calculated as

$$\begin{aligned}\text{Cash flow paid to creditors} &= \text{Interest paid} - \text{Net new borrowing} \\ &= \text{Interest paid} - (\text{Ending long-term debt} \\ &\quad - \text{Beginning long-term debt}) \\ &= \$49 - (471 - 458) \\ &= \$36\end{aligned} \quad [2.6]$$

Cash flow of the firm also is distributed to the stockholders. It is the net effect of paying dividends plus repurchasing outstanding shares of stock and issuing new shares of stock.

CASH FLOW TO STOCKHOLDERS
(in $ millions)

Dividends	$ 43
Repurchase of stock	6
Cash to stockholders	49
Proceeds from new stock issue	−43
Total	$ 6

In general, cash flow to stockholders can be determined as

$$\begin{aligned}\text{Cash flow to stockholders} &= \text{Dividends paid} - \text{Net new equity raised} \\ &= \text{Dividends paid} - (\text{Stock sold} \\ &\quad - \text{Stock repurchased})\end{aligned} \quad [2.7]$$

To determine stock sold, notice that the common stock and capital surplus accounts went up by a combined $23 + 20 = $43, which implies that the company sold $43 million worth of stock. Second, treasury stock went up by $6, indicating that the company bought back $6 million worth of stock. Net new equity is thus $43 − 6 = $37. Dividends paid were $43, so the cash flow to stockholders was

Cash flow to stockholders = $43 – 43 – 6 = $6

which is what we previously calculated.

Some important observations can be drawn from our discussion of cash flow:

1. Several types of cash flow are relevant to understanding the financial situation of the firm. **Operating cash flow**, defined as earnings before interest and depreciation minus taxes, measures the cash generated from operations not counting capital spending or working capital requirements. It is usually positive; a firm is in

trouble if operating cash flow is negative for a long time because the firm is not generating enough cash to pay operating costs. **Total distributable cash flow of the firm** includes adjustments for capital spending and additions to net working capital. It will frequently be negative. When a firm is growing at a rapid rate, the spending on inventory and fixed assets can be higher than cash flow from sales.

•

Net income is not cash flow. The net income of the U.S. Composite Corporation in 2017 was $86 million, whereas cash flow was $42 million. The two numbers are not usually the same. In determining the economic and financial condition of a firm, cash flow is more revealing.

A firm's total cash flow sometimes goes by a different name, **free cash flow**. Of course, there is no such thing as "free" cash (we wish!). Instead, the name refers to cash that the firm is free to distribute to creditors and stockholders because it is not needed for working capital or fixed asset investments. We will stick with "total distributable cash flow of the firm" as our label for this important concept because, in practice, there is some variation in exactly how free cash flow is computed; different users calculate it in different ways. Nonetheless, whenever you hear the phrase "free cash flow," you should understand that what is being discussed is cash flow from assets after adjusting for capital spending and changes in net working capital or something quite similar.

2.6 THE ACCOUNTING STATEMENT OF CASH FLOWS

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As previously mentioned, there is an official accounting statement called the statement of cash flows. This statement helps explain the change in accounting cash, which for U.S. Composite is $33 million in 2017. It is very useful in understanding financial cash flow.

The first step in determining the change in cash is to figure out cash flow from operating activities. This is the cash flow that results from the firm's normal activities producing and selling goods and services. The second step is to make an adjustment for cash flow from investing activities. The final step is to make an adjustment for cash flow from financing activities. Financing activities are the net payments to creditors and owners (excluding interest expense) made during the year.

The three components of the statement of cash flows are determined below.

Cash Flow from Operating Activities

To calculate cash flow from operating activities we start with net income. Net income can be found on the income statement and is equal to $86 million. We now need to add back noncash expenses and adjust for changes in current assets and liabilities (other than cash and notes payable). The result is cash flow from operating activities.

U.S. COMPOSITE CORPORATION
Cash Flow from Operating Activities
2017
(in $ millions)

Net income	$ 86
Depreciation	90
Deferred taxes	13
Change in current assets and liabilities	
Accounts receivable	− 24

Inventories	11
Accounts payable	31
Cash flow from operating activities	$207

Cash Flow from Investing Activities

Cash flow from investing activities involves changes in capital assets: acquisition of fixed assets and sales of fixed assets (i.e., net capital expenditures). The result for U.S. Composite is below:

U.S. COMPOSITE CORPORATION
Cash Flow from Investing Activities
2017
(in $ millions)

Acquisition of fixed assets	−$198
Sales of fixed assets	25
Cash flow from investing activities	−$173

Cash Flow from Financing Activities

Cash flows to and from creditors and owners include changes in equity and debt.

TABLE 2.7 Statement of Consolidated Cash Flows of the U.S. Composite Corporation

U.S. COMPOSITE CORPORATION
Statement of Cash Flows
2017
(in $ millions)

Operations	
Net income	$ 86
Depreciation	90
Deferred taxes	13
Changes in current assets and liabilities	
Accounts receivable	− 24
Inventories	11
Accounts payable	31
Total cash flow from operations	$207
Investing activities	
Acquisition of fixed assets	− $198
Sales of fixed assets	25
Total cash flow from investing activities	− $173
Financing activities	
Retirement of long-term debt	−$ 73
Proceeds from long-term debt sales	86
Dividends	− 43

Repurchase of stock	− 6
Proceeds from new stock issue	43
Total cash flow from financing activities	$ 7
Change in cash (on the balance sheet)	$ 41

U.S. COMPOSITE CORPORATION
Cash Flow from Financing Activities
2017
(in $ millions)

Retirement of long-term debt	−$73
Proceeds from long-term debt sales	86
Dividends	− 43
Repurchase of stock	− 6
Proceeds from new stock issue	43
Cash flow from financing activities	$ 7

The statement of cash flows is the addition of cash flows from operations, cash flows from investing activities, and cash flows from financing activities, and is produced in Table 2.7. When we add all the cash flows together, we get the change in cash on the balance sheet of $33 million.

There is a close relationship between the official accounting statement called the statement of cash flows and the total distributable cash flow of the firm used in finance. Going back to the previous section, you should note a slight conceptual problem here. Interest paid should really go under financing activities, but unfortunately that is not how the accounting is handled. The reason is that interest is deducted as an expense when net income is computed. As a consequence, a primary difference between the accounting cash flow and the cash flow of the firm (see Table 2.6) is interest expense.

SUMMARY AND CONCLUSIONS

Besides introducing you to corporate accounting, the purpose of this chapter has been to teach you how to determine cash flow from the accounting statements of a typical company.

1. Cash flow is generated by the firm and paid to creditors and shareholders. It can be classified as
   a. Cash flow from operations.
   b. Cash flow from changes in fixed assets.
   c. Cash flow from changes in working capital.
2. Calculations of cash flow are not difficult, but they require care and particular attention to detail in properly accounting for noncash expenses such as depreciation and deferred taxes. It is especially important that you do not confuse cash flow with changes in net working capital and net income.

CONCEPT QUESTIONS

1. **Liquidity** What does liquidity measure? Explain the trade-off a firm faces between high liquidity and low liquidity levels.
2. **Accounting and Cash Flows** Why is it that the revenue and cost figures shown on a standard income statement may not be representative of the actual cash inflows and outflows that occurred during the period?
3. **Accounting Statement of Cash Flows** Looking at the accounting statement of cash flows, what does the bottom-line number mean? How useful is this number for analyzing a company?
4. **Cash Flows** How do financial cash flows and the accounting statement of cash flows differ? Which is more useful when analyzing a company?

5. **Book Values versus Market Values** Under standard accounting rules, it is possible for a company's liabilities to exceed its assets. When this occurs, the owners' equity is negative. Can this happen with market values? Why or why not?

6. **Cash Flow from Assets** Suppose a company's cash flow from assets was negative for a particular period. Is this necessarily a good sign or a bad sign?

7. **Operating Cash Flow** Suppose a company's operating cash flow was negative for several years running. Is this necessarily a good sign or a bad sign?

8. **Net Working Capital and Capital Spending** Could a company's change in net working capital be negative in a given year? (*Hint:* Yes.) Explain how this might come about. What about net capital spending?

9. **Cash Flow to Stockholders and Creditors** Could a company's cash flow to stockholders be negative in a given year? (*Hint:* Yes.) Explain how this might come about. What about cash flow to creditors?

10. **Firm Values** Referring back to the Microsoft example used at the beginning of the chapter, note that we suggested that Microsoft's stockholders probably didn't suffer as a result of the reported loss. What do you think was the basis for our conclusion?

QUESTIONS AND PROBLEMS

connect

Basic (Questions 1–10)

1. **Building a Balance Sheet** Burnett, Inc., has current assets of $6,800, net fixed assets of $29,400, current liabilities of $5,400, and long-term debt of $13,100. What is the value of the shareholders' equity account for this firm? How much is net working capital?

2. **Building an Income Statement** Bradds, Inc., has sales of $528,600, costs of $264,400, depreciation expense of $41,700, interest expense of $20,700, and a tax rate of 35 percent. What is the net income for the firm? Suppose the company paid out $27,000 in cash dividends. What is the addition to retained earnings?

3. **Market Values and Book Values** Klingon Cruisers, Inc., purchased new cloaking machinery three years ago for $7 million. The machinery can be sold to the Romulans today for $5.3 million. Klingon's current balance sheet shows net fixed assets of $3.9 million, current liabilities of $1.075 million, and net working capital of $320,000. If all the current accounts were liquidated today, the company would receive $410,000 cash. What is the book value of Klingon's total assets today? What is the sum of the market value of NWC and market value of assets?

4. **Calculating Taxes** The Alexander Co. had $328,500 in taxable income. Using the rates from Table 2.3 in the chapter, calculate the company's income taxes. What is the average tax rate? What is the marginal tax rate?

5. **Calculating OCF** Timsung, Inc., has sales of $30,700, costs of $11,100, depreciation expense of $2,100, and interest expense of $1,140. If the tax rate is 40 percent, what is the operating cash flow, or OCF?

6. **Calculating Net Capital Spending** Busch Driving School's 2016 balance sheet showed net fixed assets of $3.75 million, and the 2017 balance sheet showed net fixed assets of $4.45 million. The company's 2017 income statement showed a depreciation expense of $395,000. What was the company's net capital spending for 2017?

7. **Building a Balance Sheet** The following table presents the long-term liabilities and stockholders' equity of Information Control Corp. one year ago:

Long-term debt	$37,000,000

Preferred stock	2,100,000
Common stock ($1 par value)	8,900,000
Capital surplus	41,000,000
Accumulated retained earnings	75,300,00

During the past year, the company issued 4 million shares of new stock at a total price of $26 million, and issued $9.5 million in new long-term debt. The company generated $15.3 million in net income and paid $3.1 million in dividends. Construct the current balance sheet reflecting the changes that occurred on the company's balance sheet during the year.

8. **Cash Flow to Creditors** The 2016 balance sheet of Maria's Tennis Shop, Inc., showed long-term debt of $2.4 million, and the 2017 balance sheet showed long-term debt of $2.53 million. The 2017 income statement showed an interest expense of $187,000. What was the firm's cash flow to creditors during 2017?

9. **Cash Flow to Stockholders** The 2016 balance sheet of Maria's Tennis Shop, Inc., showed $540,000 in the common stock account and $5.6 million in the additional paid-in surplus account. The 2017 balance sheet showed $595,000 and $6.18 million in the same two accounts, respectively. If the company paid out $270,000 in cash dividends during 2017, what was the cash flow to stockholders for the year?

10. **Calculating Total Cash Flows** Given the information for Maria's Tennis Shop, Inc., in the previous two problems, suppose you also know that the firm's net capital spending for 2017 was $640,000, and that the firm reduced its net working capital investment by $65,000. What was the firm's 2017 operating cash flow, or OCF?

Intermediate (Questions 11–25)

11. **Cash Flows** Ritter Corporation's accountants prepared the following financial statements for year-ends.

RITTER CORPORATION
Income Statement
2017

Revenue	$1,068
Expenses	745
Depreciation	77
EBT	$ 246
Tax	98
Net income	$ 148
Dividends	$ 40

RITTER CORPORATION
Balance Sheets
December 31

	2016	2017
Assets		
Cash	$ 81	$ 93
Other current assets	253	265
Net fixed assets	690	824
Total assets	$1,024	$1,182
Liabilities and Equity		
Accounts payable	$ 295	$ 301

Long-term debt	0	44
Stockholders' equity	729	837
Total liabilities and equity	$1,024	$1, 182

a. Explain the change in cash during the year 2017.
b. Determine the change in net working capital in 2017.
c. Determine the cash flow generated by the firm's assets during the year 2017.

12. Cash Flow Identity Freeman, Inc., reported the following financial statements for the last two years. Construct the cash flow identity for the company. Explain what each number means.

FREEMAN, INC.
2017 Income Statement

Sales	$703,100
Cost of goods sold	329,413
Selling & administrative	153,405
Depreciation	66,513
EBIT	$153,769
Interest	23,280
EBT	$130,489
Taxes	45,671
Net income	$ 84,818
Dividends	15,200
Addition to retained earnings	$ 69,618

FREEMAN, INC.
Balance Sheet as of December 31, 2016

Cash	$ 16,302	Accounts payable	$ 29,342
Accounts receivable	16,849	Long-term debt	165,300
Inventory	23,875	Owners' equity	277,673
Current assets	57,026	Total liabilities and owners' equity	$472,315
Net fixed assets	415,289		
Total assets	$472,315		

FREEMAN, INC.
Balance Sheet as of December 31, 2017

Cash	$ 18,143	Accounts payable	$ 32,978
Accounts receivable	19,527	Long-term debt	$179,400
Inventory	28,614	Owners' equity	$352,218
Current assets	$ 66,284	Total liabilities and owners' equit	$564,596
Net fixed assets	$498,312		
Total assets	$564,596		

13. Financial Cash Flows The Stancil Corporation provided the following current information:

Proceeds from long-term borrowing	$16,500
Proceeds from the sale of common stock	2,700
Purchases of fixed assets	19,200
Purchases of inventories	2,700
Payment of dividends	7,100

Determine the cash flows from the firm and the cash flows to investors of the firm.

14. Building an Income Statement During the year, the Senbet Discount Tire Company had gross sales of $757,000. The company's cost of goods sold and selling expenses were $249,800 and $146,000,

respectively. The company also had debt of $675,000, which carried an interest rate of 6 percent. Depreciation was $87,000. The tax rate was 35 percent.

a. What was the company's net income?
b. What was the company's operating cash flow?

•

Calculating Total Cash Flows Schwert Corp. shows the following information on its 2017 income statement: sales = $225,000; costs = $103,200; other expenses = $6,100; depreciation expense = $15,300; interest expense = $11,200; taxes = $31,227; dividends = $18,100. In addition, you're told that the firm issued $6,000 in new equity during 2017, and redeemed $8,500 in outstanding long-term debt.

a. What was the 2017 operating cash flow?
b. What was the 2017 cash flow to creditors?
c. What was the 2017 cash flow to stockholders?
d. If net fixed assets increased by $33,000 during the year, what was the addition to net working capital?

•

Using Income Statements Given the following information for O'Hara Marine Co., calculate the depreciation expense: sales = $57,900; costs = $28,600; addition to retained earnings = $8,100; dividends paid = $5,200; interest expense = $2,050; tax rate = 35 percent.

•

Preparing a Balance Sheet Prepare a 2017 balance sheet for Jarrow Corp. based on the following information: cash = $168,000; patents and copyrights = $827,000; accounts payable = $429,000; accounts receivable = $237,000; tangible net fixed assets = $3,410,000; inventory = $385,000; notes payable = $171,000; accumulated retained earnings = $2,084,000; long-term debt = $1,985,000.

•

Residual Claims Huang, Inc., is obligated to pay its creditors $11,600 very soon.

a. What is the market value of the shareholders' equity if assets have a market value of $15,100?
b. What if assets equal $9,900?

•

Marginal versus Average Tax Rates (Refer to Table 2.3.) Corporation Growth has $79,500 in taxable income, and Corporation Income has $7,950,000 in taxable income.

a. What is the tax bill for each firm?
b. Suppose both firms have identified a new project that will increase taxable income by $10,000. How much in additional taxes will each firm pay? Why is this amount the same?

•

Net Income and OCF During 2017, Raines Umbrella Corp. had sales of $809,000. Cost of goods sold, administrative and selling expenses, and depreciation expenses were $549,000, $136,000, and $85,000,

respectively. In addition, the company had an interest expense of $67,000 and a tax rate of 35 percent. (Ignore any tax loss carryback or carryforward provisions.)

a. What was the company's net income for 2017?
b. What was its operating cash flow?
c. Explain your results in (a) and (b).

•

Accounting Values versus Cash Flows In the previous problem, suppose Raines Umbrella Corp. paid out $75,000 in cash dividends. Is this possible? If net capital spending and the change in net working capital were both zero, and if no new stock was issued during the year, what was the change in the firm's long-term debt account?

•

Calculating Cash Flows Blue Diamond Industries had the following operating results for 2017; sales = $44,600; cost of goods sold = $27,500; depreciation expense = $4,630; interest expense = $1,050; dividends paid = $2,275. At the beginning of the year, net fixed assets were $27,510,

current assets were $6,840, and current liabilities were $4,580. At the end of the year, net fixed assets were $35,610, current assets were $7,720, and current liabilities were $4,830. The tax rate was 40 percent.

a. What was net income for 2017?
b. What was the operating cash flow for 2017?
c. What was the cash flow from assets for 2017? Is this possible? Explain.
d. If no new debt was issued during the year, what was the cash flow to creditors? What was the cash flow to stockholders? Explain and interpret the positive and negative signs of your answers in (a) through (d).

Calculating Cash Flows Consider the following abbreviated financial statements for Weston Enterprises:

WESTON ENTERPRISES
2016 and 2017 Partial Balance Sheets

Assets			Liabilities and Owners' Equity		
	2016	2017		2016	2017
Current assets	$1,066	$1,145	Current liabilities	$ 475	$ 518
Net fixed assets	5,184	5,472	Long-term debt	2,880	3,090

WESTON ENTERPRISES
2017 Income Statement

Sales	$15,690
Costs	3,739
Depreciation	1,339
Interest paid	562

a. What was owners' equity for 2016 and 2017?
b. What was the change in net working capital for 2017?
c. In 2017, the company purchased $2,740 in new fixed assets. How much in fixed assets did the company sell? What was the cash flow from assets for the year? The tax rate is 35 percent.
d. During 2017, the company raised $634 in new long-term debt. How much long-term debt must the company have paid off during the year? What was the cash flow to creditors?

Use the following information for Ingersoll, Inc., for Problems 24 and 25 (assume the tax rate is 35 percent):

	2016	2017
Sales	$ 40,743	$ 43,277
Depreciation	5,853	5,858
Cost of goods sold	14,020	15,912
Other expenses	3,322	2,776

Interest	2,098	3,142
Cash	21,364	21,856
Accounts receivable	28,283	31,864
Long-term debt	71,550	83,476
Net fixed assets	179,166	183,440
Accounts payable	27,349	25,639
Inventory	50,287	51,675
Dividends	4,966	5,468

24. Financial Statements Draw up an income statement and balance sheet for this company for 2016 and 2017.

25. Calculating Cash Flow For 2017, calculate the cash flow from assets, cash flow to creditors, and cash flow to stockholders.

Challenge (Questions 26–28)

26. Cash Flows You are researching Time Manufacturing and have found the following accounting statement of cash flows for the most recent year. You also know that the company paid $185 million in current taxes and had an interest expense of $96 million. Use the accounting statement of cash flows to construct the financial statement of cash flows.

TIME MANUFACTURING
Statement of Cash Flows
(in $ millions)

Operations	
Net income	$321
Depreciation	177
Deferred taxes	34
Changes in current assets and liabilities	
Accounts receivable	− 52
Inventories	41
Accounts payable	33
Accrued expenses	− 17
Other	4
Total cash flow from operations	$541
Investing activities	
Acquisition of fixed assets	−$332
Sale of fixed assets	42
Total cash flow from investing activities	−$290
Financing activities	
Retirement of long-term debt	−$195
Proceeds from long-term debt sales	105
Dividends	− 158
Repurchase of stock	− 26
Proceeds from new stock issue	50
Total cash flow from financing activities	−$224
Change in cash (on balance sheet)	$ 27

27. Net Fixed Assets and Depreciation On the balance sheet, the net fixed assets (NFA) account is equal to the gross fixed assets (FA) account, which records the acquisition cost of fixed assets,

minus the accumulated depreciation (AD) account, which records the total depreciation taken by the firm against its fixed assets. Using the fact that NFA = FA − AD, show that the expression given in the chapter for net capital spending, $NFA_{end} - NFA_{beg} + D$ (where D is the depreciation expense during the year), is equivalent to $FA_{end} - FA_{beg}$.

28. Tax Rates Refer to the corporate marginal tax rate information in Table 2.3.

a. Why do you think the marginal tax rate jumps up from 34 percent to 39 percent at a taxable income of $100,001, and then falls back to a 34 percent marginal rate at a taxable income of $335,001?

b. Compute the average tax rate for a corporation with exactly $335,001 in taxable income. Does this confirm your explanation in part (a)? What is the average tax rate for a corporation with income of exactly $18,333,334? Is the same thing happening here?

c. The 39 percent and 38 percent tax rates both represent what is called a tax "bubble." Suppose the government wanted to lower the upper threshold of the 39 percent marginal tax bracket from $335,000 to $200,000. What would the new 39 percent bubble rate have to be?

WHAT'S ON THE WEB?

1. **Change in Net Working Capital** Find the most recent abbreviated balance sheets for General Dynamics at finance.yahoo.com. Enter the ticker symbol "GD" and follow the "Balance Sheet" link. Using the two most recent balance sheets, calculate the change in net working capital. What does this number mean?

2. **Book Values versus Market Values** The home page for The Coca-Cola Company can be found at www.coca-cola.com. Locate the most recent annual report, which contains a balance sheet for the company. What is the book value of equity for Coca-Cola? The market value of a company is the number of shares of stock outstanding times the price per share. This information can be found at finance.yahoo.com using the ticker symbol for Coca-Cola (KO). What is the market value of equity? Which number is more relevant for shareholders?

3. **Cash Flows to Stockholders and Creditors** Cooper Tire and Rubber Company provides financial information for investors on its website at www.coopertire.com. Follow the "Investors" link and find the most recent annual report. Using the consolidated statements of cash flows, calculate the cash flow to stockholders and the cash flow to creditors.

EXCEL MASTER IT! PROBLEM

Using Excel to find the marginal tax rate can be accomplished with the VLOOKUP function. However, calculating the total tax bill is a little more difficult. Below we have shown a copy of the IRS tax table for an individual from a recent year. Often, tax tables are presented in this format.

IF TAXABLE INCOME IS OVER:	BUT NOT OVER:	THE TAX IS:
$ 0	$ 9,275	10% of the amount over $0
9,275	37,650	$927.50 plus 15% of the amount over $9,275
37,650	91,150	$5,183.75 plus 25% of the amount over $37,650
91,150	190,150	$18,558.75 plus 28% of the amount over $91,150
190,150	413,350	$46,278.75 plus 33% of the amount over $190,150
413,350	415,050	$119,934.75 plus 35% of the amount over $413,350
415,050		$120,529.75 plus 39.6% of the amount over $415,05

In reading this table, the marginal tax rate for taxable income less than $9,275 is 10 percent. If the taxable income is between $9,275 and $37,650, the tax bill is $927.50 plus the marginal taxes. The marginal taxes are calculated as the taxable income minus $9,275 times the marginal tax rate of 15 percent.

Below, we have the corporate tax table as shown in Table 2.3.

IF TAXABLE INCOME IS GREATER THAN OR EQUAL TO:	BUT LESS THAN:	THE TAX RATE IS:
$ 0	$ 50,000	15%
50,001	75,000	25
75,001	100,000	34
100,001	335,000	39
335,001	10,000,000	34
10,000,001	15,000,000	35
15,000,001	18,333,333	38
18,333,334		35

a. Create a tax table in Excel for corporate taxes similar to the individual tax table shown above. Your spreadsheet should then calculate the marginal tax rate, the average tax rate, and the tax bill for any level of taxable income input by a user.

b. For a taxable income of $1,350,000, what is the marginal tax rate?

c. For a taxable income of $1,350,000, what is the total tax bill?

d. For a taxable income of $1,350,000, what is the average tax rate?

CLOSING CASE

CASH FLOWS AT EAST COAST YACHTS

Because of the dramatic growth at East Coast Yachts, Larissa decided that the company should be reorganized as a corporation (see our Chapter 1 *Closing Case* for more detail). Time has passed and, today, the company is publicly traded under the ticker symbol "ECY".

Dan Ervin was recently hired by East Coast Yachts to assist the company with its short-term financial planning and also to evaluate the company's financial performance. Dan graduated from college five years ago with a finance degree, and he has been employed in the treasury department of a Fortune 500 company since then.

EAST COAST YACHTS
2017 Income Statement

Sales	$611,582,000
Cost of goods sold	431,006,000
Selling, general, and administrative	73,085,700
Depreciation	19,958,400
EBIT	$ 87,531,900
Interest expense	11,000,900

EBT	$ 76,531,000
Taxes	30,612,400
Net income	$ 45,918,600
Dividends	17,374,500
Retained earnings	$ 28,544,100

The company's past growth has been somewhat hectic, in part due to poor planning. In anticipation of future growth, Larissa has asked Dan to analyze the company's cash flows. The company's financial statements are prepared by an outside auditor. Nearby you will find the most recent income statement and the balance sheets for the past two years.

Larissa has also provided the following information. During the year, the company raised $40 million in new long-term debt and retired $22.6 million in long-term debt. The company also sold $24.2 million in new stock and repurchased $35.64 million. The company purchased $59.5 million in fixed assets, and sold $6,718,200 in fixed assets.

EAST COAST YACHTS
Balance Sheet

	2016	2017		2016	2017
Current assets			Current liabilities		
Cash and equivalents	$ 10,644,500	$ 11,119,700	Accounts payable	$ 43,482,200	$ 44,461,550
Accounts receivable	18,924,800	18,681,500	Accrued expenses	5,417,300	6,123,200
Inventories	17,090,100	20,149,650	Total current liabilities	$ 48,899,500	$ 50,584,750
Other	1,097,700	1,172,200			
Total current assets	$ 47,757,100	$ 51,123,050			
			Long-term debt	$151,860,000	$169,260,000
Fixed assets			Total long-term liabilities	$151,860,000	$169,260,000
Property, plant, and equipment	$404,727,800	$457,509,600			
Less accumulated depreciation	(93,887,500)	(113,845,900)			
Net property, plant, and equipment	$310,840,300	$343,663,700	Stockholders' equity		
Intangible assets and others	6,772,000	6,772,000	Preferred stock	$ 1,970,000	$ 1,970,000
Total fixed assets	$317,612,300	$350,435,700	Common stock	29,700,000	37,583,700
			Capital surplus	11,800,000	28,116,300
			Accumulated retained earnings	133,019,900	161,564,000
			Less treasury stock	(11,880,000)	(47,520,000)
			Total equity	$164,609,900	$181,714,000
Total assets	$365,369,400	$ 401,558,750	Total liabilities and shareholders' equity	$365,369,400	$401,558,750

Larissa has asked Dan to prepare the financial statement of cash flows and the accounting statement of cash flows. She has also asked you to answer the following questions:

1. How would you describe East Coast Yachts' cash flows?
2. Which cash flows statement more accurately describes the cash flows at the company?
3. In light of your previous answers, comment on Larissa's expansion plans.

[1] Bondholders are investors in the firm's debt. They are creditors of the firm. In this discussion, the term *bondholder* means the same thing as *creditor.*

[2] Confusion often arises because many financial accounting terms have the same meaning. This presents a problem with jargon for the reader of financial statements. For example, the following terms usually refer to the same thing: assets minus liabilities, net worth, stockholders' equity, owners' equity, book equity, and equity capitalization.

[3] Generally, GAAP requires assets to be carried at the lower of cost or market value. In most instances, cost is lower than market value. However, in some cases when a fair market value can be readily determined, the assets have their value adjusted to the fair market value.

[4] One situation in which taxable income may be lower than accounting income is when the firm uses accelerated depreciation expense procedures for the IRS but uses straight-line procedures allowed by GAAP for reporting purposes.

[5] A firm's current liabilities sometimes include short-term interest-bearing debt usually referred to as *notes payable.* However, financial analysts often distinguish between interest-bearing short-term debt and non-interest-bearing short-term debt (such as accounts payable). When this distinction is made, only non-interest-bearing short-term debt is usually included in the calculation of net working capital. This version of net working capital is called "operating" net working capital. The interest-bearing short-term debt is not forgotten but instead is included in cash flow from financing activities, and the interest is considered a return on capital.