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OBJECTIVES

After reading this chapter, you will be able to:

- 1 Define operating, investing, and financing activities.
- 2 Know the categories of inflows and outflows of cash.
- 3 Classify cash flows as operating, investing, or financing.
- 4 Explain the direct and indirect methods for reporting operating cash flows.
- 5 Prepare a simple statement of cash flows.
- 6 Use a worksheet (spreadsheet) for a statement of cash flows.
- 7 Compute and disclose interest paid and income taxes paid.
- 8 Identify the operating cash inflows and outflows under the direct method (Appendix).
- 9 Compute the operating cash flows under the direct method (Appendix).

The Statement of Cash Flows

Cash is King

Cash is the lifeblood of any company and is critical to its success. Cash flow information is used by both managers and analysts to understand a company's operations, assess its liquidity, gain insight into its ability to invest in new assets, and evaluate its financing decisions.

While accrual accounting provides a company with a range of accounting choices as it records transactions, this same flexibility allows a company to manage its earnings. The statement of cash flows, much like a corporate bank statement, tracks the cash receipts and cash payments for a company and can be useful in exposing many of these manipulations. In light of recent earnings restatements, cash flow analysis has taken on an added importance as many users begin to question the faith they can put in a company's reported income numbers. With an increased emphasis on the analysis of cash flows when measuring a company's performance, a financial statement user should be aware of three red flags that may signal a company is not as healthy as its income statement makes it appear¹:

- Negative operating cash flows—If a company is paying out more cash than it is generating from operations, the company will be forced to rely on issuing debt or stock or selling its assets to fund operations. This may often force a company into unfavorable financing options and possibly bankruptcy.
- High income but low operating cash flow—An examination of the ratio of income to operating cash flow can help identify high quality, sustainable earnings. If income is significantly

1. Adapted from "Watch for These 4 Cash-Flow Red Flags" by Harry Domash, <http://moneycentral.msn.com>.



Credit: Stone/George Chan

higher than operating cash flow, this may signal that the company is hemorrhaging cash (inventories and receivables are typical culprits) and the source of this cash drain should be investigated.

- Negative free cash flow—If a company must make continual investments in property, plant, and equipment to remain competitive, free cash flow (operating cash flow less capital expenditures) may be a more useful measure of cash flow than operating cash flow. While negative free cash flow may be a sign that a company is making large capital investments that may generate large future payoffs, it could also be a warning sign that the company is speculating as to the future payoff of these investments or that its investments are underperforming (not leading to cash generation).

Interpreting the statement of cash flows is not a straightforward, easy process. However, with a little time, patience, and diligent study, the use of cash flow information, along with information contained in the balance sheet and income statement, can help you identify many good investments and avoid many bad ones.

FOR FURTHER INVESTIGATION:

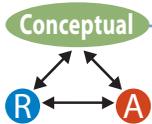
For a discussion of cash flows and its use in financial analysis, consult the Business & Company Resource Center (BCRC):

- Mind the Gap. Ronald Fink, *CFO, The Magazine for Senior Financial Executives*, 8756-7113, Dec 2003, v19, i16, p50(5).
- True Confessions: One Banker's Inner Struggle with Cash Flow. (Credit Fundamentals). Thomas P. Olson, *The RMA Journal*, 1531-0558, June 2003, v85, i9, p68(4).

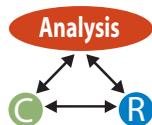
Users of financial statements are interested in the operating, investing, and financing activities of companies. For a particular company they ask questions such as (1) What is the relationship between net income and cash provided by operations? (2) Why are dividends not larger, in light of rising income? (3) What expansion activities took place and how were they financed? (4) Why did cash decrease even though net income was reported? (5) What happened to the proceeds received from issuing capital stock? Each of these questions relates to the cash flows of the company. The FASB recognized the importance of providing answers to these questions by stating that financial reporting should provide information about how a company obtains and spends cash, about its borrowing and repayment of borrowing, about its capital transactions, including cash dividends and other distributions of resources to owners, and about other factors that may affect its liquidity or solvency.²

To satisfy these objectives, the FASB issued **FASB Statement No. 95** which requires a company to present a *statement of cash flows* for the accounting period along with its income statement and balance sheet.³ The statement of cash flows is an integral part of a company's financial statements and the subject of this chapter.

CONCEPTUAL OVERVIEW AND REPORTING GUIDELINES



In Chapter 2 we noted that one of the specific objectives of financial reporting is to provide information about a company's cash flows. The FASB is concerned that a company's financial statements include information useful to external users about its cash inflows and outflows, borrowings and repayments, and capital transactions (including dividends). A company's receivables, payables, and inventory (i.e., items of working capital) are the links between its operations and its cash inflows and outflows. Information about these relationships is useful in understanding the operations of the company.



Information about a company's liquidity, financial flexibility, operating capability, and risk is related to these objectives as well. *Liquidity* is an indication of the company's ability to pay its bills as they come due. *Financial flexibility* is a measure of the company's ability to take effective actions to change the amounts and timings of its cash flows to adapt to change. Financial flexibility arises primarily from a company's ability to modify operations so as to increase net operating cash inflows. It also comes from the company's ability to raise cash from issuing new debt or equity securities or to obtain cash by disposing of assets. *Operating capability* is the company's ability to maintain a given physical level of operations, measured in terms of either the quantity of goods (inventory) produced and sold or the physical capacity of the company's property, plant, and equipment. *Risk* is the uncertainty or unpredictability of the future results of a company. The wider the range within which future results are likely to fall, the greater the risk associated with an investment in or extension of credit to the company.

The primary purpose of a company's statement of cash flows is to provide relevant information about its cash receipts and cash payments during an accounting period that is useful in evaluating the preceding items. The FASB states that the information in a statement of cash flows, if used with information in the other financial statements, helps external users assess (1) a company's ability to generate positive future net cash flows, (2) a company's ability to meet its obligations and pay dividends, (3) a company's need for external financing, (4) the reasons for differences between a company's net income and related cash receipts and payments, and (5) both the cash and noncash aspects of a company's financing and investing transactions during the accounting period.⁴

2. "Objectives of Financial Reporting by Business Enterprises," *FASB Statement of Financial Accounting Concepts No. 1* (Stamford, Conn.: FASB, 1978), par. 49.

3. "Statement of Cash Flows," *FASB Statement of Financial Accounting Standards No. 95* (Stamford, Conn.: FASB, 1987), par. 3.

4. *Ibid.*, par. 5.

Reporting Guidelines and Practices

To understand how to use and to prepare a statement of cash flows, it is important to have a definition of the statement and guidelines for preparing the statement. **A statement of cash flows is a financial statement of a company that shows the cash inflows, cash outflows, and net change in cash from its operating, investing, and financing activities during an accounting period, in a manner that reconciles the beginning and ending cash balances.**

1 Define operating, investing, and financing activities.

Operating Activities

A company's operating activities include all its transactions and other events that are not investing and financing activities. These include transactions involving acquiring (purchasing or manufacturing), selling, and delivering goods for sale, as well as providing services. Cash inflows from operating activities include *cash receipts from*:

- the sale of goods or services,
- collection of accounts receivable,
- collection of interest on loans, and
- receipts of dividends on investments in equity securities.

Cash outflows for operating activities include *cash payments to*:

- suppliers for inventory (or raw materials),
- employees,
- the government for taxes,
- lenders for interest (unless capitalized), and
- other suppliers for various expenses.

Investing Activities

A company's investing activities include its transactions involving acquiring and selling property, plant, and equipment, acquiring and selling investments (both current and noncurrent), and lending money and collecting on the loans. Cash outflows for investing activities include *cash payments for*:

- acquiring property, plant, and equipment,
- purchasing investments in other companies (e.g., stocks and bonds), and
- making loans to borrowers.

Cash inflows from investing activities include *cash receipts from*:

- sales of property, plant, and equipment,
- sales of investments in other companies, and
- principal repayments of loans by borrowers (e.g., collections of notes receivable).

How a company classifies certain items depends on its operations. For instance, if a company regularly factors its accounts receivable, then it treats the cash receipts as cash inflows from operating activities. Similarly, if a company requires its customers to sign notes for credit sales, then it treats the cash receipts from collections of these notes receivable as cash inflows from operating activities.

Financing Activities

A company's financing activities include its transactions involving obtaining resources from owners and providing them with a return on, and of, their investment, as well as obtaining money and other resources from creditors and repaying the amounts borrowed. Cash inflows from financing activities include *cash receipts (proceeds) from*:

- issuing equity securities (i.e., common stock and preferred stock),
- issuing bonds,

- issuing mortgages,
- issuing notes, and
- other short- or long-term borrowings.

Cash outflows for financing activities include *cash payments for*:

- dividends,
- repurchase of the company's equity securities, and
- repayments of amounts borrowed.

Most borrowings and repayments of borrowings are financing activities. However, as we noted, the settlement of liabilities such as accounts payable incurred to acquire inventory and salaries payable are operating activities.

Format

From a conceptual standpoint, **to predict the amounts, timing, and uncertainty of future cash flows, external users need financial information that is presented in homogeneous groups.**⁵ To implement these guidelines and for consistent reporting, a company's statement of cash flows for the accounting period must clearly show (1) the cash provided by or used in its operating activities, (2) the cash provided by or used in its investing activities, (3) the cash provided by or used in its financing activities, (4) the company's net increase or decrease in cash, and (5) a reconciliation of the company's beginning cash balance to the ending cash balance reported on its year-end balance sheet.



As we will see, most financing and investing activities of a company affect its cash; however, some transactions (such as buying land by issuing common stock) are “simultaneous” investing and financing activities that do not affect its cash. These transactions are important in providing an overall picture of a company's investing and financing activities. The company is required to report these items either in a separate schedule or narrative explanation (in this chapter we will always use a schedule) that accompanies the statement of cash flows. Also, if a company uses the indirect method (which we discuss later) of reporting operating cash flows, it must also disclose the amounts of interest paid and income taxes paid during the accounting period. (We discuss this disclosure later in this chapter.)

Cash and Cash Equivalents

As we discussed in Chapter 7, as part of its cash management procedures, a company may invest its cash in short-term, highly liquid investments, such as treasury bills, commercial paper, and money market funds. These investments are called *cash equivalents*. Then, instead of reporting “Cash” as a current asset on its balance sheet, the company reports “Cash and Cash Equivalents.” In this case, the company's statement of cash flows explains the change during the accounting period in its *cash and cash equivalents*. In this chapter, for simplicity, we focus only on changes in *cash*.

Example: Typical Statement of Cash Flows

Example 22-1 shows a typical statement of cash flows for the Ryan Corporation.

Content

Note that the statement of cash flows is divided into three sections, entitled (1) Net Cash Flow From Operating Activities, (2) Cash Flows From Investing Activities, and (3) Cash Flows From Financing Activities. These are the titles a company generally

5. “Recognition and Measurement in Financial Statements of Business Enterprises,” *FASB Statement of Financial Accounting Concepts No. 5* (Stamford, Conn.: FASB, 1984), par. 20.

EXAMPLE 22-1 Typical Statement of Cash Flows**RYAN CORPORATION****Statement of Cash Flows
For Year Ended December 31, 2007**

Net Cash Flow From Operating Activities		
Net income	\$ 14,000	
Adjustments for differences between income flows and cash flows from operating activities:		
Add: Depreciation expense	8,000	
Decrease in accounts receivable	2,600	
Increase in salaries payable	800	
Less: Increase in inventory	(2,000)	
Decrease in accounts payable	<u>(7,000)</u>	
Net cash provided by operating activities		\$16,400
Cash Flows From Investing Activities		
Payment for purchase of building	\$(28,000)	
Payment for purchase of equipment	(4,000)	
Proceeds from sale of land, at cost	<u>10,000</u>	
Net cash used for investing activities		(22,000)
Cash Flows From Financing Activities		
Proceeds from issuance of common stock	\$ 18,000	
Proceeds from issuance of bonds	12,000	
Payment of dividends	(9,000)	
Payment of note payable	<u>(13,000)</u>	
Net cash provided by financing activities		8,000
Net Increase in Cash (see Schedule 1)		<u>\$ 2,400</u>
Cash, January 1, 2007		10,900
Cash, December 31, 2007		<u>\$13,300</u>
Schedule 1: Investing and Financing Activities Not Affecting Cash		
Investing Activities		
Acquisition of land by issuance of common stock		\$ (6,000)
Financing Activities		
Issuance of common stock for land		6,000

uses in its statement of cash flows. Note also the schedule of investing and financing activities not affecting cash.

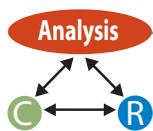
Operating Cash Flows A company reports the net cash provided by or used in its operating activities in the first section of its statement of cash flows. Over the long run, a company will be successful only if it is able to obtain positive cash flows from its operations. This situation occurs when the cash received from selling goods or services exceeds the cash paid to provide the goods or services. Generating cash from operations generally is the most important cash flow activity of a company. The Ryan Corporation provided a net cash inflow of \$16,400 from its operating activities during 2007, as we show in Example 22-1. The company determined this \$16,400 amount by adjusting the \$14,000 net income for several differences between the income flows and cash flows from operating activities. This procedure is called the “indirect method” and we explain this method later in the chapter. External users can compare the company’s net cash flow from operating activities with the same information from previous years to detect favorable or unfavorable *trends* in the company’s liquidity, financial flexibility, operating capability, and risk. They can compare this information with the same information from other companies for the same purposes.

Investing Cash Flows A company reports the cash inflows and outflows from its investing activities in the second section of the statement of cash flows. It lists each investing cash inflow and outflow and subtotals the amounts to determine the net cash used for (or provided by) investing activities. During 2007 the Ryan Corporation paid cash of \$28,000 to purchase a building and paid cash of \$4,000 to purchase equipment. It received cash of \$10,000 from the sale of land, at cost. The net result was that the company used \$22,000 cash for its investing activities.

Financing Cash Flows A company reports the cash inflows and outflows from its financing activities in the third section of the statement of cash flows. It lists each financing cash inflow and outflow and subtotals the amounts to determine the net cash provided by (or used for) financing activities. During 2007 the Ryan Corporation had cash receipts of \$18,000 and \$12,000 from issuing common stock and bonds, respectively. It had a cash payment of \$9,000 for dividends, and a \$13,000 cash payment for a note. The net result was that \$8,000 cash was provided by its financing activities.

Net Change in Cash and Reconciliation A company determines the net increase or decrease in cash by adding the amounts of the net cash flow from operating activities, the net cash flow from investing activities, and the net cash flow from financing activities. The \$16,400 net cash provided by operating activities, combined with the \$22,000 net cash used for investing activities, and the \$8,000 net cash provided by financing activities resulted in a \$2,400 net increase in cash for the Ryan Corporation in 2007. This \$2,400 net increase in cash reconciles the \$10,900 beginning cash balance to the \$13,300 ending cash balance.

Non-Cash Items A company reports its investing and financing activities not affecting cash in a separate schedule accompanying the statement of cash flows. It lists each investing and/or financing activity and offsets the related amounts against each other. During 2007 the Ryan Corporation engaged in a simultaneous investing and financing transaction. It acquired land costing \$6,000 by issuing common stock. The investing portion of the transaction was the acquisition of the land, while the financing portion was the issuance of common stock. Schedule 1 shows the investing activity as a \$6,000 “outflow” which is offset by the \$6,000 “inflow” from the financing activity. Although no cash was exchanged, both items are listed to show all of the Ryan Corporation’s investing and financing activities during 2007. ♦



Usefulness

By reviewing the three sections of a company’s statement of cash flows, external users can see how it obtained and used its cash. From the accompanying schedule, they can determine the types of investing and financing activities of the company that did not affect cash. They can examine the items in each section to see if important changes have occurred. For instance, the investing activities involving the acquisition of the building and equipment by the Ryan Corporation in 2007 may indicate an increase in its operating capability. In addition, the financing activities involving the issuance of both bonds and common stock by the Ryan Corporation in 2007 reveal a change in its capital structure and may indicate a change in its financial flexibility and risk.

A comparison with other companies can also show, for instance, whether the company is obtaining or using a greater proportion of its cash from financing or investing activities rather than operations. This may be important in assessing the relative risk of investing in the company. External users can evaluate the likelihood of future cash dividends, as well as the need for additional cash to finance existing operations or the expansion of operations. They also can evaluate the ability of the company to pay current obligations, make periodic interest payments, and pay off long-term debt when the debt reaches its maturity date. Thus, a company’s statement of cash flows provides external users with information about its liquidity, financial flexibility, operating capability, and risk. In so doing, the statement enhances the predictive value and feedback value and,

therefore, the *decision usefulness*, of a company's financial statements to help fulfill the objectives of financial reporting.

CASH INFLOWS AND OUTFLOWS

To understand a company's cash flows, the relationships between the *changes* in balance sheet accounts and the company's cash flows must be analyzed. A company's *inflows* of cash are caused by *decreases* in its assets (other than cash) and by *increases* in liabilities and in stockholders' equity during an accounting period. A company's *outflows* of cash are caused by *increases* in its assets (other than cash) and by *decreases* in liabilities and in stockholders' equity during the accounting period. The difference between the inflows and outflows is the change in cash during the accounting period. We show this relationship by the equations in Exhibit 22-1, starting with the basic accounting equation. Each equation is a modification of the previous equation, to eventually show the increases and decreases in cash. With this background in mind, we can refine the relationships we show in the last two equations of Exhibit 22-1.

EXHIBIT 22-1 Equations for Change in Cash				
	Assets	=	Liabilities	+ Stockholders' Equity
	Changes in Assets	=	Changes in Liabilities	+ Changes in Stockholders' Equity
	↓		↓	
Changes in Cash +	Changes in Assets Other Than Cash	=	Changes in Liabilities	+ Changes in Stockholders' Equity
	↓		↓	
	Changes in Cash	=	Changes in Liabilities	+ Changes in Stockholders' Equity - Changes in Assets Other Than Cash
Where:	Increases in Cash	=	Increases in Liabilities	+ Increases in Stockholders' Equity + Decreases in Assets Other Than Cash
And:	Decreases in Cash	=	Decreases in Liabilities	+ Decreases in Stockholders' Equity + Increases in Assets Other Than Cash

Inflows of Cash

There are three categories of a company's inflows (increases) of cash:

1. *Decreases in Assets Other Than Cash.* The sale or other disposal of assets (other than cash) causes an increase in cash because cash is received in exchange for the assets.
2. *Increases in Liabilities.* The issuance or other incurrence of liabilities causes an increase in cash because cash is received in exchange for the liabilities.⁶
3. *Increases in Stockholders' Equity.* Stockholders' equity increases mainly because of net income and additional investments by owners. Additional investments cause an increase in cash because cash is received in exchange for the stock issued. Net income is slightly more complicated because the inflows and outflows of cash for operations are different than the revenues and expenses included in net income (we discuss this topic later).

2 Know the categories of inflows and outflows of cash.

6. Alternatively, as we discuss later, the increase in a liability such as accounts payable results, in effect, in a "savings" (i.e., increase) in cash because of a smaller cash payment.

Outflows of Cash

There are also three categories of a company's outflows (decreases) of cash:

1. *Increases in Assets Other Than Cash.* The acquisition of assets (other than cash) causes a decrease in cash because cash is paid in exchange for the assets.⁷
2. *Decreases in Liabilities.* The payment of liabilities causes a decrease in cash because cash is paid to satisfy the liabilities.
3. *Decreases in Stockholders' Equity.* Stockholders' equity may decrease as a result of several transactions. Two common transactions are the payment of dividends and the acquisition of treasury stock. In each case, a decrease in stockholders' equity is accompanied by a decrease in cash.

Classifications of Cash Flows

We can further classify the cash inflows and outflows we just discussed into operating, investing, and financing cash flows.

3 Classify cash flows as operating, investing, or financing.

1. **Operating Cash Flows**
 - A. *Inflows of Cash.* Increases in stockholders' equity (i.e., retained earnings) because of revenues, adjusted for changes in current assets and current liabilities that are related to the operating cycle, as well as changes in certain noncurrent assets and liabilities (e.g., deferred taxes).
 - B. *Outflows of Cash.* Decreases in stockholders' equity (i.e., retained earnings) because of expenses, adjusted for changes in current assets and current liabilities that are related to the operating cycle, as well as changes in certain noncurrent assets and liabilities (e.g., deferred taxes).
2. **Investing Cash Flows**
 - A. *Inflows of Cash.* Decreases in noncurrent assets and certain current assets (e.g., notes receivable and temporary investments related to investing activities).
 - B. *Outflows of Cash.* Increases in noncurrent assets and certain current assets (e.g., notes receivable and temporary investments).
3. **Financing Cash Flows**
 - A. *Inflows of Cash.* Increases in noncurrent liabilities, stockholders' equity (other than net income), and certain current liabilities (e.g., notes payable related to financing activities).
 - B. *Outflows of Cash.* Decreases in noncurrent liabilities, stockholders' equity (other than a net loss), and certain current liabilities (e.g., notes payable and dividends payable).

Changes in assets (other than cash), liabilities, and stockholders' equity may be the result of investing and financing activities *not* affecting cash. Examples of these transactions include

- acquisitions of assets by issuing equity securities (noncash investing and financing activities),
- acquisitions of assets by assuming liabilities such as capital lease obligations (non-cash investing and financing activities),
- exchanges of debt securities for equity securities such as the conversion of bonds to common stock (noncash financing activities),
- exchanges of assets for assets (noncash investing activities),
- exchanges of liabilities for liabilities (noncash financing activities), and
- exchanges of equity securities such as the conversion of preferred stock to common stock (noncash financing activities).

7. Alternatively, as we discuss later, the increase in an asset such as accounts receivable results, in effect, in a decrease in cash because of a smaller cash receipt.

Although these transactions are relatively rare, they do involve “simultaneous” investing activities and/or financing activities not affecting cash. They generally have a significant effect on the prospective cash flows of a company, so that the company reports them in a schedule (or narrative explanation) that accompanies its statement of cash flows, as we discussed earlier.

The operating cash flows involve several adjustments for items relating to the operating cycle. We further explain the net cash flow from operating activities in the next section.



SECURE YOUR KNOWLEDGE 22-1

- The statement of cash flows provides relevant information about a company’s cash receipts and cash payments that is useful for assessing its liquidity, financial flexibility, operating capability, and risk.
- A company’s cash flows are reported as:
 - Operating activities—cash receipts and cash payments relating to the earning activities of the company (generally resulting from transactions that enter into the determination of income).
 - Investing activities—cash receipts and cash payments relating to the acquisition and disposition of assets such as property, plant, and equipment, notes receivable, and investments in other companies.
 - Financing activities—cash receipts and cash payments relating to the external financing of a company such as the issuance and repurchase of common stock, issuance and repayment of bonds, and payment of dividends.
- A company’s statement of cash flows must clearly show the three categories above as well as the net increase or decrease in cash and a reconciliation of the beginning and ending cash balance reported on the balance sheet. Furthermore, the disclosure of significant non-cash activities is required to be reported in either a separate schedule or narrative explanation that accompanies the statement of cash flows.
- A company’s cash flow is related to the changes in its balance sheet accounts as follows:
 - Increases in cash are caused by decreases in assets (other than cash), increases in liabilities, and increases in stockholders’ equity.
 - Decreases in cash are caused by increases in assets (other than cash), decreases in liabilities, and decreases in stockholders’ equity.
- These cash flows can be further classified (consistent with the reporting guidelines above) as:
 - Operating activities—increases or decreases in stockholders’ equity (e.g., retained earnings) because of certain revenues or expenses, adjusted for changes in the related current assets or current liabilities, and certain noncurrent assets and liabilities,
 - Investing activities—decreases or increases in noncurrent assets and certain current assets (e.g., notes receivable and marketable securities), or
 - Financing activities—increases or decreases in noncurrent liabilities, stockholders’ equity and certain current liabilities (e.g., notes payable and dividends payable).



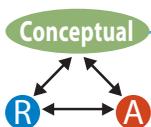
LINK TO ETHICAL DILEMMA

Polaris, Inc. manufactures and sells a variety of high-end electronic devices. Its most popular product, a portable satellite radio, has been a market leader for years and helped the company amass a large amount of cash. However, Polaris' financial performance has been somewhat disappointing over the last two years. Specifically, Polaris' return on assets has decreased by two percentage points, and its stock price has been stagnant. As the accountant for Polaris, the CEO has asked you to provide an analysis of the causes of these disappointing results and provide a recommendation that would increase the company's performance measures. Your examination of the company's financial results reveals that the company's large cash balance may be a factor in the company's disappointing performance. While the large cash balance increases the company's liquidity, the majority of these funds are invested in short-term financial instruments that yield approximately 2%. This low return is a significant cause of the company's declining return on assets measure and has many investors calling for an increased dividend which the CEO is adamantly against. Instead of paying a dividend, you suggest that Polaris use the excess cash to finance its customers' purchases of the company's products. The interest rate charged to provide this financial assistance will be much higher than the rate earned by the company's current investment strategy, and this increased return is expected to add at least one percentage point to the company's return on assets.

The CEO is very excited about this proposal but he is concerned about how the increased receivables created by the loans to the customers will affect the company's cash flow from operating activities. You state that while this is not specifically addressed by *FASB Statement No. 95*, you feel that since customer loans relate to the sale of the company's products, the associated cash outflow should be classified as an operating activity. The CEO disagrees and decides that the cash outflow associated with the lending transaction is an investing activity. He reasons that because generally accepted accounting principles do not address this issue, he has an obligation to the shareholders to make the company's financial statements look as good as possible. If the company classifies the lending transaction as an operating activity, it would report declining cash flow from operations and send an incorrect signal to the market as to the company's future. Furthermore, the CEO states that because the matter is simply a classification issue which does not change the company's total cash flow, no one would be hurt by classifying the transaction as an investing activity. How do you respond to the CEO's statements?

NET CASH FLOW FROM OPERATING ACTIVITIES

The calculation of a company's net cash flow from operating activities is usually the most detailed part of its statement of cash flows. To prepare this section, it is helpful to understand the relationship between sales revenues, expenses, and cash flows in a company's operating cycle.



Recall from Chapter 4 that a retail company's operating cycle is the average time it takes to spend cash for inventory, sell the inventory, collect the accounts receivable, and convert them back into cash. To begin a company's operating cycle, the company purchases inventory for cash or on credit. To make cash or credit sales, it incurs cost of goods sold and selling expenses and reduces inventory, and either pays cash, incurs current liabilities, or reduces prepaid items. In its operations, the company incurs general

and administrative expenses and either pays cash, incurs current liabilities, or reduces prepaid items. Finally, the company collects its accounts receivable and converts them back into cash. This step completes the operating cycle.

As you can see from the previous discussion, the impact of each phase of the operating cycle is not the same on both the company's net income and its net cash flow from operating activities because of differences in when the company records revenues and expenses and when it receives and pays cash. A company "adjusts" for these differences to help calculate its net cash flow from operating activities.

There are also "non-cash" changes in certain noncurrent asset (and liability) accounts that affect a company's net income but do not result in a cash inflow or outflow for operating activities. For instance, when a company records depreciation, the journal entry involves a debit to Depreciation Expense (a reduction of net income) and a credit to Accumulated Depreciation (a reduction of noncurrent assets). Although depreciation expense reduces net income (and noncurrent assets), there is no cash outflow for operating activities. The recording of amortization expense for intangible assets (such as a patent) and depletion expense for natural resource assets (such as a coal mine) have the same effect. That is, there is a reduction in net income (and noncurrent assets) but no operating cash outflow. A company analyzes each of the changes in these noncurrent asset accounts to help determine the effect on its net cash flow from operating activities.

Direct Method

FASB Statement No. 95 allows a company to choose one of two ways to calculate and report its net cash flow from operating activities on its statement of cash flows. The first is called the *direct* method. **Under the direct method, a company deducts its operating cash outflows from its operating cash inflows to determine its net cash flow from operating activities.** Using this method, the cash inflows from operating activities are computed and reported first. A company's operating cash inflows are:

- collections from customers,
- collections of interest and dividends, and
- other operating receipts.

For simplicity, in the following example we focus on collections from customers.

Then, the cash outflows for operating activities are computed and reported. A company's operating cash outflows are:

- payments to suppliers,
- payments to employees,
- other operating payments,
- payments for interest, and
- payments for income taxes.

For simplicity, in the following example we focus on payments to suppliers, payments to employees, and payments for income taxes.

Example: Direct Method Assume the Ryan Corporation presents the following simplified income statement information for the year ended December 31, 2007:

Sales revenue (cash and accounts receivable)		\$70,000
Less:		
Cost of goods sold (cash and accounts payable)	\$(29,000)	
Salaries expense (cash and salaries payable)	(13,000)	
Depreciation expense	(8,000)	(50,000)
Income before income taxes		\$20,000
Income tax expense (cash)		(6,000)
Net income		<u>\$14,000</u>

4 Explain the direct and indirect methods for reporting operating cash flows.

Further analysis reveals the following changes in its current asset and current liability accounts for 2007:

- accounts receivable decreased by \$2,600,
- inventory increased by \$2,000,
- accounts payable decreased by \$7,000, and
- salaries payable increased by \$800.

Under the direct method, Ryan Corporation reports the cash flows from operating activities on its statement of cash flows as follows:

Cash Flows From Operating Activities

Cash Inflows:

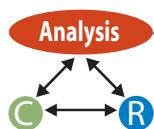
Cash collected from customers	\$ 72,600	
Cash inflows from operating activities		\$72,600

Cash Outflows:

Cash paid to suppliers	\$(38,000)	
Cash paid to employees	(12,200)	
Cash paid for income taxes	<u>(6,000)</u>	
Cash outflows for operating activities		<u>(56,200)</u>
Net cash provided by operating activities		\$16,400

The \$72,600 cash collected from customers is computed by adding the \$2,600 decrease in accounts receivable to the \$70,000 sales revenue. This adjustment is made because the company's cash collections exceeded its sales during the year. This is the only cash receipt, so that cash inflows from operating activities are \$72,600.

The \$38,000 cash paid to suppliers is computed by adding the \$2,000 increase in inventory and the \$7,000 decrease in accounts payable to the \$29,000 cost of goods sold. These adjustments are made because the company's purchases exceeded its cost of goods sold but some of these purchases were on credit. The \$12,200 cash paid to employees is computed by deducting the \$800 increase in salaries payable from the \$13,000 salaries expense. This adjustment is made because the cash paid for salaries was less than its salaries expense. The entire \$6,000 of income tax expense was paid in cash. These cash outflows for operating activities total \$56,200, so that the net cash provided by operating activities is \$16,400. Note that the depreciation expense is *not* included in the net cash flows from operating activities because it did not result in an outflow of cash. ♦



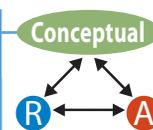
The direct method has the advantage of reporting a company's operating cash inflows separately from its operating cash outflows, which may be useful in estimating future cash flows. However, the direct method is criticized because it does not "tie" the net income reported on a company's income statement to the net cash provided by operating activities reported on its statement of cash flows. Also, the direct method does not show how the changes in the elements (i.e., current assets and current liabilities) of a company's operating cycle affected its operating cash flows.

Indirect Method

Use of the *indirect* method to report a company's net cash flow from operating activities on its statement of cash flows resolves the two criticisms of the direct method. **Under the indirect method, a company's net income is adjusted (reconciled) to its net cash flow from operating activities** on the statement of cash flows. To do so, net income is listed first and then *adjustments* (additions or subtractions) are made to net income:

1. to eliminate certain amounts (such as depreciation expense) that are included in its net income but do not involve a cash receipt or cash payment for operating activities, and
2. to include any changes in the current assets (other than cash) and current liabilities involved in the company's operating cycle that affect its cash flows differently than they affect net income.

In other words, under the indirect method, a company's income flows are converted from an *accrual* basis to a *cash flow* basis. In this manner, the indirect method shows the “quality” of a company's income by providing information about lead and lag intervals between its income flows and operating cash flows.



Example: Indirect Method Refer back to the Ryan Corporation's income statement and additional information we showed earlier. Under the indirect method, Ryan Corporation reports the net cash flow from operating activities on its statement of cash flows as follows:

Net Cash Flow From Operating Activities	
Net income	\$14,000
Adjustments for differences between income flows and cash flows for operating activities:	
Add: Depreciation expense	8,000
Decrease in accounts receivable	2,600
Increase in salaries payable	800
Less: Increase in inventory	(2,000)
Decrease in accounts payable	(7,000)
Net cash provided by operating activities	\$16,400

It is important to understand how each adjustment is used to convert the net income to the net cash provided by operating activities. First, the \$8,000 depreciation expense is *added* to the \$14,000 net income because it had been deducted to determine net income even though it did not involve an outflow of cash. The \$2,600 decrease in the current asset, accounts receivable, is added to net income because it resulted in an additional cash receipt from operations. The \$800 increase in the current liability, salaries payable, resulted in an increase in expenses and a decrease in net income. It is added to net income because it did not involve a cash payment for operations. The \$2,000 increase in the current asset, inventory, and the \$7,000 decrease in the current liability, accounts payable, are both deducted from net income because they resulted in additional operating cash payments. Note that by using either the direct method or the indirect method, net cash provided by operating activities is the same amount (\$16,400). The indirect method is the method used by the Ryan Corporation in Example 22-1 at the beginning of the chapter. The Coca-Cola Company uses the indirect method in its statement of cash flows, as shown in Appendix A. ♦

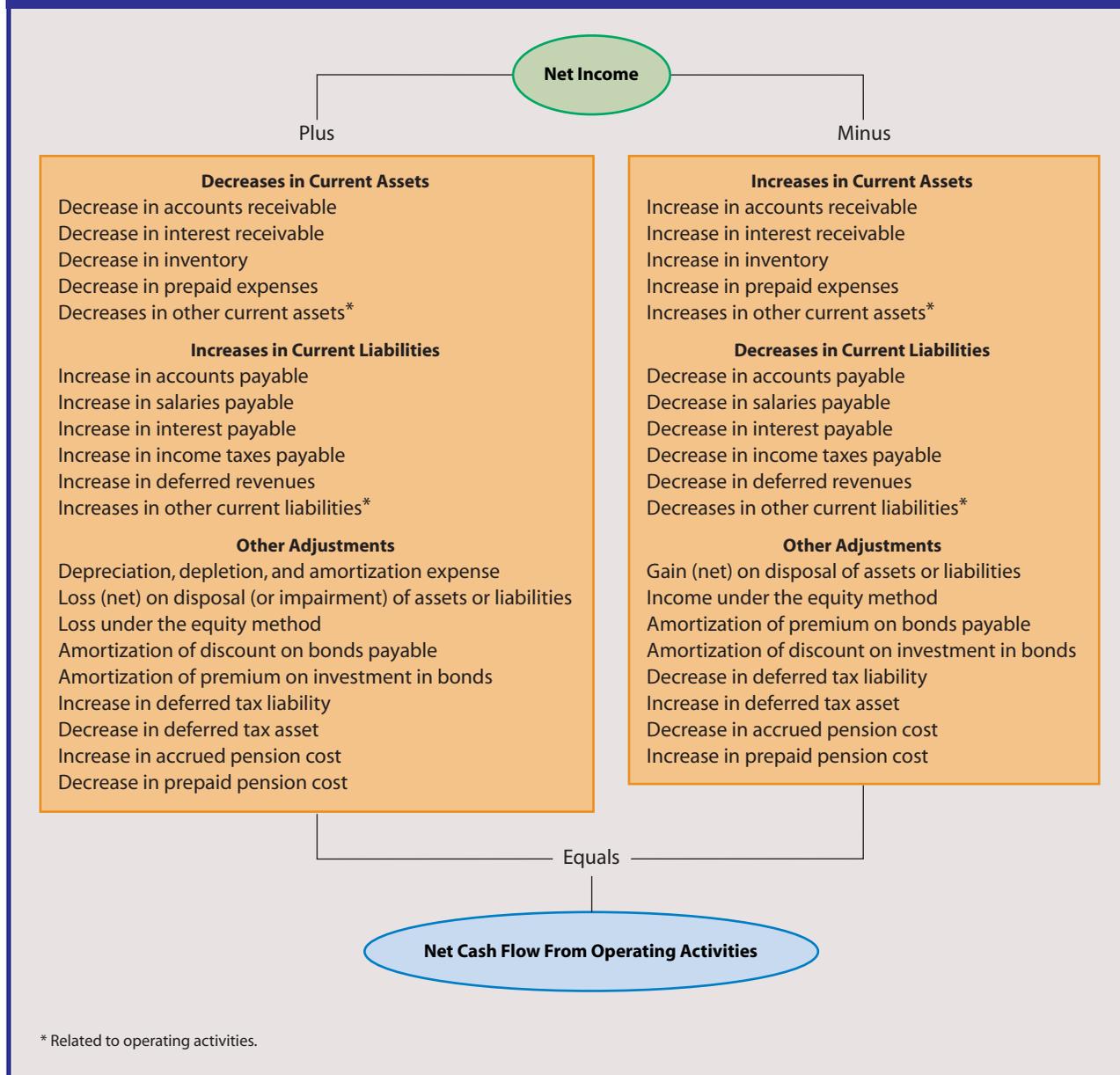
Prior to *FASB Statement No. 95*, nearly all companies reported the results of their operating activities using the indirect method on their statements of cash flows. *FASB Statement No. 95* recommends the direct method, but allows the use of either the direct method or the indirect method. However, if a company uses the direct method on its statement of cash flows, it must also include a separate schedule that reconciles its net income to its net cash flow provided by (or used in) operating activities (i.e., the indirect method). Most companies (over 98%) use the indirect method⁸ because of its prior use and the extra schedule required under the direct method. However, companies that use the indirect method must report the interest paid and income taxes paid. We use the indirect method in the main part of the chapter, but discuss the direct method in the Appendix at the end of the chapter. **(You should use the indirect method for all homework, unless otherwise indicated.)** ♦



Major Adjustments

In the previous example of the indirect method we made only a few simple adjustments to convert the net income to the net cash flow from operating activities. In reality, a company may have many adjustments involving both increases and decreases in its current assets and current liabilities, as well as other noncurrent accounts. Exhibit 22-2 lists the major adjustments used to convert a company's net income to its net cash flow from operating activities. We explain these adjustments in the examples that follow.

8. *Accounting Trends and Techniques* (New York: AICPA, 2004), p. 549.

EXHIBIT 22-2 Adjustments to Convert Net Income to Net Cash Flow From Operating Activities**INFORMATION FOR PREPARATION OF STATEMENT**

When a company prepares its statement of cash flows, it uses information for the accounting period from the following financial statements: (1) beginning and ending balance sheets, (2) income statement, and (3) retained earnings statement. In addition, it needs other information that explains the changes in its balance sheet accounts (other than cash). This additional information is obtained from its accounting records.

VISUAL INSPECTION METHOD OF ANALYSIS

There are two methods that you may use to prepare a company's statement of cash flows: the visual inspection method and the worksheet method.⁹ Under the **visual inspection method**, you review the company's financial statements and prepare its statement of cash flows without using a worksheet. This method may be used when a company's financial statements are simple and when the relationships between changes in account balances can be easily analyzed. There are seven steps in the visual inspection method, as we show in Exhibit 22-3.

EXHIBIT 22-3 Steps in Visual Inspection Method

1. Prepare the heading for the statement of cash flows and list the three major sections: a) Net Cash Flow From Operating Activities, (b) Cash Flows From Investing Activities, and (c) Cash Flows From Financing Activities.
2. Calculate the net change in cash that occurred during the accounting period. This amount is a major subtotal, or "target figure," on the statement of cash flows.
3. List the company's net income as the first item in the net cash flow from operating activities section.
4. Calculate the increase or decrease that occurred during the accounting period in each balance sheet account (except cash).
5. Determine whether the increase or decrease in each balance sheet account (except cash) caused an inflow or outflow of cash and, if so, whether the cash flow was related to an operating, investing, or financing activity.
6. If no cash flow occurred in Step 5, determine whether the increase or decrease in each balance sheet account (except cash) was (a) the result of a noncash income statement item or (b) a simultaneous investing and/or financing transaction. If (a), then determine the adjustment (addition or subtraction) to help convert net income to the net cash flow from operating activities. If (b), then identify the components of the simultaneous investing and/or financing activity.
7. Complete the various sections of the statement of cash flows (based on the analysis in Steps 5 and 6), and check that the subtotals of the sections sum to the net change (increase or decrease) in cash (from Step 2). Also check that the sum of the net change in cash and the beginning cash balance is equal to the ending cash balance reported on the balance sheet.

Steps 5 and 6 do not have to be completed in sequential order. What is important is a complete analysis of the relevant information.¹⁰ The visual inspection method is rarely used because there is no supporting documentation for the statement of cash flows.

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9. Sometimes a third method involving T-accounts is used to analyze and develop the information for a company's statement of cash flows. The T-account method, however, results in cumbersome working papers when the analysis is complex. Because the worksheet method uses the same general technique as the T-account method, but in a more efficient format, we discuss only the worksheet method in this chapter.
 10. If the company engaged in any investing and financing transactions not affecting cash, you must also prepare the heading for a schedule of Investing and Financing Activities Not Affecting Cash in Step 1 of Exhibit 22-3.

5 Prepare a simple statement of cash flows.

Simple Example (Visual Inspection Method)

Knowledge of the visual inspection method is helpful in understanding the more complex worksheet method. To explain the visual inspection method, Example 22-2 shows the condensed financial information of the Leyton Company (a small service company) for 2007. Example 22-3 shows the statement of cash flows prepared from that information. After preparing the heading and listing the three sections of the statement, the \$2,600 net increase in cash is determined. This increase is computed by subtracting the \$4,000 cash balance on the beginning balance sheet from the \$6,600 cash balance on the ending balance sheet. Then, the \$7,000 net income is obtained from the income statement and listed as the first item in the net cash flow from operating activities section. The following discussion explains the remaining steps in the visual inspection method by reviewing the items in each section of the statement.

EXAMPLE 22-2 Leyton Company: Condensed Financial Information

Income Statement Information for 2007			Balance Sheet Information		
			Balances		
			Accounts	12/31/06	12/31/07
Service revenues		\$31,800	Cash	\$ 4,000	\$ 6,600
Operating expenses			Accounts receivable	6,300	9,000
Depreciation expense	\$ 2,300		Land	9,000	6,000
Interest expense	1,400		Buildings and equipment	48,000	60,000
Other expenses	<u>18,100</u>	(21,800)	Accumulated depreciation	(12,500)	(14,800)
Income before income taxes		\$10,000	Total Assets	<u>\$54,800</u>	<u>\$66,800</u>
Income tax expense		<u>(3,000)</u>	Accounts payable	\$ 7,500	\$ 9,000
Net Income		<u>\$ 7,000</u>	Notes payable, 10%	14,000	21,000
Retained Earnings Information for 2007			Common stock, \$10 par	22,000	22,000
Beginning retained earnings		\$11,300	Retained earnings	<u>11,300</u>	<u>14,800</u>
Add: Net income		<u>7,000</u>	Total Liabilities and		
		\$18,300	Stockholders' Equity	<u>\$54,800</u>	<u>\$66,800</u>
Less: Dividends		<u>(3,500)</u>			
Ending retained earnings		<u>\$14,800</u>			

Supplemental Information for 2007

- (a) A building was purchased for cash during the year. (c) No buildings or equipment were sold during the year.
 (b) Land was sold (at cost) for cash during the year. (d) A note payable was issued at the end of the year.

Net Cash Flow From Operating Activities

In this section there are three adjustments to convert the net income to the net cash flow from operating activities. The first adjustment involves the \$2,300 depreciation expense. This amount is obtained from the income statement in Example 22-2. It is also the \$2,300 increase (from \$12,500 to \$14,800) in the accumulated depreciation account on the balance sheets during the year.¹¹ Because depreciation is deducted in computing net income but does not cause a cash outflow, the \$2,300 depreciation expense is added to net income. The second adjustment involves the \$1,500 increase (from \$7,500 to \$9,000 in Example 22-2) in accounts payable. Accounts payable increased because other operating expenses recorded during the year exceeded the cash payments for these items. Therefore, the expenses deducted to compute net income are greater than the related cash payments. Consequently, the \$1,500 increase in accounts payable is added to net income. The third adjustment involves the \$2,700 increase (from \$6,300 to \$9,000) in accounts receivable. Accounts receivable increased during the year because service revenues on credit exceeded the cash collections on

11. No buildings or equipment were sold during the year. If they had been sold, the accumulated depreciation account would have decreased. The related cash flow analysis would have been more complicated. We discuss this situation later in the worksheet method.

account. Therefore, service revenues and net income are greater than the related cash receipts. Consequently, the \$2,700 increase in accounts receivable is deducted from net income.

As a result of the preceding adjustments, the net cash flow from operating activities is \$8,100 for the Leyton Company in 2007, as we show in Example 22-3. Note that, with the exception of depreciation, the adjustments to net income involve changes in current assets (except cash) and current liabilities.

EXAMPLE 22-3 Simple Statement of Cash Flows	
LEYTON COMPANY	
Statement of Cash Flows	
For Year Ended December 31, 2007	
Net Cash Flow From Operating Activities	
Net income	\$ 7,000
Adjustments for differences between income flows and cash flows from operating activities:	
Add: Depreciation expense	2,300
Increase in accounts payable	1,500
Less: Increase in accounts receivable	<u>(2,700)</u>
Net cash provided by operating activities	\$8,100
Cash Flows From Investing Activities	
Payment for purchase of building	\$(12,000)
Proceeds from sale of land, at cost	<u>3,000</u>
Net cash used for investing activities	(9,000)
Cash Flows From Financing Activities	
Proceeds from issuance of note	\$ 7,000
Payment of dividends	<u>(3,500)</u>
Net cash provided by financing activities	<u>3,500</u>
Net Increase in Cash	\$2,600
Cash, January 1, 2007	<u>4,000</u>
Cash, December 31, 2007	<u><u>\$6,600</u></u>

Cash Flows From Investing Activities

There are only two cash flows from investing activities: one cash payment and one cash receipt. During 2007 the Buildings and Equipment account increased by \$12,000, from \$48,000 to \$60,000, as we show on the balance sheets in Example 22-2. This increase is the result of the purchase of a building, an investing activity, which required a cash payment of \$12,000. This cash payment is listed as the first item in this section. During 2007 the Land account decreased by \$3,000, from \$9,000 to \$6,000. This is the result of the sale of land, an investing activity. Because the land was sold at cost, there is no gain or loss.¹² The \$3,000 cash receipt is listed as the second item in this section. As a result of these two cash flows, net cash of \$9,000 is used for investing activities by the Leyton Company in 2007, as we show in Example 22-3.

Cash Flows From Financing Activities

There are also two cash flows from financing activities: one cash receipt and one cash payment. During 2007 the notes payable account increased by \$7,000, from \$14,000 to \$21,000, as we show in Example 22-2. This increase is the result of issuing a note, a financing activity, which provided a cash receipt of \$7,000 that is listed as the first item in this section. There was no change in the common stock account during the year, so there is no cash inflow or outflow related to common stock. During 2007 the company declared and paid dividends of \$3,500. The amount of the dividends is obtained from

12. We discuss the reporting of the sale of noncurrent assets at a gain or loss in a later example.

the retained earnings statement in Example 22-2. [Note also that the \$7,000 net income, offset by the \$3,500 dividends, accounts for the \$3,500 increase (from \$11,300 to \$14,800) in the retained earnings account shown on the balance sheets.] The \$3,500 cash payment of dividends, a financing activity, is listed as the second item in this section. As a result of these two cash flows, net cash of \$3,500 is provided by the financing activities of the Leyton Company during 2007, as we show in Exhibit 22-3.

Summary

Note that in preparing the three sections of the cash flow statement in Exhibit 22-3, we account for all the changes in the assets (except cash), liabilities, and stockholders' equity accounts during 2007, as listed in Example 22-2. Note also that, with the exception of depreciation, the adjustments to net income in the net cash flow from operating activities section involve changes in current asset (except cash) and current liability accounts. On the other hand, all of the cash receipts and payments listed in the cash flows from investing activities section and the cash flows from financing activities section involve changes in noncurrent asset, noncurrent liability, and stockholders' equity accounts. The statement of cash flows in Example 22-3 is now complete. The \$8,100 net cash provided by operating activities, less the \$9,000 net cash used for investing activities, plus the \$3,500 net cash provided by financing activities, equals the \$2,600 net increase in cash. And, the \$2,600 net increase in cash, added to the \$4,000 beginning cash balance, is equal to the \$6,600 ending cash balance (as reported on the company's December 31, 2007 balance sheet). With this background in mind, we now turn to the worksheet method of analysis. ♦

WORKSHEET (SPREADSHEET) METHOD OF ANALYSIS

Companies usually use the **worksheet method** to prepare their statements of cash flows. Under this method a company uses a worksheet to (1) record its cash receipts and payments according to the operating, investing, and financing sections of the statement of cash flows, (2) record the investing and financing activities *not* affecting cash, and (3) account for the *change* in each asset, liability, and stockholders' equity account. This method is most often used because it enables a company to analyze its complex transactions in a concise format. A common way of preparing an electronic worksheet is to use a software package such as Microsoft Excel. Because the worksheet method is used in more complex situations, it is helpful to follow a series of steps.

Steps in Preparation (Worksheet Method)

After gathering information from the financial statements and supplemental information from the accounting records, a company completes several steps to prepare the worksheet and its statement of cash flows. We list each step in Exhibit 22-4, followed by an explanation.

There are three issues related to the steps listed in Exhibit 22-4. First, other than usually starting with net income, there is no particular order in which the worksheet entries are reconstructed. You should develop a method to account for all the changes in the noncash accounts in an orderly way. Second, you may have to make *more than one* worksheet entry to reconcile the change in an account. For instance, the change in the Land account may be the result of both a sale and a purchase of land. In these cases, both the cash receipt and cash payment are accounted for, and reported, separately. Finally, remember that these worksheet entries are *not* posted to any accounts. They are recorded on the worksheet only to help prepare the statement of cash flows.

EXHIBIT 22-4 Steps in Worksheet Method

Step 1. Prepare the column headings on a worksheet (see Example 22-5). Then enter the account title Cash on the first line of the account titles column and list the beginning balance, ending balance, and change in cash in the respective columns.

Step 2. Enter the titles of all the remaining accounts from the balance sheets on the worksheet and list each beginning and ending account balance, and the change in the account balance directly below the cash information. (To simplify the worksheet, only the change in each account balance may be entered.) The accounts with debit balances are listed first, followed by the accounts with credit balances. Total the amount columns to verify that the debit totals equal the credit totals.

Step 3. Directly below these accounts, add the following headings:

- A. Net Cash Flow From Operating Activities
- B. Cash Flows From Investing Activities
- C. Cash Flows From Financing Activities
- D. Investing and Financing Activities Not Affecting Cash

Leave sufficient room below each heading so that each type of cash flow may be listed.

Step 4. Account for all the changes in the noncash accounts that occurred during the current period. *Reconstruct* the journal entries that caused the changes in the noncash accounts directly on the worksheet, making certain modifications to show the cash receipts and payments for operating, investing, and financing activities. Remember that you are preparing this worksheet at the *end* of the accounting period. The actual journal entries that caused the changes have already been made and posted to the accounts. In this step you are reconstructing the entries on the worksheet to prepare the statement of cash flows. Use the following *general rules*:

- A. *Start with net income.* The net income is a summary of all the journal entries from operating activities that affect current assets or current liabilities (and some noncurrent) and retained earnings. The net income is adjusted on the worksheet to reconcile it to the net cash flow from operating activities. Therefore, the entry on the worksheet to list net income and to explain the impact on retained earnings is a debit to the caption Net Income under the heading Net Cash Flow From Operating Activities and a credit to Retained Earnings.^a
- B. *Account for the changes in the current asset (except cash) and current liability accounts.* Because nearly all the changes in the current assets and current liabilities relate to the company's *operating activities*, the impacts of these changes on cash are listed as *adjustments (additions or deductions) to net income* in the Net Cash Flow From Operating Activities section of the worksheet.^b Review each current asset (except cash) and current liability account. Make an entry on the worksheet to record the change (debit or credit) in that account and the adjustment [credit (deduction) or debit (addition)] to net income.
- C. *Account for the changes in the noncurrent accounts.* Review each noncurrent account and determine the journal entry responsible for its change. Identify whether the transaction involves an operating, investing, or financing activity. If the transaction involved an investing or financing activity, make the entry on the worksheet with the following changes:
 1. If the entry affects cash, replace a debit to cash with either an investing or financing cash inflow caption, and list the item as a debit (receipt) under the proper heading. Replace a credit to cash with a proper cash outflow caption, and list the item as a credit (payment) under the proper heading.
 2. If the entry involves an operating activity and affects a noncash income statement item (e.g., depreciation, gain, or loss), replace the debit or credit to this noncash item with an adjustment to net income under the Net Cash Flow From Operating Activities heading.
 3. If the entry does not affect an operating activity or cash, it is a simultaneous financing and/or investing transaction. For this type of transaction, create expanded entries to record both the financing and/or investing activities.

Step 5. Make a final worksheet entry to record the net change in cash. The worksheet entries must account for all the changes in the noncash accounts recorded in Step 2. The difference between the total cash inflows and outflows must be equal to the change in the Cash account. The final worksheet entry to record a net increase in cash is a debit to Cash and a credit to Net Increase in Cash.^c Total the debit and credit worksheet entries in the upper and lower portions to verify that the respective totals are equal.

Step 6. Prepare the statement of cash flows and accompanying schedule. Use the information developed in the lower part of the worksheet (and the beginning and ending cash balances). Under the major sections of the statement, list the various cash receipts and payments. Subtotal the items under each major section and add or subtract the subtotals to determine the net change in cash. Add the net change in cash to the beginning cash balance to determine the ending cash balance. In an accompanying schedule, list the various investing and financing activities not affecting cash.

- a. The entry to show a net loss involves a debit to Retained Earnings and a credit to Net Loss. Any adjustments for noncash items included in net income, such as in Step 4C(2), are made as usual.
- b. The major exceptions to this adjustment are changes in short-term notes receivable and notes payable, changes in temporary investments (i.e., marketable securities), and changes in dividends payable. These changes are the results of investing or financing activities and are handled like the changes in the noncurrent accounts discussed in Step 4(C), except that changes in temporary investments may require additional analysis as discussed in a later section.
- c. For a net decrease in cash, an opposite entry (a debit to Net Decrease in Cash and a credit to Cash) is made.

6 Use a worksheet (spreadsheet) for a statement of cash flows.

Comprehensive Example (Worksheet Method)

To understand how to prepare a worksheet and statement of cash flows we discuss a comprehensive example. The example is not intended to be all-inclusive. However, it provides a basis from which to develop a logical approach to using a worksheet for analyzing similar operating, investing, and financing transactions. The example includes a discussion of each step in Exhibit 22-4. As you study this example, it will be helpful to reread these steps. Example 22-4 shows the condensed financial information of the Jones Company for 2007 that we use in the example. In Example 22-4 we include letters of the alphabet in parentheses beside amounts or items of information. These letters correspond to the letters we use to explain the worksheet entries in Example 22-5.

Steps 1, 2, and 3: Setting Up the Worksheet

Steps 1 and 2 involve setting up the worksheet, entering the account titles, their beginning and ending balances, and the changes in the account balances in the appropriate columns. The columns are totaled to check for accuracy. In Step 3 the major headings, Net Cash Flow From Operating Activities, Cash Flows From Investing Activities, Cash Flows From Financing Activities, and Investing and Financing Activities Not Affecting Cash, are then listed on the worksheet. Enough space is left under each heading so that the cash flows may be listed accordingly. Example 22-5 shows these accounts and their headings for the Jones Company.¹³

Step 4: Completion of the Worksheet

The worksheet entries to account for all the *changes* in the noncash accounts are entered directly on the worksheet in Step 4, as we show in Example 22-5. We explain each entry in the following discussion. Entries (a) through (j) generally affect current assets and current liabilities and relate to operating activities. Entries (k) through (w) generally affect non-current assets, noncurrent liabilities, and stockholders' equity items and relate to investing and financing activities. As you study each entry, it will be helpful to review the discussion under Step 4 of Exhibit 22-4, as well as the financial information in Exhibit 22-4.

Worksheet Entries for Operating Activities

Entry (a) records net income as the first item on the worksheet under the heading Net Cash Flow From Operating Activities. Adjustments are then made for noncash expenses and for changes in current assets and current liabilities.

Non-Cash Expenses A review of the expenses on the income statement in Exhibit 22-4 shows three "noncash" expenses: depreciation expense on equipment, depreciation expense on buildings, and patent amortization expense. Each of these is added back to net income to help reconcile it to the net cash flow from operating activities, as we show in entries (b), (c), and (d). Note that entries (b) and (d) account for the changes in Accumulated Depreciation: Equipment and Patents (net), respectively. Entry (o), which we discuss later, is also recorded to account for the change in the Accumulated Depreciation: Buildings account.

Changes in Current Assets A review of the changes in the current assets (except cash) reveals several additional adjustments that are made to help reconcile the net income to the net cash flow from operating activities. Accounts receivable increased by \$2,000 during the year because the company collected less cash than the credit sales it made. To adjust net income for the lower operating cash inflow, entry (e) is made. Note that, for simplicity, we ignore bad debts here. If accounts receivable (net) are affected by a provision for bad debts, then both the change in accounts receivable because of recording bad

13. Normally, in Step 3 the major headings are listed *below* the account titles. However, because Example 22-5 is so long, we show the lower portion of the worksheet on the facing page.

debts expense and the change because of cash collections in excess of (or less than) sales are treated as adjustments of net income.

EXAMPLE 22-4 Jones Company: Condensed Financial Information
Income Statement Information for 2007

Sales		\$ 88,020
Less: Cost of goods sold	\$ (52,200)	
Other operating expenses	(15,800)	
Depreciation expense:		
equipment	(2,820) (b)	
Depreciation expense:		
building	(5,100) (c)	
Patent amortization expense	(600) (d)	
Bond interest expense	(1,100)	
Income tax expense	(3,630)	
Plus: Gain on sale of land	1,700	(79,550)
Income before extraordinary items		\$ 8,470
Extraordinary loss		
(net of income taxes)		(2,100)
Net Income		<u>\$ 6,370</u> (a)

Balance Sheet Information

Accounts	Balances	
	12/31/06	12/31/07
Cash	\$ 3,200	\$ 5,900 (w)
Accounts receivable	5,600	7,600 (e)
Inventories	7,300	7,000 (f)
Prepaid expenses	1,200	1,400 (g)
Land	10,000	18,200
Equipment	35,000	35,000
Accumulated depreciation:		
equipment	(12,000)	(14,820)
Buildings	144,000	149,000
Accumulated depreciation:		
buildings	(39,300)	(39,600)
Leased equipment	0	5,300
Patents (net)	5,000	4,400
Total Assets	<u>\$160,000</u>	<u>\$179,380</u>
Accounts payable	\$ 8,600	\$ 7,300 (h)
Income taxes payable	1,500	2,130 (i)
Interest payable	0	500 (j)
Note payable	0	2,600
Obligation under capital lease	0	5,300
Bonds payable, 10%	0	10,000
Discount on bonds payable	0	(900)
Deferred tax liability	1,920	2,100
Preferred stock, \$100 par	6,000	0
Premium on preferred stock	1,000	0
Common stock, \$10 par	34,000	37,400
Premium on common stock	67,000	73,700
Retained earnings	39,980	39,250
Total Liabilities and Stockholders' Equity	<u>\$160,000</u>	<u>\$179,380</u>

Retained Earnings Information for 2007

Beginning retained earnings		\$ 39,980
Add: Net income		<u>6,370</u>
		\$46,350
Less: Stock dividends	\$ 3,100	
Cash dividends	4,000 (v)	(7,100)
Ending Retained Earnings		<u>\$39,250</u>

Supplemental Information for 2007

- (k) On December 31, 2007 the company borrowed \$2,600 from a bank by issuing a 12%, 90-day note payable.
- (l) During the year additional land was acquired at a cost of \$10,400.
- (m) During the year land that cost \$2,200 was sold for \$3,900, resulting in a \$1,700 gain.
- (n) During the year a new building was acquired at a cost of \$15,000.
- (o) During the year an earthquake completely destroyed a building that cost \$10,000 and had a book value of \$5,200. Settlement with the insurance company, combined with the tax credit, resulted in after-tax cash proceeds of \$3,100 and an extraordinary loss (net of income taxes) of \$2,100.
- (p) On December 31, 2007 the company leased equipment under a long-term capital lease, recording the lease at \$5,300.
- (q) On January 1, 2007 the company issued \$10,000 of long-term bonds at 90. The bonds pay interest semiannually on July 1 and January 1 at a 10% annual rate and mature in 10 years on January 1, 2017.
- (r) The company uses straight-line amortization for the bond discount in (q); consequently, bond discount amortization was \$100 for the year.
- (s) On January 1, 2007 sixty shares of preferred stock with a total par value of \$6,000 and book value of \$7,000 were converted into 240 shares of common stock. The required book value method was used to record the conversion.
- (t) Taxable income was less than pretax accounting income for the year, resulting in an increase in deferred taxes payable of \$180.
- (u) During the year, a small stock dividend was declared and issued. The stock dividend involved 100 shares of \$10 par common stock. The market value of the stock on the declaration date was \$31 per share.

EXAMPLE 22-5 Cash Flow Worksheet for 2007 (Jones Company)

	A	B	C	D	E	F
1	Jones Company					
2	Cash Flow Worksheet					
3	For Year Ended Dec. 31, 2007					
4						
5		Balances		Change	Worksheet Entries	
6				Increase		
7	Account Titles	12/31/06	12/31/07	(Decrease)	Debit	Credit
8	Debits					
9	Cash	3,200	5,900	2,700	(w) 2,700	
10	Noncash Accounts:					
11	Accounts receivable (net)	5,600	7,600	2,000	(e) 2,000	
12	Inventories	7,300	7,000	(300)		(f) 300
13	Prepaid expenses	1,200	1,400	200	(g) 200	
14	Land	10,000	18,200	8,200	(l) 10,400	(m) 2,200
15	Equipment	35,000	35,000	0		
16	Buildings	144,000	149,000	5,000	(n) 15,000	(o) 10,000
17	Leased equipment	0	5,300	5,300	(p-2) 5,300	
18	Patents (net)	5,000	4,400	(600)		(d) 600
19	Discount on bonds payable	0	900	900	(q) 1,000	(r) 100
20	Totals	211,300	234,700	23,400		
21						
22	Credits					
23	Accumulated depreciation:					
24	equipment	12,000	14,820	2,820		(b) 2,820
25	Accumulated depreciation:					
26	buildings	39,300	39,600	300	(o) 4,800	(c) 5,100
27	Accounts payable	8,600	7,300	(1,300)	(h) 1,300	
28	Income taxes payable	1,500	2,130	630		(i) 630
29	Interest payable	0	500	500		(j) 500
30	Note payable	0	2,600	2,600		(k) 2,600
31	Obligation under capital lease	0	5,300	5,300		(p-1) 5,300
32	Bonds payable, 10%	0	10,000	10,000		(q) 10,000
33	Deferred tax liability	1,920	2,100	180		(t) 180
34	Preferred stock, \$100 par	6,000	0	(6,000)	(s-2) 6,000	
35	Premium on preferred stock	1,000	0	(1,000)	(s-2) 1,000	
36	Common stock, \$10 par	34,000	37,400	3,400		(s-1) 2,400
37						(u) 1,000
38	Additional paid-in capital					
39	on common stock	67,000	73,700	6,700		(s-1) 4,600
40						(u) 2,100
41	Retained earnings	39,980	39,250	(730)	(u) 3,100	(a) 6,370
42					(v) 4,000	
43	Totals	211,300	234,700	23,400	56,800	56,800
44						

(Lower portion shown on facing page)

Inventories decreased by \$300 during the year, indicating that the company purchased less inventory than it recorded as cost of goods sold. To adjust net income for the lower operating cash outflow, entry (f) is made. Prepaid expenses increased by \$200 during the year, indicating that the company paid more cash for these items than the amount of expense it included in other operating expenses. To adjust net income for the higher operating cash outflow, entry (g) is made.

EXAMPLE 22-5 (Continued)

	A	B	C	D	E	F	
45	Net Cash Flow From Operating Activities						
46	Net Income					(a) 6,370	
47	Add: Depreciation expense: equipment					(b) 2,820	
48	Depreciation expense: buildings					(c) 5,100	
49	Patent amortization expense					(d) 600	
50	Decrease in inventories					(f) 300	
51	Increase in income taxes payable					(i) 630	
52	Increase in interest payable					(j) 500	
53	Extraordinary loss					(o) 2,100	
54	Bond discount amortization					(r) 100	
55	Increase in deferred tax liability					(t) 180	
56	Less: Increase in accounts receivable						(e) 2,000
57	Increase in prepaid expenses						(g) 200
58	Decrease in accounts payable						(h) 1,300
59	Gain on sale of land						(m) 1,700
60	Cash Flows From Investing Activities						
61	Payment for purchase of land						(l) 10,400
62	Proceeds from sale of land					(m) 3,900	
63	Payment for purchase of building						(n) 15,000
64	Proceeds from building destroyed by earthquake					(o) 3,100	
65	Cash Flows From Financing Activities						
66	Proceeds from issuance of short-term note payable					(k) 2,600	
67	Proceeds from issuance of bonds					(q) 9,000	
68	Payment of dividends						(v) 4,000
69	Investing and Financing Activities Not Affecting Cash						
70	Incurrence of capital lease obligation for equipment					(p-1) 5,300	
71	Acquisition of equipment under capital lease						(p-2) 5,300
72	Issuance of common stock to convert preferred stock					(s-1) 7,000	
73	Conversion of preferred stock to common stock						(s-2) 7,000
74	Net Increase in Cash						(w) 2,700
75	Totals					49,600	49,600
76							

Changes in Current Liabilities Accounts payable decreased by \$1,300 during the year. This decrease indicates that the company's cash payments for operating activities exceeded expenses. To adjust net income for the higher cash outflow, entry (h) is made. Both income taxes payable and interest payable increased during the year, indicating that the company paid less cash than it reported as the respective expenses. To adjust net income for the lower cash outflows, entries (i) and (j) are made. A few entries which we record later also affect the net cash flow from operating activities.

Note that no adjustment is made to the net cash flow from *operating* activities for the \$2,600 increase in the current liability, notes payable. This is because the increase was due to a *financing* activity, which we summarized in the supplemental information of Example 22-4. To record the cash receipt from this financing activity, entry (k) is made. At this point all the changes in the current assets (except cash) and current liabilities are accounted for.

Worksheet Entries for Investing and Financing Activities

Turning to the noncurrent assets and liabilities, a review of the supplemental information is needed to identify the various investing and financing activities.

Changes in Land During the year the company both purchased and sold land; both are investing activities. The acquisition of land resulted in a \$10,400 cash payment, which is recorded in entry (l). Land that cost \$2,200 was sold for \$3,900, which resulted in a \$1,700 gain (not extraordinary) that increased net income. Because the entire \$3,900 is reported as a cash receipt from an investing activity, the gain is *subtracted* from net income to avoid double counting, and because there was no cash inflow from *operating* activities. Therefore, entry (m) is made.¹⁴ Note that entries (l) and (m) account for the \$8,200 increase in the Land account.

Changes in Buildings (and Extraordinary Loss) The acquisition of a new building during the year resulted in a \$15,000 cash payment for an investing activity, which is recorded in entry (n). *FASB Statement No. 95* requires that a company report its cash flows from extraordinary items (as well as discontinued operations) as investing or financing activities and exclude them from its net cash flows from operating activities.¹⁵ During the year, an earthquake (extraordinary event) occurred that destroyed a building owned by the company with a cost of \$10,000 and a book value of \$5,200. Because the company received after-tax cash proceeds of \$3,100 from its insurance company, it incurred an extraordinary loss (net of taxes) of \$2,100, which it included in (and reduced) net income. The proceeds are a cash receipt *from an investing activity*. To record the cash receipt, eliminate the book value, and *add back* the extraordinary loss to net income, entry (o) is made. Because worksheet entry (o) is complex, we show it below in journal entry form to help you in your analysis:

(o) Cash Flows From Investing Activities:			
Proceeds From Building Destroyed by Earthquake	3,100		
Accumulated Depreciation: Building	4,800		
Net Cash Flow From Operating Activities:			
Extraordinary Loss	2,100		
Buildings			10,000

Note that entries (n) and (o) account for the \$5,000 increase in the Building account, and that entries (c) and (o) account for the \$300 increase in the Accumulated Depreciation account. Note also that the Extraordinary Loss is shown on the worksheet as an addition to net income in the usual manner, along with the other added items.

Change in Leased Equipment At the end of the year the company leased equipment under a capital lease, recording the asset and liability at \$5,300. Although not affecting cash, this is a simultaneous investing and financing transaction, and the company reports both activities in a schedule accompanying the statement of cash flows. Entries (p-1) and (p-2) record these events.

Changes in Bonds Payable (and Related Discount) On January 1 the company issued bonds payable with a face value of \$10,000, at a discount, receiving proceeds of \$9,000. This is a financing activity and the cash receipt is recorded in entry (q). Note that the \$1,000 debit to Discount on Bonds Payable does not equal the net change (\$900) in the account. This is because the company amortized part of the discount during the year. On the income statement in Example 22-4, note that the bond interest expense is \$1,100; however, the cash paid or owed on the bonds is 10% of \$10,000, or \$1,000. The additional \$100 of interest expense is due to the discount amortization. This amortization increased interest expense and reduced net income but did not involve a cash outflow. To

14. If the land was sold at a loss, the loss would decrease net income even though there was no outflow of cash for operating activities. In this case, the worksheet entry would be modified so that the caption Loss on Sale of Land is *debited* under the heading Net Cash Flow From Operating Activities to *add back* the loss to net income in a manner similar to depreciation expense.

15. *FASB Statement No. 95, op. cit.*, par. 28.

adjust for the lower operating cash outflow, entry (r) is made. The \$900 increase in Discount on Bonds Payable is now accounted for. The adjustment for the amortization of a premium on bonds payable would be handled in a similar but opposite way. Bond premium amortization reduces interest expense to an amount *less* than the operating cash outflow. Therefore, the worksheet entry would involve a debit to Premium on Bonds Payable and a credit to Net Cash Flow From Operating Activities: Bond Premium Amortization for the amount of the premium amortization.

Change in Preferred Stock During the year, sixty shares of convertible preferred stock with a total par value of \$6,000 and a book value of \$7,000 were converted to 240 shares of \$10 par common stock; the company accounted for the transaction by the required book value method. Although not affecting cash, two simultaneous financing activities involving the exchange of equity securities occurred that the company reports in a schedule accompanying the statement of cash flows. Entries (s-1) and (s-2) record these events. Note that entry (s-1) did not account for all the changes in the Common Stock and Additional Paid-In Capital on Common Stock accounts. Entry (u) also affects these accounts, as we discuss below.

Change in Deferred Taxes The deferred tax liability increased by \$180 because the company's income tax expense was higher than the actual income taxes it paid or owes (because of a temporary difference between pretax financial income and taxable income). To adjust net income for the lower operating cash outflow, entry (t) is made.

Stock Dividend The company declared and issued a small stock dividend during the year; it recorded the transaction at the market price of the stock. Recall that stock dividends affect only stockholders' equity accounts and do not involve the transfer of assets to stockholders or the exchange of equity securities. Consequently, the issuance of a stock dividend is *not* considered to be a financing activity and is *not* reported on a company's statement of cash flows. However, to account for the \$3,100 effect on the company's stockholders' equity accounts, entry (u) is made in the *upper* part of the worksheet.

Cash Dividends The \$730 net decrease in retained earnings during the year has not yet been accounted for. Entry (a) increased retained earnings for the net income of \$6,370, while entry (u) decreased it for the stock dividend of \$3,100. The remaining decrease in retained earnings was due to the declaration and payment of \$4,000 in cash dividends. This payment is a financing activity and is recorded in entry (v).

Step 5: Final Worksheet Entry

In Step 5 a check of the debit and credit entries in the upper portion of the worksheet shows that all the changes in the noncash accounts have been accounted for. A final worksheet entry is made to record the increase in cash and to bring the debit and credit column totals into balance. This is entry (w). The debit and credit totals in the upper portion of Example 22-5 are \$56,800 and in the lower portion are \$49,600. The worksheet for the Jones Company is now complete.

Step 6: Preparation of Statement

Example 22-6 shows the statement of cash flows and the accompanying schedule of investing and financing activities not affecting cash for the Jones Company. They were prepared from the *lower* part of the worksheet in Example 22-5, along with the beginning and ending cash balances. Note that in the Cash Flows From Investing Activities section, the company reports the payment for the purchase of land separately from the receipt from the sale of land. Similarly, it reports the payment for the purchase of the building separately from the receipt from the building destroyed by the earthquake. *FASB Statement No. 95* requires that a company report the cash inflows and cash outflows for related investing activities as well as for related financing activities *separately* and *not* "net"

them against each other.¹⁶ Note also that the reconciliation of the beginning and ending cash balances at the bottom of the statement of cash flows enables a user to trace the change in cash to related amounts on the company's balance sheets. Finally, note that the schedule of investing and financing activities not affecting cash discloses the \$5,300 non-cash transaction that had both an investing and financing element, and the \$7,000 other transaction that involved two financing elements.

EXAMPLE 22-6 Comprehensive Statement of Cash Flows

JONES COMPANY

Statement of Cash Flows For Year Ended December 31, 2007

Net Cash Flow From Operating Activities	
Net income	\$ 6,370
Adjustments for differences between income flows and cash flows from operating activities:	
Add: Depreciation expense: equipment	2,820
Depreciation expense: buildings	5,100
Patent amortization expense	600
Decrease in inventories	300
Increase in income taxes payable	630
Increase in interest payable	500
Extraordinary loss (net) from earthquake	2,100
Increase in deferred tax liability	180
Bond discount amortization	100
Less: Increase in accounts receivable	(2,000)
Increase in prepaid expenses	(200)
Decrease in accounts payable	(1,300)
Gain on sale of land	(1,700)
Net cash provided by operating activities	<u>\$13,500</u>
Cash Flows From Investing Activities	
Payment for purchase of land	\$(10,400)
Proceeds from sale of land	3,900
Payment for purchase of building	(15,000)
Proceeds from building destroyed by earthquake	3,100
Net cash used for investing activities	<u>(18,400)</u>
Cash Flows From Financing Activities	
Proceeds from issuance of short-term note payable	\$ 2,600
Proceeds from issuance of bonds	9,000
Payment of dividends	(4,000)
Net cash provided by financing activities	<u>7,600</u>
Net Increase in Cash (see Schedule 1)	<u>\$ 2,700</u>
Cash, January 1, 2007	3,200
Cash, December 31, 2007	<u>\$ 5,900</u>
Schedule 1: Investing and Financing Activities Not Affecting Cash	
Investing Activities	
Acquisition of equipment under capital lease	\$ (5,300)
Financing Activities	
Issuance of capital lease obligation for equipment	5,300
Conversion of preferred stock to common stock	(7,000)
Issuance of common stock to convert preferred stock	7,000

16. FASB Statement No. 95, *op. cit.*, par. 31 and 75.



SECURE YOUR KNOWLEDGE 22-2

- The calculation of a company's net cash flow from operating activities involves an adjustment of net income for differences in when the company records revenues and expenses and when it receives and pays cash, as well as for non-cash items (e.g., depreciation expense, amortization expense for intangible assets) that affect net income but do not result in a cash receipt or payment. These adjustments are made using either the direct or indirect methods.
- The direct method calculates and reports a company's net cash flow from operating activities by computing the company's cash inflows for each operating activity and then deducting its cash outflows for each operating activity.
 - The direct method requires that each income statement account be analyzed and adjusted for changes in current assets or liabilities, certain noncurrent assets or liabilities, and any non-cash items.
 - If the direct method is used, a company must include a reconciliation of net income to net cash flow from operating activities.
- The indirect method calculates a company's net cash flow from operating activities by converting its net income from an accrual basis to a cash flow basis.
 - The indirect method adjusts net income for changes in the appropriate current assets or liabilities, certain noncurrent assets or liabilities, and any non-cash items.
 - The indirect method is the most commonly used method for the preparation of net cash flow from operating activities.
- A company's net cash flows from investing and financing activities are identified through an analysis of the changes in the balance sheet accounts (generally noncurrent assets and liabilities) and a review of any supplemental information provided.
- The statement of cash flows may be prepared by using either the visual inspection method or the worksheet method. The steps for each method are outlined in Exhibit 22-3 and Exhibit 22-4, respectively.
 - Under either method, all of the changes in the assets (except cash), liabilities, and stockholders' equity accounts during the period are explained.

SPECIAL TOPICS

We designed the previous examples and discussion to show the common issues involved in using the worksheet to prepare the statement of cash flows. For simplicity, we omitted several topics. We briefly discuss these topics in the following sections.

Sale of Depreciable Asset

A company computes the gain or loss on the sale of a depreciable asset by comparing the current book value of the asset to the selling price. When the company records the transaction it increases cash, eliminates the book value (cost and accumulated depreciation), and recognizes a gain or loss that it reports on its income statement. At the end of the year, when preparing the worksheet for the statement of cash flows, this journal entry must be properly reconstructed on the worksheet to account for the changes in the various accounts.

Example: Sale of Depreciable Asset Assume that during the year Brandt Company sold equipment with a cost of \$2,200 and accumulated depreciation of \$700 for \$2,100. The company recorded an increase (debit) in Cash for \$2,100, a decrease (debit) in Accumulated Depreciation for \$700, and a decrease (credit) in Equipment for \$2,200. Because the \$2,100

selling price (proceeds) was more than the \$1,500 ($\$2,200 - \700) book value, the company also recorded (credited) a Gain on the Sale of Equipment for \$600.

The proceeds of \$2,100 are a cash receipt from an *investing* activity. The gain increased net income but there was no cash inflow from *operating* activities. In preparing the worksheet entry for this transaction, two modifications are made: (1) instead of debiting cash, the caption Proceeds From Sale of Equipment under the heading Cash Flows From Investing Activities is debited for the \$2,100, and (2) the caption Gain on Sale of Equipment is *credited* under the heading Net Cash Flow From Operating Activities to *subtract* the gain from net income to avoid double counting and to correctly show the cash provided by operating activities. The worksheet entry (in journal entry format) is as follows:

Cash Flows From Investing Activities:		
Proceeds From Sale of Equipment	2,100	
Accumulated Depreciation	700	
Equipment		2,200
Net Cash Flow From Operating Activities:		
Gain on Sale of Equipment		600

The sale of equipment (or other depreciable assets) at a loss is handled in a similar manner, except that the caption Loss on Sale of Equipment is *debited* under the heading Net Cash Flow From Operating Activities to *add back* the loss to net income because it did not involve an operating cash outflow. ♦

Retirement of Bonds

A company computes the gain or loss on the retirement of bonds by comparing the current book value of the bonds payable to the retirement price. When the company records the transaction, it decreases cash, eliminates the book value (face value and any related premium or discount), and recognizes a gain or loss that it reports on its income statement. At the end of the year, this journal entry must be properly reconstructed on the worksheet to account for the changes in the various accounts.

Example: Retirement of Bonds Assume that during the year, Rosen Company paid \$8,900 to retire bonds with a face value of \$10,000 and a book value of \$9,700. The company recorded a decrease (debit) to Bonds Payable for \$10,000, a decrease (credit) to Discount on Bonds Payable for \$300, and a decrease (credit) to Cash for \$8,900. Since the cash paid was less than the book value, the company also recorded (credited) an \$800 ($\$9,700 - \$8,900$) Gain on Retirement of Bonds.

The cash paid of \$8,900 is a cash payment for a *financing* activity. The gain increased net income but there was no cash inflow from *operating* activities. In preparing the worksheet entry for this transaction, two modifications are made: (1) instead of crediting cash, the caption Cash Flows From Financing Activities: Payment to Retire Bonds is credited for \$8,900, and (2) instead of crediting gain, the caption Net Cash Flow From Operating Activities: Gain on Retirement of Bonds is credited for \$800 to *subtract* the gain from net income to correctly show the cash provided by operating activities. The retirement of bonds payable at a loss is handled in a similar manner, except that the caption Net Cash Flow From Operating Activities: Loss on Retirement of Bonds is debited to *add back* the loss to net income because it did not involve an operating cash outflow. ♦

Interest Paid and Income Taxes Paid

FASB Statement No. 95 requires a company using the indirect method of reporting its operating cash flows to also disclose its interest *paid* and income taxes *paid*. This disclosure may be made in a separate schedule, narrative description, or the notes to the financial statements. Interest *expense* is affected by the cash paid, accruals, and any premium or discount amortizations on bonds (or notes) payable. Income tax *expense* is affected by the

- 7** Compute and disclose interest paid and income taxes paid.

cash paid, accruals, and changes in deferred income taxes. To convert interest expense to interest paid, and to convert income tax expense to income taxes paid, the following adjustments¹⁷ are necessary:

Interest	Income Taxes
Interest <i>expense</i>	Income tax <i>expense</i>
+ Decrease in interest payable	+ Decrease in income taxes payable
<i>or</i>	<i>or</i>
– Increase in interest payable	– Increase in income taxes payable
+ Amortization of premium on bonds payable	+ Decrease in deferred tax liability
<i>or</i>	<i>or</i>
– Amortization of discount on bonds payable	– Increase in deferred tax liability
= Interest <i>paid</i>	+ Increase in deferred tax asset
	<i>or</i>
	– Decrease in deferred tax asset
	= Income taxes <i>paid</i>

Example: Interest and Income Taxes Refer back to the Jones Company information shown in Example 22-4 and 22-5. To determine its interest paid and income taxes paid for 2007, the Jones Company prepares the following schedules:

Bond interest expense	\$1,100	Income tax expense	\$3,630
– Increase in interest payable	(500)	– Increase in income taxes payable	(630)
– Bond discount amortization	<u>(100)</u>	– Increase in deferred tax liability	<u>(180)</u>
Interest paid	<u>\$ 500</u>	Income taxes paid	<u>\$2,820</u>

Based on these computations, Jones Company reports interest paid of \$500 and income taxes paid of \$2,820 with its 2007 statement of cash flows shown in Example 22-6. **Unless directed otherwise, you are *not* required to make these disclosures in the chapter homework. ♦**

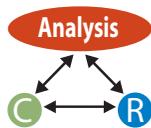
Flexibility in Reporting

FASB Statement No. 95 permits flexibility in reporting a company's net cash flow from operating activities under the indirect method. That is, the company may show the reconciliation of net income to the net cash provided by (or used in) operating activities in a separate schedule accompanying its statement of cash flows. Thus, for instance, if the Jones Company used this approach, the first section of Example 22-6 would appear as follows:

Net Cash Flow From Operating Activities	
Net cash provided by operating activities (Schedule 1)	\$13,500

Then the company would report the reconciliation of the \$6,370 net income to the \$13,500 net cash provided by operating activities in Schedule 1. The rest of the statement of cash flows would remain the same. (The schedule to report the investing and financing activities not affecting cash would be numbered as Schedule 2.) The advantage of reporting the reconciliation in a separate schedule is that it reduces the amount of detail that a

17. A company may have a valuation allowance related to its deferred tax asset. Since the valuation allowance is a contra account, it handles any changes in the account in the opposite way to that of the deferred tax asset.



company shows on its statement of cash flows. The disadvantage is that it removes from the statement a key factor in assessing the quality of the company's net income and its relationship to cash flows. By relegating the reconciliation to a separate schedule, this analysis may be overlooked by external users. For this reason, we advocate that a company include the reconciliation directly on its statement of cash flows, which most companies do.

Partial Cash Investing and Financing Activities

In the previous examples and discussion, we assumed that no cash was exchanged in any "noncash" transactions involving investing and financing activities. In some transactions, however, a company may exchange a small amount of cash even though most of the transaction involves a noncash exchange. In other transactions, it may exchange a large amount of cash even though some of the transaction is a noncash exchange. In these cases, there are alternative ways the company may use to disclose simultaneous investing and financing activities involving some cash.

Example: Small Amount of Cash Assume Hembrey Company acquired land for \$10,000 by paying \$1,000 down and signing a \$9,000 note payable. One method it may use to disclose the effects of this transaction is to report the cash payment on its statement of cash flows and the noncash element on the accompanying schedule of investing and financing activities not affecting cash as follows:

<i>Statement of Cash Flows</i>	
Cash Flows From Investing Activities	
Payment for purchase of land	\$(1,000)
<i>Schedule: Investing and Financing Activities Not Affecting Cash</i>	
Investing Activities	
Purchase of land for \$10,000 by issuance of note	\$(9,000)
Financing Activities	
Issuance of note to acquire land	9,000

The advantage of this approach is that it keeps the significant noncash elements of the transaction separate from the cash elements. The disadvantage is that the external user cannot identify the relationships between the items. ♦

Example: Large Amount of Cash When the amount of cash is large in such an exchange, it may be more appropriate to report the items in the statement of cash flows. Several alternative disclosure formats are acceptable. For instance, if Lakewood Company acquired land for \$18,000 by paying \$15,000 down and signing a \$3,000 note payable, it might report the effects on its statement of cash flows as follows:

Cash Flows From Investing Activities	
Purchase of land by issuance of note and cash	\$(18,000)
Less: Issuance of note	<u>3,000</u>
Cash payment for purchase of land	\$(15,000)

The advantage of this approach is that the related items are shown in close proximity. The disadvantage is that a financing element (issuance of note) is disclosed in an investing section. Each of the alternative disclosures has its advantages and disadvantages. You must use good judgment to determine the most informative disclosure for the given circumstances. ♦

Temporary and Long-Term Investments

As we discussed in Chapter 15, a company reports its investments (whether temporary or long-term) in "available-for-sale" debt and equity securities as assets at their fair value (by using an allowance account) on its year-end balance sheet. It also includes any resulting

Credit: © Getty Images/PhotoDisc



unrealized increase or decrease in value as a component of its accumulated other comprehensive income¹⁸ in its stockholders' equity. When the company sells this temporary or long-term investment, it eliminates the fair value (cost and allowance accounts) of the security, as well as any related cumulative unrealized increase or decrease in value, from its accounting records. It also records a realized gain or loss on the sale. It computes the realized gain or loss by comparing the proceeds to the *cost* of the security.

Because the company used an allowance account and an unrealized increase or decrease account to value the investment in avail-

able-for-sale securities, it must carefully analyze any changes in these accounts to determine the impact (if any) on its statement of cash flows. The company reports an increase in the investment account due to the *purchase* of the securities on its statement of cash flows as a cash payment for an investing activity. The entry on the worksheet to prepare the statement is also made in the usual manner. The company does *not* report any changes in the allowance and the unrealized increase or decrease accounts resulting from a *reevaluation to fair value at year-end* on its statement of cash flows. However, it must account for the changes on the worksheet. The company reports a decrease in the investment account because of the *sale* of the securities on its statement of cash flows as a cash receipt from an investing activity in the usual manner. However, the worksheet entry must reconcile the changes in the investment, allowance, unrealized increase/decrease, and realized gain (or loss) accounts.

Example: Purchase and Sale of Investment Assume that on November 28, 2007, the Dougherty Company purchased 1,000 shares of Bear Company common stock for \$40,000 as a temporary investment in available-for-sale securities. On December 31, 2007 the fair value of the stock has risen to \$42 per share, so that the company reported the temporary investment as a current asset of \$42,000 (\$40,000 cost + \$2,000 allowance). It also reported a \$2,000 unrealized increase in value of available-for-sale securities as a component of its accumulated other comprehensive income in its stockholders' equity on the December 31, 2007 balance sheet. For its cash flow analysis, Dougherty Company would make the following worksheet entries at the end of 2007 to reconcile the \$42,000 change in the carrying value of the temporary investment:

Temporary Investment in Available-for-Sale Securities	40,000
Cash Flows From Investing Activities:	
Payment for Purchase of Temporary Investments	40,000
Allowance for Change in Value of Investment	2,000
Unrealized Increase in Value of Available-for-Sale Securities	2,000

The debit portion of the first entry is listed in the upper part of the worksheet. This helps to reconcile the change in the temporary investment account. The credit portion of the

18. The company would first include the periodic *change* in the unrealized increase or decrease in value in its other comprehensive income for the period, as we discussed in Chapter 5.

first entry is listed in the lower part of the worksheet and accounts for the cash payment for the purchase of the temporary investment. The company reports this \$40,000 cash payment in its 2007 statement of cash flows. Both the debit and credit portions of the second entry are listed in the upper portion of the worksheet and complete the reconciliation of the changes in the allowance and unrealized increase accounts. The company does *not* include this portion of the increase in the carrying value of the temporary investment on its 2007 statement of cash flows because there was no cash outflow.

Now suppose that the Dougherty Company sold its investment in Bear Company stock for \$45,000 on January 16, 2008. Dougherty Company would make the following worksheet entries at the end of 2008 to reconcile the changes in the various accounts:

Cash Flows From Investing Activities: Receipt from Sale of Temporary Investment	45,000	
Temporary Investment in Available-for-Sale Securities		40,000
Net Cash Flow From Operating Activities: Gain on Sale of Temporary Investment		5,000
Unrealized Increase in Value of Available-for-Sale Securities	2,000	
Allowance for Change in Value of Investment		2,000

These two journal entries (1) record the \$45,000 investing cash inflow from the sale of the securities, (2) treat the \$5,000 gain on the sale as a subtraction from net income to reconcile it to the net cash flow from operating activities, and (3) reconcile the changes in the temporary investment, allowance, and unrealized increase accounts. The company reports the first two items on its 2008 statement of cash flows in the usual manner. ♦

A company may also make a long-term investment in debt securities (e.g., bonds) that it expects to hold to maturity. It amortizes any premium or discount each year as an adjustment to interest revenue, and reports the investment at its book value on the year-end balance sheet. For cash flow reporting purposes, it reports the purchase as a cash payment for investing activities. The company also adds any premium amortization on this type of investment to net income in the operating activities section of the statement of cash flows because the amortization reduced interest revenue to an amount lower than the cash received. The company subtracts any discount amortization from net income because the amortization increased interest revenue to an amount higher than the cash received. Each of these adjustments helps reconcile the net income to the net cash flow from operating activities. Although rare, if a company sells such an investment before maturity, it computes any gain or loss by comparing the proceeds to the unamortized cost. It reports the proceeds as a cash receipt from investing activities and deducts the gain from net income (or adds the loss to net income) in the usual manner on its statement of cash flows.

A company may also make short-term investments in trading securities. It reports the cash flows from purchases, sales, and maturities of trading securities as cash flows from operating activities. Also, as we discussed in Chapter 15, *FASB Statement No. 115* requires companies to report investments in trading securities at their fair value and report any resulting unrealized holding gain or loss in net income. Consequently, for reporting its operating cash flows under the indirect method, a company adds (deducts) an unrealized holding loss (gain) on trading securities to net income to help adjust net income from an accrual basis to a cash basis.

Financial Institutions

When the FASB was discussing the requirements of *FASB Statement No. 95*, one controversial issue was the proper reporting of interest collected and interest paid, and collections and payments of notes receivable and notes payable. Most companies do not deal with

notes receivable and notes payable as a primary part of their operations. On the other hand, notes are a major aspect of the business of banks (and other financial institutions). Banks also frequently buy and sell notes, mortgages, and similar securities. The question arose as to whether companies should be required to report the related cash inflows and outflows (i.e., interest and principal) as operating activities or as investing and financing activities. As we discussed earlier in the chapter, the FASB concluded that companies must report interest collected and interest paid as cash flows relating to operating activities. The Board concluded that this would provide consistency with the reporting of the related interest revenue and interest expense on the income statement. However, the Board decided that companies must report the collections and payments of the principal of notes receivable and notes payable as cash flows relating to their investing and financing activities, respectively.

In *FASB Statement No. 102* the FASB reversed parts of its original requirements. For banks, brokers and dealers in securities, and other similar companies that hold loans for resale on a short-term basis or carry securities in a “trading account,” other requirements now apply. (A trading account includes accounts that are acquired specifically for resale and are turned over very quickly.) The Board concluded that financial institutions must report the cash flows from the purchases or sales of these trading accounts in the operating activities section of the statement of cash flows.¹⁹ In coming to this conclusion, the FASB reasoned that these types of assets for financial institutions are similar to inventory for other businesses and, as such, are part of the operating activities.

As we discussed earlier in the chapter, in most situations *FASB Statement No. 95* does not allow a company to “net” its cash outflows against cash inflows for reporting the results of related investing or financing activities. An exception is made for certain activities of banks and other financial institutions. These institutions are allowed to report the net cash flows for (1) deposits and withdrawals with other financial institutions, (2) time deposits accepted and repaid, and (3) loans made to customers and principal collections of these loans.²⁰ This exception is allowed because showing these items on a “gross” basis provides information that is costly for a company to accumulate and is of limited value to external users.

Cash Dividends Declared

In the previous examples, whenever we discussed cash dividends, we assumed that the dividends were declared *and* paid in the current year. The declaration and payment of cash dividends causes a decrease in both retained earnings and cash. A company reports this as a cash payment for financing activities.

In some instances a company will declare a cash dividend in the *current* year and pay the cash dividend in the *next* year. In this case the cash dividend is handled differently in preparing the worksheet for the statement of cash flows. The declaration of the cash dividend is recorded on the worksheet as a decrease (debit) in Retained Earnings and an increase (credit) in Dividends Payable. Because no cash outflow occurs in the current year, the company does not report dividends paid on its statement of cash flows. In the next year, the company records the payment of the cash dividends on the worksheet as a

19. “Statement of Cash Flows—Exemption of Certain Enterprises and Classification of Cash Flows from Certain Securities Acquired for Resale,” *FASB Statement of Financial Accounting Standards No. 102* (Norwalk, Conn.: FASB, 1989), par. 8 and 9.

20. “Statement of Cash Flows—Net Reporting of Certain Cash Receipts and Cash Payments and Classification of Cash Flows from Hedging Transactions,” *FASB Statement of Financial Accounting Standards No. 104* (Norwalk, Conn.: FASB, 1989), par. 7.

decrease (debit) in Dividends Payable and a decrease (credit) in Cash. The company then reports the dividends paid as a cash payment in the cash flows from financing activities section of its statement of cash flows.

When a company follows a policy of declaring a dividend in one year and paying the dividend in the next year, its Dividends Payable account balance will change during each year. A comparison of the change in the account balance to the dividends reported on the retained earnings statement will determine the worksheet entry necessary to account for the cash dividends.

Cash Flows for Compensatory Share Option Plans

In Chapter 16, we showed how a corporation records its estimated compensation expense for a compensatory share option plan. In Chapter 19, we explained how recording this compensation expense for financial reporting purposes but not recording any compensation expense for income tax purposes results in a deferred tax asset for the future deductible amount. Although both of these journal entries affect net income, neither results in a cash flow. Therefore, on the corporation's statement of cash flows, under the indirect method the increase in compensation expense must be *added* back to net income and the increase in the deferred tax asset must be *subtracted* from net income to help determine the net cash flow from operating activities.

When employees exercise the share options, the cash flow treatment is more complicated and we only provide a brief overview here. In Chapter 19, we explained that in the year an employee exercises the share options, the corporation is allowed to take a tax deduction (for compensation expense) equal to the difference between the market price of the shares on the exercise date and the exercise price. However, for financial reporting purposes, the corporation has already recorded all of the compensation expense during the service period. So, when the share options are exercised, the corporation has higher pretax financial income than taxable income because the previous future deductible difference has "reversed." Therefore, it eliminates the deferred tax asset (that it had previously recorded during the service period) and increases income tax expense. For cash flow purposes, this decrease in the deferred tax asset is *added* back to net income under the indirect method to help determine the net cash flow from operating activities.

If the actual market price used to record the compensation expense for income tax purposes is the same as the estimated market price (based on the option pricing model) used to record the compensation expense for financial reporting purposes, then there are no more cash flow issues. However, this is not likely because of the use of estimates, and a "permanent" difference will exist that provides a tax benefit by reducing the corporation's income tax expense and income taxes payable. Therefore, *FASB Statement No. 95* (as amended by *FASB Statement No. 123R*) requires that the corporation compute the excess realized tax benefit related to the difference between the compensation expense reported for income tax purposes and the compensation expense recorded for financial reporting purposes. The corporation is then required to report the excess realized tax benefit as a cash inflow from financing activities because it relates to the issuance of stock, which is a financing activity. The corporation is also required to *subtract* the excess realized tax benefit from net income to help determine its net cash flow from operating activities on its statement of cash flows.²¹ The amount is subtracted because it reduced income tax expense but did not involve an operating cash savings.

21. *FASB Statement No. 95*, op.cit., par. 19 and 23, as amended by *FASB Statement No. 123* (revised 2004) (Norwalk, Conn.: FASB, 2004), par. 68 and A96.

For example, suppose that Petricka Corporation reported net income of \$500,000 and had a tax deduction of \$800,000 in the current year for compensation expense because employees exercised share options. In previous years, for financial reporting purposes, the corporation had recorded compensation expense of \$700,000 for this compensatory share option plan. If the corporation is subject to a 30% tax rate and uses the indirect method to report its cash flows from operating activities, then it would report the \$30,000 $[(\$800,000 - \$700,000) \times 0.30]$ excess realized tax benefit on its statement of cash flows for the current year as follows:

<i>Cash flows from operating activities</i>	
Net income	\$500,000
Less: Excess tax benefits from compensatory stock option plan	(30,000)
<i>Cash flows from financing activities</i>	
Excess tax benefits from compensatory stock option plan	\$ 30,000

For more details, see Illustration 4 in Appendix A of *FASB Statement No. 123R*.

Effects of Exchange Rates

Many companies have operations in foreign countries. When a company with foreign operations prepares its statement of cash flows, the statement must disclose the “reporting currency equivalent” of the “foreign currency” cash flows using the exchange rates in effect at the time of the cash flows. It may use a weighted average exchange rate for the period if this yields similar results. On the statement, then, a company reports the effect of exchange rate changes on cash balances held in foreign currencies as a separate part of the reconciliation of the change in cash during the period.²²

Cash Flow Per Share

A company must report its earnings per share on the face of its income statement, as we discussed in Chapter 17. Although the cash flow information presented in a company’s statement of cash flows is useful in evaluating the performance of the company, the FASB believes that cash flow (or any component) is not an alternative to income as an indicator of a company’s performance. Consequently, a company is *not* allowed to report a cash flow per share amount in its financial statements.²³ Users often compute other cash flow ratios, however, as we discussed in Chapter 6.

Disclosure

Real Report 22-1 shows the statement of cash flows for **Kellogg Company**. Note that Kellogg uses the indirect method to report net cash flow from operating activities and discloses the changes in current assets and current liabilities in the notes to its financial statements. Additionally, the effect of the exchange rate on cash is disclosed separately after net cash flow from financing activities.

22. *FASB Statement No. 95, op. cit.*, par. 25.

23. *Ibid.*, par. 33.



Real Report 22-1 Kellogg Company - Statement of Cash Flows

<i>(millions)</i>	2004	2003	2002
Operating activities			
Net earnings	\$ 890.6	\$ 787.1	720.9
Adjustments to reconcile net earnings to operating cash flows:			
Depreciation and amortization	410.0	372.8	349.9
Deferred income taxes	57.7	74.8	111.2
Other	104.5	76.1	67.0
Pension and other postretirement benefit plan contributions	(204.0)	(184.2)	(446.6)
Changes in operating assets and liabilities	(29.8)	44.4	197.5
Net cash provided from operating activities	\$1,229.0	\$1,171.0	\$999.9
Investing activities			
Additions to properties	(\$ 278.6)	(\$ 247.2)	(\$253.5)
Acquisitions of businesses	—	—	(2.2)
Dispositions of businesses	—	14.0	60.9
Property disposals	7.9	13.8	6.0
Other	.3	.4	—
Net cash used in investing activities	(\$ 270.4)	(\$ 219.0)	(\$188.8)
Financing activities			
Net increase (reduction) of notes payable, with maturities less than or equal to 90 days	\$ 388.3	\$ 208.5	(\$226.2)
Issuances of notes payable, with maturities greater than 90 days	142.3	67.0	354.9
Reductions of notes payable, with maturities greater than 90 days	(141.7)	(375.6)	(221.1)
Issuances of long-term debt	7.0	498.1	—
Reductions of long-term debt	(682.2)	(956.0)	(439.3)
Net issuances of common stock	291.8	121.6	100.9
Common stock repurchases	(297.5)	(90.0)	(101.0)
Cash dividends	(417.6)	(412.4)	(412.6)
Other	(6.7)	(.6)	—
Net cash used in financing activities	(\$ 716.3)	(\$ 939.4)	(\$944.4)
Effect of exchange rate changes on cash	33.9	28.0	2.1
Increase (decrease) in cash and cash equivalents	\$ 276.2	\$ 40.6	(\$ 131.2)
Cash and cash equivalents at beginning of year	141.2	100.6	231.8
Cash and cash equivalents at end of year	\$ 417.4	\$ 141.2	\$100.6

NOTE 15 SUPPLEMENTAL FINANCIAL STATEMENT DATA

Consolidated Statement of Cash Flows	2004	2003	2002
Trade receivables	\$ 13.8	(\$ 36.7)	\$ 14.6
Other receivables	(39.5)	18.8	13.5
Inventories	(31.2)	(48.2)	(26.4)
Other current assets	(17.8)	.4	70.7
Accounts payable	63.4	84.8	41.3
Other current liabilities	(18.5)	25.3	83.8
Changes in operating assets and liabilities	(\$ 29.8)	\$ 44.4	\$197.5

Questions:

1. How did Kellogg's net cash flow from operating activities differ from its net income for 2004? Explain this difference.
2. What type of activities did Kellogg invest in for 2004?
3. What kind of financing activities did Kellogg's engage in for 2004?



LINK TO INTERNATIONAL DIFFERENCES

International accounting standards require a company to include a cash flow statement as one of its basic financial statements. These standards define operating, investing, and financing activities in a manner similar to U.S. standards. A company may present its operating cash flows under either the indirect or direct method. However, contrary to U.S. standards, international standards do not require a company using the direct method to reconcile its net income to its operating cash flows. There are also a few differences in the way a company presents certain items under international standards as compared to U.S. standards. For instance, under international standards a company is (1) allowed to report dividends paid as either an operating cash outflow or a financing cash outflow, (2) allowed to report payments of income taxes identified with financing and investing transactions as financing and investing activities, (3) allowed to report cash flow per share, and (4) allowed more freedom in netting cash receipts and payments. Finally, contrary to U.S. standards, international accounting standards encourage a company to disclose any undrawn borrowing facilities that may be available for future operating activities, the cash flows that represent increases in its operating capacity separately from the cash flows that are needed to maintain its operating capacity, and the operating, investing, and financing activities of each of its reported industry and geographic segments.



SECURE YOUR KNOWLEDGE 22-3

- The sale of a depreciable asset generally involves an increase in cash (classified as an investing activity), the elimination of the book value of the asset, and the recognition of a non-cash gain or loss (the difference between the book value and the proceeds from the sale) which requires an adjustment to net income in the operating activities section of the statement of cash flows prepared under the indirect method.
- The retirement of bonds generally involves a decrease in cash (classified as a financing activity), the elimination of the book value of the bonds, and the recognition of a non-cash gain or loss (the difference between the book value of the bonds and cash paid to retire the bonds) which requires an adjustment to net income in the operating activities section of the statement of cash flows prepared under the indirect method.
- A company using the indirect method must disclose the interest paid and the income taxes paid in a separate schedule, narrative description, or the notes to the financial statements.
- The reconciliation of net income to the net cash flow from operating activities may be provided in a separate schedule.
- For simultaneous investing and financing activities that involve some cash, a company may choose to report the cash portion on its statement of cash flows and the non-cash portion in the accompanying schedule of non-cash activities, or it may choose to report both the cash and non-cash items on its statement of cash flows.
- Cash receipts or payments relating to the sale or purchase of investments in available-for-sale securities are classified as a cash inflow or outflow from investing activities.

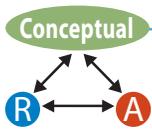
(continued)

However, the unrealized change in the market value of these securities is not included on the statement of cash flows.

- The sale or purchase of debt securities classified as held-to-maturity is recorded as a cash inflow or outflow from investing activities. The amortization of any premium or discount related to this long-term investment is a non-cash item requiring an adjustment to net income in the operating activities section of the statement of cash flows prepared under the indirect method.
- Cash dividends declared in the current year and paid in the next year are recorded as a cash payment for financing activities in the year paid.
- The recognition of compensation expense (a non-cash item) related to compensatory share option plans results in an increase in a deferred tax asset. On a statement of cash flows prepared under the indirect method, a corporation must add the increase in compensation expense and subtract the increase in the deferred tax asset in determining net cash flow from operating activities. When the share options are exercised, the decrease in the deferred tax asset is added back to net income in the operating activities section of the statement of cash flows.

APPENDIX: DIRECT METHOD FOR REPORTING OPERATING CASH FLOWS

In the main part of this chapter, we used the *indirect* method to report the net cash flow from operating activities on the statement of cash flows. Most companies (over 98%) use this method. *FASB Statement No. 95* allows a company to use either the indirect method or the direct method to report the cash flows from operating activities on its statement of cash flows, but encourages the use of the *direct method*. As we briefly discussed earlier in the chapter, **under the direct method a company deducts its operating cash outflows from its operating cash inflows to determine its net cash provided by (or used in) operating activities.** This approach has the advantage of separating the company's operating cash receipts from operating cash payments, and of directly showing the cash it paid for interest and income taxes. Each of these disclosures may be useful in estimating its future cash flows. Because of the FASB's support for the direct method, use of this method is likely to increase. Therefore, we explain the direct method in this Appendix.



The direct method is an alternative to the indirect method for a company to report its net cash flow from *operating* activities. However, the company reports its cash flows from *investing* activities and cash flows from *financing* activities on the statement of cash flows in exactly the same manner as we discussed earlier. Therefore, in this Appendix we primarily focus on determining and reporting the cash flows from *operating* activities. However, because there are some slight differences in *preparing* information concerning investing and financing activities, we discuss these differences as well.

OPERATING CASH FLOWS

According to *FASB Statement No. 95*, under the direct method a company reports its operating cash inflows separately from its operating cash outflows. We discuss each of these classifications in the following sections.

Operating Cash Inflows

Under the direct method a company reports its cash inflows from operating activities in three categories: (1) collections from customers, (2) interest and dividends collected, and (3) other operating receipts, if any. Generally, these cash inflows from operating activities are calculated by an analysis of income statement and balance sheet items as follows:

1. *Collections from Customers.* Sales revenue, plus decrease in accounts receivable or minus increase in accounts receivable, and plus increase in deferred revenues or minus decrease in deferred revenues.

8 Identify the operating cash inflows and outflows under the direct method.

2. *Interest and Dividends Collected.* Interest revenue and dividend revenue, plus decrease in interest/dividends receivable or minus increase in interest/dividends receivable, and plus amortization of premium on investment in bonds or minus amortization of discount on investment in bonds.
3. *Other Operating Receipts.* Other operating revenues, minus gains on disposals of assets and liabilities, and minus investment income recognized under the equity method.

Operating Cash Outflows

A company reports its cash outflows from operating activities in five categories: (1) payments to suppliers,²⁴ (2) payments to employees, (3) other operating payments, (4) payments of interest, and (5) payments of income taxes. Generally, these cash outflows for operating activities are calculated by an analysis of income statement and balance sheet items as follows:

1. *Payments to Suppliers.* Cost of goods sold, plus increase in inventory or minus decrease in inventory, plus decrease in accounts payable or minus increase in accounts payable.
2. *Payments to Employees.* Salaries (wages) expense, plus decrease in salaries payable or minus increase in salaries payable.
3. *Other Operating Payments.* Other operating expenses, plus increase in prepaid items or minus decrease in prepaid items; minus depreciation, depletion, and amortization expense; minus losses on disposals of assets and liabilities; minus investment loss recognized under the equity method.
4. *Payments of Interest.* Interest expense, plus decrease in interest payable or minus increase in interest payable, plus amortization of premium on bonds payable or minus amortization of discount on bonds payable.
5. *Payments of Income Taxes.* Income tax expense, plus decrease in income taxes payable or minus increase in income taxes payable, plus decrease in deferred tax liability or minus increase in deferred tax liability.²⁵

Under the direct method, the company's net cash provided by (or used in) operating activities is the difference between the cash inflows from operating activities and the cash outflows for operating activities.

Diagram of Operating Cash Flows

Under the *direct* method a company computes the cash inflows from operating activities for its statement of cash flows by adjusting the various revenue accounts for changes in certain asset accounts (primarily current assets involved in the operating cycle) and deferred revenues, and to eliminate certain "noncash" revenues (gains). The company computes the cash outflows for operating activities by adjusting the various expense accounts for changes in certain liability (and asset) accounts (primarily current liabilities and current assets in the operating cycle) and deferred revenues, and to eliminate certain "noncash" expenses (losses).

Exhibit 22-5 shows these adjustments. The adjustments may have to be modified depending on the way that the company reports and classifies the related items in its financial statements. For instance, an increase in deferred revenue of an airline would be due to selling tickets in advance. In this case the adjustment would be to sales revenue.

-
24. *FASB Statement No. 95* (par. 27) combines payments to suppliers and payments to employees into one category. However, it encourages companies to provide further breakdowns of operating cash receipts and operating cash payments, when useful. The authors believe that separating payments to suppliers from payments to employees may be useful to different external users, and do so throughout this Appendix. In a manufacturing company, a separation of payments to suppliers and payments to employees may not be practical. This is because the company may record various manufacturing costs, including direct and indirect materials as well as direct and indirect labor, directly in the work in process inventory and not show them as separate expenses. In this case it would be difficult to separate the related cash flows, so that reporting the combined payments to suppliers and employees may be the only practical disclosure.
 25. For a company that has a deferred tax asset, it adds an increase in the deferred tax asset to income tax expense or subtracts a decrease. It handles a change in a related valuation allowance (contra account) in the opposite way.

EXHIBIT 22-5 Major Adjustments to Convert Income Statement Amounts to Operating Cash Flows

Income Statement Amounts	Adjustments	Operating Cash Receipts and Payments	Net Operating Cash Flows
Sales revenue	<ul style="list-style-type: none"> + Decrease in accounts receivable or - Increase in accounts receivable + Increase in deferred revenues or - Decrease in deferred revenues 	= Collections from customers	Cash Inflows From Operating Activities
Interest revenue and dividend revenue	<ul style="list-style-type: none"> + Decrease in interest receivable or - Increase in interest receivable + Amortization of premium on investment in bonds or - Amortization of discount on investment in bonds 	= Interest and dividends collected	
Other revenues	<ul style="list-style-type: none"> - Gains on disposals of assets and liabilities^a - Investment income (equity method)^a 	= Other operating receipts	
Cost of goods sold	<ul style="list-style-type: none"> + Increase in inventory or - Decrease in inventory + Decrease in accounts payable or - Increase in accounts payable 	= Payments to suppliers	Cash Outflows For Operating Activities
Salaries expense	<ul style="list-style-type: none"> + Decrease in salaries payable or - Increase in salaries payable 	= Payments to employees	
Other expenses	<ul style="list-style-type: none"> + Increase in prepaid items or - Decrease in prepaid items - Depreciation, depletion, and amortization expense^a - Losses on disposals of assets and liabilities^a - Investment loss (equity method)^a 	= Other operating payments	
Interest expense	<ul style="list-style-type: none"> + Decrease in interest payable or - Increase in interest payable + Amortization of premium on bonds payable or - Amortization of discount on bonds payable 	= Payments of interest	
Income tax expense	<ul style="list-style-type: none"> + Decrease in income taxes payable or - Increase in income taxes payable + Decrease in deferred tax liability^b or - Increase in deferred tax liability 	= Payments of income taxes	

a. Unless listed as separate items on income statement

b. A change in a deferred tax asset is handled in an opposite manner.

On the other hand, an increase in deferred revenue of a retail company may be due to a collection of rent (for a sub-lease) in advance. In this case the adjustment is to other revenue instead of sales revenues.

Example: Adjustments for Operating Cash Flows

We now show the calculations for some of the adjustments in Exhibit 22-5. Assume for simplicity that the Smith Company made cash sales of \$30,000 and credit sales of \$42,000 during its *first* year of operations. So, its Sales Revenue account has a credit balance of \$72,000 at the end of the year. It also collected \$37,000 of the \$42,000 accounts receivable during the year, so that its Accounts Receivable account has a debit balance of \$5,000 at the end of the year. That is, the Accounts Receivable balance increased from \$0 to \$5,000 from the beginning to the end of the year. As we show in the top part of Example 22-7, by subtracting the \$5,000 *increase* in Accounts Receivable from the \$72,000 Sales Revenue, the company determines that it collected \$67,000 from customers during the year. (You can verify the \$67,000 cash collections by adding the \$30,000 cash sales to the \$37,000 cash collected from accounts receivable.) The company would include the \$67,000 cash collected from customers in its cash inflows from operating activities.

EXAMPLE 22-7 Calculation of Cash Flows From Operating Activities

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th colspan="2" style="text-align: center;">Sales Revenue</th></tr> <tr><td style="width: 50%;"></td><td style="width: 50%; text-align: right;">30,000</td></tr> <tr><td></td><td style="text-align: right;">42,000</td></tr> <tr><td style="border-top: 1px dashed black;"></td><td style="border-top: 1px dashed black; text-align: right;">Bal 72,000</td></tr> </table>	Sales Revenue			30,000		42,000		Bal 72,000	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th colspan="2" style="text-align: center;">Accounts Receivable</th></tr> <tr><td style="width: 50%;"></td><td style="width: 50%; text-align: right;">Bal 0</td></tr> <tr><td></td><td style="text-align: right;">42,000</td></tr> <tr><td style="border-top: 1px dashed black;"></td><td style="border-top: 1px dashed black; text-align: right;">Bal 5,000</td></tr> <tr><td></td><td style="text-align: right;">37,000</td></tr> </table>	Accounts Receivable			Bal 0		42,000		Bal 5,000		37,000
Sales Revenue																			
	30,000																		
	42,000																		
	Bal 72,000																		
Accounts Receivable																			
	Bal 0																		
	42,000																		
	Bal 5,000																		
	37,000																		
$\begin{array}{rcl} \text{Sales Revenues} & - & \text{Increase in Accounts} \\ \$72,000 & - & \text{Receivable} \\ & & \$5,000 \\ \hline & & = \text{Collections from} \\ & & \text{Customers} \\ & & \underline{\underline{\$67,000}} \end{array}$																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th colspan="2" style="text-align: center;">Salaries Expense</th></tr> <tr><td style="width: 50%;"></td><td style="width: 50%; text-align: right;">13,000</td></tr> <tr><td></td><td style="text-align: right;">1,000</td></tr> <tr><td style="border-top: 1px dashed black;"></td><td style="border-top: 1px dashed black; text-align: right;">Bal 14,000</td></tr> </table>	Salaries Expense			13,000		1,000		Bal 14,000	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th colspan="2" style="text-align: center;">Salaries Payable</th></tr> <tr><td style="width: 50%;"></td><td style="width: 50%; text-align: right;">Bal 0</td></tr> <tr><td></td><td style="text-align: right;">1,000</td></tr> <tr><td style="border-top: 1px dashed black;"></td><td style="border-top: 1px dashed black; text-align: right;">Bal 1,000</td></tr> </table>	Salaries Payable			Bal 0		1,000		Bal 1,000		
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$\begin{array}{rcl} \text{Salaries Expense} & - & \text{Increase in} \\ \$14,000 & - & \text{Salaries Payable} \\ & & \$1,000 \\ \hline & & = \text{Payments to} \\ & & \text{Employees} \\ & & \underline{\underline{\$13,000}} \end{array}$																			

Now assume that the Smith Company paid salaries of \$13,000 during the year and that it accrued salaries of \$1,000 at the end of the year. So, its Salaries Expense account has a debit balance of \$14,000 at the end of the year. Its Salaries Payable account has a credit balance of \$1,000 at the end of the year. That is, the Salaries Payable account increased from \$0 to \$1,000 from the beginning to the end of the year. As we show in the bottom part of Example 22-7, by subtracting the \$1,000 *increase* in Salaries Payable from the \$14,000 Salaries Expense, the company determines that it paid \$13,000 to employees during the year. The company would add the \$13,000 cash paid to employees in its cash outflows for operating activities. ♦

If a company uses the direct method of reporting its operating cash flows, *FASB Statement No. 95* requires the company to reconcile its net income to the net cash provided by (or used) in operating activities in a separate schedule accompanying its statement of cash flows. This reconciliation is, in effect, prepared under the *indirect* method.



Because we fully discussed the indirect method of reconciling net income to operating cash flows in the main part of the chapter, we do not repeat the discussion here.

PROCEDURES FOR STATEMENT PREPARATION

When a company uses the direct method to prepare the information for its statement of cash flows, it may use either the visual inspection method or the worksheet method. This depends on the complexity of its accounting information. The information is obtained, however, in a slightly different manner. Normally, under the direct method, a company obtains the information for its statement of cash flows from the following working papers:

1. **Post-closing trial balance (or balance sheet) from *previous* period.** Recall from Chapter 3 that a post-closing trial balance contains the debit and credit balances of all the *permanent* accounts in a company's general ledger. In other words, a post-closing trial balance of the previous period contains the same information as the *ending balance sheet* of the previous period.
2. **Adjusted trial balance of *current* period.** Recall from Chapter 3 that an adjusted trial balance contains the debit and credit balances (after adjustments but before closing) of all the temporary and permanent accounts in a company's general ledger. In other words, an adjusted trial balance of the current period contains the *balance sheet, income statement, and retained earnings statement* information for the current period.

In addition, the company needs other information to explain the changes in its balance sheet (permanent) accounts (other than cash). This information is obtained from its accounting records. In complex situations, use of the post-closing trial balance of the prior period and the adjusted trial balance of the current period is the most efficient way to prepare the statement of cash flows. In simpler situations, however, the statement may be developed based on the information contained in the beginning and ending balance sheets, the income statement, and the retained earnings statement of the current year.

Visual Inspection Method

Under the visual inspection approach, the steps to complete the statement of cash flows using the direct method for operating activities are similar to those for the indirect method, except that the information for the cash flows from operating activities section is computed as follows:

9 Compute the operating cash flows under the direct method.

- Make adjustments to the applicable revenues for the period (e.g., to sales revenue for change in accounts receivable and deferred revenues) to determine the amounts of collections from customers, interest and dividends collected, and other operating receipts.
- Make adjustments to the applicable expenses for the period (e.g., to cost of goods sold for changes in inventory and accounts payable) to determine the amounts of payments to suppliers, payments to employees, other operating payments, payments of interest, and payments of income taxes.

Exhibit 22-5 is helpful for making these adjustments. Once the operating activities section is completed, the investing activities section and the financing activities section are completed by analyzing the changes in the other balance sheet accounts in the same way as we discussed for the indirect method.

Example: Visual Inspection Method

Assume that the following income statement items were taken from the adjusted trial balance of the Betha Company at the end of 2007:

	Debit	Credit
Sales revenue		\$94,000
Interest revenue		5,400
Cost of goods sold	\$43,000	
Salaries expense	18,500	
Depreciation expense	11,000	
Other expenses	4,700	
Interest expense	9,200	
Income tax expense	3,900	

Also assume that a comparison of the post-closing trial balance for 2006 with the adjusted trial balance for 2007 shows the following *changes* in selected balance sheet accounts:

Accounts receivable	\$ 8,200 credit (decrease)
Interest receivable	1,200 debit (increase)
Inventory	6,300 debit (increase)
Prepaid expenses	600 debit (increase)
Accumulated depreciation	11,000 credit (increase)
Accounts payable	4,800 credit (increase)
Salaries payable	500 debit (decrease)
Discount on bonds payable	200 credit (decrease)
Income taxes payable	300 credit (increase)
Deferred tax liability	400 credit (increase)

Based on the preceding information, Betha Company prepares Example 22-8 to determine each of the operating cash inflows and outflows.

EXAMPLE 22-8 Schedule to Compute Cash Flows

Income Statement Amounts	Adjustments	Operating Cash Flows
Sales revenue	\$ 94,000 + Decrease in accounts receivable of \$ 8,200	= \$ 102,200 Collections from customers
Interest revenue	5,400 - Increase in interest receivable of 1,200	= <u>4,200</u> Interest collected
		\$ 106,400 Operating cash inflows
Cost of goods sold	\$ (43,000) { + Increase in inventory of 6,300 - Increase in accounts payable of 4,800 }	= \$ (44,500) Payments to suppliers
Salaries expense	(18,500) + Decrease in salaries payable of 500	= (19,000) Payments to employees
Other expenses	(4,700) + Increase in prepaid expenses of 600	= (5,300) Other operating payments
Interest expense	(9,200) - Decrease in discount on bonds payable (amortization) of 200	= (9,000) Payments of interest
Income tax expense	(3,900) { - Increase in income taxes payable of 300 - Increase in deferred tax liability of 400 }	= <u>(3,200)</u> Payments of income taxes
		\$ (81,000) Operating cash outflows
		<u>\$ 25,400</u> Net cash provided by operating activities

Operating Cash Inflows The \$94,000 of sales revenue is increased by the \$8,200 decrease in accounts receivable to determine the \$102,200 collections from customers. This is because the company's cash collections exceeded its sales during the year. The

\$5,400 interest revenue is decreased by the \$1,200 increase in interest receivable to determine the \$4,200 interest collected because the company received less cash than it recorded as interest revenue. The total operating cash inflows were \$106,400 in 2007.

Operating Cash Outflows The \$43,000 cost of goods sold is adjusted for two items. It is increased for the \$6,300 increase in inventory because the company's purchases exceeded its cost of goods sold. It is decreased by the \$4,800 increase in accounts payable because the company's cash payments were less than its purchases. Thus, payments to suppliers totaled \$44,500 in 2007. The \$18,500 of salaries expense is increased by the \$500 decrease in salaries payable to determine the \$19,000 paid to employees, because salaries paid exceeded salaries expense. The \$4,700 of other expenses are increased by the \$600 increase in prepaid expenses to determine the \$5,300 other operating payments, because the company's cash payments for prepaid items exceeded its expenses. Note that the \$11,000 depreciation expense is the same as the \$11,000 credit to accumulated depreciation. Because this is a "noncash" income statement item and is listed separately from other operating expenses, no adjustment is made for operating cash flows.

The decrease in the discount on bonds payable resulted from the amortization of the discount. Recall that the amortization of the discount on bonds payable increases interest expense to an amount greater than the cash the company paid for interest. Therefore, the \$200 decrease in the discount on bonds payable is subtracted from the \$9,200 interest expense to determine the \$9,000 interest paid. The \$3,900 income tax expense is decreased by the \$300 increase in income taxes payable and the \$400 increase in the deferred tax liability to determine the \$3,200 payments of income taxes, because the company paid less taxes currently than it recorded as an expense. The total operating cash outflows were \$81,000 in 2007, so that \$25,400 net cash was provided by operating activities during 2007 as we show at the bottom of Example 22-8.

Example 22-9 shows the cash flows from operating activities section of the Beta Company's statement of cash flows, under the direct method. The company includes cash flows from investing activities and the cash flows from financing activities in the usual manner to complete the statement of cash flows.

EXAMPLE 22-9 Operating Cash Flows (Direct Method)

BETHA COMPANY

Statement of Cash Flows (Partial) For Year Ended December 31, 2007

Cash Flows From Operating Activities

Cash Inflows:		
Collections from customers	\$102,200	
Interest collected	<u>4,200</u>	
Cash inflows from operating activities		\$106,400
Cash Outflows:		
Payments to suppliers	\$(44,500)	
Payments to employees	(19,000)	
Other operating payments	(5,300)	
Payments of interest	(9,000)	
Payments of income taxes	<u>(3,200)</u>	
Cash outflows for operating activities		<u>(81,000)</u>
Net cash provided by operating activities		\$ 25,400

Worksheet Method

Under the worksheet approach, the steps completed using the direct method are very similar to those of the indirect method. There are enough slight differences, however, that we list all of the steps using the direct method in Exhibit 22-6, after which we present an example.

EXAMPLE: WORKSHEET (SPREADSHEET) AND DIRECT METHOD

To learn how to use a worksheet under the direct method, look at Example 22-10. Assume that the post-closing trial balance and adjusted trial balance were obtained from the Copeland Company's accounting records. In addition, the following information was included in its accounting records for 2007:

1. Land costing \$2,000 was sold for \$2,800.
2. Equipment was purchased at a cost of \$24,700.
3. Common stock was issued for \$10,000.
4. Dividends of \$3,500 were declared and paid.

After entering the accounts and amounts of the trial balances, the changes in the accounts are entered in the appropriate change column of the worksheet (spreadsheet). Then, based on the preceding information, entries (a) through (r) are entered on the worksheet to complete it. We briefly explain each of the worksheet entries next.

Operating Cash Flows

Entries (a) and (b) account for the sales revenue and interest revenue and record the "unadjusted" collections from customers and receipts of interest. (There are no other operating receipts.) Entries (c), (d), (e), (f), and (g) account for the cost of goods sold, salaries expense, other expenses, interest expense, and income tax expense, and record the "unadjusted" payments to suppliers, payments to employees, payments of interest, other operating payments, and payments of income taxes. Entry (h) accounts for the depreciation expense and increase in accumulated depreciation. Note that it is made in the normal manner in the upper part of the worksheet and, therefore, has no effect on the operating cash flows. The entry is necessary, however, to help account for the changes in all the income statement and balance sheet accounts.

Entries (i) through (m) account for the effect of the changes in the current assets and current liabilities on the "unadjusted" operating cash flows recorded earlier. Entry (i) reduces (adjusts) the collections from customers because of the increase in accounts receivable. Entries (j) and (k) reduce (adjust) the payments to suppliers because of the decrease in inventory and the increase in accounts payable. Entry (l) increases (adjusts) the payments to employees because of the decrease in salaries payable. Finally, entry (m) reduces (adjusts) the interest payments because of the increase in interest payable. There are no adjustments to the other operating payments or to the payments of income taxes in this example.

Investing and Financing Cash Flows

Entries (n) through (q) record the investing and financing cash flows. Entry (n) records the \$2,800 investing cash receipt (proceeds) from the sale of land costing \$2,000. Note that the \$800 gain is recorded in the usual way. Entry (o) records the investing cash payment for the purchase of equipment. Entry (p) records the financing cash receipt (proceeds) from the sale of common stock. Entry (q) records the financing cash payment of dividends.

EXHIBIT 22-6 Steps in Worksheet Approach for Direct Method

Step 1. Prepare the column headings on a worksheet (see Example 22-10). Then enter the account titles and the debit and credit amounts of the post-closing trial balance from the previous year and the adjusted trial balance for the current year in the respective columns. Total the amount columns to check the equality.

Step 2. Compare each account balance in the post-closing trial balance and adjusted trial balance, and record the debit or credit difference in the Change column. Note that each revenue and expense account listed on the adjusted trial balance will not have a beginning balance; in that case the ending balance is the change amount. (To simplify the worksheet, sometimes the debit and credit amounts of the accounts in the trial balances are omitted, and only the changes in the accounts are listed.) Total the amount columns to check the equality.

Step 3. Directly below the account titles, add the following headings:

- A. Cash Flows From Operating Activities
- B. Cash Flows From Investing Activities
- C. Cash Flows From Financing Activities
- D. Investing and Financing Activities Not Affecting Cash

Under the heading Cash Flows From Operating Activities, list the eight possible inflow and outflow captions (e.g., collections from customers). Leave sufficient room below each of the subheadings so that each cash flow can be listed where appropriate.

Step 4. Account for all the changes in the noncash accounts that occurred during the current period. *Reconstruct* the journal entries that caused the changes in the noncash accounts directly on the worksheet, making the necessary modifications to show the cash receipts and payments related to operating, investing, and financing activities. Use the following general rules for the worksheet entries:

- A. *Start with the usual revenue and expense accounts.* The changes in these accounts during the year represent potential operating cash receipts or payments. Therefore, the entry on the worksheet is to debit or credit the related operating cash inflow or outflow caption and to credit or debit the revenue or expense account. Observe that these changes represent potential cash flows. They may have to be adjusted later for changes in certain current assets (e.g., accounts receivable) and current liabilities (e.g., accounts payable), as well as other accounts, to show the actual cash flows.

Note that there are two exceptions to the previous procedures. First, the worksheet entries for any noncash revenues and expenses (e.g., depreciation expense) are made in the usual manner, without any modifications.

Second, worksheet entries are *not* prepared at this time to account for gains or losses (either ordinary or extraordinary). The changes in these accounts will be accounted for later when dealing with the investing or financing transactions to which they relate (e.g., retirement of bonds at a gain).

- B. *Account for the changes in the current asset (except cash) and current liability accounts.* Because most of the changes in the current assets and current liabilities relate to the *operating activities*, the impacts of these changes on cash are listed as adjustments to the related operating cash inflow or outflow. There are several exceptions to this procedure. These exceptions involve changes in short-term notes receivable and notes payable, changes in temporary investments (i.e., marketable securities), and changes in dividends payable. These changes are the results of investing or financing activities and are handled like the changes in the noncurrent accounts discussed in Step 4(C).
- C. *Account for the changes in the remaining current assets (except cash) and current liabilities, as well as the changes in noncurrent accounts.* Review each account and determine the journal entry responsible for its change. Identify whether the transaction involves an operating,^a investing, or financing activity. If the transaction involves an investing or financing activity, make the entry on the worksheet with the following changes:
 1. If the entry affects cash, replace a debit to cash with either an investing or financing cash inflow caption, and list the item as a debit (receipt) under the proper heading of the worksheet. Replace a credit to cash with a proper cash outflow caption, and list the item as a credit (payment) under the proper heading of the worksheet. In the case of a transaction involving a gain or loss, record the gain or loss portion of the worksheet entry in the usual manner.

(continued)

EXHIBIT 22-6 (Continued)

2. If the entry does not affect an operating activity or cash, it is a “simultaneous” financing and/or investing transaction. For this type of transaction, create “expanded” entries on the worksheet to record both the financing and/or investing activities. The first entry shows the financing aspect of the exchange, while the second entry shows the investing aspect. These types of transactions are disclosed on a schedule accompanying the statement of cash flows.

Step 5. Make a final worksheet entry to record the net change in cash. The worksheet entries must account for all the changes in the noncash accounts recorded in Step 2. The difference between the total cash inflows and outflows must be equal to the change in the Cash account. Total the debit and credit worksheet entries in the upper and lower portions of the worksheet to verify that the respective totals are equal.

Step 6. Prepare the statement of cash flows and accompanying schedules^b. Use the information developed in the *lower* portion of the worksheet, along with the beginning and ending cash balances.

- a. The primary examples of changes in noncurrent accounts that affect operating activities are the amortization of premiums or discounts on bonds payable or investments in bonds, changes in deferred taxes, and changes in prepaid/accrued pension costs. In these cases, the related income statement item (interest expense or interest revenue, income tax expense, and pension expense) has already been treated as an adjustment to an operating cash flow (payment of interest or receipt of interest, payment of income taxes, and payment of pensions) in Step 4A. Therefore, the worksheet entry involves a direct adjustment to the operating cash flow. For instance, a change (credit) in the discount on bonds payable due to amortization is accounted for as a debit to Cash Flows From Operating Activities: Payments of Interest and as a credit to Discount on Bonds Payable to adjust for the lesser cash outflow.
- b. The separate schedules include a schedule of the investing and financing activities not affecting cash and a schedule reconciling the net income to the net cash provided by operating activities.

Completion of Worksheet and Statement

Entry (r) is the final entry and records the increase in cash. The debit and credit columns in the upper and lower parts are totaled to check for equality and the worksheet is complete. Example 22-11 shows the statement of cash flows of the Copeland Company, prepared from the worksheet in Example 22-10. Note that the only difference between this statement, prepared under the direct method, and a statement of cash flows prepared under the indirect method is in the presentation of the cash flows from operating activities.

EXAMPLE 22-11 Statement of Cash Flows (Direct Method)**COPELAND COMPANY****Statement of Cash Flows
For Year Ended December 31, 2007**

Cash Flows From Operating Activities		
Cash Inflows:		
Collections from customers	\$ 97,400	
Interest and dividends collected	<u>2,500</u>	
Cash inflows from operating activities		\$99,900
Cash Outflows:		
Payments to suppliers	\$(47,700)	
Payments to employees	(23,300)	
Other operating payments	(1,900)	
Payments of interest	(3,800)	
Payments of income taxes	<u>(3,300)</u>	
Cash outflows for operating activities		(80,000)
Net cash provided by operating activities		\$19,900
Cash Flows From Investing Activities		
Proceeds from sale of land	\$ 2,800	
Payment for purchase of equipment	<u>(24,700)</u>	
Net cash used for investing activities		(21,900)
Cash Flows From Financing Activities		
Proceeds from issuance of common stock	\$ 10,000	
Payment of dividends	<u>(3,500)</u>	
Net cash provided by financing activities		6,500
Net Increase in Cash		\$ 4,500
Cash, January 1, 2007		5,300
Cash, December 31, 2007		<u>\$ 9,800</u>

SUMMARY

At the beginning of the chapter, we identified several objectives you would accomplish after reading the chapter. The objectives are listed below, followed by a brief summary of the key points in the chapter discussion.

1. **Define operating, investing, and financing activities.** A company's operating activities include all its transactions involving acquiring, selling, and delivering goods for sale, as well as providing services. Its investing activities include its transactions involving acquiring and selling property, plant, and equipment, acquiring and selling investments, and lending money and collecting on loans. Its financing activities include its transactions involving obtaining resources from owners and providing them with a return on, and of, their investment, as well as obtaining money and other resources from creditors and repaying the amounts borrowed.
2. **Know the categories of inflows and outflows of cash.** A company's inflows of cash come from decreases in assets other than cash, increases in liabilities, and increases in stockholders' equity. Its outflows of cash come from increases in assets other than cash, decreases in liabilities, and decreases in stockholders' equity.
3. **Classify cash flows as operating, investing, or financing.** Operating cash inflows (outflows) come from increases (decreases) in stockholders' equity because of revenues (expenses), adjusted for changes in certain current assets and current liabilities. Investing cash inflows (outflows) come from decreases (increases) in noncurrent assets and certain current assets. Financing cash inflows (outflows) come from increases (decreases) in noncurrent liabilities, stockholders' equity, and certain current liabilities.

4. **Explain the direct and indirect methods for reporting operating cash flows.** Under the direct method, a company deducts its operating cash outflows from its operating cash inflows to determine its net cash flow from operating activities. Under the indirect method, a company adjusts (reconciles) its net income for differences between income flows and cash flows for operating activities to determine its net cash flow from operating activities.
5. **Prepare a simple statement of cash flows.** To complete a simple statement of cash flows, use the visual inspection method. Prepare the heading and major sections, and list the net change in cash at the bottom. Next, list net income under the operating activities section. Then list the increase or decrease in each balance sheet account as a cash receipt or payment (or adjustment) in the appropriate operating, investing, or financing section. Subtotal each section, add them together to calculate the net change in cash, then add the net change in cash to the beginning cash balance to determine the ending cash balance. Verify that this amount is the same as the ending cash balance reported on the balance sheet.
6. **Use a worksheet (spreadsheet) for a statement of cash flows.** Set up a worksheet that shows the change in the balance of each balance sheet account at the top and the sections of the statement of cash flows (and a section for noncash investing and financing activities) at the bottom. Make worksheet entries to account for the changes in all the noncash balance sheet accounts, making certain modifications to show the cash receipts and payments for operating, investing, and financing activities. Make a final worksheet entry to record the net change in cash. Total the debit and credit worksheet entries in the upper and lower portions to verify that the respective totals are equal.
7. **Compute and disclose interest paid and income taxes paid.** To compute interest paid, start with interest expense and adjust this amount for any increase (decrease) in interest payable and any bond premium (discount) amortization. To compute income taxes paid, start with income tax expense and adjust this amount for any increase (decrease) in income taxes payable, deferred tax liability, and deferred tax asset. Disclose interest paid and income taxes paid in a separate schedule, narrative description, or notes to the company's financial statements.
8. **Identify the operating cash inflows and outflows under the direct method (Appendix).** The operating cash inflows are: (1) collections from customers, (2) interest and dividends collected, and (3) other operating receipts. The outflows are: (1) payments to suppliers, (2) payments to employees, (3) other operating payments, (4) payments of interest, and (5) payments of income taxes.
9. **Compute the operating cash flows under the direct method (Appendix).** To determine the operating cash inflows, make adjustments to the applicable revenues for changes in related balance sheet accounts to determine the collections from customers, interest and dividends collected, and other operating receipts. To determine the operating cash outflows, make adjustments to the applicable expenses for changes in related balance sheet accounts to determine the payments to suppliers, to employees, of interest, for other operating items, and for income taxes. Subtract the total operating cash outflows from the total operating cash inflows to determine the net cash flow from operating activities.

ANSWERS TO REAL REPORT QUESTIONS

Real Report 22-1 Answers

1. Net cash flow from operating activities is \$338.4 million higher than net income (\$1,229 million less \$890.6 million). This difference is mainly due to non-cash charges for depreciation and amortization of \$410 million. Kellogg's income tax expense was greater than its income tax payable, resulting in cash flow from operating activities being \$57.7 million higher than net income. Finally, Kellogg contributed cash to its pension and postretirement benefit plans in excess of its expenses by \$204 million.
2. While Kellogg disposed of businesses in 2003 and 2004, these dispositions were completed by 2005 and its most recent investments were for property, plant, and equipment.
3. A review of Kellogg's cash flows from financing activities reveals that the issuances and repurchases of common stock were approximately the same. Additionally, Kellogg experienced a net cash outflow related to debt of \$286.3 million ($\$388.3 + \$142.3 + \$7.0 - \$141.7 - \682.2). In addition, Kellogg was able to pay \$417.6 million (almost one-half of its income) to shareholders in the form of dividends. The combination of a steady balance in its common stock account and a decreasing balance in its debt accounts indicates that Kellogg used its cash flow provided by operating activities to make capital investments and reduce its debt level.

QUESTIONS

Q22-1 What is a *statement of cash flows*?

Q22-2 Briefly describe the three types of activities of a company reported in its statement of cash flows.

Q22-3 What does the information in a statement of cash flows help external users to assess?

Q22-4 Name the five items a company's statement of cash flows must clearly show. What items are reported in a separate schedule accompanying the statement?

Q22-5 What are "cash equivalents"? How does a company's reporting on its cash and cash equivalents affect the statement of cash flows?

Q22-6 What are the three categories of a company's inflows of cash? What are the three categories of a company's outflows of cash?

Q22-7 Starting with the basic accounting equation, derive a set of equations that show the relationship between increases (decreases) in cash and increases (decreases) in assets other than cash, liabilities, and stockholders' equity.

Q22-8 Briefly describe a retail company's operating cycle and the relationship of its various stages to cash inflows and outflows.

Q22-9 What are the two ways to calculate and report a company's net cash flow from operating activities? Briefly describe each method.

Q22-10 Briefly describe the *indirect method* for reporting a company's net cash flow from operating activities. List several adjustments to net income and indicate whether they are additions or subtractions.

Q22-11 Give two examples of a company's (a) cash inflows from investing activities, and (b) cash outflows for investing activities.

Q22-12 Give two examples of a company's (a) cash inflows from financing activities, and (b) cash outflows for financing activities.

Q22-13 Give two examples of a company's investing and financing activities not affecting cash.

Q22-14 What is the *visual inspection method*? List the steps in this method.

Q22-15 Briefly describe the *worksheet method* of analyzing the information for a company's statement of cash flows. (Do *not* list the steps in preparation.)

Q22-16 Indicate how a company computes the amount of interest and income taxes that it paid during the year.

Q22-17 What two alternatives are allowed for *where* a company may disclose the net cash flow from operating activities prepared under the indirect method in regard to its statement of cash flows?

Q22-18 A company purchases equipment costing \$12,500 by paying \$5,000 down and signing a \$7,500 note payable. Show two ways of disclosing the effects of this transaction in regard to the statement of cash flows.

Q22-19 (Appendix) Define the *direct method* of reporting the cash flows from operating activities of a company.

Q22-20 (Appendix) List the three operating cash inflows that a company reports under the direct method.

Q22-21 (Appendix) List the five operating cash outflows that a company reports under the direct method.

Q22-22 (Appendix) Briefly describe how to determine each of the operating cash inflows and operating cash outflows under the direct method.

MULTIPLE CHOICE

Select the best answer for each of the following.

M22-1 If a company issues a balance sheet and an income statement with comparative figures from last year, a statement of cash flows

- Is no longer necessary, but may be issued at the company's option
- Should not be issued
- Should be issued for each period for which an income statement is presented
- Should be issued for the current year only

M22-2 Selected information from Brook Corporation's accounting records and financial statements for 2007 is as follows:

Net cash provided by operating activities	\$1,500,000
Mortgage payable issued to acquire land and building	1,800,000
Common stock issued to retire preferred stock	500,000
Proceeds from sale of equipment	400,000
Cost of office equipment purchased	200,000

On the statement of cash flows for the year ended December 31, 2007, Brook should disclose a net increase in cash in the amount of

- \$1,700,000
- \$2,400,000
- \$3,700,000
- \$4,200,000

M22-3 In a statement of cash flows (indirect method), the amortization of patents of a company with substantial operating profits should be presented as a (an)

- Cash flow from investing activities
- Cash flow from financing activities
- Deduction from net income
- Addition to net income

M22-4 The net cash provided by operating activities in Seat's statement of cash flows for 2007 was \$8,000,000. For 2007, depreciation on fixed assets was \$3,800,000, amortization of patents was \$100,000, and dividends on common stock were \$2,000,000. Based on the preceding information, Seat's net income for 2007 was

- \$2,100,000
- \$4,100,000
- \$8,000,000
- \$11,900,000

E22-2 Net Cash Flow From Operating Activities The following is accounting information taken from the Hyde Company's records for 2007:

- | | |
|--|--|
| 1. Amortization of premium on bonds payable, \$600 | 8. Gain on sale of land, \$8,000 |
| 2. Purchase of equipment, \$6,000 | 9. Increase in prepaid assets, \$500 |
| 3. Depreciation expense, \$7,400 | 10. Declaration and payment of cash dividends, \$1,800 |
| 4. Decrease in accounts receivable, \$800 | 11. Increase in wages payable, \$300 |
| 5. Decrease in accounts payable, \$2,800 | 12. Patent amortization expense, \$1,000 |
| 6. Issuance of long-term note for cash, \$4,200 | 13. Net income, \$10,800 |
| 7. Increase in inventories, \$7,500 | |

Required

Prepare the net cash flow from operating activities section of the 2007 statement of cash flows for the Hyde Company.

E22-3 Statement of Cash Flows The following is a list of the items for the 2007 statement of cash flows of the Lombardo Company:

- | | |
|---|---|
| 1. Depreciation expense, \$4,200 | 7. Proceeds from issuance of note, \$6,200 |
| 2. Proceeds from sale of land, \$5,600 | 8. Gain on sale of land, \$1,800 |
| 3. Payment of dividends, \$5,000 | 9. Payment for purchase of building, \$13,000 |
| 4. Net income, \$7,900 | 10. Increase in accounts receivable, \$2,700 |
| 5. Conversion of bonds to common stock, \$7,000 | 11. Ending cash balance, \$13,900 |
| 6. Increase in accounts payable, \$3,100 | |

Required

Prepare the statement of cash flows.

E22-4 Statement of Cash Flows The following is a list of items for the 2007 statement of cash flows of the Witts Company:

- | | |
|---|--|
| 1. Receipt from sale of equipment, \$2,700 | 8. Loss on sale of equipment, \$2,200 |
| 2. Increase in inventory, \$3,900 | 9. Payment of dividends, \$5,200 |
| 3. Net income, \$13,500 | 10. Decrease in accounts receivable, \$1,700 |
| 4. Payment for purchase of building, \$29,000 | 11. Issuance of common stock for land, \$6,900 |
| 5. Depreciation expense, \$8,700 | 12. Decrease in accounts payable, \$1,500 |
| 6. Receipt from issuance of bonds, \$8,000 | 13. Beginning cash balance, \$10,200 |
| 7. Increase in prepaid expenses, \$800 | |

Required

Prepare the statement of cash flows.

E22-5 Direct and Indirect Methods The Dauve Company reported the following condensed income statement for 2007:

Sales		\$100,000
Cost of goods sold		<u>(58,000)</u>
Gross profit		\$ 42,000
Operating expenses		
Depreciation expense	\$ 8,000	
Salaries expense	<u>12,000</u>	<u>(20,000)</u>
Income before income taxes		\$ 22,000
Income tax expense		<u>(6,600)</u>
Net income		<u>\$ 15,400</u>

During 2007, the following changes occurred in the company's current assets and current liabilities:

	Increase (Decrease)
Cash	\$3,700
Accounts receivable	(5,500)
Inventories	8,900
Accounts payable (purchases)	(4,600)
Salaries payable	2,800

Required

- By visual inspection, prepare the net cash flow from operating activities section of the Dauve Company's 2007 statement of cash flows using the indirect method.
- By visual inspection, prepare the net cash flow from operating activities section of the Dauve Company's 2007 statement of cash flows using the direct method.

E22-6 Fixed Asset Transactions The following is an Equipment account and its associated Accumulated Depreciation account:

Equipment			Accumulated Depreciation		
Beginning balance	\$49,000	Machine A 8,100	Related to Machine A	6,300	Beginning balance \$29,000
Machine C	25,000	Machine B 5,200	Related to Machine B	4,600	Depreciation expense 12,000
Ending balance	\$60,700				Ending balance \$30,100

Additional data:

- Machine A was sold at a gain of \$900
- Machine B was sold for its scrap value of \$200
- Machine C was acquired during the year

Required

Analyze the two accounts and show, in journal entry form, the entries that would be made in preparation of the statement of cash flows to reflect all of the changes listed in the accounts.

E22-7 Visual Inspection The following changes in account balances and other information for 2007 were taken from the accounting records of the Gordon Company:

	Net Changes for 2007	
	Debit	Credit
Cash	\$ 1,000	
Accounts receivable		\$ 1,100
Inventory	2,000	
Buildings and equipment	8,800	
Accumulated depreciation		2,900
Accounts payable	900	
Common stock, no par		5,500
Retained earnings		3,200
	<u>\$12,700</u>	<u>\$12,700</u>

Other information: Net income totaled \$5,800. Dividends were declared and paid. Equipment was purchased for \$8,800. No buildings and equipment were sold during the year. One hundred shares of common stock were sold for \$55 per share. The ending cash balance was \$4,200.

Required

Using visual inspection, prepare a 2007 statement of cash flows for the Gordon Company.

E22-8 Visual Inspection The following changes in account balances and other information for 2007 were taken from the accounting records of the Noble Company:

	Net Changes for 2007	
	Debit	Credit
Cash		\$ 2,000
Accounts receivable	\$ 1,900	
Inventory		2,400
Land		1,700
Buildings and equipment	23,000	
Accumulated depreciation		4,500
Accounts payable		1,600
Salaries payable	600	
Bonds payable		5,000
Common stock, no par		3,000
Retained earnings		5,300
	<u>\$25,500</u>	<u>\$25,500</u>

Other information: Net income was \$9,900. Dividends were declared and paid. Land was sold for \$1,700; a building was purchased for \$23,000. No land was purchased and no buildings and equipment were sold. Bonds payable were issued at the end of the year. Two hundred shares of stock were issued for \$15 per share. The beginning cash balance was \$4,800.

Required 

Using visual inspection, prepare a 2007 statement of cash flows for the Noble Company.

E22-9 Balance Sheet The following beginning balance sheet and statement of cash flows for 2007 are available for Fazzi Company:

Balance Sheet January 1, 2007			
Cash	\$ 900	Accounts payable	\$ 1,600
Accounts receivable	2,300	Notes payable	3,900
Land	4,900	Common stock, \$5 par	4,500
Equipment	\$20,000	Additional paid-in capital	1,800
Less: Accumulated depreciation	(9,100)	Retained earnings	7,200
Total Assets	\$19,000	Total Liabilities and Stockholders' Equity	\$19,000

**Statement of Cash Flows
For Year Ended December 31, 2007**

Net Cash Flow From Operating Activities	
Net income	\$3,900
Adjustments for differences between income flows and cash flows from operating activities:	
Add: Depreciation expense	900
Increase in accounts payable	100
Less: Increase in accounts receivable	(700)
Gain on sale of land	(200)
Net cash provided by operating activities	\$4,000
Cash Flows From Investing Activities	
Payment for purchase of equipment	\$(5,000)
Proceeds from sale of land	1,200
Net cash used for investing activities	(3,800)
Cash Flows From Financing Activities	
Proceeds from issuance of common stock (200 shares)	\$ 2,600
Payment of long-term note	(900)
Payment of dividends	(1,300)
Net cash provided by financing activities	400
Net Increase in Cash	\$ 600
Cash, January 1, 2007	900
Cash, December 31, 2007	\$1,500

Required

On the basis of this information, prepare a balance sheet for the Fazzi Company as of December 31, 2007.

E22-10 Erroneous Statement of Cash Flows The 2007 statement of cash flows for the Andell Company, as developed by its bookkeeper, is shown here:

**Cash Flows Statement
December 31, 2007**

Inflows of Cash	
Operating Activities	
Net income	\$10,600
Add: Proceeds from sale of equipment	4,400
Proceeds from issuance of stock	4,300
Less: Payment for investment in bonds	(6,000)
Payment of long-term note	(5,000)
Net cash inflows from operations	\$ 8,300

Other Inflows

Decrease in accounts receivable	\$ 2,100	
Depreciation expense	<u>4,800</u>	
Total other inflows of cash		<u>6,900</u>
Total inflows of cash		\$15,200

Outflows of Cash

Payment for purchase of land	\$(5,200)	
Decrease in accounts payable	(2,800)	
Payment of dividends	(3,000)	
Gain on sale of equipment	<u>(700)</u>	
Total outflows of cash		<u>(11,700)</u>
Net Increase in Cash		\$ 3,500
Cash, December 31, 2007		<u>11,700</u>
Cash, January 1, 2007		<u>\$ 8,200</u>

You determine that the *amounts* of the items listed on the statement are correct, but in certain circumstances, incorrectly classified.

Required

Prepare a corrected 2007 statement of cash flows for the Andell Company.

E22-11 Partially Completed Worksheet (Spreadsheet) The Hanks Company has prepared the following changes in account balances for the worksheet to support its 2007 statement of cash flows:

	A	B	C	D
1				
2		Increase	Worksheet Entries	
3	Account Title	(Decrease)	Debit	Credit
4	<i>Debits</i>			
5	Cash	\$ 830		
6	<i>Noncash Accounts</i>			
7	Accounts receivable	(290)		
8	Inventory	1,280		
9	Investments	1,550		
10	Land	(700)		
11	Equipment	2,300		
12	Patents (net)	(100)		
13	Total	<u>\$4,870</u>		
14				
15	<i>Credits</i>			
16	Accumulated depreciation	\$ 350		
17	Accounts payable	120		
18	Bonds payable	2,000		
19	Premium on bonds payable	300		
20	Common stock, \$2 par	480		
21	Premium on common stock	1,120		
22	Retained earnings	500		
23	Total	<u>\$4,870</u>		
24				

Additional information: The net income was \$1,300. Depreciation expense was \$350 and patent amortization expense was \$100. At the end of 2007, long-term investments were purchased at a cost of \$1,550. Land that cost \$700 was sold for \$900. On December 31, 2007, bonds payable with a face value of \$2,000 were issued for equipment valued at \$2,300. Two hundred shares of common stock were issued at \$7 per share. Forty shares of common stock were issued as a "small" stock dividend, the relevant market price being \$5 per share. Cash dividends declared and paid totaled \$600.

Required

On the basis of the preceding information, complete the worksheet (spreadsheet).

E22-12 Worksheet (Spreadsheet) The following 2007 information is available for the Payne Company:

	Comparative Balance Sheets	
	January 1, 2007	December 31, 2007
Cash	\$ 400	\$ 600
Accounts receivable	220	200
Inventory	370	610
Land	250	410
Equipment	2,070	2,200
Less: Accumulated depreciation	<u>(310)</u>	<u>(400)</u>
Total Assets	<u>\$3,000</u>	<u>\$3,620</u>
Accounts payable	\$ 800	\$ 500
Notes payable (long-term)	900	720
Common stock, no par	600	1,000
Retained earnings	<u>700</u>	<u>1,400</u>
Total Liabilities and Stockholders' Equity	<u>\$3,000</u>	<u>\$3,620</u>

Partial additional information: The net income for 2007 totaled \$1,600. During 2007 the company sold for \$390, equipment that cost \$390 and had a book value of \$300. The company sold land for \$200, resulting in a loss of \$40. The remaining change in the Land account resulted from the purchase of land through the issuance of common stock.

Required

Making whatever additional assumptions that are necessary, prepare a worksheet (spreadsheet) to support the 2007 statement of cash flows for the Payne Company.

E22-13 Worksheet (Spreadsheet) and Statement The following 2007 information is available for the Stewart Company:

Condensed Income Statement for 2007		
Sales		\$9,000
Cost of goods sold		(6,000)
Other expenses		(2,000)
Loss on sale of equipment		(260)
Gain on sale of land		<u>400</u>
Net income		<u>\$1,140</u>

	Comparative Balance Sheets	
	December 31, 2006	December 31, 2007
Cash	\$ 700	\$1,130
Accounts receivable	450	310
Inventory	350	400
Land	300	500
Equipment	1,600	1,800
Less: Accumulated depreciation	<u>(200)</u>	<u>(150)</u>
Total Assets	<u>\$3,200</u>	<u>\$3,990</u>
Accounts payable	\$ 600	\$ 750
Bonds payable (due 1/1/2012)	1,000	1,000
Common stock, \$10 par	900	1,400
Retained earnings	<u>700</u>	<u>840</u>
Total Liabilities and Stockholders' Equity	<u>\$3,200</u>	<u>\$3,990</u>

Partial additional information:

- The equipment that was sold for cash had cost \$400 and had a book value of \$300.
- Land that was sold brought a cash price of \$530.
- Fifty shares of stock were issued at par.

Required

Making whatever additional assumptions that are necessary,

1. Prepare a worksheet (spreadsheet) to support a statement of cash flows for the Stewart Company for 2007.
2. Prepare the statement of cash flows.

E22-14 Retirement of Debt Moore Company is preparing its statement of cash flows for the current year. During the year, the company retired two issuances of debt and properly recorded the transactions. These transactions were as follows:

1. Paid cash of \$18,000 to retire bonds payable with a face value of \$20,000 and a book value of \$18,300.
2. Paid cash of \$38,000 to retire bonds payable with a face value of \$35,000 and a book value of \$37,000.

Required

Record, in journal entry form, the entries that Moore Company would make for the preceding transactions on its worksheet to prepare its statement of cash flows.

E22-15 Interest and Income Taxes The Staggs Company has prepared its 2007 statement of cash flows. In conjunction with this statement, it plans to disclose the interest and income taxes it paid during 2007. The following information is available from its 2007 income statement and beginning and ending balance sheet:

Income Statement		
Interest expense		\$12,000
Income tax expense		35,000
	Balance Sheet	
	Cr. Bal.	Cr. Bal.
	01/01/07	12/31/07
Interest payable	\$ 600	\$ 2,300
Income taxes payable	5,000	3,000
Bonds payable	80,000	80,000
Premium on bonds payable	9,000	8,100
Deferred taxes payable	3,300	4,400

Required

Compute the amounts of interest paid and income taxes paid by the Staggs Company for 2007.

E22-16 Investments On October 4, 2007, Collins Company purchased 100 shares of Steph Company common stock for \$64 per share as a temporary investment in securities available for sale. On December 31, 2007, the stock had a fair value of \$63 per share, and on February 8, 2008, Collins sold the stock for \$67 per share.

Required

In journal entry form, prepare the worksheet entries to record these transactions for the Collins Company's 2007 and 2008 statement of cash flows.

E22-17 Operating Cash Flows (Appendix) Use the information in E22-13.

Required 

Based only on the information presented and using the direct method, prepare the cash flows from operating activities section of the 2007 statement of cash flows for the Stewart Company.

E22-18 Operating Cash Flows (Appendix) The following is accounting information taken from the adjusted trial balance of the Woodrail Company for 2007:

	Debit	Credit
Sales		\$75,000
Interest revenue		4,300
Cost of goods sold	\$43,600	
Salaries expense	13,600	
Interest expense	5,400	
Income tax expense	3,000	

In addition, the following changes occurred in selected accounts during 2007:

Accounts receivable	\$5,700 credit
Inventory	9,800 debit
Accounts payable	7,000 credit
Salaries payable	900 debit
Interest payable	300 credit

Required

Using the direct method, prepare the cash flows from operating activities section of the 2007 statement of cash flows for the Woodrail Company.

E22-19 Statement of Cash Flows (Appendix) The following is a list of items to be included in the 2007 statement of cash flows of the Estes Company:

- | | |
|--|--|
| 1. Payments to suppliers, \$31,500 | 8. Interest and dividends collected, \$7,100 |
| 2. Other operating receipts, \$1,200 | 9. Other operating payments, \$900 |
| 3. Payments of dividends, \$4,000 | 10. Proceeds from issuance of bonds, \$11,300 |
| 4. Payments of income taxes, \$5,000 | 11. Payments of interest, \$8,400 |
| 5. Collections from customers, \$68,400 | 12. Proceeds from sale of investments, \$6,000 |
| 6. Payment for purchase of equipment, \$18,500 | 13. Beginning cash balance, \$28,400 |
| 7. Payments to employees, \$19,300 | |

Required

Prepare the statement of cash flows using the direct method for operating cash flows.

E22-20 Visual Inspection (Appendix) The following changes in account balances were taken from the adjusted trial balance of the Walson Company at the end of 2007:

	Net Changes for 2007	
	Debit	Credit
Cash	\$ 2,100	
Accounts receivable	8,700	
Inventory		\$ 2,500
Land		1,900
Buildings and equipment	10,400	
Accumulated depreciation		6,800
Accounts payable	4,500	
Salaries payable		800
Income taxes payable		1,000
Common stock, no par		9,000
Retained earnings	4,000	
Sales		69,000
Cost of goods sold	34,000	
Salaries expense	17,200	
Depreciation expense	6,800	
Income tax expense	3,300	
Totals	<u>\$91,000</u>	<u>\$91,000</u>

In addition, the following information was obtained from the company's records:

- | | |
|--|--|
| 1. Land was sold, at cost, for \$1,900 | 4. Common stock was issued for \$9,000 |
| 2. Dividends of \$4,000 were declared and paid | 5. Beginning cash balance was \$17,000 |
| 3. Equipment was purchased for \$10,400 | |

Required

Using visual inspection and the direct method, prepare a 2007 statement of cash flows for the Walson Company. (A separate schedule reconciling net income to cash provided by operating activities is not necessary.)

PROBLEMS

P22-1 Classifications of Cash Flows A company's statement of cash flows and the accompanying schedule of investing and financing activities not affecting cash may contain the following major sections:

- | | |
|--|--|
| A. Net Cash Flow From Operating Activities | C. Cash Flows From Financing Activities |
| B. Cash Flows From Investing Activities | D. Investing and Financing Activities Not Affecting Cash |

The following is a list of items that might appear on a company's statement of cash flows or in the accompanying schedule.

- | | |
|---|---|
| _____ 1. Decrease in accounts payable | _____ 4. Proceeds from issuance of note |
| _____ 2. Payment of dividends | _____ 5. Payment for purchase of available- |
| _____ 3. Increase in income taxes payable | for-sale temporary investments |

- | | | | |
|-----------|--|-----------|---|
| _____ 6. | Amortization of premium on investment in bonds | _____ 16. | Amortization of discount on bonds payable |
| _____ 7. | Increase in prepaid expenses | _____ 17. | Decrease in deferred taxes payable |
| _____ 8. | Payment of note | _____ 18. | Proceeds from issuance of bonds |
| _____ 9. | Gain on sale of equipment | _____ 19. | Issuance of stock dividend |
| _____ 10. | Proceeds from sale of land | _____ 20. | Payment for purchase of treasury stock |
| _____ 11. | Net income | _____ 21. | Depletion expense |
| _____ 12. | Payment for acquisition of building | _____ 22. | Increase in inventory |
| _____ 13. | Depreciation expense | _____ 23. | Conversion of preferred stock to common stock |
| _____ 14. | Issuance of common stock for land | _____ 24. | Proceeds from issuance of stock |
| _____ 15. | Proceeds (principal) from collection of note | _____ 25. | Lease of equipment under capital lease |
| | | _____ 26. | Proceeds from sale of patent |

Required

In the space provided and using the letters A through D, indicate in which section of the statement of cash flows (or the accompanying schedule) the preceding items would most likely be classified. After each letter indicate with a plus (+) or a minus (−) whether the items would be reported as an increase (inflow) or decrease (outflow). If an item would not be reported in the statement (or the accompanying schedule), put an X in the space provided.

P22-2 *Net Cash Flow From Operating Activities* The following is accounting information taken from the Verna Company's records for 2007:

- | | |
|---|--|
| 1. Decrease in accounts payable, \$4,600 | 11. Depletion expense, \$5,000 |
| 2. Loss on sale of land, \$1,900 | 12. Decrease in salaries payable, \$1,400 |
| 3. Increase in inventory, \$7,800 | 13. Decrease in accounts receivable, \$3,500 |
| 4. Increase in income taxes payable, \$2,700 | 14. Gain on sale of equipment, \$6,100 |
| 5. Net income, \$68,400 | 15. Proceeds from issuance of stock, \$57,000 |
| 6. Patent amortization expense, \$1,600 | 16. Extraordinary gain (net), \$3,700 |
| 7. Extraordinary loss (net), \$6,200 | 17. Depreciation expense, \$10,000 |
| 8. Decrease in deferred taxes payable, \$2,500 | 18. Amortization of discount on investment in bonds, \$1,500 |
| 9. Amortization of discount on bonds payable, \$1,300 | |
| 10. Payment of cash dividends, \$24,000 | |

Required

Prepare the net cash flow from operating activities section of the 2007 statement of cash flows for the Verna Company.

P22-3 *Statement of Cash Flows* The following is a list of the items to be included in the preparation of the 2007 statement of cash flows for the Warrick Company:

- | | |
|---|--|
| 1. Net income, \$59,200 | 10. Decrease in inventory, \$3,700 |
| 2. Payment for purchase of building, \$98,000 | 11. Payment for purchase of long-term investments, \$9,600 |
| 3. Increase in accounts receivable, \$7,400 | 12. Amortization of discount on bonds payable, \$1,900 |
| 4. Proceeds from issuance of common stock, \$37,100 | 13. Proceeds from issuance of note, \$18,000 |
| 5. Increase in accounts payable, \$4,500 | 14. Increase in deferred taxes payable, \$5,000 |
| 6. Proceeds from sale of land, \$7,000 | 15. Equipment acquired by capital lease, \$19,500 |
| 7. Depreciation expense, \$12,600 | 16. Decrease in salaries payable, \$2,300 |
| 8. Payment of dividends, \$36,000 | 17. Beginning cash balance, \$20,300 |
| 9. Gain on sale of land, \$5,300 | |

Required

- Prepare the statement of cash flows.
- Assume the company's preferred stock has been selling for \$120 per share during 2007. How many shares would the company have had to issue to avoid having a decrease in cash during the year? Where would this issuance have been reported in the statement of cash flows?

P22-4 *Statement of Cash Flows* The following is a list of the items to be included in the preparation of the 2007 statement of cash flows for the Trone Company:

- | | |
|---|--|
| 1. Extraordinary gain (net), \$9,200 | 7. Decrease in accounts payable, \$4,000 |
| 2. Proceeds from issuance of note, \$25,000 | 8. Proceeds from sale of investments, \$8,500 |
| 3. Decrease in accounts receivable, \$5,000 | 9. Amortization of premium on bonds payable, \$2,100 |
| 4. Payment for purchase of patent, \$19,800 | 10. Net income, \$49,200 |
| 5. Increase in inventory, \$6,700 | 11. Common stock exchanged for land, \$14,000 |
| 6. Payment of dividends, \$30,000 | 12. Payment for purchase of equipment, \$39,400 |

- | | |
|---|---------------------------------------|
| 13. Loss on sale of investments, \$4,800 | 16. Payment to retire bonds, \$37,800 |
| 14. Decrease in deferred taxes payable, \$3,600 | 17. Depreciation expense, \$10,700 |
| 15. Proceeds from issuance of preferred stock, \$52,800 | 18. Ending cash balance, \$22,100 |

Required

- Prepare the statement of cash flows.
- What would have happened if the company had not issued the note during 2007? How did the issuance of the note affect the company's debt ratio (discussed in Chapter 6) at the end of 2007?

P22-5 Infrequent Transactions The following transactions were recorded on the books of the Baxter Company during the current year. The company:

- Issued a "small" common stock dividend of 400 shares. The par value is \$10 per share and the relevant market price was \$20 per share.
- Exchanged equipment with a cost of \$10,000 and a book value of \$3,800 for land valued at \$12,000, paying an additional \$8,500 in cash.
- Converted preferred stock (\$100 par) with a total par value of \$20,000 and a book value of \$22,800 to 1,500 shares of its \$10 par common stock. The book value method was used to account for the conversion.
- Recorded a loss of \$4,200 as a result of retiring bonds payable with a face value of \$30,000 and a related premium of \$5,000 by paying \$39,200.
- Recorded an extraordinary gain (net of income taxes) of \$6,000 as a result of a tornado that destroyed a building costing \$100,000 and having an associated book value of \$70,000. The insurance proceeds (net of income taxes) totaled \$76,000.
- Acquired equipment by entering into a capital lease. The lease required payments of \$5,000 in advance; the present value of the lease payments (before the initial payment) was \$34,000.

Required

For each of the preceding items, discuss *if* and illustrate *how* the transaction would be recorded on the worksheet to support the statement of cash flows. Use a journal entry format for your illustrations.

P22-6 Partially Completed Worksheet (Spreadsheet) The following partially completed worksheet has been prepared for the 2007 statement of cash flows of the Perrin Company:

	A	B	C	D	E	F
1						
2		Balances		Change	Worksheet Entries	
3	Account Titles	12/31/06	12/31/07	Increase (Decrease)	Debit	Credit
4	<i>Debits</i>					
5	Cash	\$ 800	\$ 1,540			
6	<i>Noncash Accounts:</i>					
7	Accounts receivable	1,500	2,180			
8	Inventory	3,100	6,055			
9	Investments in stock	—	2,800			
10	Land	6,000	9,200			
11	Buildings	20,000	20,000			
12	Office equipment	4,000	6,100			
13	Delivery equipment	3,000	5,900			
14	Treasury stock	—	2,000			
15	Totals	\$38,400	\$55,775	\$?		
16						
17	<i>Credits</i>					
18	Accumulated depreciation	\$ 7,000	\$ 8,500			
19	Accounts payable	3,300	3,695			
20	Wages payable	600	500			
21	Bonds payable	—	5,000			
22	Premium on bonds payable	—	240			
23	Common stock, \$10 par	6,000	8,200			
24	Additional paid-in capital	9,000	13,640			
25	Retained earnings	?	?	\$3,500		
26	Totals	\$38,400	\$55,775	\$?		
27						

Other relevant information:

(a) Beginning retained earnings		\$ 12,500
Plus: Net income		<u>8,000</u>
		\$ 20,500
Less: Stock dividends	\$ 840	
Cash dividends	<u>3,660</u>	<u>(4,500)</u>
Ending retained earnings		<u>\$16,000</u>

- (b) Accumulated depreciation is a contra account for all the depreciable assets. Depreciation on these assets totaled \$2,200 for the year.
- (c) On January 1, 2007 the company issued 10% bonds with a face value of \$5,000 at 106. Interest was paid semiannually on June 30 and December 31. The bonds mature on January 1, 2009. Straight-line amortization is used for bond discount or premium. Bond interest expense was \$440.
- (d) Land was purchased for \$3,200 during the year.
- (e) Two hundred shares of common stock were issued for delivery equipment valued at \$2,900 and office equipment valued at \$3,100.
- (f) Twenty shares of stock were issued as a stock dividend. The market price per share was \$42.
- (g) Office equipment with a cost of \$1,000 and a book value of \$300 was sold for \$50.
- (h) Fifty shares of its own common stock were reacquired by the company as treasury stock. The company purchased the shares for \$40 per share.
- (i) One hundred shares of Doe Company stock were purchased for \$28 per share at year-end.

Required 

Complete the worksheet (spreadsheet).

P22-7 Worksheet (Spreadsheet) and Statement of Cash Flows The following information was taken from the accounting records of the Lamberson Company:

	<u>Account Balances</u>	
	<u>January 1, 2007</u>	<u>December 31, 2007</u>
<i>Debits</i>		
Cash	\$ 1,400	\$ 2,400
Accounts receivable (net)	2,800	2,690
Marketable securities (at cost)	1,700	3,000
Allowance for change in value	500	800
Inventories	8,100	7,910
Prepaid items	1,300	1,710
Investments (long-term)	7,000	5,400
Land	15,000	15,000
Buildings and equipment	32,000	46,200
Discount on bonds payable	<u>—</u>	<u>290</u>
	<u>\$69,800</u>	<u>\$85,400</u>
<i>Credits</i>		
Accumulated depreciation	\$16,000	\$16,400
Accounts payable	3,800	4,150
Income taxes payable	2,400	2,504
Wages payable	1,100	650
Interest payable	—	400
Note payable (long-term)	3,500	—
12% bonds payable	—	10,000
Deferred taxes payable	800	1,196
Convertible preferred stock, \$100 par	9,000	—
Common stock, \$10 par	14,000	21,500
Additional paid-in capital	8,700	13,700
Unrealized increase in value of marketable securities	500	800
Retained earnings	<u>10,000</u>	<u>14,100</u>
	<u>\$69,800</u>	<u>\$85,400</u>

Additional information for the year:

(a) Sales	\$ 39,930
Cost of goods sold	(19,890)
Depreciation expense	(2,100)
Wages expense	(11,000)
Other operating expenses	(1,000)
Bond interest expense	(410)
Dividend revenue	820
Gain on sale of investments	700
Loss on sale of equipment	(200)
Income tax expense	<u>(2,050)</u>
Net income	<u>\$ 4,800</u>

- (b) Dividends declared and paid totaled \$700.
- (c) On January 1, 2007, convertible preferred stock that had originally been issued at par value were converted into 500 shares of common stock. The book value method was used to account for the conversion.
- (d) Long-term nonmarketable investments that cost \$1,600 were sold for \$2,300.
- (e) The long-term note payable was paid by issuing 250 shares of common stock at the beginning of the year.
- (f) Equipment with a cost of \$2,000 and a book value of \$300 was sold for \$100. The company uses one Accumulated Depreciation account for all depreciable assets.
- (g) Equipment was purchased at a cost of \$16,200.
- (h) The 12% bonds payable were issued on August 31, 2007 at 97. They mature on August 31, 2017. The company uses the straight-line method to amortize the discount.
- (i) Taxable income was less than pretax accounting income, resulting in a \$396 increase in deferred taxes payable.
- (j) Short-term marketable securities were purchased at a cost of \$1,300. The portfolio was increased by \$300 to a \$3,800 fair value at year-end by adjusting the related allowance account.

Required

- Prepare a worksheet (spreadsheet) to support the Lamberson Company's statement of cash flows for 2007.
- Prepare the statement of cash flows.
- Compute the cash flow from operations to sales ratio and the profit margin ratio for 2007. What is the primary reason for the difference in the results of the ratios?

P22-8 Worksheet (Spreadsheet) and Statement of Cash Flows The following information is available for the Bott Company:

	Account Balances	
	December 31, 2006	December 31, 2007
<i>Debits</i>		
Cash	\$ 1,800	\$ 2,000
Accounts receivable	4,600	4,720
Notes receivable (short-term)	0	1,000
Inventories	12,000	9,700
Prepaid items	1,700	1,380
Land	11,000	17,100
Buildings and equipment	78,000	110,000
Patent	4,400	4,000
Treasury stock (common, at cost, \$25 per share)	<u>2,500</u>	<u>1,000</u>
Totals	<u>\$116,000</u>	<u>\$150,900</u>
<i>Credits</i>		
Accumulated depreciation	\$ 24,000	\$ 31,800
Accounts payable	6,000	8,210
Salaries payable	2,600	3,500
Miscellaneous current payables	1,400	1,200
Interest payable	0	140
12% bonds payable	0	7,000
Premium on bonds payable	0	650
Convertible preferred stock, \$50 par	9,000	6,500

Premium on preferred stock	3,000	2,500
Common stock, \$10 par	18,000	23,500
Premium on common stock	28,800	41,150
Retained earnings	<u>23,200</u>	<u>24,750</u>
Totals	<u>\$116,000</u>	<u>\$150,900</u>

Additional information for the year:

(a) Beginning retained earnings, unadjusted		\$23,200
Less: Prior period adjustment—correction of understatement of depreciation (net of income taxes)		<u>(1,300)</u>
Adjusted beginning retained earnings		\$21,900
Add: Net income		<u>11,500</u>
		\$33,400
Less: Cash dividends	\$(4,000)	
Stock dividends (150 shares at \$31 per share)	<u>(4,650)</u>	<u>(8,650)</u>
Ending retained earnings		<u>\$24,750</u>

- (b) Last year depreciation expense was inadvertently understated in the amount of \$1,800. The correction was made this year to Accumulated Depreciation and to Retained Earnings as a prior period adjustment. The company also received a related income tax refund of \$500.
- (c) Sixty shares of treasury stock (common) were reissued at \$30 per share.
- (d) Bonds payable with a face amount of \$7,000 were issued for \$7,750 on April 30, 2007. The bonds mature on April 30, 2012, and pay interest semiannually. The straight-line method is used to amortize the bond premium. Interest expense totaled \$460 for 2007.
- (e) Fifty shares of preferred stock (originally issued at \$60 per share) were converted into 100 shares of common stock.
- (f) Land costing \$2,900 was sold for \$3,800.
- (g) Three hundred shares of common stock were sold for \$33 per share.
- (h) Equipment costing \$32,000 was purchased during the year.
- (i) Land was acquired at a cost of \$9,000 during the year.
- (j) Depreciation expense was \$6,000.
- (k) Patent amortization was \$400.
- (l) The company loaned money to one of its executives and received a \$1,000 short-term note receivable on December 31, 2007. The note matures 90 days from the date of issuance.

Required 

- Prepare a worksheet (spreadsheet) to support a statement of cash flows for 2007.
- Prepare the 2007 statement of cash flows for the Bott Company. Show the reconciliation of the net income to the net cash provided by operating activities in a separate schedule accompanying the statement.

P22-9 Worksheet (Spreadsheet) from Trial Balance The post-closing trial balance as of December 31, 2006 and the adjusted trial balance as of December 31, 2007 are shown here for the Heinz Company:

	December 31, 2006		December 31, 2007	
	Post-closing Trial Balance		Adjusted Trial Balance	
Cash	\$	2,700	\$	3,520
Accounts receivable		5,900		6,215
Inventories		15,300		15,530
Prepaid items		1,400		1,000
Investments in bonds (long-term)		8,300		7,300
Land		16,300		19,000
Buildings		68,700		60,700
Accumulated depreciation: buildings		\$ 35,000		\$ 34,500
Equipment		29,600		25,600
Accumulated depreciation: equipment		14,200		14,700
Patents (net)		8,700		9,185
Accounts payable		8,900		9,195
Interest payable		630		300
Wages payable		2,500		2,600

Bonds payable		23,000		17,000
Discount on bonds payable	0		715	
Common stock, \$10 par		22,000		22,650
Additional paid-in capital		15,320		15,970
Retained earnings		<u>35,350</u>		35,350
	<u>\$156,900</u>	<u>\$156,900</u>		
Sales (net)				49,550
Cost of goods sold			23,800	
Wages expense			16,510	
Other operating expenses			1,100	
Depreciation expense: buildings			2,700	
Depreciation expense: equipment			3,100	
Patent amortization			815	
Interest expense			1,715	
Loss (ordinary) on sale of investments			200	
Interest revenue				790
Gain (ordinary) on exchange of assets				1,300
Income tax expense			500	
Extraordinary loss (net of income taxes)			2,600	
Dividends declared			<u>2,100</u>	
Totals			<u>\$203,905</u>	<u>\$203,905</u>

A review of the accounting records reveals the following additional information:

- Bonds payable with a face value, book value, and market value of \$14,000 were retired on June 30, 2007.
- Bonds payable with a face value of \$8,000 were issued at 90.25 on August 1, 2007. They mature on August 1, 2012. The company uses the straight-line method to amortize bond discount.
- A tornado completely destroyed a small building that had an original cost of \$8,000 and a book value of \$4,800. Settlement with the insurance company resulted in after-tax proceeds of \$2,200 and an extraordinary loss (net of income taxes) of \$2,600.
- Equipment with a cost of \$4,000 and a book value of \$1,400 was exchanged for an acre of land valued at \$2,700. No cash was exchanged.
- Long-term investments in bonds being held to maturity with a cost of \$1,000 were sold for \$800.
- Sixty-five shares of common stock were exchanged for a patent. The common stock was selling for \$20 per share at the time of the exchange.

Required

Prepare a worksheet (spreadsheet) to support a statement of cash flows for 2007.

P22-10 Prepare Ending Balance Sheet On December 31, 2007 a fire destroyed a significant portion of the Richey Company accounting records. Only the January 1, 2007 balance sheet, the statement of cash flows for 2007, and several additional documents were saved as follows:

Balance Sheet January 1, 2007

<i>Assets</i>			
Current assets:			
Cash			\$ 1,900
Accounts receivable			5,100
Inventories			13,900
Prepaid items			<u>1,300</u>
Total current assets			\$22,200
Property, plant, and equipment:			
Land			\$12,000
Buildings	\$60,000		
Equipment	<u>20,000</u>	\$ 80,000	
Less: Accumulated depreciation		<u>(29,000)</u>	<u>51,000</u>
Total fixed assets			\$63,000

Patents (net)		7,100
Total assets		<u>\$92,300</u>
<i>Liabilities</i>		
Current liabilities:		
Accounts payable		\$ 5,500
Income taxes payable		4,100
Miscellaneous payables		<u>1,200</u>
Total current liabilities		\$ 10,800
Long-term liabilities:		
10% bonds payable (due 12/31/2016)	\$15,000	
Less: Discount on bonds payable	<u>(1,000)</u>	<u>14,000</u>
Total liabilities		\$24,800
<i>Stockholders' Equity</i>		
Preferred stock, \$100 par	\$17,000	
Premium on preferred stock	<u>1,500</u>	\$ 18,500
Common stock, \$10 par	\$14,000	
Premium on common stock	<u>11,200</u>	25,200
Retained earnings		<u>23,800</u>
Total stockholders' equity		\$67,500
Total liabilities and stockholders' equity		<u>\$92,300</u>

Statement of Cash Flows
For Year Ended December 31, 2007

Net Cash Flow From Operating Activities		
Net income	\$ 10,000	
Adjustments for differences between income flows and cash flows from operating activities:		
Add: Depreciation expense	5,100	
Patent amortization expense	600	
Loss on sale of land	400	
Decrease in accounts receivable (net)	1,100	
Decrease in inventories	3,010	
Increase in income taxes payable	190	
Increase in miscellaneous payables	200	
Bond discount amortization	100	
Less: Gain on sale of equipment	(180)	
Gain on sale of patent	(1,100)	
Increase in prepaid items	(120)	
Decrease in accounts payable	<u>(400)</u>	
Net cash provided by operating activities		\$ 18,900
Cash Flows From Investing Activities		
Purchase of building by issuance of mortgage and cash	\$(43,000)	
Less: Issuance of mortgage	<u>20,000</u>	
Payment for purchase of building	\$(23,000)	
Proceeds from sale of land	2,800	
Proceeds from sale of equipment	500	
Proceeds from sale of patent	<u>2,100</u>	
Net cash used for investing activities		(17,600)
Cash Flows From Financing Activities		
Proceeds from issuance of common stock (150 shares)	\$ 3,000	
Payment of dividends	<u>(5,000)</u>	
Net cash used for financing activities		<u>(2,000)</u>
Net Decrease in Cash (see Schedule 1)		\$ (700)
Cash, January 1, 2007		<u>1,900</u>
Cash, December 31, 2007		<u>\$ 1,200</u>

Schedule 1: Investing and Financing Activities Not Affecting Cash

Investing Activities	
Acquisition of land by issuance of preferred stock (40 shares)	\$(4,800)
Financing Activities	
Issuance of preferred stock to acquire land	4,800

The remaining financial documents reveal the following additional data:

1. The new building was acquired on December 31, 2007. The related mortgage requires equal annual repayments of the principal over a five-year period beginning December 31, 2009.
2. The company issued a stock dividend of 200 shares of common stock on December 14, 2007. On the date of declaration, the stock was selling for \$18 per share.
3. The equipment that was sold had an original cost of \$1,900.

Required

Prepare a December 31, 2007 balance sheet for Richey Company. Include supporting calculations.

P22-11 *Erroneous Statement of Cash Flows* The bookkeeper of the Ryan Company prepared the following 2007 statement of cash flows:

Flows of Cash Statement	
December 31, 2007	
<i>Sources (Inflows) of Cash</i>	
Net Source from Operations	
Net income	\$ 47,800
Add: Cash receipt from sale of land	6,500
Inflow from issuing 10% bonds payable	25,000
Depreciation expense	13,200
Reduction in inventory	1,900
Less: Outflow to buy equipment	(16,400)
Increase in prepaid expenses	(700)
Cash (principal) paid on long-term note	(9,500)
Extraordinary gain (net)	<u>(2,000)</u>
Total source from operations	\$ 65,800
Other Sources (Inflows) of Cash	
Loss on sale of land	\$ 2,300
Increase in accounts payable	1,000
Cash from issuing preferred stock	38,700
Patent amortization expense	<u>2,100</u>
Total other sources of cash	44,100
Sources (Financing) Not Affecting Cash	
Issuance of common stock for patent	<u>11,000</u>
Total inflows of cash	\$120,900
<i>Uses (Outflows) of Cash</i>	
To purchase building	\$(62,000)
Increase in accounts receivable	(7,800)
For acquiring marketable securities	(7,100)
Decrease in income taxes payable	<u>(1,400)</u>
Total uses of cash	(78,300)
Uses (Investing) Not Affecting Cash	
Acquisition of patent by issuing common stock	<u>(11,000)</u>
Net inflow before dividends	\$ 31,600
Less: Cash dividends	<u>(24,000)</u>
Net Increase in Cash	\$ 7,600
Cash, January 1, 2007	<u>15,300</u>
Cash, December 31, 2007	<u>\$ 22,900</u>

After a thorough investigation, you have determined that the *amounts* of the items listed on the statement are correct. However, you notice several items that are incorrectly classified and reported.

Required 

Prepare a corrected 2007 statement of cash flows for the Ryan Company.

P22-12 AICPA Adapted Comprehensive Angel Company has prepared its financial statements for the year ended December 31, 2007 and for the three months ended March 31, 2008. You have been asked to prepare a statement of cash flows for the three months ended March 31, 2008. The company's balance sheet data at December 31, 2007 and March 31, 2008, and its income statement data for the three months ended March 31, 2008, follow. You have previously satisfied yourself as to the correctness of the amounts presented.

	Balance Sheet Data	
	December 31, 2007	March 31, 2008
Cash	\$ 25,300	\$ 79,400
Marketable investments (at cost)	17,500	8,300
Allowance for decrease in value	(1,000)	(900)
Accounts receivable	24,320	49,320
Inventory	<u>31,090</u>	<u>48,590</u>
Total current assets	\$ 97,210	\$ 184,710
Land	40,000	18,700
Building	250,000	250,000
Equipment	—	81,500
Accumulated depreciation	(15,000)	(16,250)
Investment in 30% owned company	61,220	67,100
Other assets	<u>15,100</u>	<u>15,100</u>
Total	<u>\$448,530</u>	<u>\$600,860</u>
Accounts payable	\$ 21,220	\$ 38,417
Income taxes payable	<u>—</u>	<u>13,529</u>
Total current liabilities	\$ 21,220	\$ 51,946
Other liabilities	187,000	187,000
Bonds payable	50,000	115,000
Discount on bonds payable	(2,300)	(2,150)
Deferred taxes payable	510	846
Preferred stock	30,000	—
Common stock	80,000	110,000
Unrealized decrease in value of marketable investments	(1,000)	(900)
Dividends declared	—	(8,000)
Retained earnings	<u>83,100</u>	<u>147,118</u>
Total	<u>\$448,530</u>	<u>\$600,860</u>
	Income Statement Data For the Three Months Ended March 31, 2008	
Sales		\$242,807
Gain on sale of marketable investments		2,400
Equity in earnings of 30% owned company		5,880
Extraordinary gain on condemnation of land (net of tax)		<u>8,560</u>
Total revenues		\$259,647
Cost of sales		\$157,354
General and administrative expenses		22,010
Depreciation		1,250
Interest expense		1,150
Income taxes		<u>13,865</u>
Total expenses		\$195,629
Net income		<u>\$ 64,018</u>

Your discussion with the company's controller and a review of the financial records have revealed the following information:

- On January 7, 2008 the company sold marketable securities for cash. These securities had cost \$9,200, and had a fair value of \$8,600 at December 31, 2007. The remaining marketable securities were adjusted to their \$7,400 fair value on March 31, 2008 by adjustment of the related allowance account. The dividend and interest revenue on these marketable securities is not material.
- The company's preferred stock was converted into common stock at a rate of one share of preferred for two shares of common. The preferred stock and common stock have par values of \$2 and \$1, respectively.
- On January 16, 2008, three acres of land were condemned. An award of \$32,000 in cash was received on March 24, 2008. Purchase of additional land as a replacement is not contemplated by the company.
- On March 25, 2008 the company purchased equipment for cash.
- On March 26, 2008 bonds payable were issued by the company at par for cash.
- The investment in 30% owned company included an amount of \$9,600 attributable to an increase in the recorded value of depreciable assets at December 31, 2007. This increase is being depreciated at a quarterly rate of \$480.

Required

- Prepare a worksheet (spreadsheet) to support the statement of cash flows for Angel Company for the three months ended March 31, 2008.
- Prepare the statement of cash flows.

P22-13 AICPA Adapted Comprehensive The following are the balance sheets of Farrell Corporation as of December 31, 2007 and 2006, and the statement of income and retained earnings for the year ended December 31, 2007:

	Balance Sheets		
	December 31		Increase (Decrease)
	2007	2006	
<i>Assets</i>			
Cash	\$ 225,000	\$ 180,000	\$ 45,000
Accounts receivable, net	295,000	305,000	(10,000)
Inventories	549,000	431,000	118,000
Investment in Hall, Inc., at equity	73,000	60,000	13,000
Land	350,000	200,000	150,000
Plant and equipment	624,000	606,000	18,000
Less: Accumulated depreciation	(139,000)	(107,000)	(32,000)
Patent	16,000	20,000	(4,000)
Total assets	<u>\$1,993,000</u>	<u>\$1,695,000</u>	<u>\$298,000</u>
<i>Liabilities and Stockholders' Equity</i>			
Accounts payable and accrued expenses	\$ 604,000	\$ 563,000	\$ 41,000
Note payable, long-term	150,000	—	150,000
Bonds payable	160,000	210,000	(50,000)
Deferred taxes payable	41,000	30,000	11,000
Common stock, \$10 par	410,000	400,000	10,000
Additional paid-in capital	196,000	175,000	21,000
Retained earnings	432,000	334,000	98,000
Treasury stock, at cost	—	(17,000)	17,000
Total liabilities and stockholders' equity	<u>\$1,993,000</u>	<u>\$1,695,000</u>	<u>\$298,000</u>

Statement of Income and Retained Earnings For the Year Ended December 31, 2007

Net sales	<u>\$1,950,000</u>
Operating expenses:	
Cost of sales	1,150,000
Selling and administrative expenses	505,000
Depreciation	53,000
	<u>1,708,000</u>
Operating income	<u>242,000</u>

Other (income) expense:	
Interest expense	15,000
Equity in net income of Hall, Inc.	(13,000)
Loss on sale of equipment	5,000
Amortization of patent	<u>4,000</u>
	<u>11,000</u>
Income before income taxes	<u>231,000</u>
Income taxes:	
Current	79,000
Deferred	<u>11,000</u>
Provision for income taxes	<u>90,000</u>
Net income	\$ 141,000
Retained earnings, January 1, 2007	<u>334,000</u>
	475,000
Cash dividends, paid August 13, 2007	<u>43,000</u>
Retained earnings, December 31, 2007	<u>\$ 432,000</u>

Additional information:

- On January 2, 2007 Farrell sold equipment costing \$45,000, with a book value of \$24,000, for \$19,000 cash.
- On April 2, 2007 Farrell issued 1,000 shares of common stock for \$23,000 cash.
- On May 14, 2007 Farrell sold all of its treasury stock for \$25,000 cash.
- On June 1, 2007 Farrell paid \$50,000 to retire bonds with a face value (and book value) of \$50,000.
- On July 2, 2007 Farrell purchased equipment for \$63,000 cash.
- On December 31, 2007 land with a fair market value of \$150,000 was purchased through the issuance of a long-term note in the amount of \$150,000. The note bears interest at the rate of 15% and is due on December 31, 2012.
- Deferred taxes payable represent temporary differences relating to the use of accelerated depreciation methods for income tax reporting and the straight-line method for financial statement reporting.

Required

- Prepare a worksheet (spreadsheet) to support a statement of cash flows for the Farrell Corporation for the year ended December 31, 2007, based on the preceding information.
- Prepare the statement of cash flows.

P22-14 Operating Cash Flows (Appendix) Use the information presented in P22-7.

Required

- Using the direct method, prepare the cash flows from operating activities section of the 2007 statement of cash flows for the Lamberson Company.
- (Optional). If you completed P22-7 earlier, prepare the remaining portion of the statement of cash flows. (A separate schedule reconciling net income to cash provided by operating activities is not necessary.)

P22-15 Statement of Cash Flows (Appendix) The following is a list of the items to be included in the preparation of the 2007 statement of cash flows for the Yellow Company:

- | | |
|--|--|
| 1. Proceeds from sale of land, \$2,100 | 8. Payment for purchase of investments, \$12,100 |
| 2. Payments of interest, \$5,000 | 9. Collections from customers, \$54,500 |
| 3. Equipment acquired by capital lease, \$7,200 | 10. Payments of income taxes, \$2,900 |
| 4. Proceeds from issuance of preferred stock, \$11,000 | 11. Payment of dividends, \$5,200 |
| 5. Other operating payments, \$1,300 | 12. Other operating receipts, \$1,600 |
| 6. Interest and dividends collected, \$4,700 | 13. Payments to suppliers, \$29,500 |
| 7. Payments to employees, \$20,300 | 14. Beginning cash balance, \$29,700 |

Required

Prepare the statement of cash flows using the direct method for operating cash flows.

P22-16 Worksheet and Statement (Appendix) Use the information presented in P22-13 for the Farrell Corporation.

Required

- Using the direct method for operating cash flows, prepare a worksheet (spreadsheet) to support a 2007 statement of cash flows. (*Hint:* Combine the income statement and December 31, 2007 balance sheet items for the adjusted trial balance. Use a retained earnings balance of \$291,000 in this adjusted trial balance.)
- Prepare the statement of cash flows. (A separate schedule reconciling net income to cash provided by operating activities is not necessary.)

P22-17 Comprehensive (Appendix) The following are the December 31, 2006 post-closing trial balance and the December 31, 2007 adjusted trial balance of the Adair Company:

Accounts	12/31/06 Post-Closing Trial Balance		12/31/07 Adjusted Trial Balance	
	Debit	Credit	Debit	Credit
Cash	2,700		3,300	
Accounts receivable	7,300		6,200	
Inventory	8,100		9,900	
Investments in bonds	10,000		18,600	
Property and equipment	105,300		133,300	
Accumulated depreciation		42,400		49,200
Accounts payable		8,100		8,500
Salaries payable		1,300		700
Interest payable		0		300
Notes payable		0		9,000
Common stock, no par		43,600		58,100
Retained earnings		38,000		31,500
Sales				89,000
Cost of goods sold			48,800	
Depreciation expense			6,800	
Salaries expense			12,000	
Other operating expenses			1,700	
Interest revenue				1,200
Interest expense			900	
Income tax expense			6,000	
Totals	<u>133,400</u>	<u>133,400</u>	<u>247,500</u>	<u>247,500</u>

A review of the accounting records reveals the following additional information for 2007:

- Investments in bonds to be held to maturity were purchased at year-end for \$8,600.
- A building was purchased for \$28,000.
- A note payable was issued for \$9,000.
- Common stock was issued for \$14,500.
- Dividends of \$6,500 were declared and paid.

Required

- Using the direct method for operating cash flows, prepare a worksheet (spreadsheet) to support the 2007 statement of cash flows for the Adair Company.
- Prepare the statement of cash flows. (A separate schedule reconciling net income to cash provided by operating activities is not necessary.)

P22-18 Complex Worksheet (Appendix) Use the information presented in P22-9 for the Heinz Company.

Required

Using the direct method for operating cash flows, prepare a worksheet (spreadsheet) to support a 2007 statement of cash flows.

CASES

COMMUNICATION

C22-1 Financial Statement Interrelationships

Prepare an outline of the general format of the statement of cash flows (indirect method). Include examples of cash inflows and outflows that would be reported under each

major section. Finally, discuss the information that is disclosed on the income statement, balance sheet, and statement of cash flows, respectively, that is not disclosed on the other statements.

C22-2 Statement of Cash Flows

A friend of yours is taking an elementary accounting course. He says, "I understand the income statement and balance sheet, but I am confused by the statement of cash flows (and accompanying schedule). What is this statement, what is it useful for, what are its major sections, and what items are reported in each section and the accompanying schedule? I need to understand this statement better so I can do well in my class."

Required

Prepare a written response to your friend's questions.

C22-3 Cash Flow Activities

A company's statement of cash flows shows its cash inflows, cash outflows, and net change in cash from the operating, investing, and financing activities during an accounting period.

Required

Prepare a short memo that defines a company's operating, investing, and financing activities, and identifies the cash inflows and cash outflows related to each activity.

C22-4 Worksheet Method

The worksheet method is commonly used to analyze the information for preparing a company's statement of cash flows. This method involves the completion of several steps.

Required

Explain the worksheet method and list and briefly discuss the steps in this method.

C22-5 Operating Cash Flows

There are two methods to calculate and report a company's net cash provided by (or used in) operating activities.

Required

Prepare a short memo that identifies the two methods and explains the calculations necessary for each method.

CREATIVE AND CRITICAL THINKING

C22-6 Financing and Investing Activities Not Involving Cash

AICPA Adapted The statement of cash flows is normally a required basic financial statement for each period for which an earnings statement is presented. The statement should include a separate schedule listing the financing and investing activities not involving cash.

Required

1. What are financing and investing activities not involving cash?
2. What are two types of financing and investing activities not involving cash?
3. Explain what effect, if any, each of the following seven items would have on the statement of cash flows.
 - a. Accounts receivable
 - b. Inventory
 - c. Depreciation
 - d. Deferred tax liability
 - e. Issuance of long-term debt in payment for a building
 - f. Payoff of current portion of debt
 - g. Sale of a fixed asset resulting in a loss

C22-7 Inflows and Outflows

AICPA Adapted Alfred Engineering Company is a young and growing producer of electronic measuring instruments and technical equipment. You have been retained by Alfred to advise it in the preparation of a statement of cash flows. For the fiscal year ended October 31, 2007, you have obtained the following information concerning certain events and transactions of Alfred:

1. The amount of reported earnings for the fiscal year was \$800,000.
2. Depreciation expense of \$240,000 was included in the earnings statement.

3. Uncollectible accounts receivable of \$30,000 were written off against the allowance for uncollectible accounts. Also, \$37,000 of bad debts expense was included in determining earnings for the fiscal year, and the same amount was added to the allowance for uncollectible accounts.
4. A gain of \$4,700 was realized on the sale of a machine; it originally cost \$75,000, of which \$25,000 was undepreciated on the date of sale.
5. On July 2, 2007, a building and land were purchased for \$600,000; Alfred gave in payment \$100,000 cash, \$200,000 market value of its unissued common stock, and a \$300,000 mortgage.
6. On August 3, 2007, \$700,000 of Alfred's convertible preferred stock was converted into \$140,000 par value of its common stock. The preferred stock was originally issued at par.
7. The board of directors declared a \$320,000 cash dividend on October 19, 2007, payable on November 16, 2007 to stockholders of record on November 5, 2007.

Required

For each of the seven items, explain whether each is an inflow or outflow of cash and explain how it should be disclosed in Alfred's statement of cash flows (indirect method) for the fiscal year ended October 31, 2007. If any item is neither an inflow nor outflow of cash, explain why it is not and indicate the disclosure, if any, that should be made of the item in Alfred's statement of cash flows for the fiscal year ended October 31, 2007.

C22-8 Analyzing Coca-Cola's Cash Flow Disclosures

Refer to the financial statements and related notes of The Coca-Cola Company in Appendix A of this book.

Required

1. What was the net cash provided by operating activities for 2004? What method was used to determine this amount? What was the largest positive adjustment to net income?
2. What was the net cash used in investing activities for 2004? What was the largest investing cash outflow? Investing cash inflow?
3. What was the net cash used in financing activities for 2004? What was the largest financing cash inflow? Financing cash outflow?
4. What was the interest paid in 2004? Income taxes paid?
5. Compute the “cash flow from operations to sales” ratio for 2004. How does this result compare to 2003? Why?
6. Compute the profit margin for 2004. How does this result compare to the cash flow from operations to sales ratio for 2004? Why?

**C22-9 Ethics and Cash Flows**

You are the accountant for Nello Company, which manufactures specialty equipment. Nello has been in financial difficulty, so its suppliers require purchases to be paid in cash. Furthermore, Nello has long-term debt with a debt covenant that requires it to maintain a 1:1 acid-test (quick) ratio. Nello’s employees work a five-day week, Monday through Friday.

On Wednesday morning during the last week of the current year, Sam (the production supervisor) comes to you and says,

“I don’t understand it. We have this large special order from a customer that must be delivered at the end of the first week in January. Once we get the raw materials, it is going to take five solid days of work without overtime to produce the order. If Bob (the president) would let me order the raw materials this morning, we could have them by late today. This would give us two days this week and the four days after New Years Day (Monday) of next week to complete the order without incurring overtime costs. But Bob says we must wait until next Tuesday to order the materials. This means we will have to work doubletime that Wednesday through Friday to finish the order. That overtime cost is going to really increase next year’s factory salary expense, so our profit and operating cash flows from that order will be very low. Please talk to him.”

When you approach Bob about buying the raw materials this morning, he says, “If we purchase those materials today, we will have to write a check. And that means our cash flow from operating activities for this year will be much lower, which our stockholders won’t like. Furthermore, our quick ratio will go down from 1.01:1 to .90:1, so our creditors may be upset. I know our profit and operating cash flows for next year will be lower if we delay the purchase, but that seems to be the best decision. Don’t you agree?”

Required

From financial reporting and ethical perspectives, how would you respond to Bob?

RESEARCH SIMULATION

R22-1 Researching GAAP**Situation**

You are the new accountant for 12th National Bank and are preparing its 2007 statement of cash flows. The bank reports net income of \$75,800 on its 2007 income statement. Included in this net income are the following items: \$6,700 gain on sale of trading securities, \$1,200 unrealized holding gain on trading securities, and \$5,100 loss on sale of securities available for sale. Among its 2007 transactions, the bank sold trading securities with a carrying value of \$22,900 for \$29,600, and purchased trading securities for \$65,200. The bank sold securities available for sale with a cost (and carrying value) of \$58,700 for \$53,600, and purchased securities available for sale for \$39,400. It also

made routine 90-day loans of \$47,500 to customers and collected \$20,000 principal on these customer loans. As a result of the preceding information, the bank’s trading securities account increased by \$43,500, the securities available for sale account decreased by \$19,300, and the loans receivable account increased by \$27,500. The bank uses the indirect approach to report operating cash flows on its statement of cash flows.

Directions

Research the applicable generally accepted accounting principles and prepare a written memo to the 12th National Bank’s auditors that explains how you plan to report the preceding items on the bank’s 2007 statement of cash flows. Cite your reference and applicable paragraph numbers.