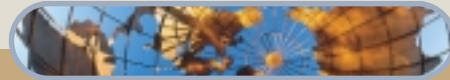


## CHAPTER THIRTEEN



# The Cash Flow Statement and Decisions

### Review

Previous chapters examined the information provided by the income statement, balance sheet, and statement of changes in owners' equity. In addition, a brief introduction to the cash flow statement was provided in Chapters 2 and 3.

### Where This Chapter Fits

This chapter examines the cash flow statement in depth and focuses on how the information provided by this important statement is used for financial decisions.

### Looking Ahead

Chapters 14 and 15 complete an in-depth look at the financial statements and how the information provided is useful for decision making.

## The Personal View

Why am I always broke? My job pays a decent salary, but somehow I never have cash when I need it. I get paid on the first of the month, but most of that goes for rent and food. My car payment is due on the tenth, but I don't get paid again until the fifteenth. Once I make my car payment and pay the late charges, I've used up most of that paycheck. Then come the credit card bills. Luckily, I can just make the minimum payments and let the rest go, although the interest charges are starting to be almost as much as my purchases. Maybe I need to figure out where all of my money goes.

## The Business View

The German company Siemens is a \$60 billion conglomerate that manufactures everything from power stations to semiconductors. The company is known for its expert cash management and earns as much from interest income as from manufacturing. It is sometimes regarded as "a bank with an electronics department attached." "[T]he company usually has the cashflow to fund even the largest investments, such as this year's \$1.5 billion acquisition of Westinghouse."<sup>1</sup>

<sup>1</sup>Laura Covill, "Siemens The Financial Engineer," *Euromoney* (August 1998), p. 65.

**I**ndividuals make personal decisions based in part on the amount of cash they have and their expectations about future cash flows. Similarly, current cash balances and forecasts of future cash flows are at the heart of many business decisions. Managers, investors, and creditors all need information about cash and cash flows so they can make decisions.

An important source of information about an organization's cash flows is the statement of cash flows. This statement, one of the four basic financial statements, provides information about the amounts and types of an entity's cash flows during the period. The purpose of this chapter is to examine the type of information provided in this statement and see how it is

used in decision making. After completing this chapter, you should be able to:

1. Describe the type of information included in a cash flow statement, how it is organized, and how it is useful for decision making.
2. Describe the different types of cash flows that are important for decision makers and how these cash flows are reported.
3. Explain the cash flow effects of common types of transactions and describe how they are reported in the cash flow statement.
4. Explain how decision makers analyze cash sources and uses listed in the cash flow statement, and describe ratios often used in analyzing cash flows.

## UNDERSTANDING THE STATEMENT OF CASH FLOWS

### Information for Decisions

The statement of cash flows reports sources and uses of cash for an entity. This information is used by decision makers when assessing the adequacy of an entity's cash for future needs and in projecting future cash inflows and outflows. It helps financial statement users answer questions

such as these: Is the company generating enough cash from normal operations to continue operating and to make required payments to creditors? Will the company generate sufficient cash for future expansion? Is the company generating sufficient cash to pay future dividends?

A **statement of cash flows** is required by generally accepted accounting principles to be included in a complete set of financial statements. A cash flow statement must be included for each year for which an income or operating statement is included. Thus, the annual reports of most organizations include cash flow statements for either two or three years for comparative purposes.

The purpose of the cash flow statement is to report how an organization generated and used its cash. Knowing where the cash comes from is important in projecting whether cash will be generated from those sources in the future. Knowing where the cash goes is important in assessing the organization's future cash needs. When presenting cash flow statements, most companies combine cash and cash equivalents because short-term investments classified as cash equivalents are used primarily as a substitute for cash.

Exhibit 13-1 shows the Consolidated Statement of Cash Flows of The May Department Stores Company, which is typical of those of major corporations. May Company reports earnings for three years and does the same for cash flows. The statements report all of the different sources and uses of cash during each of the three years and show the total change in cash and cash equivalents. Each item in May Company's cash flow statements reflects a summary of specific transactions. The organization of the statement of cash flows is standardized to facilitate understanding the organization's cash flows.

### ORGANIZATION OF THE STATEMENT OF CASH FLOWS

The statement of cash flows, as you can see from May Company's, is divided into three categories: operating, investing, and financing. By categorizing the entity's cash flows in this way, the statement helps decision makers better understand how the company generates and uses its cash. This is important so that decision makers can better project future cash flows. Some of the different types of cash flows that a business might have are listed in Exhibit 13-2.

**Cash flows from operations** are generated from the organization's normal activities. These cash flows are generally routine and recurring. They are particularly important because most organizations must be capable of generating positive cash flows from operations over the long run to remain viable. (See In Practice 13-1.) Is May Company, for example, successful in generating cash from its operations?

**Cash flows related to investing** reflect how an organization's cash is used to provide future benefits, such as through the purchase of new plant and equipment, and investing in securities. For example, to what extent has May Company been making capital expenditures to acquire property and equipment and to expand?

# MAY COMPANY'S CONSOLIDATED STATEMENT OF CASH FLOWS

**Exhibit 13-1**

Consolidated Statement of Cash Flows			
(dollars in millions)	1998	1997	1996
<b>Operating activities:</b>			
Net earnings	\$ 849	\$ 775	\$ 755
Adjustments for noncash items included in earnings:			
Depreciation and amortization	439	412	374
Deferred income taxes	48	58	45
Deferred and unearned compensation	5	8	10
Working capital changes*	158	265	142
Other assets and liabilities, net	6	8	(43)
Total operating activities	1,505	1,526	1,283
<b>Investing activities:</b>			
Capital expenditures	(630)	(496)	(632)
Dispositions of property and equipment	44	33	29
Acquisition	(302)	—	—
Cash used in discontinued operation	—	—	(24)
Total investing activities	(888)	(463)	(627)
<b>Financing activities:</b>			
Issuances of long-term debt	350	—	800
Repayments of long-term debt	(221)	(340)	(388)
Purchases of common stock	(589)	(394)	(869)
Issuances of common stock	64	65	49
Dividend payments	(308)	(297)	(305)
Total financing activities	(704)	(966)	(713)
<b>Increase (decrease) in cash and cash equivalents</b>	<b>(87)</b>	<b>97</b>	<b>(57)</b>
<b>Cash and cash equivalents, beginning of year</b>	<b>199</b>	<b>102</b>	<b>159</b>
<b>Cash and cash equivalents, end of year</b>	<b>\$ 112</b>	<b>\$ 199</b>	<b>\$ 102</b>
<b>*Working capital changes comprise:</b>			
Accounts receivable, net	\$ 20	\$ 262	\$ 139
Merchandise inventories	(176)	(53)	(211)
Other current assets	12	46	45
Accounts payable	176	(30)	180
Accrued expenses	89	26	(20)
Income taxes payable	37	14	9
Net decrease in working capital	\$ 158	\$ 265	\$ 142
<b>Cash paid during the year:</b>			
Interest	\$ 297	\$ 319	\$ 288
Income taxes	411	355	380

**Cash flows related to financing** reflect amounts received by borrowing or from issuing stock, as well as payments made to retire debt, repurchase stock, and provide dividends to owners. For example, did May Company increase its financing through debt and equity?

One additional category occasionally included in the statement of cash flows relates to significant noncash activities. These are activities related to investing or financing, but that do not generate or use cash. For example, a company might have convertible bonds outstanding; the conversion of these bonds into common stock is an important change in financing but does not affect cash. Gateway has chosen to report noncash investing and financing activities in Note 11 to its financial statements rather than in its cash flow statement, as shown in Appendix A.

**Exhibit 13-2 SOME OF THE DIFFERENT TYPES OF CASH FLOWS****Cash Flows Related to Operating Activities:**

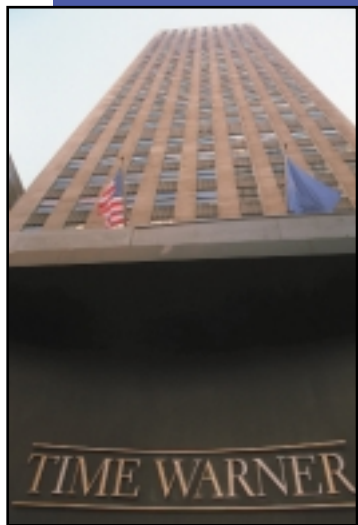
- Cash receipts and collections from sales of goods and services
- Cash receipts from earnings on investments in securities (interest and dividends)
- Payments to suppliers
- Payments to employees
- Payments for interest
- Payments for taxes

**Cash Flows Related to Investing Activities:**

- Cash receipts from the sale of securities of other companies
- Cash receipts from sales of productive assets
- Payments for the purchase of securities of other companies
- Payments at the time of purchase for the acquisition of productive assets

**Cash Flows Related to Financing Activities:**

- Proceeds from issuing capital stock or other equity securities
- Proceeds from issuing debt securities or obtaining loans (other than trade credit)
- Payments for reacquisition of capital stock or other equity securities of the entity
- Payments for the retirement of debt securities (excluding interest)
- Payments of principal on loans (other than trade payables)
- Payments of dividends

**In Practice 13-1****Time Warner**

In its 1998 financial statements, Time Warner reported its fourth straight net loss applicable to common shares (after paying preferred stock dividends), a loss of \$372 million. In management's discussion and analysis, various statements refer to expansion plans, and the company paid \$155 million in dividends on common stock. In addition, the company reported cash outflows for capital expenditures, investments, and acquisitions of \$671 million. Even though Time Warner reported a net loss applicable to common shares, the consolidated statement of cash flows showed cash generated from operations of almost \$2 billion.

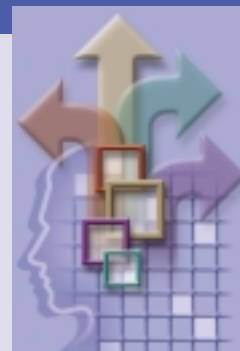
**Analysis**

*Although the company reported a loss applicable to common shares in 1998, it still generated significant cash inflows from operations and has for a number of years. Financing dividends and capital expenditures from operating cash inflows, therefore, appears feasible. [www.timewarner.com]*

## You Decide 13-1

## How Much Cash Flow Do You Need?

You have always wanted to be a part of some exciting business venture that might make you rich. Now you have the chance. The supervisor from your job has offered you the chance to invest \$2,000 in a young software company he owns. You have the \$2,000, and you were really interested until he said that, even though the company generates a lot of cash, he doesn't plan to pay any dividends for at least five years. At the end of five years he promises that your investment will be "worth a lot." If you could get cash flow information for last year and projections for the next five years, what would you look for to help you decide whether to invest \$2,000?



## TYING TOGETHER ACTIVITIES AND FINANCIAL STATEMENTS

Businesses engage in three main types of activities: operations, investing, and financing. Their regular operations represent their reason for being, why they exist. A certain amount of investment in assets is usually necessary for an enterprise to operate, and financing is necessary to have resources to invest and to be able to operate. Some aspects of these activities are reflected in the balance sheet, income statement, and statement of changes in stockholders' equity. The statement of cash flows, however, ties together all of these activities and the three other financial statements by reporting the effects of an entity's operating, investing, and financing activities on the cash balance. More specifically, the cash flow statement reflects the changes in the balances of all balance sheet items during the period. All changes are reported in terms of their effects on cash, or they are reported as noncash activities. In addition, the income or operating statement is tied to the cash flow statement because operations represent an important source (or use) of cash, and the statement of changes in stockholders' equity is tied in because dividends and other changes in equity are important elements related to financing. Looking at May Company's statement of cash flows in Exhibit 13-1, you can see that all of the items deal with income, dividends, or changes in balance sheet accounts.

Let's look at each major type of cash flow and see what it includes and what it tells us that is useful for decision making.

## OPERATING CASH FLOWS

### Information for Decisions

Cash provided or used by operations reflects the effect of an entity's main activities. Understanding operating cash flows, along with related adjustments, permits decision makers to better anticipate future recurring cash flows and answer questions such as these: Will this company be able to finance its future expansion internally without having to borrow or issue additional stock? How secure is the company's dividend

when considered in relation to the cash generated from the company's operations? When a stockbroker tells me the company being recommended had a net loss but generated a great deal of cash from depreciation, should I buy the stock hoping the company will depreciate more in the future? What are the implications of a company's cash from operations coming largely from an increase in trade payables?

The operating section of the cash flow statement is most important because it deals with the cash generated or used by the entity's primary activities. These activities, and the related cash flows, are recurring. The cash flow statement reports past cash flows, but the same or similar activities and cash flows can be expected to occur in the future. If an organization cannot sustain itself over the long run with the cash generated from operations, it cannot survive.

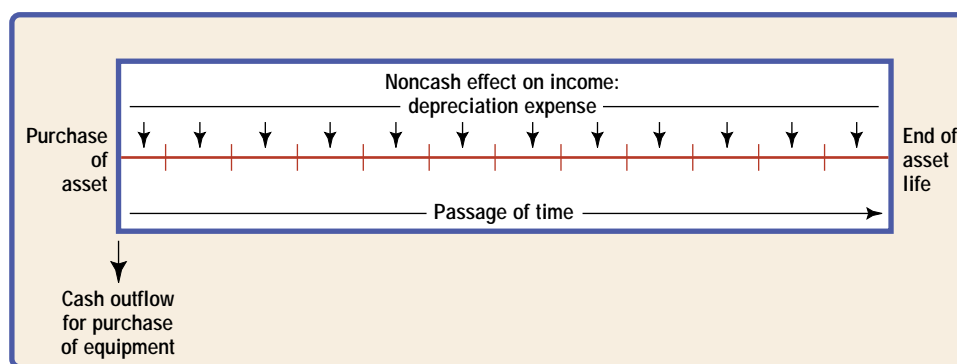
Most companies present the operating section of the cash flow statement using an **indirect approach** under which they start with accrual-basis net income and adjust that figure to obtain the cash generated or used by operations. Although accrual-basis income is regarded as the best measure of operating success, it does not tell us the amount of cash flows from operating and must be adjusted for all items that affect income and cash differently. Thus, this section of the cash flow statement includes the following adjustments to net income to determine the cash generated or used by operations:

1. Expenses that reduced net income this period but did not use cash must be added back.
2. Cash payments made this period for expenses of other periods must be deducted.
3. Revenues that did not result in cash inflows during the current period must be deducted.
4. Cash collections for revenues earned in other periods must be added.
5. Items reported in the income statement but not directly related to normal operations must be removed.

Let's consider a few of the more common adjustments to net income needed to convert to a cash basis.

## DEPRECIATION AND AMORTIZATION

Under accrual accounting, income is reduced for the cost of an operating asset's service potential used up during the period. As we have seen earlier, depreciation, or the amount of cost recognized during the period under the matching concept, is an allocation of the original cost of the asset. The depreciation expense recognized during a period is not a cash expense; it does not result in a decrease in the cash balance. Cash was reduced initially when the asset was first acquired. The expense is simply an accountant's allocation of a cost incurred previously. Therefore, while income for the period is decreased by the amount of the depreciation expense, cash is not. The difference in timing between the cash outflow for the purchase of a fixed asset and the related income effects can be shown as follows:



If we are interested in the amount of cash generated by a company's operations, then we need to add back the amount of depreciation expense to the company's net income. In other words, if all other revenues and expenses were cash items, net income would understate cash generated by the amount of the depreciation expense.



Because depreciation is added back to net income to get the cash generated from operations, financial analysts sometimes mistakenly refer to depreciation as a source of cash. But this is silly because firms cannot generate cash just by depreciating. If depreciation were a source of cash, a change to a more rapid depreciation method would cause the cash balance to go up. But, that will not happen. The addition of depreciation in the cash flow statement is simply a way of adding back an amount that was deducted from income but did not use cash. Depreciation is neither a source nor a use of cash.

## In Practice 13-2

### Cash Generated from Operations at Sony Corporation

In fiscal 1999, Sony Corporation reported (in yen) net income of ¥179,004 million. However, net cash provided by operating activities was ¥663,267 million. Cash generated from operations was much higher than income because income had been reduced by depreciation and amortization expense of ¥307,173 million, a noncash expense. Also, the company reduced its receivables and merchandise inventory, freeing up additional cash, although this was partially offset by an increase in film inventories.



#### Analysis

*By reporting net income in the cash flow statement, Sony allows readers to reconcile cash generated from operations with the income reported in the income statement. Adjustments for depreciation, changes in receivables and inventories, and other items permit decision makers to see how the company's income translates into cash flows.*  
[www.sony.com]

Some analysts also believe that, because depreciation is deducted from income but does not use cash, this creates a “reserve” for replacing assets when they are worn out or obsolete. This reasoning is faulty, however, because it assumes that the new assets will cost exactly the same as the old and that cash equal to the depreciation is set aside for replacement. In actuality, both assumptions are usually incorrect.

The amortization of intangible assets and the depletion of natural resources also result in noncash expenses. As with depreciation, these expenses are deducted to get net income, but do not use cash. Therefore, they are added back to net income to get the amount of cash generated from operations.

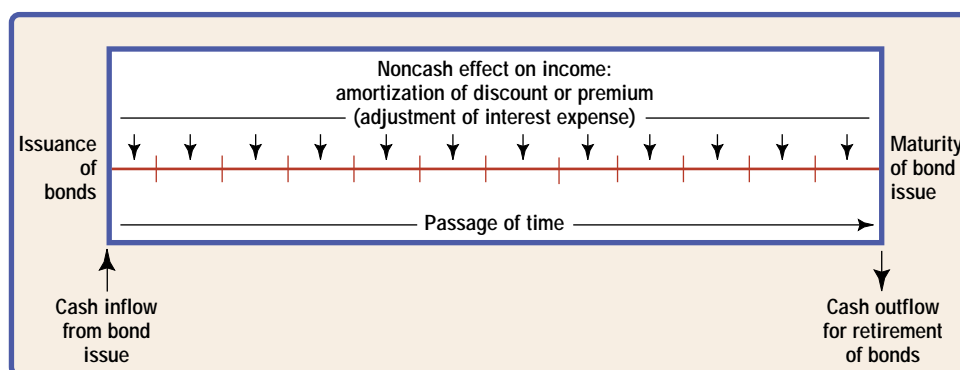
## CHANGES IN DEFERRED INCOME TAXES

As we discussed in Chapter 11, companies must report income tax expense on an accrual basis by matching tax expense to reported income. If temporary differences exist between the income reported in the income statement and that reported on the tax return, a deferred tax liability or asset is affected. In addition, the tax expense reported in the income statement is different from cash tax payments. Therefore, the cash flow statement must report an adjustment to bring net income to the amount of cash generated from operations. May Company's cash flow statement, shown in Exhibit 13-1, reflects a \$48 million positive adjustment from an increase in deferred income taxes, while Gateway's cash flow statement in Appendix A reports a negative deferred tax adjustment of more than \$58 million for 1998.



## AMORTIZATION OF DEBT DISCOUNT AND PREMIUM

As we saw in Chapter 11, debt discount arises when debt is issued for less than its maturity value. Because the debt ultimately must be repaid at maturity value, the actual (effective) interest costs are higher than the current cash interest payments. A portion of the discount is charged to interest expense each period under accrual accounting. However, the amount of discount expensed each period represents a noncash charge against income. When will cash actually be paid? When the debt matures, its maturity value will be paid in cash. The difference in timing between the cash flows and expense recognition can be shown as follows:



Because the company's interest expense contains a noncash portion, the net income figure must be adjusted to arrive at the cash generated from operations. Thus, when interest expense has been increased by the amortization of bond discount, an amount must be added to net income in the cash flow statement to determine the amount of cash generated from operations. If interest expense has been decreased by the amortization of bond premium, an amount must be deducted from net income in the cash flow statement to arrive at cash generated from operations.

## GAINS AND LOSSES

Companies often include in their income statements gains and losses that are not directly related to their regular operations. For example, companies often report gains and losses from disposing of investments or fixed assets, and from retiring debt. Because these gains and losses are not related to regular operations, they must be eliminated from the operating section of the cash flow statement. Gains must be deducted from net income in the operating section of the cash flow statement to arrive at cash generated from operations, and losses must be added back. The cash effects of the transactions giving rise to the gains and losses are reported in the investing or financing sections of the cash flow statement.

## CHANGES IN CURRENT ASSETS AND LIABILITIES

Current assets and current liabilities are important in the operations of a company and facilitate the flow of resources through the operating cycle. We discussed the operating or cash cycle in Chapter 3 and how changes in receivables, inventories, payables, and other current accounts can affect the amount of cash received. Because current assets and liabilities play such an important role in the way that cash moves through the operating

cycle, changes in these items must be considered in determining the cash generated from operations. For example, sales increase income, but if the sales are on credit and the receivables are not immediately collected, no cash is generated. Thus, the cash generated from operations during the period can be determined only after adjusting net income for the change in receivables during the period: if receivables increase, less cash is collected than if receivables decrease.

Similarly, if a company does not pay its bills as quickly as in the past, and payables increase, less cash is used in operations. Because the expenses reduce income even though the cash has not been paid, the cash flow statement reports an adjustment added to net income in the cash flow statement to reflect more cash being generated from operations. A decrease in trade payables would indicate that more cash was being used to pay off bills and less was generated by operations. This would call for a negative adjustment to be reflected in the cash flow statement. Changes in current liabilities not directly related to sales or normal operating expenses, such as short-term bank loans or dividends payable, are reported in the financing section of the cash flow statement.

Exhibit 13-3 identifies the adjustments related to changes in current assets and liabilities that would be made to net income to arrive at cash generated from operations. The direction of adjustments for changes in all current assets is the same, and that for current liabilities is the opposite. Keep in mind that the purpose of these adjustments in the cash flow statement is to convert accrual-basis net income to cash generated from operations.

May Company, in the operating section of its cash flow statement, indicates the net effect of working capital changes on cash from operations. It details the individual working capital changes at the bottom of the statement. Gateway, on the other hand, details the adjustments for individual working capital items within the operating section of the statement.

## ADJUSTMENTS RELATED TO CHANGES IN CURRENT ASSETS AND CURRENT LIABILITIES TO COMPUTE CASH FLOWS GENERATED FROM OPERATIONS

### Exhibit 13-3

#### *Current Assets*

##### Accounts Receivable:

- Increases—subtract from net income to get operating cash flow
- Decreases—add to net income to get operating cash flow

##### Inventory:

- Increases—subtract from net income to get operating cash flow
- Decreases—add to net income to get operating cash flow

##### Other Current Assets (e.g., prepaid expenses):

- Increases—subtract from net income to get operating cash flow
- Decreases—add to net income to get operating cash flow

#### *Current Liabilities*

##### Accounts and Trade Notes Payable:

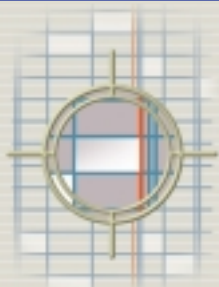
- Increases—add to net income to get operating cash flow
- Decreases—subtract from net income to get operating cash flow

##### Other Liabilities (e.g., accruals), excluding nontrade payables:

- Increases—add to net income to get operating cash flow
- Decreases—subtract from net income to get operating cash flow

## A CLOSER LOOK AT

## Net cash Provided by Operations



In 2001, Atkins Corporation reported net income of \$275,000 and net cash provided by operations of \$414,000 as follows:

Net cash provided by operations:

Net income		\$275,000
Add (deduct) noncash items		
Depreciation	\$115,000	
Net increase in deferred income taxes	32,000	
Amortization of debt premium	(3,000)	
Unearned royalties	10,000	154,000
Add (deduct) changes in current assets and liabilities		
Accounts receivable increase	\$ (30,000)	
Inventory decrease	8,000	
Accounts payable increase	39,000	
Short-term trade notes payable decrease	(32,000)	(15,000)
Net cash provided by operations		<u>\$414,000</u>

The first two noncash adjustments reflect expenses that reduced net income but did not use cash. The third item, amortization of bond premium, reflects an expense reduction that did not affect cash, and the fourth item, unearned royalty income, is added back because cash was received but the item was not included in income. In the second section, decreases in current assets and increases in current liabilities increase the cash flow, and increases in current assets and decreases in current liabilities reduce cash flow.

## ASSESSING CASH FLOWS FROM OPERATIONS

Why do companies report detailed information about operating cash flow? Why not just report the total? The answer is that, while the total operating cash flow is important, providing the details allows decision makers to develop a better understanding of a company's cash situation and, in turn, make better projections of future cash flows.

Starting the operating section of the cash flow statement with net income provides a comparison between accrual-basis income and cash flows and ties the cash flow statement to the income statement. Reporting individual adjustments allows decision makers to see precisely how a company's operations generate cash and why cash might be more or less than expected based on reported income.

The individual adjustments might show that cash is reduced because receivables and inventories are building, or perhaps that cash flow is increased through increases in payables. For example, Kellwood Company's fiscal 1998 net income was \$42.7 million, but operating activities used \$75.2 million of cash. An examination of individual adjustments in the cash flow statement showed that during the year receivables had increased by \$48.5 million, inventory had increased by \$75.5 million, and accounts payable had decreased by \$14.4 million, all having a significant negative effect on the cash flows from operations.

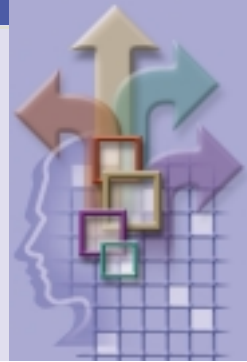
By examining the elements of the operating section of the cash flow statement, decision makers might be able to identify cash, receivables, and inventory management problems that could ultimately affect liquidity. Or, they might be able to spot an impending credit crisis by

determining that cash flow is being maintained by not paying bills. Whatever this section of the statement shows, the key is understanding the relationships between cash and the elements reported, and using that information to project future cash flows.

## You Decide 13-2

### How Much Cash Does It Take to Deliver Fish?

The Lewers Company is starting a fried fish delivery service to local restaurants. Lewers buys fish in bulk, cooks it, and delivers it to local restaurants. Joe Lewers figures that he will have a low overhead operation. He will do the deliveries and hire only one employee, the cook. The fish will be bought on credit, with payment due in ten days, and Joe will give his customers thirty days to pay him. Because it will be a credit operation, Joe figures he won't need much money. He figures all he will have to use cash for is gas and repairs on the van he will use for delivery. Do you think Joe can make a go of it? What would be the elements of Joe's cash flow statement for the first month? Would you lend Joe money to help his business grow? Explain.



## INVESTING CASH FLOWS

### Information for Decisions

The investing activities section of the cash flow statement reports the cash flow effect of purchases and sales of operating assets and other investments. Because investing activities are critical to a company's success or failure, decision makers need to evaluate investing cash flows to answer questions such as these: To what extent

is the company investing in new plant and equipment needed for future operations? Is the company expanding its operations through the purchase of new plant and equipment or by investing in other companies? To what extent has the company generated cash by selling off fixed assets and investments?

Organizations usually must invest cash so they can conduct the operating activities needed to attain their goals. Thus, an understanding of an organization's investing activities is important for anyone analyzing the organization. Cash flows related to the investing activities of a business typically involve either operating assets (property, plant, and equipment) or investments in other companies. Cash outflows for operating assets are usually quite large for companies that are replacing assets or expanding. Cash inflows can be generated from selling operating assets no longer needed. Cash outflows for investments in stock often involve the acquisition of a controlling interest in other companies, referred to as affiliates. Sales of investments usually result in cash inflows.

Analyzing the investing activities section of the cash flow statement can tell decision makers whether a company is expanding or contracting its operating capacity, and how. Is the company expanding by acquiring new plant and equipment, or by investing in affiliated companies? Is the company generating a major portion of its cash inflows by selling off its

productive assets, and can such cash inflows be sustained? Answers to these types of questions are crucial to understanding a company's future prospects and projecting future cash flows.

Examining the cash expended for plant and equipment in comparison with the amount of depreciation expense and the amount of plant and equipment reported in the balance sheet can provide some idea of the rate of growth or contraction. For example, as can be seen in Appendix A, Gateway made capital expenditures of about \$235 million during 1998. This is significant when compared with its property, plant, and equipment base (net) at the beginning of the year (1997 balance sheet) of about \$376 million and the increase in accumulated depreciation of about \$76 million (Note 10 to the financial statements). Although Gateway's fixed asset base is small as compared to other types of manufacturing firms, the information from its financial statements indicates that those assets are relatively young, being only 30 percent depreciated, and that the company appears to be expanding, not just maintaining, its productive capacity. Gateway's comparative cash flow statements reflect capital expenditures that increased significantly each year. This implies that Gateway's management anticipates major future sales growth.

## You Decide 13-3

## How Are Asset Acquisitions Financed?



From looking at Gateway's cash flow statement in Appendix A, can you tell how Gateway financed its capital expenditures? Where did Gateway get the cash to purchase new plant and equipment? Was the source the same for each of the three years reported? Where did May Company (Exhibit 13-1) get the cash for its capital expenditures? Do you view favorably the means of financing new plant and equipment used by these two companies? Explain.

## FINANCING CASH FLOWS

## Information for Decisions

The financing section of the cash flow statement provides information about cash provided by the suppliers of the company's capital, both creditors and owners, as well as cash paid to the suppliers of capital. Decision makers use this information to evaluate changes in financing and answer questions such as these: Has the riskiness of the com-

pany changed because of a shift in the mix of debt and equity financing? To what extent did dividends draw away cash that was needed to acquire new plant and equipment? How much of the company's additional financing during the period came from short-term sources in relation to long-term sources of capital?

As we have seen, much of an existing company's financing may come from operations. However, many companies, especially new ones and those that are expanding rapidly, need to rely on other sources to provide a stable financing base. As we discussed in Chapters 11 and 12, this type of financing comes either through borrowing or by selling ownership interests. The financing section of the cash flow statement reports on the cash effects of (1) borrowing (other than trade payables), (2) repaying debt, (3) issuing stock, (4) repurchasing stock, and (5) paying dividends.

### In Practice 13-3

#### Emerson Electric Co.

Emerson Electric invested almost \$1.1 billion in fiscal 1998 and \$860.6 million in 1997 in new plant and equipment and the net purchases of other businesses. Its financing activities for the fiscal years ended September 30, 1998 and 1997, are reported in its Consolidated Statements of Cash Flows as follows:

	(in millions of dollars)	
	1998	1997
Net increase in short-term borrowing	145.4	321.8
Proceeds from long-term debt	452.0	5.8
Principal payments on long-term debt	(132.5)	(13.1)
Net purchases of treasury stock	(499.4)	(376.6)
Dividends paid	(521.0)	(480.7)
Net cash used in financing activities	<u>(555.5)</u>	<u>(542.8)</u>



#### Analysis

*Considering the extent to which Emerson made cash investments in plant and equipment and used cash to reduce its debt, purchase treasury stock, and pay dividends, the company's operations must have generated significant amounts of cash. In fact, Emerson did generate more than \$1.6 billion in cash from operations in fiscal 1998 and almost \$1.5 billion in 1997. [www.emersonelectric.com]*

## CHANGES IN DEBT AND CAPITAL STOCK

Changes in debt reported in the statement of cash flows are simple and straightforward: increases in debt generate cash, and decreases use cash for repayments. Changes in nontrade notes payable, including commercial paper (short-term negotiable notes), and bonds payable are included in this section of the cash flow statement. Decision makers are often especially interested in the financing employed by companies because debt must be repaid and also usually requires periodic interest payments. The issuance of stock, on the other hand, results in earnings being shared by more owners and may result in pressure to use cash to pay dividends.

May Company's cash flow statement in Exhibit 13-1 shows that the company generated so much cash from operations that it actually reduced its reliance on external financing. In addition to paying dividends to its stockholders, the company paid off almost as much long-term debt as it issued during the period, and it reacquired more than half a billion dollars of its own stock. Gateway (Appendix A) paid off more debt than it issued, and its small amount of additional financing came from its employees exercising their stock options.



## In Practice 13-4



## How Caldor Cut Financing Costs and Went Broke

Caldor Corp., a Norwalk, Connecticut, discounter, was profitable, having earned \$3.3 million in the latest quarter, following a net income of \$44 million in its latest fiscal year. And, it was in the midst of a major expansion and remodeling. However, the company entered bankruptcy in September 1995 after its factors (lenders) stopped providing the cash needed to finance its inventory. What happened? The company could have issued long-term debt or equity, but found that short-term financing from banks and trade creditors was much cheaper:

*“If you took the time to look at their annual report,” says one factor who did, “you would see the fixed assets going up, the working capital going down.” . . . This factor adds: “They were expanding using working capital”—which, of course, is supposed to be used for short-term liquidity.<sup>2</sup>*

### Analysis

*In Caldor’s case, using trade credit and other short-term financing was cheaper than using long-term debt or equity financing. However, short-term financing, by definition, is not permanent and can quickly evaporate. Caldor’s short-term creditors suddenly refused to renew the credit and, by that time, Caldor was no longer able to refinance on a long-term basis. By looking at Caldor’s cash flow statement, the company’s approach to financing its expansion should have been obvious.*

## PAYMENT OF CASH DIVIDENDS

Owners of a corporation expect a return on their investments. One way they receive a return on their stock investments is through corporate distributions of income to the owners, or dividends. Cash dividends paid during the period are reported in the financing section of the cash flow statement because they reflect a payment to one group of capital suppliers, and, therefore, are related to financing. Perhaps reflecting an inconsistency, interest expense—the return paid to suppliers of debt financing—is not reported in the financing section of the cash flow statement; it is included in the net income amount reported in the operating section of the statement.

Decision makers are often interested in the portion of the cash generated from operations that is used to pay dividends. Although the declaration of dividends is not required, many companies have established dividend policies that place great pressure on management to continue dividend payment trends. Thus, cash generated from operations should, at least in the long run, be sufficient to provide for dividends, as well as the replacement of assets.

From Exhibit 13-1, you can see that May Company pays significant dividends, totaling about 36 percent of net income. May Company is a relatively mature company and pays out a large portion of its income in dividends. Gateway, on the other hand, is a relatively young and rapidly growing company. It pays no dividends, reinvesting all of its earnings for future growth.

<sup>2</sup>Excerpts from Roger Lowenstein, “Lenders’ Stampede Tramples Caldor,” *The Wall Street Journal* (October 26, 1995), C1.



## REPORTING CHANGES IN FINANCIAL POSITION

### Information for Decisions

Decision makers analyze changes in financial position as a way of projecting future directions for a company's operations. The statement of cash flows explains balance sheet changes from one period to the next and can help answer questions such as these: Has the company's management taken proper advantage of changing interest rates

by substituting debt with a different maturity for debt outstanding? Do the reported changes in plant and equipment include both increases and decreases that partially offset? Why did intangible assets reported in the balance sheet decrease from last year to this year?

The statement of cash flows provides vital information about an organization's cash inflows and outflows, but it also does more. It bridges the gap between one balance sheet and the next. Decision makers want to know how an organization's financial position has changed during the reporting period, and the cash flow statement provides an explanation. Decision makers can look at this year's balance sheet, compare it with last year's, and see the changes. But what brought about those changes? Why did plant and equipment go up and investments go down? Why did short-term debt decrease and long-term debt increase? Decision makers can trace through the changes in financial position with the statement of cash flows.

The income statement provides part of the explanation as to why financial position changed during the year. The statement of changes in stockholders' equity provides an additional part of the answer. But, only the cash flow statement provides a comprehensive look at the changes in financial position during the period. A closer look at some common transactions can help you better understand how the cash flow statement reports cash flows and reflects all changes in financial position.

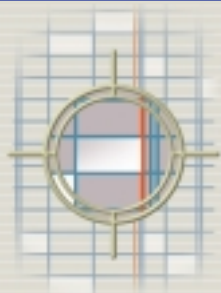
### IDENTIFYING CASH EFFECTS

In many cases, the cash effects of a change in financial position can be determined easily. If, for example, the balance of the land account increases by \$100,000 during the year, and only one transaction has occurred involving land, this would seem to indicate that land was purchased for \$100,000; land increases and cash decreases by \$100,000. However, suppose the company both bought and sold land during the period. Or, suppose the land was purchased in exchange for a long-term note. The cash effects of changes in financial position are not always as simple as they seem. Therefore, accountants must be careful to explain the changes in a company's financial position and the effects on cash so decision makers can understand what has occurred.

Changes in a particular account that involve both increases and decreases normally must be reported separately. For example, an increase in land during the period might involve both a sale of land and a purchase of land, and the two must be reported separately. In addition, the gain or loss on the sale of land is included in net income and, therefore, must be removed from the operating section of the cash flow statement because it does not relate to operations and does not have a cash effect separate from the sales price of the land.

## A CLOSER LOOK AT

## Increases and Decreases with Gains or Losses



Bradley Company's land account increases \$100,000 during the year. The company also reports a \$10,000 gain on the sale of land in its income statement. The land account on the company's books appears as follows:

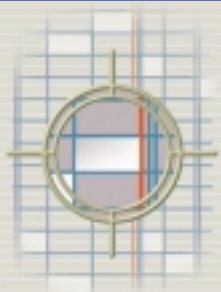
Land			
1/1 Balance	350,000		
9/20 Purchase	<u>140,000</u>	7/15 Sale	40,000
12/31 Balance	<u>450,000</u>		

Thus, Bradley has sold one parcel of land for \$50,000, its original cost of \$40,000 plus the gain of \$10,000, and purchased another parcel for \$140,000. The statement of cash flows reports an adjustment of \$10,000 deducted from net income in the operating section to remove the gain from operations and to avoid counting that \$10,000 twice. The full \$50,000 sales amount of the land is reported in the investing section of the statement as a cash inflow from the sale of land. In addition, the purchase of land for \$140,000 is reported in the investing section, but as a cash outflow.

Increases and decreases in other assets or liabilities also must generally be dealt with separately. For example, from Exhibit 13-1, you can see that May Company reports in the financing section of its cash flow statement proceeds from issuance of debt separately from repayments of debt. In addition, the complications of depreciation and amortization must be dealt with when considering changes in limited-life assets.

## A CLOSER LOOK AT

## Depreciable Assets and Cash Flows



Robin Corporation sells equipment during the year at a loss of \$2,000 and also purchases equipment for \$100,000. On the company's books, the Equipment and related Accumulated Depreciation accounts appear as follows for the year:

Equipment			
1/1 Balance	275,000		
9/30 Purchase	<u>100,000</u>	1/5 Sale	50,000
12/31 Balance	<u>325,000</u>		

Accumulated Depreciation—Equipment			
		1/1 Balance	125,000
1/5 Asset Sale	30,000	12/31 Expense	<u>40,000</u>
		12/31 Balance	<u>135,000</u>

When recorded on Robin's books, the sale of equipment increases cash by \$18,000, reduces equipment by the original cost of \$50,000 and accumulated depreciation \$30,000, and leads to a \$2,000 loss on the sale, as follows:

Cash		\$18,000
Less book value of equipment:		
Original cost	\$ 50,000	
Accumulated depreciation	<u>(30,000)</u>	
Book value		<u>20,000</u>
Loss on sale		<u>\$ 2,000</u>

The investing section of Robin's cash flow statement includes the following:

Cash provided by (used in) investing activities:	
Sale of equipment	\$ 18,000
Purchase of equipment	(100,000)

The cash provided by the sale is equal to the \$20,000 book value of the equipment sold (cost of \$50,000, less accumulated depreciation of \$30,000) minus the \$2,000 loss. In the operating section of the statement, the \$2,000 loss is eliminated through an adjustment adding it to net income because it is not related to operations and because the total cash effect of the sale is reported in the investing section. The amount of depreciation expense for the year, \$40,000, is added to net income in the operating section of the statement because it had been deducted to arrive at net income but did not use cash.

## SUPPLEMENTAL CASH FLOW INFORMATION

Some changes in financial position do not affect cash directly, yet they reflect important investing or financing activities of which decision makers should be aware. Because these activities do not provide or use cash, they are not reported in the operating, investing, or financing sections of the cash flow statement. However, authoritative standards do require that they be disclosed. In addition, companies are required to disclose cash payments made for income taxes and interest because of the importance of these two items.

These supplemental disclosures are made in a variety of ways, although the standards encourage that these disclosures be made on the face of the cash flow statement. (See In Practice 13-5.) Some companies include a separate section at the bottom of the cash flow statement for supplemental disclosures, as can be seen in Exhibit 13-1 for May Company's interest and income taxes. Others include the supplemental information in a note to the cash flow statement or in the notes to the financial statements in general.

## ALTERNATIVE REPORTING APPROACHES

Nearly all companies, including May Company and Gateway, use what is referred to as an indirect approach to reporting cash flows. The operating section of the cash flow statement starts with net income and then presents adjustments to reach the amount of cash provided by operations. The advantage of this approach is that it reconciles the cash provided by operations with the income reported in the income statement and clearly presents the differences. The disadvantage is that financial statement users may have difficulty understanding the adjustments, and this leads to misunderstandings, such as referring to the "cash provided by depreciation."

## In Practice 13-5



## Lucent Technologies and Pizza Inn, Inc.

Lucent Technologies includes the following information on the fifth page of its Notes to Consolidated Financial Statements:

## SUPPLEMENTAL CASH FLOW INFORMATION (dollars in millions)

	Year Ended September 30 (Twelve Months)		Nine Months Ended September 30,
	1998	1997	1996
Interest payments, net of amounts capitalized	\$ 319	\$ 307	\$209
Income tax payments	\$ 714	\$ 781	\$142
ACQUISITIONS OF BUSINESSES			
Fair value of assets acquired	\$2,341	\$1,812	\$527
Less: Fair value of liabilities assumed	\$ 994	\$ 244	\$293
Acquisitions of businesses	\$1,347	\$1,568	\$234

Pizza Inn includes the following presentation at the end of its Consolidated Statements of Cash Flows:

SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION  
(In Thousands)

	Year Ended		
	June 28, 1998	June 29, 1997	June 30, 1996
CASH PAYMENTS FOR:			
Interest	\$526	\$612	\$880
Income taxes	160	150	110
NONCASH FINANCING AND INVESTING ACTIVITIES:			
Capital lease obligations incurred	\$ —	\$ —	\$477

## Analysis

*Although these two companies disclose the supplemental cash flow information in different locations, and some companies use different formats, all companies disclose the required information in their financial reports so that it is easily accessible. [www.lucent.com]*

The FASB has recommended that companies present the cash flow statement using a format referred to as the **direct approach**, which focuses on cash flows directly rather than starting with net income and adjusting for noncash items. Under this approach, the operating section of the cash flow statement reports cash received from customers, cash interest or dividends received from investments, and cash received from other income sources, as well as cash payments made to suppliers and employees, and cash paid for interest and for taxes. Noncash revenues and expenses, as well as all nonoperating gains and losses, are not included because they have no direct cash flow effects. This direct approach is generally considered to be more understandable than the indirect approach, but a separate reconciliation with net income is needed. The investing and financing sections of the statement are the same under both approaches.

Both the direct and indirect approaches arrive at the same cash from operations, but the direct method focuses on the cash flows, while the indirect method focuses on net income and adjusting it to arrive at the net cash flow from operations. Although the indirect method allows users to tie the cash flow statement to the other financial statements more easily, the direct method provides a more intuitive presentation.

## A CLOSER LOOK AT

### Alternative Approaches to the Cash Flow Statement

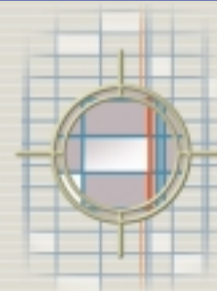
Ritts Company's comparative year-end balance sheet amounts are as follows:

	2001	2000	Increase (Decrease)
Cash	\$ 3,400	\$ 2,200	\$ 1,200
Accounts receivable	24,000	25,500	(1,500)
Inventory	67,800	53,100	14,700
Land	55,000	41,400	13,600
Buildings and equipment	221,100	138,400	82,700
Accumulated depreciation	(36,100)	(20,500)	(15,600)
Patents	40,000	45,000	(5,000)
Total assets	<u>\$375,200</u>	<u>\$285,100</u>	<u>\$90,100</u>
Accounts payable and accruals	\$ 2,100	\$ 1,400	\$ 700
Taxes payable	1,200	700	500
Long-term debt	150,000	100,000	50,000
Capital stock	50,000	40,000	10,000
Additional paid-in capital	88,800	71,300	17,500
Retained earnings	83,100	71,700	11,400
Total liabilities and equity	<u>\$375,200</u>	<u>\$285,100</u>	<u>\$90,100</u>

The following is the company's income statement for 2001:

Revenues	\$ 565,000
Cost of goods sold	(323,000)
Gross margin	<u>\$ 242,000</u>
Other income: gain on sale of land	3,000
Expenses:	
General operating expenses	(152,700)
Depreciation and amortization	(20,600)
Interest expense	(8,200)
Income taxes	(19,100)
Net income	<u>\$ 44,400</u>

Ritts sold land during the year for \$9,500 and purchased land for \$20,100. The company did not sell any buildings, equipment, or patents. Ritts paid cash dividends of \$33,000 during the year, and its interest expense was all paid in cash. From its financial statements and other information, Ritts prepares the cash flow statement shown in Exhibit 13-4, using the indirect approach. The cash expended for new buildings and equipment is determined from the increase in the balance sheet account, and the amortization of the patents is determined from the decrease in the Patents account.



If Ritts had used the direct approach to preparing its cash flow statement, the operating section of the statement would appear as in Exhibit 13–5. The rest of the statement would be the same as under the indirect approach. The cash collected from customers is determined by adding the decrease in accounts receivable to the sales revenue reported in the income statement. The cash paid to suppliers is computed by summing the cost of goods sold and operating expenses in the income statement, adding the increase in inventory, and subtracting the increase in accounts payable and accruals. The cash paid for interest is taken from the income statement, and the cash paid for income taxes is computed by subtracting the increase in taxes payable from the income taxes reported in the income statement.

**Exhibit 13-4 STATEMENT OF CASH FLOWS—INDIRECT METHOD**

Ritts Company	
Statement of Cash Flows	
For the Year 2001	
Cash Flows from Operations:	
Net income	\$ 44,400
Adjustments:	
Depreciation and amortization of patents	20,600
Gain on sale of land	(3,000)
Decrease in accounts receivable	1,500
Increase in inventory	(14,700)
Increase in accounts payable and accruals	700
Increase in taxes payable	500
Cash provided by operations	\$ 50,000
Cash Flows from Investing Activities:	
Sale of land	\$ 9,500
Purchase of land	(20,100)
Purchase of buildings and equipment	(82,700)
Cash flows used in investing activities	(93,300)
Cash Flows from Financing Activities:	
Issuance of long-term debt	\$ 50,000
Issuance of capital stock	27,500
Dividends paid	(33,000)
Cash provided by financing activities	44,500
Increase in cash	\$ 1,200
Beginning cash balance	2,200
Ending cash balance	\$ 3,400
Supplemental Information	
Cash payments for:	
Interest	\$ 8,200
Income taxes	18,600

**OPERATING SECTION OF STATEMENT OF CASH FLOWS—  
DIRECT METHOD****Exhibit 13-5**

Ritts Company	
Statement of Cash Flows	
For the Year 2001	
Cash Flows from Operations:	
Cash collections from customers	\$ 566,500 <sup>a</sup>
Payments to suppliers	(489,700) <sup>b</sup>
Interest	(8,200)
Income taxes	(18,600) <sup>c</sup>
Cash provided by operations	<u>\$ 50,000</u>

<sup>a</sup>\$565,000 + \$1,500<sup>b</sup>(\$323,000 + \$152,700) + (\$14,700 – \$700)<sup>c</sup>\$19,100 – \$500**EVALUATING CASH FLOW INFORMATION****Information for Decisions**

Cash flow information is often best used in comparison with other information over several time periods. This type of evaluation can help financial statement users answer questions such as these: Even though total cash flow is adequate, what is the relative reliability of each source of cash, and

how does this compare to industry standards? Will this company generate enough cash flow per share to be able to continue its dividend payments? To what extent do the operations of the company generate available cash after maintaining the company's productive capacity?

Throughout this chapter we have seen that the information reported in the cash flow statement helps decision makers better understand an organization's activities. As with other accounting information, data about cash flows are generally most useful when used in comparison with other information. Some comparisons are made within the cash flow statement itself. For example, we saw that comparing the cash generated by operations with the cash used in investing activities is a good indication of how a company finances its growth and whether that growth can be sustained.

In some cases, decision makers may wish to determine the primary sources of cash for an organization. One way of looking at this information is to accumulate all of the organization's sources (not uses) of cash from the cash flow statement and determine the percentage contribution by each. For example, using the cash flow statement in Exhibit 13-4, Ritts Company's sources of cash can be analyzed as follows:

	Amount	Percent
Sources of Cash:		
Income before gain and after adjustment for depreciation and amortization: \$44,400 + \$20,600 – \$3,000	\$ 62,000	41.3%
Net increases in current liabilities	1,200	0.8%
Sale of assets	9,500	6.3%
Issuance of long-term debt	50,000	33.3%
Issuance of capital stock	27,500	18.3%
Total cash flow inflows	<u>\$150,200</u>	<u>100.0%</u>



This analysis provides an overview of all of the sources that an organization is relying on for cash. These sources can then be considered for their reliability and durability. This type of analysis also can be useful in comparison with other companies in the same industry or the same company in prior years.

As we saw in earlier chapters, ratios are useful when analyzing a company's financial position and activities because they provide standardized comparisons. Although any ratios that a decision maker may find useful can be constructed, several are commonly used.

## CASH FLOW MEASURES RELATED TO RETURN

Perhaps the most commonly used ratio relating to cash flows is operating cash flow per share, usually referred to simply as cash flow per share. For many years, the accounting profession discouraged reporting this number because it detracted from accrual-basis income and earnings per share. However, this measure is viewed as particularly useful in assessing a company's ability to pay dividends and, over time, as an indication of how successful a company's operations are. **Cash flow per share** is computed as follows:

$$\text{Cash flow per share} = \frac{(\text{Net cash provided by operations} - \text{Dividends on preferred stock})}{\text{Common shares outstanding}}$$

Gateway does not report its cash flow per share, but based on its reported operating cash flows and the average number of common shares outstanding [from Note 1(n) to its financial statements], its cash flow per share for each of the three years for which its cash flow statement is shown in Appendix A is as follows:

1998	1997	1996
$\frac{\$907,651}{155,542} = \$5.84$	$\frac{\$442,797}{153,840} = \$2.88$	$\frac{\$483,996}{152,745} = \$3.17$

Gateway has no preferred stock outstanding, so no preferred dividend is deducted from cash flow. The number of common shares used in the computations is the same as that used to compute earnings per share.

As a potential investor, what does this ratio tell you? You can see that the cash flow generated by Gateway's operations is significant and, after dropping slightly in 1997, increased dramatically in 1998. This bodes well for the future of the company, indicating a significant capacity for internal financing of future growth. Further, although Gateway does not currently pay dividends, its cash flow per share indicates a growing potential for such payments in the future.

Another cash measure of return is the ratio of **cash flow to total assets**. This ratio is computed as follows:

$$\text{Cash flow to total assets} = \frac{\text{Cash flow from operations}}{\text{Average total assets}}$$

For Gateway, the ratio of cash flow to total assets in 1998 is:

$$\frac{\$907,651}{(\$2,039,271 + \$2,890,380)/2} = .368$$

The amount of average total assets is computed by summing total assets at the end of 1997 and 1998, and then dividing by 2. In effect, the ratio of cash flow to total assets provides a measure of cash return on the investment in assets and can be used over time as a measure of profitability. However, this measure tends to be more volatile than accrual-based return on assets.

One other measure that is often discussed by financial analysts is **free cash flow**. This measure indicates the amount of cash that is generated by operations after maintaining productive capacity. Free cash flow is measured as follows:

$$\text{Free cash flow} = \left( \begin{array}{c} \text{Cash generated} \\ \text{from} \\ \text{operations} \end{array} \right) - \left( \begin{array}{c} \text{Cash invested} \\ \text{to maintain} \\ \text{capacity} \end{array} \right)$$

The resulting figure provides a measure of the cash flows that can be used for expansion, paying off debt, retiring stock, or paying dividends to owners. Unfortunately, most companies do not report investments to maintain capacity separate from expansion investments. Therefore, some estimate must be made of the portion of investment representing a maintenance of the status quo. Many times, however, the entire amount of cash invested in operating capacity is deducted, thus understating the free cash flow.

## CASH FLOW MEASURES RELATED TO SAFETY

Measures of cash flow related to safety typically have to do with how cash flows from operations compare with some required or anticipated payment. One such measure is the ratio of **dividends to operating cash flow**, which compares cash provided by operations with the current dividend to stockholders. For Gateway, the ratio is not meaningful because Gateway does not pay dividends. For May Company, based on Exhibit 13–1, this ratio is calculated as follows:

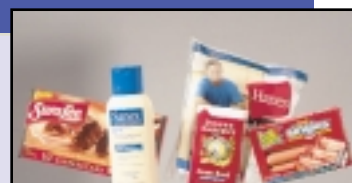
1998	1997	1996
$\frac{\$308}{\$1,505} = .205$	$\frac{\$297}{\$1,526} = .195$	$\frac{\$305}{\$1,283} = .238$

With May Company's dividend payments equal to about 20 percent of cash generated from operations, a reasonable margin of safety for the dividend is provided. In addition, some margin is provided for internal financing. However, a significant asset replacement or expansion could strain internal financing and require additional long-term financing.

## In Practice 13-6

### Sara Lee Corporation

In 1998, Sara Lee reported a net loss of \$523 million. Yet, the company paid cash dividends to common shareholders of \$358 million to continue its policy of paying regular cash dividends. Where did Sara Lee get the money to pay cash dividends? Its cash flow from operating activities in 1998 was \$1.935 billion. Many of its 1998 expenses did not use cash, including \$618 million of depreciation and amortization and, the main reason for its net loss, a restructuring charge of more than \$2 billion.



### Analysis

The company's ratio of common stock dividends to operating cash flow was:

$$\frac{\$358 \text{ million}}{\$1,935 \text{ million}} = .185$$

This ratio indicates the high margin of safety reflected in Sara Lee's dividend policy.  
[www.saralee.com]

Another measure of safety is the ratio of **cash flow to current maturities of debt**. This ratio indicates a company's ability to generate enough cash from its operations to repay debt commitments that mature in the near future, excluding normal trade payables. The ratio is calculated as follows:

$$\text{Cash flow to maturing debt} = \frac{\text{Cash provided by operations}}{\text{Debt maturing currently}}$$

Gateway's ratios are as follows:

1998	1997
$\frac{\$907,651}{\$11,415} = 79.5$	$\frac{\$442,797}{\$13,969} = 31.7$

These ratios are very high, indicating Gateway's ability to easily meet its current maturities of debt. The reasons that Gateway has such unusually high ratios of cash flow to current maturities of debt reflect the characteristics of Gateway's operations. First, Gateway's operations generate a very large cash inflow. Second, Gateway has little long-term debt, and, even though the majority of it will be coming due shortly, the amount is small.

A similar safety measure is the ratio of **cash flow to total debt**. This ratio takes a longer-run view by comparing current cash flow from operations with total liabilities. The higher the ratio, the better a company's debt-paying ability and the better the safety margin for creditors and stockholders. Gateway's ratios of cash flow to total debt are as follows:

1998	1997
$\frac{\$907,651}{\$1,546,005} = .587$	$\frac{\$442,797}{\$1,109,227} = .399$

The ratio of cash flow to total debt is a stringent safety measure related to cash flows. Gateway's ratios are very good because of its high cash flows from operations and the small amount of long-term debt.

## SUMMARY

Much of current financial reporting is designed to project future cash flows. Accrual accounting, revenue and expense recognition principles, and valuation principles are all designed to assist in this projection. Accrual-basis income is considered useful for projecting both future income and cash flows. However, the statement of cash flows looks at current cash flows more directly, and information about cash flows is also considered useful by decision makers in projecting future cash flows. Decision makers use cash flow information to assess whether an organization will be able to meet its obligations in a timely manner, continue in business, have the means to expand, and provide cash distributions to the owners.

The cash flow statement reports how an organization's activities affected cash during the period, and it discloses significant noncash investing and financing activities. The statement reports sources and uses of cash in three main sections, reflecting the primary types of enterprise activities: operating activities, investing activities, and financing activities.

The major recurring source of cash for a business should be its operations. If a company cannot consistently generate cash from its operations over the long run, it eventually must stop operating. Most companies use an indirect approach to reporting cash from operations, starting with accrual-basis income and adjusting that amount to reflect cash generated from operations. While these adjustments may appear in the statement as if they are sources of cash, they are not; they are simply adjustments needed to determine the cash generated because some items affect net income and cash differently.

Cash flows related to investing activities are concerned primarily with the replacement and expansion of operating capacity, as well as the disposal of assets no longer used. This section of the cash flow statement is important because it indicates the company's commitment to maintaining and expanding its capacity.

Cash flows related to financing activities indicate to what extent a company has increased its cash or financed

its investments through external sources. It also reports reductions in outside financing by using cash to retire debt or reacquire stock. Further, this section shows how much cash has been returned to owners through dividend distributions.

The analysis of a company's cash flow statement and related ratios is a key part of making decisions about the company. Useful comparisons relating to cash flows tend to focus on cash flows from operations and to compare these cash flows with current or expected future cash needs.

## LIST OF IMPORTANT TERMS

cash flow per share (514)	cash flows from operations (494)	dividends to operating cash flow (515)
cash flow to current maturities of debt (516)	cash flows related to financing (495)	free cash flow (515)
cash flow to total assets (514)	cash flows related to investing (494)	indirect approach (498)
cash flow to total debt (516)	direct approach (510)	statement of cash flows (494)

## EXAMINING THE CONCEPTS

**Q13-1** The cash flow statement is one of four basic financial statements. What are the other three statements?

**Q13-2** What is the purpose of the cash flow statement?

**Q13-3** What are the three major sections of a cash flow statement? Give an example of an item that would be reported in each.

**Q13-4** How can you tell whether a company is expanding or contracting by reading its cash flow statement?

**Q13-5** Explain what is meant by the statement that managing a company's cash flow is, in part, a balancing of profitability and liquidity.

**Q13-6** Identify at least three alternative uses of a company's cash generated from operations.

**Q13-7** How does the statement of cash flows tie together the other three financial statements? Why is a full set of financial statements needed to understand a company's financial position and changes in that position?

**Q13-8** When preparing the cash flow statement by the indirect method, why does net income need to be adjusted to arrive at operating cash flows?

**Q13-9** Is depreciation a source of cash from operations? Explain.

**Q13-10** If depreciation does not use cash, how is the cash outflow used to acquire depreciable assets reported?

**Q13-11** Identify three expenses that do not involve cash outflows during the period the expenses are recognized. For each, explain why no cash flow occurs in the period in which the expense is recognized.

**Q13-12** Explain how a company can increase its sales and, in the same year, experience a decrease in cash generated by operations.

**Q13-13** Where in the statement of cash flows is a loss from the sale of equipment reported? Explain why this is done.

**Q13-14** Under normal circumstances, when a company increases its accounts receivable balance from the previous year, it also increases its current assets, working capital, and current ratio. Does it also increase its cash inflows? If so, how and when is the cash inflow increased?

**Q13-15** If a company reported only the total cash flows from operations without all of the confusing adjustments, identify at least one important piece of information that would be lost. What decision might this missing information affect?

**Q13-16** What are the two main investing cash flows for most companies? List two others.

**Q13-17** What is the possible significance of a company generating most of its cash from investing activities? What effect could this information have on an investor's or creditor's decisions about the company?

**Q13-18** Companies often choose between issuing bonds and common stock when they need additional capital. How does the way in which interest payments on the debt are reported in the cash flow statement differ from the reporting of dividends paid on stock?

**Q13-19** If a company obtains needed cash through financing activities rather than operations, does this mean the company is in financial difficulty? Explain.

**Q13-20** Why might a company borrow short-term to repay long-term debt? Given that the short-term debt will need to be “rolled over,” do you think such a company expects interest rates to be going up or going down in the future?

**Q13-21** Why is the ratio of cash dividends paid to operating cash flow of interest to investors? To managers?

**Q13-22** Johnson Company recently sold a building at a loss. How will the company report the transaction in the cash flow statement if it uses the indirect approach of presenting its statement?

**Q13-23** What supplemental cash flow information must be reported? How would the exchange of outstanding bonds for common stock in a conversion be reported?

**Q13-24** Companies are required to disclose the cash payments made for income taxes and interest. Why are these two

items singled out? In what two ways do companies most often report these items?

**Q13-25** If you are concerned that a company has reported positive cash flows by slowing its payments on current liabilities and by issuing additional long-term debt, what factors might you examine? Explain.

**Q13-26** Compare cash flow per share and earnings per share. Would you expect one to be higher than the other? Why?

**Q13-27** Explain how the ratio of a company’s cash flows from operations to current maturities of its debt provides information about the safety of an investor’s holdings in that company. Does the ratio of cash flow to total debt provide the same information? Explain.

## UNDERSTANDING ACCOUNTING INFORMATION

### E13-1 Understanding the Statement of Cash Flows

Sorter Company reported the following summarized cash flows for the current year:

Cash flows from operations	\$ 600,000
Cash flows from investing activities	(700,000)
Cash flows from financing activities	200,000
Net cash flows	\$ 100,000
Beginning cash balance	70,000
Ending cash balance	<u>\$ 170,000</u>

- Does Sorter Company appear to be in a favorable position to pay a cash dividend of \$130,000 at year-end?
- Why are operating cash flows critical in evaluating Sorter’s ability to pay future cash dividends?
- If an investor wishes to determine if Sorter Company has generated cash by issuing additional stock, which portion of the cash flow statement would provide the information?
- Is it possible for a company such as Sorter to report a positive cash flow for the period even though it has a negative cash flow from operations? Explain.

**E13-2 Operating Cash Flows** Moret Company’s cash flow statement for the current year contained the following information on cash flows provided by operations:

Net income		\$ 57,000
Depreciation and amortization	\$ 42,000	
Increase in accounts receivable	(15,000)	
Decrease in inventory	7,000	
Increase in accounts payable	12,000	46,000
Cash provided by operations		<u>\$103,000</u>

- Why must noncash expenses such as depreciation be added to net income in computing the cash provided by operations?
- If Moret Company had reported depreciation expense of \$62,000 rather than \$42,000, what impact would this change have on cash provided by operations for the year? Which of the above totals would change? By what amounts?
- In what way does an increase in accounts payable represent a cash savings?
- Why is the computation used above in determining Moret’s cash provided by operations described as the indirect method?

**E13-3 Investing Cash Flows** Rigor Company reported the following net cash flow from investing activities in its cash flow statement:

Sale of equipment	\$ 40,000
Sale of land	160,000
Purchase of Starback Corporation bonds	(350,000)
Cash used in investing activities	<u>\$(150,000)</u>

- If Rigor Company is expanding, would the cash flows from investing activities be expected to be positive or negative? Explain why.
- Does Rigor Company appear to be expanding or contracting its operations? How do you know?
- Is it possible to determine if a gain or loss was recorded on the sale of equipment by looking at the cash flow statement? Where would this amount be disclosed?
- Does the \$40,000 reported from the sale of equipment represent the cash received or the carrying value of the equipment at the time of sale?

- e. In light of Rigor's cash flows from investing activities, would you expect Rigor to be generating cash flows from financing activities? Explain.

**E13-4 Financing Cash Flows** The cash flow from financing activities reported by Bobble Corporation included the following:

Issuance of preferred stock	\$ 150,000
Issuance of common stock	720,000
Retirement of bonds payable	(210,000)
Dividends paid	(35,000)
Cash provided by financing activities	<u>\$ 625,000</u>

- Are the financing activities reported by Bobble consistent with a company that is expanding or contracting? Explain.
- Which of the financing activities reported for the current year are not likely to occur on an annual basis?
- If Bobble is operating profitably, is more of the \$625,000 of cash provided by financing activities likely to be used on operating activities or investing activities?
- Why are dividends excluded from the income statement but included in the statement of cash flows?

#### E13-5 Reporting Changes in Financial Position

- Why does the change in cash balance reported in the cash flow statement typically differ from the change in retained earnings reported in the statement of changes in stockholders' equity?
- What are the major sources of cash typically used to purchase long-term assets?
- What are the major sources of cash typically used to retire short-term debt? Long-term debt?
- Which section(s) of the cash flow statement is (are) reported differently if the direct method is used in preparing the cash flow statement?
- Are total cash flows for the period computed using the direct method generally larger than, less than, or equal to cash flows computed using the indirect method? Explain.

**E13-6 Evaluating Cash Flow Information** An analysis of financial statement data for Grapp Company and Stomp Corporation resulted in the following ratio information:

	<b>Grapp</b>	<b>Stomp</b>
Earnings per share	\$2.50	\$1.20
Cash flow per share from operations	3.00	1.25
Cash flow to total assets	.20	.05

- What is likely to cause the amount reported as cash flow per share to be greater than the amount reported as earnings per share?

- Is the amount reported as earnings per share or cash flow per share more likely to be affected by a delay in paying suppliers? Explain.
- Which of the two companies appears to be in a better position to pay a cash dividend at the end of the current accounting period? Explain.
- Why is the ratio of cash flow to total assets computed using the cash flow from operations rather than the cash flow from all sources? How might use of the net cash flows from all sources mislead investors?
- Which of the two companies appears to be in a better position to replace its operating assets? Explain.

#### E13-7 Multiple Choice: The Statement of Cash Flows

Select the correct answer for each of the following:

- The cash flows from operations section of the statement of cash flows prepared using the indirect approach includes:
  - Net income on an accrual basis.
  - Adjustments for noncash expenses.
  - Adjustments to remove gains and losses on the sale of noncurrent assets.
  - All of the above.
- Which of the following has the effect of increasing cash flows?
  - Accounts receivable increases more than inventory increases.
  - Accounts receivable increases less than inventory increases.
  - Accounts receivable and inventory both decrease.
  - Accounts receivable and inventory both increase.
- The statement of cash flows ties together the other financial statements by:
  - Reporting the adjustments necessary to reconcile net income and cash generated by operations.
  - Reporting all changes in the balance sheet in terms of their effects on cash.
  - Separating cash flow activities into operating, investing, and financing.
  - All of the above.
- The statement of cash flows is divided into three main categories. These categories are:
  - Operating, investing, and cash collections.
  - Operating, marketing, and investing.
  - Cash outflows, cash inflows, and noncash activities.
  - Operating, investing, and financing.
- Which of the following describes the content of the categories of the statement of cash flows?
  - Cash flows from operations are routine in nature and usually are expected to be repetitive.
  - Cash flows related to investing reflect the use of cash for the purchase of new plant and equipment.
  - Cash flows from financing reflect amounts received by borrowing or from issuing stock.
  - All of the above.



**E13-8 Multiple Choice: Operating Cash Flows** Select the correct answer for each of the following:

- Which of the following is added to net income in deriving cash flows generated from operations when using the indirect method?
  - Increases in accounts receivable.
  - Increases in accounts payable.
  - Decreases in accounts payable.
  - None of the above.
- Which of the following is deducted from net income in deriving cash flows generated from operations when using the indirect method?
  - Increases in accounts receivable and increases in inventory.
  - Increases in accounts payable and decreases in inventory.
  - Decreases in accounts receivable and decreases in inventory.
  - All of the above.
- Expenses that reduce net income in the current period but do not use cash are added back to determine cash generated by operations for the period. They include:
  - Cost of goods sold.
  - Interest expense on short-term bank loans.
  - Amortization of intangible assets.
  - Amortization of premium on bonds payable.
- Which of the following decisions are likely to be influenced as much or more by cash flows from operations than by reported net income?
  - Whether the company will have to enter the capital markets to finance its planned expansions.
  - Whether the new product line added this year is profitable enough to improve the overall gross margin.
  - Whether the company should reduce its investment in inventory in accordance with its plans for a just-in-time inventory management system.
  - Whether the company would improve its liquidity by changing to an accelerated depreciation method for financial reporting.
- Which of the following items reported in the operating section of the statement of cash flows might indicate a potential liquidity problem?
  - Positive cash flow appears to have been maintained by increasing accounts payable.
  - Cash inflows seem to be lower in the current year because of an increase in accounts receivable and inventory.
  - Prepaid expenses have not decreased in the current year.
  - Both (a) and (b) are correct.

**E13-9 Multiple Choice: Cash Flows** Select the correct answer for each of the following:

- If a company is expanding, purchases of operating assets normally:
  - Are treated as a deduction from depreciation expense in determining the change in cash flow from operations.

- Will be larger than the cash generated from issuing additional bonds or stocks.
  - Will be larger than the depreciation expense adjustment to operating cash flows.
  - All of the above.
- Free cash flow is a measure of:
    - The amount of cash that is generated by operations after maintaining productive capacity.
    - The cash flow that is left after paying off debt.
    - The cash flow used to retire stock and pay dividends.
    - The ratio of cash flow to total assets.
  - The financing section of the statement of cash flows reports:
    - The amount of cash made available by recording depreciation expense for the year.
    - The cash effects of borrowing, repaying debt, issuing stock, repurchasing stock, and paying dividends.
    - The amount of cash used to increase operating assets or long-term investments.
    - The cash used to pay interest on long-term debt and dividends on outstanding stock.
  - The payment of cash dividends is:
    - Limited to free cash flow.
    - Limited to cash flow generated from operations.
    - Reported in the financing section of the cash flow statement.
    - Limited to the cash flow from operations, less any cash used to purchase investments.
  - The statement of cash flows presents a comprehensive look at the changes in financial position beyond the information reported in the balance sheet when:
    - Property, plant, and equipment is both purchased and sold during the period.
    - Long-term debt is retired and new debt is issued.
    - Intangible assets are increased by the purchase of trademarks and copyrights and decreased by annual amortization.
    - All of the above.

**E13-10 Tying Together Activities and Financial Statements**

- Which part of the cash flow statement is most directly linked to the income statement?
- Which part of the cash flow statement is most directly linked with an increase in noncurrent assets?
- Which part of the cash flow statement is most directly linked to an increase in long-term liabilities?
- Which part of the cash flow statement is most directly linked to the distribution of net income in the form of cash dividends?
- Which section of the cash flow statement should investors examine if they wish to predict a company's ability to pay future dividends?
- Which section of the cash flow statement should investors examine if they wish to predict a company's ability to pay off existing long-term debt?



**E13-11 Statement Classification** Indicate whether the (1) operating, (2) investing, or (3) financing section of the statement of cash flows is most likely to contain the information needed to answer the following questions. If the information is in more than one section, so indicate. If information from other financial statements is needed, so indicate.

- Will there be enough cash to pay the accounts payable when they are due?
- Are there unpaid wages, and will cash be available to make the payments?
- Will there be enough cash to pay off the long-term debt when it is due without additional borrowing?
- Does the company consistently generate enough cash to pay dividends?
- How dependable are the company's sources of cash?
- Has the company expanded in the past year and, if so, how was the expansion financed?
- Does the company have sufficient cash inflows to make required interest payments?
- Is the amount of cash generated through operating activities greater than the amount reported as net income?
- Are receivables being collected on a timely basis?
- How are the cash flows affected by unusual transactions or events such as losses from restructuring or write-offs of obsolete production facilities?
- Were any bonds converted into common stock during the period?

**E13-12 Classification of Activities** Indicate whether each of the following items should be classified as an operating, investing, or financing activity when reported in the statement of cash flows, classified in some other way, or excluded from the statement:

- Payment of cash dividends on common stock.
- Borrowing cash by issuing a long-term note.
- Sale of a warehouse at book value.
- Purchase of common stock of an affiliated company to obtain control of its operations.
- Interest payments on an outstanding long-term note.
- Collection of accounts receivable.
- Purchase of treasury stock.
- Conversion of outstanding bonds to shares of common stock.
- Declaration (but not payment) of dividends on preferred stock.
- Acquisition of land in exchange for common stock.
- Purchase of operating equipment.

**E13-13 Sources of Cash Flows** The Expando Company plans to invest approximately \$500,000 each year for the next 3 years to expand its operations into a neighboring state. Net income for the last 3 years, most recent first, has been \$225,000, \$223,000 and \$224,000, respectively. Cash generated by operations for each of the last 3 years has been \$420,000, \$410,000, and \$398,000, respectively. Much of the difference between net income and cash flow from operations each year is due to depreciation expense.

- Is it possible for Expando Company to fund its expansion from operating cash flows? What other uses may have to be made of the cash generated from operations? Will it help to increase depreciation? Explain.
- Identify the alternative sources of cash that Expando should consider for its expansion.
- Expando's management says that the expansion is needed because sales in the neighboring state have increased by \$1,000,000 in the past 2 years. This, in turn, caused an increase in accounts receivable of \$150,000 and inventory of \$100,000. What effect has this had on cash generated by operations?

**E13-14 Cash Flows from Operations** You have been given the following information from the Albert Park Company. From the information, prepare a schedule that shows cash flows from operations using the indirect approach.

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Net income	\$775,000
Accounts receivable increase	163,000
Inventory decrease	187,000
Prepaid expense increase	12,000
Accounts payable increase	79,000
Depreciation expense	365,000
Amortization of goodwill	120,000
Decrease in deferred tax liability	185,000

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**E13-15 Cash Receipts and Payments** Lazard Company had sales of \$783,400 for the year. The company reported accounts receivable of \$87,500 at the end of last year and \$77,600 at the end of this year. Lazard's cost of goods sold this year was \$510,000. In last year's balance sheet, Lazard reported inventory of \$131,000 and accounts payable of \$53,700. In this year's balance sheet, Lazard reported inventory of \$142,600 and accounts payable of \$55,900.

- How much cash did Lazard collect from customers during the year?
- How much cash did Lazard pay to suppliers for inventory during the year?

**E13-16 Sale of Depreciable Assets** Linwood Corporation purchased equipment for \$300,000 on January 1, 1994, and used straight-line depreciation over a 10-year life. Estimated scrap value was \$20,000. If Linwood sold the equipment for \$88,000 on December 31, 2000, give the dollar amounts that would be reported in the cash flows from operations section and the investing section of Linwood's 2000 cash flow statement and state whether they would be added or deducted.

**E13-17 Increases and Decreases in Operating Cash Flows** Indicate whether each of the following items would be added to Melody Corporation's net income, deducted from net income, or have no effect in deriving cash provided by operations using the indirect method:

- An increase of \$6,000 in prepaid insurance.
- A reduction of \$21,000 in wages payable.
- A purchase of land for \$134,000.
- A purchase of inventory for \$49,000 on credit on December 31.
- A transfer of \$40,000 from the checking account to a money market account.
- An \$8,000 loss on the retirement of long-term bonds.
- A purchase of \$72,000 of treasury stock.
- A sale of buildings for \$320,000. The net book value at the time of sale is \$274,000.
- A receipt of \$75,000 from the maturity of a 30-day certificate of deposit.

Melody Corporation includes cash and cash equivalents in its cash balance. Cash equivalents include all highly liquid investments purchased with an original maturity of 3 months or less.

**E13-18 Operating Cash Flows** Davis Enterprises reported net income for the year of \$324,000 and paid cash dividends of \$40,000. Included in net income was interest expense of \$3,500, wage expense of \$112,000, depreciation expense of \$68,000, and cost of goods sold of \$667,000. The company's income also included a loss of \$7,000 on the sale of land and a gain of \$10,000 on the sale of investments. During the year, the company's inventory increased \$4,500, its accounts receivable increased \$15,000, and its accounts payable decreased \$7,200. The company's net income had been reduced by income taxes of \$85,000. The balance of income taxes payable at the end of the year was \$6,000 less than at the beginning of the year. Compute the amount of cash Davis Enterprises generated from its operations.

**E13-19 Adjusting Operating Cash Flows** Greenbow reported cash provided by operations of \$175,000 and an increase in its cash balance from \$90,000 to \$210,000 during the year. In reviewing Greenbow's financial statements you discover the following:

- Payments to suppliers were reduced by \$200,000 for the current year as the result of a one-time saving from adopting a new inventory control system.
  - A major customer was forced to delay payment of \$310,000 from November until January due to a strike by its employees. The customer is expected to resume paying promptly for all purchases starting in January.
  - Greenbow did not pay a dividend to its preferred shareholders during the current year. The preferred stock is cumulative and pays an annual dividend of \$30,000. Greenbow plans to pay a dividend of \$80,000 to its common shareholders next year.
  - Greenbow decided to change the depreciable lives of its long-term assets from 15 years to 20 years at the start of the year. The annual reduction in depreciation expense is expected to be \$82,000.
- What effect did each of these have on Greenbow's cash flow from operations or other cash flows reported in the cash flow statement in the current period?

- What would you project Greenbow's cash generated from operations to be for next year if all other operating results are same as this year?

**E13-20 Direct and Indirect Approaches** Jalleen Associates started business on February 4, 2000. During its first year of operations, the company had sales of \$445,600 and cost of goods sold of \$284,000. At the end of the year, customers still owed Jalleen \$17,000. The company reported wage expense of \$85,000 for the year, including \$3,000 of wages not yet paid at year-end. The company held inventory of \$12,000 at the end of the year and owed \$4,500 to suppliers. Jalleen recognized a total of \$21,000 of depreciation expense for the year. All of the company's other expenses of \$29,400 were paid in cash, except for \$1,300 still owed at year-end.

- Present the operating section of Jalleen's cash flow statement using the indirect approach.
- Present the operating section of Jalleen's cash flow statement using the direct approach.

**E13-21 Cash Flow Statement** During 2001, the London Prime Company reported net income of \$5,000,000 and paid dividends of \$3,000,000. The company had no sales of property, plant, and equipment during the year. Use the following information for the London Prime Company to prepare a statement of cash flows for the year ended December 31, 2001, using the indirect approach:

London Prime Company Balance Sheets, December 31		
	2001	2000
Cash	\$ 200,000	\$ 180,000
Accounts receivable	580,000	510,000
Inventory	1,020,000	970,000
Prepaid expenses	50,000	70,000
Property, plant, & equipment	30,000,000	25,000,000
Less accumulated depreciation	(15,000,000)	(12,000,000)
Goodwill (net)	9,000,000	10,000,000
Total assets	<u>\$ 25,850,000</u>	<u>\$ 24,730,000</u>
Accounts payable	\$ 300,000	\$ 340,000
Income taxes payable	450,000	290,000
Long-term debt	9,000,000	10,000,000
Common stock	8,000,000	8,000,000
Retained earnings	8,100,000	6,100,000
Total liabilities and owners' equity	<u>\$ 25,850,000</u>	<u>\$ 24,730,000</u>

**E13-22 Identifying Cash Flows** Classify each of the following transactions or activities as increasing, decreasing, or having no effect on cash flows:

- Selling merchandise on account.
- Amortizing purchased trademarks.

- c. Paying accounts payable.
- d. Borrowing on a long-term note payable.
- e. Prepaying premiums on a 3-year insurance policy.
- f. Collecting accounts receivable.
- g. Writing off a bad account to the allowance for uncollectibles.
- h. Estimating and recording warranty expense and a liability account for expected future warranty costs.
- i. Purchasing new factory equipment.
- j. Declaring a dividend.
- k. Paying a dividend previously declared.
- l. Paying interest on bonds previously sold at a discount.

### E13-23 Cash Flow Statement for Carey Corporation

Carey Corporation wishes to prepare a statement of cash flows for 2001. Carey had cash on hand of \$58,000 on January 1, 2001. During the year, Carey reported the following:

1. Sales of \$620,000.
2. Sale of investments for \$135,000 (including a gain of \$7,000).
3. Cost of goods sold of \$450,000.
4. Purchase of treasury stock of \$52,000.
5. Salaries and wage expense of \$80,000.
6. Payment of \$60,000 to retire bonds.
7. Purchase of land for \$71,000.
8. Depreciation expense of \$24,000.
9. Payment of dividends of \$30,000.
10. Tax expense of \$10,000.
11. Other expense of \$20,000.

Carey Corporation also reported the following changes in current assets and liabilities during 2001:

12. Accounts receivables increased from \$45,000 to \$53,000.
13. Inventory decreased from \$87,000 to \$83,000.
14. Wages payable increased from \$9,000 to \$15,000.
15. Accounts payable decreased from \$36,000 to \$31,000.
16. Taxes payable increased from \$6,000 to \$7,500.

- a. Compute net income for 2001 for Carey Corporation.
- b. Prepare a statement of cash flows for 2001 for Carey Corporation.

**E13-24 Operating Cash Flows—Indirect Method** Mellon Company reported sales and expenses as follows for the month of March:

Sales	\$95,000
Cost of goods sold	30,000
Depreciation expense	11,000
Utility expense	9,000
Wage expense	14,000
Amortization of goodwill	3,000

The following balances in current assets and liabilities were reported at the dates indicated:

	March 1	March 31
Accounts receivable	\$40,000	\$33,000
Inventory	55,000	72,000
Accounts payable to suppliers	24,000	28,000
Wages payable	20,000	18,500

- a. Compute the amount reported as net income by Mellon Company for the month of March.
- b. Present the cash flow from the operations section of Mellon's statement of cash flows using the indirect approach.

**E13-25 Operating Cash Flows—Direct Method** Using the information provided in E13-24, prepare the cash flow from operations section of Mellon's statement of cash flows using the direct method.

**E13-26 Preparing a Cash Flow Statement** Manchester Corporation reported the following transactions and changes in account balances during the year ended December 31, 2000:

Increase in:	
Accounts payable	\$ 40,000
Inventory	55,000
Interest receivable	1,800
Decrease in:	
Accounts receivable	75,000
Wages payable	22,000
Depreciation expense	64,000
Loss on sale of investments (\$55,000 carrying value at time of sale)	12,000
Purchase of new equipment	168,000
Purchase of treasury stock	90,000
Issuance of preferred stock	70,000
Dividends paid	85,000

Net income for 2000 was \$160,000. The cash balance at January 1, 2000, was \$34,900. Prepare a cash flow statement for the year 2000 for Manchester Corporation.

**E13-27 Financial Statement Balances** Provide correct answers for the following:

- a. Snorkel Company reported cash receipts of \$128,000 from the sale of land in the Cash Flow from Investing Activities section of its cash flow statement. It also reported a deduction of \$23,000 from net income for a gain on the sale of land in the Cash Flow from Operations section of the cash flow statement. What was the carrying value of the land on Snorkel's books at the time of sale?
- b. Turnbuckle Corporation reported cash provided by financing activities of \$34,000, cash used in investing activities of \$87,000, cash provided by operations of \$135,000, a direct exchange of preferred stock with a fair value of \$190,000 for land to be used for expansion, and an ending

cash balance of \$113,000. What was the cash balance at the beginning of the year?

- c. Sulter Company reported cash provided by operations of \$185,000. Adjustments to net income consisted of an increase in accounts receivable of \$39,000, an increase in accounts payable of \$27,000, a loss on sale of land of \$13,000, depreciation of \$22,000, and a decrease in taxes payable of \$42,000. What amount did Sulter report as net income for the year?

**E13-28 Analysis of Cash Flows** Gerrard Company reported the following cash flows for the year ending December 31:

Cash flows from operations:		
Cash receipts from sales of product		\$1,300,000
Cash payments to suppliers		(720,000)
Cash payments to employees		(410,000)
Cash payments to others		(120,000)
Cash provided by operations		<u>\$ 50,000</u>
Cash flows from investing activities:		
Sale of investments	\$ 600,000	
Purchase of equipment	<u>(1,000,000)</u>	
Cash used in investing activities		(400,000)
Cash flows from financing activities:		
Issuance of capital stock		380,000
Increase in cash	\$ 30,000	
Beginning cash balance		10,000
Ending cash balance		<u><u>\$ 40,000</u></u>

Explain your answer to each of the following:

- Is the presentation of Gerrard's cash flows from operations based on the direct or indirect method?
- Is Gerrard in a good position to pay a cash dividend in the near future?
- Is Gerrard expanding or contracting its operations?
- Has Gerrard financed its purchase of new assets by borrowing additional money or by other means? What has been its primary sources of cash during the current year?

**P13-29 Evaluation of Cash Flow Information** An analysis of the financial statement data of Brown Company and Amber Company resulted in the following ratio information:

	Brown	Amber
Earnings per share	\$4.00	\$8.00
Dividends per share	1.50	3.00
Cash flow per share	5.00	7.50
Cash flow to total assets	.125	.125
Cash flow to total debt	.50	.20

Brown Company and Amber Company each have 20,000 shares of common stock outstanding.

- Compute the amount of cash provided by operations for each company. Which company has the larger dollar amount of cash provided by operations?
- Compute the amount of total assets reported by each company. Which company has the larger amount of total assets?
- Which company has the larger amount of debt outstanding? What amounts are reported by each company?

**E13-30 Computation of Cash Flows** In preparing the cash flows from operations section of its statement of cash flows, Lester Corporation reported the following:

Net income		\$188,000
Adjustments:		
Depreciation and amortization	\$ 36,000	
Increase in accounts receivable	(44,000)	
Increase in inventory	(17,000)	
Decrease in accounts payable to suppliers	(24,000)	
Increase in interest payable	13,000	
Decrease in income taxes payable	<u>(9,000)</u>	<u>(45,000)</u>
Cash provided by operations		<u><u>\$143,000</u></u>

In its income statement for the year, Lester Corporation reported sales of \$980,000, cost of goods sold of \$579,000, depreciation expense of \$36,000, interest expense of \$37,000, and income tax expense of \$140,000.

- What amount of cash did Lester Corporation receive from customers for the year?
- What amount did Lester Corporation pay to its suppliers for the year?
- What amount of interest payments did Lester Corporation make to its bondholders for the year?
- What amount of income tax did Lester Corporation pay for the year?
- Prepare the cash flows from operations section of Lester Corporation's statement of cash flows using the direct method.

**E13-31 Analyzing Transactions** For each of the following items, (1) identify the accounts affected and give the amounts by which they would be increased or decreased, (2) state the amount of any cash flow and whether cash is increased or decreased, and (3) identify how they would be reported in the statement of cash flows:

- A depreciable asset is sold for \$80,000. The asset originally cost \$175,000, and the accumulated depreciation is \$120,000.
- A depreciable asset is purchased for \$383,000. A cash payment of \$83,000 is made, and the remainder is paid with a long-term note of \$300,000.

- c. Interest of 8 percent is paid on bonds that were originally issued at a \$150,000 discount from their par value of \$1,000,000. A total of \$13,000 of the discount was amortized this year.
- d. Goodwill of \$630,000 from the purchase of a business was recorded several years ago. The goodwill is amortized over a 20-year period at the rate of \$31,500 per year.
- e. Income tax expense for the year is \$1,300,000. The tax payment during the year was \$1,150,000 because a portion of the revenue received will not be recognized on the tax return until next year.

**E13-32 Cash Flow Statement** Powell Corporation reported the following abbreviated balance sheet and income statement information:

<b>Powell Corporation</b>		
<b>Income Statement</b>		
<b>Year Ended December 31, 2001</b>		
Sales		\$ 400,000
Cost of goods sold		(180,000)
Gross profit		\$ 220,000
Supplies expense	\$25,000	
Depreciation expense	40,000	
Wages and salaries	90,000	
Interest expense	18,000	(173,000)
		\$ 47,000
Other income		14,000
Net income		\$ 61,000

<b>Powell Corporation</b>		
<b>Balance Sheets, December 31</b>		
	<b>2001</b>	<b>2000</b>
Cash	\$ 11,000	\$ 60,000
Accounts receivable	100,000	120,000
Inventory	320,000	260,000
Buildings & equipment (net)	400,000	350,000
Total assets	<u>\$831,000</u>	<u>\$790,000</u>
Accounts payable	\$ 80,000	\$ 90,000
Wages and salaries payable	25,000	20,000
Bonds payable	300,000	350,000
Common stock	170,000	100,000
Retained earnings	256,000	230,000
Total liabilities and equities	<u>\$831,000</u>	<u>\$790,000</u>

- a. Prepare a cash flow statement for Powell Corporation for the year ended December 31, 2001.
- b. Did working capital change by the same amount as cash generated by operations? Should these two be the same? Explain.

**E13-33 Determining Cash Flows** Dolores Company had a \$261,800 cash balance at the beginning of 2000. The com-

pany reported net income of \$388,900 for 2000. Included in the company's income statement was depreciation expense of \$67,000, interest expense of \$31,600, and income tax expense of \$102,000. The following also occurred during 2000:

- Accounts receivable increased by \$13,000.
- Inventory decreased by \$7,000.
- Accounts payable increased by \$3,500.
- Wages payable decreased by \$1,300.
- Income taxes payable increased by \$3,100, and the deferred tax liability increased by \$12,000.
- The patent account increased by \$27,400. One patent was purchased during the year for \$31,200.
- The plant and equipment account increased by \$465,000. One piece of equipment was sold during the year for \$22,000. It originally had cost \$51,000 and had a \$17,000 book value at the time of sale.
- Dolores declared and paid cash dividends of \$52,000 during 2000.
- The company repurchased shares of its common stock during the year for \$44,000 and held them in its treasury.
- The company issued \$100,000 of bonds during the year at 99. The amount of the discount amortized during 2000 was \$200.

To help the management of Dolores Company better understand its sources and uses of cash, do the following:

1. Compute the cash generated from operations.
2. Compute the cash flow related to investing activities.
3. Compute the cash flow related to financing activities.
4. Prepare a cash flow statement for Dolores for 2000 in good form.

**E13-34 Analysis of Cash Flows** As a part of your evaluation of the return available from Mori Company, you decide to analyze its cash flows. You collect the following information:

Cash from operations for 2001	\$ 600,000
Total assets, December 31, 2001	4,000,000
Total assets, December 31, 2000	3,600,000
Earnings per share	4.00
Net income	400,000
Preferred stock	-0-
Depreciation expense	300,000

The management of Mori Company states that depreciation expense is a fair measure of the expenditures needed to maintain operating capacity.

- a. Using the information provided, compute the ratios of cash flow per share, cash flow to total assets, and free cash flow.
- b. What information does each of these ratios provide?
- c. How would you arrive at an evaluation of whether these ratios are satisfactory?



**E13-35 Safety of Cash Flows** When you review your results in E13-34, you realize that you should have looked at the safety of cash flows, also. You request and receive the following additional data so you can calculate additional ratios:

Cash dividends per share of common stock for 2001	\$ 2.00
Current maturities of long-term debt	150,000
Total current liabilities	600,000
Total long-term debt	1,800,000

## USING ACCOUNTING FOR DECISION MAKING

**P13-36 Identifying Cash Flow Information** Your consulting team is preparing a report about the operations of the Tower Company as a part of an overall evaluation to determine whether to help Tower obtain financing for a major project. You are trying to anticipate as many questions as possible that might come up in the next team meeting. Where would you look in Tower's financial statements or notes to answer the following questions?

- Will Tower be able to pay off current maturities of long-term debt without additional borrowing?
- Is the company retaining operating cash by delaying payment to its suppliers?
- As sales increase, the accounts receivable and inventory balances will probably increase. Will Tower have to use the proceeds of the new financing to cover its operating cash needs?
- If operating cash needs increase, will dividends have to be reduced?
- To what extent is net income a reasonable forecast of the cash generated from operations by Tower?

**P13-37 Further Cash Flow Analysis** The team meeting about Tower Company that you prepared for in P13-36 went very well. You were well prepared, so much so that the team gave you another list of questions to answer. These look harder, but you remember that all the financial statements report on operating, investing, and financing activities, and the cash flow statement helps tie them all together. Again, where would you look in Tower's financial statements or notes to answer the following questions?

- Over the past 2 years, has Tower been investing enough in operating assets to maintain operating capacity?
- Does Tower have any long-term lease commitments and, if so, how much are the required annual payments on these leases?
- Has Tower changed the ratio of debt to equity over the past 2 years? In other words, has Tower issued proportionally more debt than stock?

Required:

- Calculate the ratio of dividends to operating cash flow, cash flow to maturing debt, and cash flow to total debt.
- What additional information is provided by these ratios?
- What is your evaluation of Mori Company? Does the company appear to be in a strong position or to be headed for future difficulties in meeting its cash flow commitments? Explain.

- Has the company reported any major unusual transactions or events that have affected reported net income? What effect, if any, has this had on cash flows?
- Are there significant unfunded pension or other post-employment benefit obligations? If so, when will they require cash payments?
- Tower reports a deferred tax liability in the most recent financial report. When will this liability have to be paid? How much cash will be involved?

**P13-38 Cash Flows at Disney** The following cash flows were reported by The Walt Disney Company and Subsidiaries for 1998 (stated in millions):

Net Income	\$1,850
Items Not Requiring Cash Outlays:	
Amortization of film and television costs	2,514
Depreciation	809
Amortization of intangible assets	431
Other	(75)
Changes In:	
Receivables	(664)
Inventories	(46)
Other assets	179
Accounts and taxes payable and accrued liabilities	218
Film and television costs—television broadcast rights	(447)
Deferred income taxes	346
	<u>3,265</u>
Cash Provided by Operations	<u>5,115</u>
Investing Activities:	
Film and television costs	(3,335)
Investments in theme parks, resorts, and other property	(2,314)
Acquisitions	(213)
Proceeds from sales of marketable securities and other investments	238
Purchase of marketable securities	(13)
Investment in and loan to E! Entertainment	(28)
	<u>(5,665)</u>

## Financing Activities:

Borrowings	1,830
Reduction of borrowings	(1,212)
Repurchases of common stock	(30)
Dividends	(412)
Exercise of stock options and other	184
	<u>360</u>
Decrease in Cash and Cash Equivalents	(190)
Cash and Cash Equivalents, Beginning of Year	317
Cash and Cash Equivalents, End of Year	<u>\$ 127</u>

- a. Did Disney's cash position increase or decrease during 1998? By what amount?
- b. Is Disney's reported net income a good measure of total cash provided by operations in 1998? What proportion of total cash provided by operations does it represent?

- c. What proportion of the adjustments to net income used in computing cash provided by operations is represented by depreciation and amortization?
- d. Did Disney's additional investment in film and television and theme parks, resorts, and other property exceed depreciation and amortization for the year? By what amount?
- e. What portion of the amount invested in film and television and theme parks, resorts, and other property was generated by issuing new long-term debt and common stock?
- f. How does the information on cash provided (used) by investing activities and financing activities help investors to evaluate a company such as Disney?

**P13-39 Cash Flow Statement for Dwight Company**

Dwight Company paid dividends of \$20,000 during 2002. Prepare a statement of cash flows for Dwight Company for 2002 based on the following balance sheet and income statement information:

Dwight Company Income Statement Year Ended December 31, 2002		
Sales		\$ 840,000
Cost of goods sold		(490,000)
Gross profit		\$350,000
Salary expense	\$175,000	
Depreciation expense	35,000	
Rent expense	16,000	
Utilities expense	74,000	
Interest expense	18,000	
Total other expenses		(318,000)
Net income		<u>\$ 32,000</u>
Dwight Company Balance Sheets December 31, 2001 and 2002		
	2002	2001
Cash	\$ 28,000	\$ 35,000
Accounts receivable	97,000	87,000
Merchandise inventory	120,000	132,000
Supplies	15,000	10,000
Buildings and equipment	510,000	410,000
Accumulated depreciation	(195,000)	(160,000)
Total assets	<u>\$ 575,000</u>	<u>\$ 514,000</u>
Accounts payable	\$ 35,000	\$ 41,000
Wages payable	21,000	39,000
Utilities payable	7,000	4,000
Bonds payable	240,000	200,000
Common stock	110,000	80,000
Retained earnings	162,000	150,000
Total liabilities and owners' equity	<u>\$ 575,000</u>	<u>\$ 514,000</u>



**P13-40 Examining Best Buy** The following are the cash flow statement and balance sheets of Best Buy Co., Inc. De-

termine what amounts should appear in Best Buy's cash flow statement in the places marked by the letters A through I.

Best Buy Co., Inc.	
Consolidated Statement of Cash Flows	
For the Fiscal Year Ended February 2, 1998	
(stated in thousands)	
<b>Operating Activities</b>	
Net earnings	\$ A
Charges to earnings not affecting cash:	
Depreciation and amortization	68,330
Other	3,254
	\$166,037
Changes in operating assets and liabilities:	
Receivables	B
Merchandise inventories	C
Prepaid taxes and expenses	4,657
Accounts payable	D
Other liabilities	68,103
Income taxes	33,759
Deferred revenue	(24,603)
Total cash provided by operating activities	\$542,388
<b>Investing Activities</b>	
Additions to property and equipment	\$ (72,063)
Decrease in recoverable costs from developed properties	45,270
Decrease in other assets	4,494
Total cash used in investing activities	\$ E
<b>Financing Activities</b>	
Decrease in obligations under financing arrangements	\$ F
Long-term debt borrowings	10,000
Long-term debt payments	(22,694)
Common stock issued	14,869
Total cash used in financing activities	\$ G
Increase in Cash and Cash Equivalents	\$ 430,319
Cash and Cash Equivalents at Beginning of Period	H
Cash and Cash Equivalents at End of Period	\$ I

Best Buy Co., Inc.		
Consolidated Balance Sheets		
(stated in thousands)		
Assets	February 28, 1998	March 1, 1997
Current Assets		
Cash and cash equivalents	\$ 520,127	\$ 89,808
Receivables	95,702	79,581
Recoverable costs from developed properties	8,215	53,485
Merchandise inventories	1,060,788	1,132,059
Refundable and deferred income taxes	16,650	25,560
Prepaid expenses	8,795	4,542
Total current assets	\$1,710,277	\$1,385,035
Property and Equipment		
Land and buildings	\$ 19,977	\$ 18,000
Leasehold improvements	160,202	148,168
Furniture, fixtures and equipment	372,314	324,333
Property under capital leases	29,079	29,326
	\$ 581,572	\$ 519,827
Less accumulated depreciation and amortization	248,648	188,194
Net property and equipment	\$ 332,924	\$ 331,633
Other Assets	13,145	17,639
Total Assets	\$2,056,346	\$1,734,307
<b>Liabilities and Shareholders' Equity</b>		
Current Liabilities		
Accounts payable	\$ 727,087	\$ 487,802
Obligations under financing arrangements	35,565	127,510
Accrued salaries and related expenses	48,772	33,663
Accrued liabilities	163,744	122,611
Income taxes payable	24,608	
Deferred service plan revenue	18,975	24,602
Current portion of long-term debt	14,925	21,391
Total current liabilities	\$1,033,676	\$ 817,579
Deferred Income Taxes	7,095	3,578
Deferred Revenue and Other Liabilities	17,578	28,210
Long-Term Debt	210,397	216,625
Convertible Preferred Securities of Subsidiary	229,854	230,000
Shareholders' Equity		
Preferred stock, \$1.00 par value: Authorized—		
400,000 shares; Issued and outstanding—none		
Common stock, \$.10 par value: Authorized—		
120,000,000 shares; Issued and outstanding—		
89,252,000 and 86,574,000 shares, respectively	4,463	4,329
Additional paid-in capital	266,144	241,300
Retained earnings	287,139	192,686
Total shareholders' equity	\$ 557,746	\$ 438,315
Total Liabilities and Shareholders' Equity	\$2,056,346	\$1,734,307

**P13-41 Analyzing a Cash Flow Statement** The 2000 financial statements of White Company included the cash flow statement shown below.

- Prepare an analysis of White Company's 2000 cash flow statement showing the total sources of cash and the percentage of cash coming from each.
- Prepare an analysis of White's 2000 cash flow statement showing the uses of White's cash and the percentage going to each use.
- Did White Company increase or decrease its current assets other than cash in 2000? Is this change consistent with an increase or a decrease in sales during the period? Explain.

Has White Company become more or less risky during 2000 from an investor's viewpoint? Explain why.

- Does White appear to be expanding or contracting its operations? How can you tell? What other financial statement information might you examine to determine if White is expanding? Does White appear able to maintain its productive capacity without additional financing? Explain.

**P13-42 Using Cash Flow Information** The operating section of Jelic Custom Manufacturing Company's cash flow statement is shown at the bottom of the page.

White Company	
Cash Flow Statement	
Year ending December 31, 2000	
Cash flows from operations:	
Net income	\$ 444,000
Adjustment for depreciation	230,000
Adjustment for gain on sale of operating assets	(14,000)
Adjustment for change in current assets other than cash	(120,000)
Adjustment for change in current liabilities	80,000
Cash provided by operations	\$ 620,000
Cash flows from investing activities:	
Purchase of operating assets	\$(1,200,000)
Sale of operating assets	300,000
Cash used in investing activities	(900,000)
Cash flows from financing activities:	
Issuance of capital stock	\$ 2,000,000
Retirement of bonds	(1,300,000)
Dividends paid	(250,000)
Cash provided by financing activities	450,000
Increase in cash	\$ 170,000

Jelic Custom Manufacturing Company	
Statement of Cash Flows	
For the Year 2000	
Cash Flows from Operations:	
Net income	\$ 732,000
Adjustments:	
Depreciation expense	320,000
Amortization of bond discount	27,000
Gain on sale of investments	(80,000)
Change in current items:	
Accounts receivable	\$(260,000)
Inventory	(20,000)
Prepaid expenses	5,000
Accounts payable	95,000
Trade notes payable	2,000
Cash Provided by Operations	\$ 821,000
Cash Balance, January 1	176,000
Cash Balance, December 31	\$ 997,000

Using this information, answer the following questions. If a question cannot be answered from the information given, indicate why.

- Have accounts receivable increased or decreased this year?
- If Jelic has had only a single bond issue outstanding during the year, are those bonds reported at an amount above or below par value in the company's year-end balance sheet? How do you know?
- Does the company appear to be more or less inclined to prepay expenses than in the past? Does this help or hurt its cash position? Explain.
- Has inventory increased or decreased this year? Explain why this affects cash.
- Compared with last year, does the company seem to be relying more or less heavily on trade credit to finance its activities?
- Has depreciation expense increased from last year?
- If you were a potential creditor of Jelic, do you see any warning signs in the cash flow statement that you would want to investigate further before lending the company money? Explain.
- Jelic has \$2,000,000 of bonds maturing on January 12, 2002. Jelic does not have a bond sinking fund established to pay off the bonds. Do you think Jelic will be able to meet its obligation to pay off the bonds without additional long-term financing? Discuss.

**P13-43 Identifying Information** You have been provided with limited summary information from the Wright Equipment Company. For each of the following questions, indicate what additional information you would need to answer the questions. Also, identify the financial statement or note where you would expect to find the information needed.

Cash flows provided by operations	\$1,550,000
Cash flows used in investing activities	2,730,000
Cash flows provided by financing activities	1,200,000
Increase in cash	20,000

Questions:

- What proportion of the cash flows from operations was provided by delaying payments on trade accounts payable?
- What percentage of cash needs were provided by issuing debt?
- Is cash flow per share high enough to assure the safety of cash dividends?
- Has total cash flow increased this year?
- What is the cash return on assets (operating cash flow to total assets) for the company?
- Does cash flow from operations provide sufficient cash to maintain assets?
- Do operating cash flows provide a reasonable margin of safety for payment of cash dividends?
- Is the company generating enough cash from operations to repay debt commitments that mature in the near future? Is cash generated from operations enough to pay normal trade payables on a timely basis?
- How does the ratio of cash flow to total debt compare to last year?
- Are deferred taxes increasing? What does this mean for cash flows provided by operations?
- What are the requirements for interest payments this year? Were operating cash flows sufficient to cover these payments?

## EXPANDING YOUR HORIZONS

**C13-44 Caterpillar's Condensed Statement of Cash Flow** Caterpillar published a condensed statement of cash flow containing the following information (stated in millions):

	1997	1996
Profit after Tax	\$1,665	\$1,361
Depreciation and amortization	738	696
Changes in working capital— excluding cash and debt	(552)	(696)
Capital expenditures—excluding equipment leased to others	(824)	(506)
Expenditures for equipment leased to others, net of disposals	(144)	(130)
Dividends paid	(338)	(289)

<b>Net Free Cash Flow</b>	<b>\$ 545</b>	<b>\$ 436</b>
Other significant cash flow items:		
Treasury shares purchased	(706)	(303)
Net increase in long-term finance receivables	(501)	(314)
Net increase in debt	1,109	1,059
Investments and acquisitions	(59)	(612)
Prefunding of employee benefit plans	(200)	(200)
Other	(383)	(217)
<b>Change in Cash and Short-Term Investments</b>	<b>\$ (195)</b>	<b>\$ (151)</b>

Based on the information presented in the condensed cash flow statement:

- What appears to be the amount of cash provided by operations?
- What appears to be the amount of cash provided (used) in investing activities (assuming the Prefunding of Employee Benefit Plans is a financing activity and Other is primarily investing activity)?
- What appears to be the amount of cash provided (used) in financing activities (assuming the Prefunding of Employee Benefit Plans is a financing activity and Other is primarily investing activity)?
- In what ways does the presentation of Caterpillar's cash flow statement differ from the presentation in the chapter?
- Evaluate the usefulness of Caterpillar's condensed cash flow statement in comparison to Gateway's cash flow statement shown in Appendix A.

**C13-45 Evaluating Cash Flows of Dell Computer and Gateway** Cash flow statements and selected balance sheet data are presented for Dell Computer Corporation and Gateway, Inc., as follows:

Dell Computer Corporation		
Consolidated Cash Flow Statements		
For the Years Ended February 1, 1998, and January 29, 1999		
(in millions)		
	Jan. 29, 1999	Feb. 1, 1998
Cash flows from operating activities:		
Net income	\$ 1,460	\$ 944
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	103	67
Tax benefits of employee stock plans	444	164
Other	11	24
Changes in:		
Operating working capital	367	365
Non-current assets and liabilities	51	28
Net cash provided by operating activities	\$ 2,436	\$ 1,592
Cash flows from investing activities:		
Marketable securities:		
Purchases	\$(16,459)	\$(12,305)
Maturities and sales	15,341	12,017
Capital expenditures	(296)	(187)
Net cash used in investing activities	\$ (1,414)	\$ (475)
Cash flows from financing activities:		
Purchase of common stock	\$ (1,518)	\$ (1,023)
Issuance of common stock under employee plans	212	88
Proceeds from issuance of long-term debt, net of issuance costs	494	
Cash received from sale of equity options and other		37
Net cash used in financing activities	\$ (812)	\$ (898)
Effect of exchange rate changes on cash	\$ (10)	\$ (14)
Net increase in cash	\$ 200	\$ 205
Cash at beginning of period	320	115
Cash at end of period	\$ 520	\$ 320

Gateway, Inc.		
Consolidated Cash Flow Statements		
For the Years Ended December 31, 1997 and 1998		
(in thousands)		
	1998	1997
Cash flows from operating activities:		
Net income	\$ 346,399	\$ 109,797
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	105,524	86,774
Provision for uncollectible accounts receivable	3,991	5,688
Deferred income taxes	(58,425)	(63,247)
Other, net	770	42
Nonrecurring expenses	—	113,842
Changes in operating assets and liabilities:		
Accounts receivable	(52,164)	(41,950)
Inventory	81,300	59,486
Other assets	451	(54,513)
Accounts payable	228,921	66,253
Accrued liabilities	144,899	48,405
Accrued royalties	8,455	34,148
Other current liabilities	76,278	35,816
Warranty and other liabilities	21,252	42,256
Net cash provided by operating activities	907,651	442,797
Cash flows from investing activities:		
Capital expenditures	(235,377)	(175,656)
Purchases of available-for-sale securities	(168,965)	(49,619)
Proceeds from maturities or sales of available-for-sale securities	48,924	10,985
Acquisitions, net of cash acquired	—	(142,320)
Other, net	(992)	(4,055)
Net cash used in investing activities	(356,410)	(360,665)
Cash flows from financing activities:		
Proceeds from issuances of notes payable	—	10,000
Principal payments on long-term obligations and notes payable	(13,173)	(15,588)
Stock options exercised	36,159	5,741
Net cash provided by financing activities	22,986	153
Foreign exchange effect on cash and cash equivalents	1,982	(5,044)
Net increase in cash and cash equivalents	576,209	77,241
Cash and cash equivalents, beginning of year	593,601	516,360
Cash and cash equivalents, end of year	\$1,169,810	\$ 593,601

**Other Financial Information**  
**Dell Computer Corporation and Gateway, Inc.**

Fiscal year ending	Dell Computer (in millions)		Gateway (In thousands)	
	Jan. 29 1999	Feb. 1 1998	Dec. 31 1998	Dec. 31 1997
Current assets	\$6,339	\$3,912	\$2,228,186	\$1,544,683
Total assets	6,877	4,268	2,890,380	2,039,271
Current liabilities	3,695	2,697	1,429,674	1,003,906
Long-term liabilities	861	278	116,331	105,321
Stockholders' equity	2,321	1,293	1,344,375	930,044
Weighted average shares outstanding				
Basic	2,531	2,631	155,542	153,840
Diluted	2,772	2,952	158,929	156,201

Prepare an analysis of Dell and Gateway and report on their strengths and weaknesses. The following ratios or amounts should be computed and used in your analysis:

- Earnings per share, basic
- Earnings per share, diluted
- Cash flow per share (based on weighted average basic shares outstanding)
- Cash flow to total assets (based on total assets at year-end)
- Free cash
- Cash flow to total debt
- Purchases of long-term assets to total assets
- Long-term debt issued to total long-term debt
- Total debt to total assets
- Working capital
- Current (working capital) ratio



**C13-46 Assessing Solvency** Select two companies in the same industry, such as General Motors and Ford, and analyze their statements of cash flows for the most recent 2 years. Use annual reports available in your library or from electronic databases such as the SEC EDGAR database, company homepages on the World Wide Web, or Internet news sources. Calculate appropriate ratios and use the notes or management discussion and analysis to explain any unusual items. Assess the ability of the companies to meet current obligations and their capacity to meet additional debt servicing requirements (payments of interest and principal) if the companies were to issue new debt. To what extent are the companies able to finance possible expansion internally without having to resort to external financing?

**C13-47 Ethics, Responsibility, and Reporting** As senior personnel officer of the World Time Corporation, this has not been one of your best days. World Time specializes in the manufacture, assembly, and distribution of international communication equipment. Competition from electronic communication through Internet and other direct electronic transfers has made the past several years very difficult for World Time. In fact,

World Time will have a serious cash shortage next year if no additional cash sources are found. The banks have already indicated that they will not lend World Time any more money. One of the reasons for the cash shortage is that World Time is diversifying by publishing international electronic mail directories, and the initial investments will use all the available cash. If this conversion of the business is successful, the company hopes to survive the changes in international communication.

What does all this have to do with personnel? The manufacturing work force has been reduced significantly in recent years, although it has been handled well through natural attrition and contract buy-outs. Now, however, one of the senior financial officers has suggested that the anticipated cash shortage next year could be made up by pulling some cash out of the pension fund set up for employees. The pension fund is held for World Time by a pension trustee. Because of higher-than-expected earnings on investments and the contract buy-outs of some senior employees, the trust fund assets exceed the current pension liability by about \$15 million. This is more than the projected \$6 million cash shortage predicted for next year. The company attorney has given an opinion that using the excess cash from the pension fund is legal as long as World Time meets the actuarial requirements of the plan. You argue that it is not right and it will cause real morale problems in a work force that is already concerned about future job security. The company accountant says that the source of cash will have to be reported in the cash flow statement, although it probably can be buried by showing it as a negative adjustment, along with all the others that appear there, to cash flows from operations.

- Should World Time use this source of cash?
- Is the accountant correct in "hiding" the source by treating it as an adjustment to operating cash flows?
- Would your answer to part a depend on how certain you were that World Time could recover and be successful as a publisher of international electronic mail directories? Explain.





**Internet Exercises:** Visit our Web site for additional exercises.

## Annual Report Project Part 13

Refer to the Annual Report Project, Part 1, at the end of Chapter 1. Using the annual report of the company you have chosen, and any other available information, answer the following questions, providing sources and computations where appropriate.

- a. What have been the primary sources of the company's cash inflows during the period?
- b. What have been the major uses of the company's cash during the period?
- c. Was depreciation a major source of cash for your company? Explain.
- d. How much were your company's cash payments for interest and income taxes?
- e. Discuss the adequacy of the cash generated from your company's operations.
- f. Did your company report any significant investing or financing transactions that did not affect cash? If so, describe those transactions.