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The Statement of Cash Flows

OBJECTIVES

After careful study of 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.

SYNOPSIS

Conceptual Overview and Reporting Guidelines

1. One of the specific objectives of financial reporting is to provide users with information about a company's cash flows as well as information about a company's liquidity, financial flexibility, operating capability, and risk. Liquidity is the company's ability to meet its obligations as they become due. Financial flexibility is a measure of the company's ability to adapt to unexpected needs and opportunities by changing the amounts and timing of its cash flows. Operating capability is the company's ability to maintain a given physical level of operations. Risk is the uncertainty or unpredictability of the future results of the company.
2. GAAP requires a statement of cash flows for the accounting period along with a company's income statement and balance sheet. A statement of cash flows is a financial statement that shows a company's 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 company's beginning and ending cash balances.
3. The primary purpose of a statement of cash flows is to provide relevant information about the company's cash receipts and cash payments during the accounting period, information that is useful in evaluating the company's liquidity, financial flexibility, operating capability, and risk.
4. Operating activities (i.e., the provision of services and the acquisition, sale, and delivery of goods) are the cash receipts and cash payments relating to the earning activities of a company. These include all transactions and other events that are not investing and financing activities.
5. Investing activities are the cash receipts and cash payments that relate to the external financing of a company and include making and collecting loans, acquiring and selling investments, and acquiring and selling property, plant, and equipment.
6. Financing activities are the cash receipts and cash payments that relate to the external financing of a company and include obtaining resources from owners (and providing a return on, and of, those resources to the owners) and obtaining and repaying resources to creditors. Examples include the issuance of securities, payment of dividends, and borrowing and repayment of money.
7. To enable external users to predict the amounts, timing, and uncertainty of future cash flows, a company's statement of cash flows should clearly show for the accounting period: (a) the cash provided by or used in its operating activities; (b) the cash provided by or used in its investing activities; (c) the cash provided by or used in its financing activities; (d) the net increase or decrease in cash; and (e) a reconciliation of a company's beginning cash balance to its ending cash balance. "Simultaneous" investing and financing activities that do not affect cash (such as the acquisition of land by the issuance of common stock) are reported in a separate schedule (or narrative explanation) accompanying the statement of cash flows.
8. Cash equivalents are short-term, highly liquid investments. When a company makes such investments and reports "Cash and Cash Equivalents" on its balance sheet, the statement of cash flows explains the change in cash and cash equivalents.

Cash Inflows and Outflows

9. A company's inflows of (increases in) cash can be divided into three categories: decreases in assets other than cash; increases in liabilities; and increases in stockholders' equity.

10. A company's outflows of (decreases in) cash can be divided into three categories: increases in assets other than cash; decreases in liabilities; and decreases in stockholders' equity.
11. Operating cash inflows are increases in stockholders' equity (i.e., retained earnings) due to revenues, adjusted for changes in certain current assets and certain current liabilities (related to the operating cycle), as well as changes in certain noncurrent assets or liabilities. Operating cash outflows are decreases in stockholders' equity (i.e., retained earnings) due to expenses, adjusted for changes in certain current assets and certain current liabilities (related to the operating cycle), as well as changes in certain noncurrent assets and liabilities.
12. Investing cash inflows are decreases in noncurrent assets and certain current assets (e.g., notes receivable, marketable securities). Investing cash outflows are increases in noncurrent assets and certain current assets (e.g., notes receivable, temporary investments).
13. Financing cash inflows are increases in noncurrent liabilities, stockholders' equity, and certain current liabilities (e.g., notes payable related to financing activities). Financing cash outflows are decreases in noncurrent liabilities, stockholders' equity, and certain current liabilities (e.g., notes payable and dividends payable).

Net Cash Flow from Operating Activities

14. A company's operating cycle is the average time taken to spend cash for inventory, process and sell the inventory, collect the accounts receivable, and convert them back into cash. Net income and the net cash flow within the operating cycle are unlikely to be the same because of differences between when the company receives and pays cash and when it records revenues and expenses.
15. GAAP allows two methods for calculating and reporting a company's net cash flow from operating activities. While both methods result in the same amount of net cash provided by operating activities, the FASB prefers the direct method. Under the direct method, a company deducts operating cash outflows from its operating cash inflows to determine the net cash flow from operating activities. The direct method does not "tie" a company's net income to the net cash provided by operating activities, or show how the changes in the company's current assets and current liabilities affected its operating cash flows. Consequently, GAAP requires that a company using the direct method also include a separate schedule reconciling net income to its operating cash flows.
16. Under the indirect method a company's net income is adjusted to its net cash flow from operating activities. That is, the indirect method converts income flows from an accrual basis to a cash flow basis. Many adjustments, involving increases and decreases in current assets and liabilities as well as noncurrent accounts, may be required. According to the FASB, a company may show the reconciliation of net income to the net cash provided by (or used in) operating activities either in the statement of cash flows or in a separate schedule. Most companies are currently using the indirect method.

Visual Inspection Method of Analysis

17. When the financial statements are not complex, a company may prepare the statement of cash flows by the seldom-used visual inspection method. The steps for preparation of the statement of cash flows using the visual inspection method are explained in Exhibit 22-3 of the text. Companies use the worksheet (spreadsheet) method most often, however, because it enables a company to analyze complex transactions and events in a concise format. The steps for preparation of the statement of cash flows using the worksheet (spreadsheet) method are explained in Exhibit 22-4 of the text.

18. Under either the visual inspection or the worksheet method, all of the changes in the assets (except cash), liabilities, and stockholders' equity accounts are accounted for and shown as either cash inflows or outflows for operating, investing, and financing activities. The difference between the total cash inflows and outflows recorded must equal the change in the Cash account.
19. Based on Examples 22-4, 22-5, and 22-6, note that:
- Depreciation expense and amortization expense, involving no outflows of cash, are added back to net income.
 - The decrease in inventories, representing a cash inflow because a company purchased less inventory than it recorded as cost of goods sold, is added to net income.
 - The increase in income taxes payable and interest payable, representing cash outflows less than the expenses recorded, are added to net income.
 - The increase in accounts receivable, representing a cash outflow because the company collected less cash than the credit sales it made, is subtracted from net income.
 - The increase in prepaid expenses, indicating that the company paid more cash than the expense it recorded, is subtracted from net income.
 - The decrease in accounts payable, representing a cash outflow greater than the expense recorded, is subtracted from net income.
 - The gain on the sale of land, which does not involve a cash flow, is subtracted from net income.
 - The cash flow from extraordinary items is reported as an investing or financing activity and is not included in net cash flows from operating activities.

Special Topics

20. When a company sells a depreciable asset, any cash that is received is classified as a cash inflow from an investing activity and any gain (loss) on the sale is subtracted from (added to) net income (if the indirect method is used) to correctly show the cash provided by operating activities.
21. When a company retires bonds, any cash paid is classified as a financing activity, and any gain or loss on the retirement is subtracted from (added to) net income (if the indirect method is used) to correctly show the cash provided by operating activities.
22. Companies using the indirect method must disclose interest paid and income tax paid in a separate schedule, narrative description, or notes to the financial statements.
23. A company is allowed the flexibility to provide the reconciliation of net income to the net cash flow from operating activities in a separate schedule accompanying the statement of cash flows.
24. The issuance of stock dividends is not considered a financing activity, and is not reported on the statement of cash flows.
25. Cash inflows and outflows from related investing and financing activities must be shown separately, not "netted" against each other.
26. A company may disclose simultaneous financing and investing activities involving both cash and noncash elements by (a) reporting the cash payment on the statement of cash flows and the noncash element on the schedule of financing and investing activities not affecting cash or (b) reporting both the cash and noncash elements on the statement of cash flows.

27. A company reports an increase (decrease) in the investment account due to the purchase (sale) of available-for-sale or held-to-maturity securities as a cash outflow (inflow) from an investing activity. However, the unrealized change in the market value of these securities (due to revaluation of the securities to fair value) is not included on the statement of cash flows. The company must account for these unrealized gains/losses on the worksheet as an adjustment of the allowance and unrealized increase/decrease accounts.
28. Any increase (decrease) in the investment account due to the purchase (sale) of trading securities is reported as a cash outflow (inflow) from an operating activity. Any unrealized holding loss (gain) on these trading securities is then added to (deducted from) net income to adjust net income from an accrual basis to a cash flow basis.
29. While a company reports any dividends paid as a cash outflow from financing activities, any dividends declared but not paid in the current year are not reported on the statement of cash flows for the current year.
30. A company must add the increase in compensation expense (related to compensatory share option plans) and subtract the decrease in the deferred tax asset from net income in the determination of net cash flows from operating activities.
31. A company with foreign operations must disclose the "reporting currency equivalent" of its "foreign currency" cash flows, and report the effects of exchange rate changes as a separate part of the reconciliation of the change in cash during the period.
32. The FASB has concluded that a cash flow per share amount should not be reported in a company's financial statements.
33. International accounting standards require companies to prepare a statement of cash flows. However, a company that uses the direct method does not have to also reconcile its net income to its operating cash flows. There is also more flexibility as to where certain cash flows (e.g., dividends paid) may be reported.

SELF-EVALUATION EXERCISES

True-False Questions

Determine whether each of the following statements is true or false.

- | | |
|---|---|
| 1. GAAP encourages but does not require that a company present a statement of cash flows. | Answer: False
A company is required to present a statement of cash flows for an accounting period along with its income statement and balance sheet. |
| 2. The presentation of the cash flows from financing and investing activities differ under the direct and indirect methods. | Answer: False
The presentation of the financing and investing cash flows is the same under either the direct or indirect methods. The presentation of the cash flows from operating activities does differ under the direct and indirect methods. |

3. Outflows of cash may be caused by decreases in liabilities or by decreases in owners' equity.

Answer: True

The decrease in a liability causes a decrease in cash because cash is paid to satisfy the liability. A decrease in owners' equity may be accompanied by a cash outflow if the decrease is due to the payment of dividends or the acquisition of treasury stock.

GAAP requires a company to report its cash flow per share on the face of the statement of cash flows.

4. The company is not allowed to report a cash flow per share amount in its financial statements because the FASB believes that the cash flow is not an alternative to income as an indicator of a company's performance.

Answer: False

5. "Financial flexibility" refers to the company's ability to meet its obligations as they come due.

Answer: False

Financial flexibility is a measure of the company's ability to take effective actions to change the amounts and timings of its cash flows. Liquidity is an indication of a company's ability to meet its obligations as they come due.

6. A company reports depreciation as a cash inflow from operating activities on the statement of cash flows prepared under the indirect method.

Answer: False

Depreciation is a noncash expense. Because depreciation is deducted in computing income but does not cause a cash outflow, depreciation is added to net income in the determination of net cash flow from operating activities.

7. Cash flows from extraordinary items are reported as cash flows from investing or financing activities, not as cash flows from operating activities.

Answer: True

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.

8. A company shows payments of dividends on its statement of cash flows as cash outflows from financing activities.

Answer: True

Financing activities include transactions involving obtaining resources from owners and providing them with a return on, and of, their investment. A dividend, a distribution to owners, is considered a return of an owner's investment and is included as a cash outflow from financing activities.

9. A company adds an increase in salaries payable to net income, and deducts an increase in inventory from net income, when converting net income to the net cash flow from operating activities under the indirect method.

Answer: True

An increase in salaries payable is, in effect, a "savings" of cash. Because an expense was incurred for the full amount of the salary but the cash outflow was less than the full amount of the salary, this cash "savings" must be added to net income to determine net cash flow from operating activities. An increase in inventory requires an outflow of cash in exchange for the inventory. Therefore, this outflow of cash must be deducted from net income to determine net cash flow from operating activities.

10. When a company sells equipment used in its operations, it reports the proceeds as a cash inflow from operating activities.

Answer: False

The proceeds received from selling property, plant, and equipment are reported as a cash inflow from investing activities.

11. Usually a company reports the effects on cash of changes in current assets and current liabilities as adjustments to net income in the net cash flow from operating activities section of its statement of cash flows using the indirect method.

Answer: True

A company's operating activities relate to the earnings activities of the company. Because changes in current assets and current liabilities usually relate to the operating cycle of a company, changes in these accounts normally affect net income and should be used to adjust net income in the determination of net cash flows from operating activities.

12. The issuance of a stock dividend is reported as a financing activity on the statement of cash flows.

Answer: False

A stock dividend is a noncash transaction that only affects stockholders' equity accounts. Therefore, a stock dividend is not reported on a company's statement of cash flows.

13. A company's cash outflows can be divided into three categories: increases in assets other than cash, decreases in liabilities, and increases in stockholders' equity.

Answer: False

A company's cash outflows can be divided into increases in assets other than cash, decreases in liabilities, and decreases in stockholders' equity.

14. Net income can be defined as the net cash flow within an operating cycle.

Answer: False

Net income is the result of the accrual accounting process. Net income and net cash flow usually vary because of differences in when a company records revenues and expenses and when it receives and pays cash.

15. The indirect method converts income flows from the accrual basis to the cash basis.

Answer: True

Because of differences in when a company records revenues and expenses and when it receives and pays cash, a company must adjust for these differences to convert accrual net income to net cash flow from operating activities. This adjustment can be accomplished by using the indirect method.

16. The collection of a loan and the acquisition of a building are examples of investing activities.

Answer: True

Investing activities include transactions involving acquiring property, plant, and equipment and collecting on loans made to others (e.g., collection of notes receivable).

17. Cash equivalents are not reported on a company's statement of cash flows.

Answer: False

If a company utilizes cash equivalents as part of its cash management procedures, the company will report "Cash and Cash Equivalents" as a line item on its balance sheet and will explain the change in cash and cash equivalents on its statement of cash flows.

18. Cash inflows from investing and financing activities are shown net of related cash outflows.

Answer: False

Cash inflows and cash outflows related to investing and financing activities are shown separately on the statement of cash flows.

19. Operating activities include all transactions and other events that are not investing and financing activities.

Answer: True

Operating activities is a "catch-all" category that includes all transactions and events that are not investing and financing activities.

Operating activities include cash receipts and cash payments relating to the earning activities of a company (generally resulting from transactions that enter into the determination of income).

20. Both international accounting standards and U.S. GAAP require a reconciliation of a company's net income to its operating cash flows when a cash flow statement is presented using the direct method.

Answer: False

International standards do not require a company using the direct method to reconcile its net income to its operating cash flows.

Multiple Choice Questions

Select the one best answer for each of the following questions.

1. Which of the following items should be shown in a separate schedule accompanying the statement of cash flows?

- (a) the cash provided by, or used in, investing activities
- (b) the net increase or decrease in cash
- (c) simultaneous investing and financing activities that do not affect cash
- (d) the net increase or decrease in accounts receivable

Answer: (c) simultaneous investing and financing activities that do not affect cash.

These simultaneous investing and financing activities do not affect cash (and, thus, can't be shown on a statement of cash flows) but generally have a significant impact on the future cash flows of a company. Because of this significant impact, these transactions are reported in a schedule (or narrative explanation) that accompanies the statement of cash flows.

Answers (a), (b), and (d) are items that are all reported in a company's statement of cash flows.

2. The Cooper Company had net income of \$20,000, an increase in accounts receivable of \$2,000, depreciation expense of \$5,500, a decrease in available-for-sale securities of \$750, a payment of \$10,000 for new equipment, and income tax expense (no taxes payable or deferred tax) of \$6,000. Cooper's net cash flow from operating activities was:
- (a) \$18,250.
 - (b) \$24,250.
 - (c) \$14,250.
 - (d) \$23,500.

Answer: (d) \$23,500.

Beginning with net income of \$20,000: the increase in accounts receivable of \$2,000 should be subtracted because it is the result of a smaller cash receipt relative to the sale that was recorded; and depreciation expense of \$5,500 should be added because it is a noncash expense that reduces net income. The resulting amount, \$23,500, represents cash flow from operating activities.

The \$750 decrease in available-for-sale securities should not be added to net income because a change in available-for-sale securities represents an investing activity, not an operating activity. The \$10,000 payment for equipment is not subtracted from net income because the purchase of equipment is an investing activity. The \$6,000 of income tax expense, while an operating activity, is already included in net income. Because there is no tax payable or deferred tax, the cash paid for taxes equals income tax expense and no adjustment is necessary.

3. Which of the following statements regarding the direct method of reporting the cash flows from operating activities is incorrect?
- (a) GAAP encourages the use of the direct method.
 - (b) The direct method "ties" a company's net income, on the accrual basis, to cash flows provided by operating activities.
 - (c) By presenting cash receipts separately from cash disbursements, the direct method may help users estimate future cash flows.
 - (d) Under the direct method a company reports its cash inflows from operating activities in three categories: collections from customers, interest and dividends collected, and other operating receipts.

Answer: (b) The direct method "ties" a company's net income, on the accrual basis, to cash flows provided by operating activities.

The indirect method, not the direct method, ties a company's accrual net income to its net cash flows from operating activities.

4. In 2011, the Hemingray Company had net income of \$450,000, a decrease in income taxes payable of \$30,000, an increase in accounts payable of \$15,000, and an increase in inventory of \$10,000. The company purchased a new factory building for \$250,000, repaid a note for \$75,000, and paid dividends of \$50,000. Hemingray's net cash flows from operating, financing, and investing activities (in that order) were:
- (a) \$465,000; \$(280,000); \$0.
 - (b) \$425,000; \$(125,000); \$(250,000).
 - (c) \$505,000, \$125,000; \$(280,000).
 - (d) \$455,000; \$(50,000); \$(295,000).

Answer (b) \$425,000; \$(125,000); \$(250,000).

Net cash flows from operating activities are calculated as: \$450,000 (net income) – \$30,000 (decrease in income tax payable) + \$15,000 (increase in accounts payable) – \$10,000 (decrease in inventory) = \$425,000. Net cash flows from financing activities are calculated as cash outflows for repayment of a note and dividends of (\$75,000) + (\$50,000) = (\$125,000). Cash flows from investing activities represent the cash paid for the purchase of a building of (\$250,000).

5. During the year, the Howard Company purchased a building for \$800,000 and sold land for \$500,000 (at a \$150,000 gain). An earthquake destroyed a factory with a cost of \$2,700,000 and a book value of \$1,000,000. Insurance proceeds for that factory, net of tax, were \$750,000. Net income reported for the year was \$500,000. The Howard Company's net cash flows from operating and investing activities were:
- (a) \$(150,000); \$150,000.
 - (b) \$750,000; \$(800,000).
 - (c) \$300,000; \$1,045,000.
 - (d) \$600,000; \$450,000.

Answer: (d) \$600,000; \$450,000.

Net cash flows from operating activities is computed by starting with net income of \$500,000. Because the entire \$500,000 proceeds from the sale of land is reported as a cash inflow from investing activities, the \$150,000 gain associated with the sale must be deducted from net income to avoid double-counting (and also because there is no cash effect associated with a gain). Because FASB Statement No. 95 requires extraordinary gains and losses to be reported as investing or financing activities, the \$250,000 extraordinary loss (difference between the book value of \$1,000,000 and the insurance proceeds of \$750,000) related to the factory should be added back to net income. The resulting amount, \$600,000, is the net cash flow from operating activities.

Net cash flow from investing activities is computed by taking the cash outflow from the purchase of the building (\$800,000), adding to it the cash receipt from the sale of land \$500,000, and then adding the insurance proceeds of \$750,000 received in relation to the factory. The resulting amount, \$450,000, is the net cash flow from investing activities.

6. The Herriott Company uses the direct method to report its cash flows from operating activities. Herriott's working papers showed the following:

Cost of goods sold	\$25,000
Interest expense	400
Salaries expense	10,000
Amortization of premium on bonds payable	50
Decrease in salaries payable	150
Decrease in inventories	3,000

At what amounts should Herriott report payments to suppliers, payments to employees, and payments of interest?

- (a) \$22,000; \$10,150; \$450
- (b) \$28,000; \$9,850; \$450
- (c) \$26,950; \$10,000; \$350
- (d) \$22,000; \$10,150; \$400

Answer: (a) \$22,000; \$10,150; \$450

The payment to suppliers is computed as \$25,000 (cost of goods sold) – \$3,000 (decrease in inventories) = \$22,000.

The payments to employees are computed as \$10,000 (salaries expense) + \$150 (decrease in salaries payable) = \$10,150.

The payments for interest are computed as \$400 (interest expense) + \$50 (amortization of premium on bonds payable) = \$450. Note that the amortization of the bond premium is a noncash item that reduces the amount of interest expense recorded. Therefore, it must be added back to interest expense to get the actual cash paid for interest.

7. Further information from Herriott's working papers is shown below:

Other revenues	\$ 4,000
Interest revenue	1,500
Sales revenue	40,000
Investment income recognized under the equity method	3,000
Decrease in accounts receivable	500
Increase in deferred revenue	400
Amortization of discount on investment in bonds	50

At what amounts should Herriott report collections from customers, interest and dividends collected, and other operating receipts?

- (a) \$40,500; \$1,450; \$1,400
 (b) \$39,500; \$1,550; \$600
 (c) \$44,500; \$1,500; \$(2,600)
 (d) \$44,900; \$5,450; \$3,000
8. The 2011 statement of cash flows of the Tucson Company shows net cash provided by operating activities in the amount of \$1,000,000. During the year, Tucson sold a building at a net gain of \$40,000. Inventory increased by \$10,000. Deferred income taxes decreased by \$1,000. The company paid dividends of \$30,000. Tucson's net income for 2011 was:
- (a) \$1,049,000.
 (b) \$951,000.
 (c) \$1,051,000.
 (d) \$951,000.

Answer: (a) \$40,500; \$1,450; \$1,400

The collections from customers is computed as \$40,000 (sales revenue) + \$500 (decrease in accounts receivable) = \$40,500.

Interest and dividends collected is computed as \$1,500 (interest revenue) – \$50 (amortization of discount on investment in bonds) = \$1,450. Note that the amortization of the discount on the investment is subtracted from interest revenue because the amortization is a noncash item that increased the amount of interest revenue. Because no cash was involved, it must be subtracted from interest revenue.

Other operating receipts are computed as \$4,000 (other revenues) – \$3,000 (investment income recognized under the equity method) + \$400 (increase in deferred revenue) = \$1,400. Note that the \$3,000 of equity method income is a noncash revenue that needed to be subtracted from other revenues to get the amount of cash received.

Answer: (c) \$1,051,000.

Working backward, you begin with the net cash provided by operating activities of \$1,000,000.

Because a gain is a noncash item that increases income, the \$40,000 gain on the sale of a building must be added back to cash flow. Additionally, the \$10,000 increase in inventory represents a cash outflow for the purchase of inventory that was not recorded in income. Therefore, it must be added back to net cash flow. The decrease in deferred income taxes of \$1,000 represents a cash outflow for taxes that must be added back to cash flow. Based on the above, net income was \$1,051,000. Note that the \$30,000 paid for dividends does not impact net income; it is reported as a cash outflow from a financing activity.

9. The Kelso Company's accounting records show the following information:

Proceeds from collection of accounts receivable	\$ 40,000
Proceeds from issuance of common stock	530,000
Purchase of factory equipment	400,000
Purchase of available-for-sale securities	100,000
Proceeds from sale of building	250,000
Gain on sale of building	60,000
Purchase of inventory	200,000
Payment of dividends on preferred stock	10,000

Kelso's net cash flows from investing and financing activities were:

- (a) \$15,000; \$(80,000).
 (b) \$(200,000); \$(520,000).
 (c) \$140,000; \$565,000.
 (d) \$(250,000); \$520,000.
10. Which of the following statements regarding the statement of cash flows is correct?
- (a) Under the indirect method, an extraordinary gain is added back to net income to determine the net cash flow from operating activities.
 (b) A subsidiary loss under the equity method is reported as an outflow of cash from investing activities.
 (c) The direct method does not show how the changes in the elements of a company's operating cycle affected its operating cash flows.
 (d) Equity transactions, including the acquisition of treasury stock and the issuance of stock dividends, are reported as flows of cash from financing activities.
11. Cash flows from extraordinary items are reported as:
- (a) investing activities.
 (b) financing activities.
 (c) either investing or financing activities.
 (d) neither investing nor financing activities.

Answer: (d) \$(250,000); \$520,000.

Net cash flow from investing activities is computed as: Cash outflow of (\$400,000) for purchase of factory equipment + (\$100,000) cash outflow from purchase of available-for-sale securities + \$250,000 proceeds from sale of building = (\$250,000) net cash outflow from investing activities.

Net cash flow from financing activities is computed as: \$530,000 cash inflow from issuance of common stock – \$10,000 cash outflow for payment of dividends = \$520,000 net cash inflow from financing activities.

Note that the collection of accounts receivable, the gain on the sale of the building, and the purchase of inventory are reported as operating activities.

Answer: (c) The direct method does not show how the changes in the elements of a company's operating cycle affected its operating cash flows.

Because the direct method computes cash inflows and cash outflows related to specific activities (e.g., collections from customers, payments to suppliers), it suffers from the criticism that it does not show how changes in the elements of a company's operating cycle affect its operating cash flows. However, the direct method may be more useful in estimating future cash flows.

Answer (a) is incorrect because, under the indirect method, an extraordinary gain is subtracted from net income to determine the net cash flow from operating activities. Answer (b) is incorrect because a loss under the equity method is reported as an operating activity. Answer (d) is incorrect because stock dividends affect only stockholder equity accounts and do not involve either an inflow or an outflow of cash. Therefore, stock dividends are not reported on the statement of cash flows.

Answer: (c) either investing or financing activities.

GAAP requires that a company report its cash flows from extraordinary items as investing or financing activities and exclude them from its net cash flows from operating activities.

Problem-Solving Strategies

Preparing a statement of cash flows can be done using either the visual inspection method or the worksheet method. The visual inspection method can be used when a company's financial statements are simple and when the relationships between the accounts can be easily analyzed. The worksheet method is helpful when the financial statements become more complex. The worksheet method will be used to illustrate the preparation of a statement of cash flows.

Strategy: Whether you choose to prepare a statement of cash flows using the visual inspection or the worksheet method, you need to be sure to keep track of the various accounts and the amounts that these accounts have been adjusted to ensure that you have completely accounted for all of the transactions. This can be done more formally with a worksheet or informally with t-accounts.

The following information was taken from the accounting records of Tiger Company.

	Account Balances	
	January 1, 2011	December 31, 2011
<i>Debits</i>		
Cash	\$ 25,000	\$ 20,000
Accounts Receivable (net)	50,000	65,000
Marketable Securities (at cost)	4,000	2,000
Allowance for Change in Value	2,000	500
Inventories	42,000	40,000
Prepaid Expenses	2,000	4,000
Land	50,000	70,000
Buildings and Equipment	300,000	350,000
Discount on Bonds Payable	<u>3,000</u>	<u>2,950</u>
	<u>\$478,000</u>	<u>\$554,450</u>
<i>Credits</i>		
Accumulated Depreciation	100,000	120,000
Accounts Payable	35,000	42,000
Salaries Payable	2,000	1,000
Interest Payable	5,000	9,000
Notes Payable, long-term	25,000	20,000
Bonds Payable, long-term	35,000	50,000
Common Stock, \$10 par	150,000	200,000
Additional paid-in capital	60,000	60,000
Unrealized increase in value of marketable securities	2,000	500
Retained Earnings	<u>64,000</u>	<u>51,950</u>
	<u>\$478,000</u>	<u>\$554,450</u>

Additional information for the year:

- | | |
|---------------------------------------|-----------------|
| a. Sales | \$ 500,000 |
| Cost of Goods Sold | (250,000) |
| Salary Expense | (3,000) |
| Other Operating Expenses | (164,000) |
| Depreciation Expense | (60,000) |
| Loss on Sale of Equipment | (5,000) |
| Gain on Sale of Marketable Securities | 1,000 |
| Dividend Revenue | 3,600 |
| Interest Expense | (4,050) |
| Income Tax Expense | <u>(10,600)</u> |
| Net Income | <u>\$ 7,950</u> |
- b. Equipment with a cost of \$50,000 and a book value of \$10,000 was sold for \$5,000.
- c. New equipment was purchased for \$100,000.
- d. Cash dividends declared and paid totaled \$20,000.
- e. Purchased land through the issuance of a long-term note in the amount of \$20,000.
- f. Sold marketable securities for cash. At January 1, 2011, these securities had a cost of \$2,000 and a fair market value of \$3,000. The remaining marketable securities had a fair value of \$2,500 on December 31, 2011.

Indirect Method

A company can use either the **indirect method** or the **direct method** to report its net cash flow from operating activities. Under the indirect method, a company's net income is adjusted to eliminate noncash transactions and to include the changes in current assets or current liabilities involved in the operating cycle that affect a company's cash flows differently than they affect its net income. Under the direct method, a company computes operating cash inflows and operating cash outflows directly from individual accounts presented on the income statement, after appropriate adjustments for noncash transactions and changes in current assets or current liabilities that affect a company's cash flows differently than they affect its net income.

Strategy: Whether you use the direct or indirect method, your final result, net cash flow from operating activities, will be the same.

Strategy: The indirect and direct methods are only used for the calculation of net cash flow from operating activities. The computation of cash flow from investing activities and the cash flow from financing activities is not affected by the method used to compute net cash flow from operating activities.

Below is a worksheet for Tiger Company used to prepare a statement of cash flows using the **indirect method**.

Tiger Company Cash Flow Worksheet For Year Ended Dec. 31, 2011			
Account Title	Increase (Decrease)	Worksheet Entries	
		Debit	Credit
<i>Debits</i>			
Cash	\$ (5,000)		(s) 5,000
<i>Noncash Accounts</i>			
Accounts Receivable (net)	15,000	(b) 15,000	
Marketable Securities (at cost)	(2,000)		(h) 2,000
Allowance for Change in Value	(1,500)		(h) 1,000 (i) 500
Inventories	(2,000)		(c) 2,000
Prepaid Expenses	2,000	(d) 2,000	
Land	20,000	(j-1) 20,000	
Buildings and Equipment	50,000	(l) 100,000	(k) 50,000
Discount on Bonds Payable	<u>(50)</u>		(n) 50
	<u>76,450</u>		
<i>Credits</i>			
Accumulated Depreciation	20,000	(k) 40,000	(m) 60,000
Accounts Payable	7,000		(e) 7,000
Salaries Payable	(1,000)	(f) 1,000	
Interest Payable	4,000		(g) 4,000
Notes Payable, long-term	(5,000)	(p) 25,000	(j-2) 20,000
Bonds Payable, long-term	15,000		(o) 15,000
Common Stock, \$10 par	50,000		(q) 50,000
Additional paid-in capital	0		
Unrealized increase in value of marketable securities	(1,500)	(h) 1,000 (i) 500	
Retained Earnings	<u>(12,050)</u>	(r) <u>20,000</u>	(a) <u>7,950</u>
	<u>76,450</u>	<u>224,500</u>	<u>224,500</u>
Net Cash Flow From Operating Activities			
Net Income		(a) 7,950	
Increase in Accounts Receivable			(b) 15,000
Decrease in Inventories		(c) 2,000	
Increase in Prepaid Expenses			(d) 2,000
Increase in Accounts Payable		(e) 7,000	
Decrease in Salaries Payable			(f) 1,000
Increase in Interest Payable		(g) 4,000	
Gain on Sale of Marketable Securities			(h) 1,000
Loss on Sale of Equipment		(k) 5,000	
Depreciation Expense		(m) 60,000	
Amortization of Bond Discount		(n) 50	

Cash Flows From Investing Activities			
Proceeds from Sale of Marketable Securities		(h) 3,000	
Proceeds from Sale of Equipment		(k) 5,000	
Purchase of Equipment			(l) 100,000
Cash Flows From Financing Activities			
Issuance of Bonds Payable		(o) 15,000	
Retired Long-Term Note			(p) 25,000
Issue Common Stock		(q) 50,000	
Paid Dividends			(r) 20,000
Investing and Financing Activities Not Affecting Cash			
Acquisition of Land through Issuance of Long-Term Note			(j-1) 20,000
Issuance of Long-Term Note for Land		(j-2) 20,000	
Net Increase in Cash		(s) 5,000	
Totals		<u>184,000</u>	<u>184,000</u>

To begin the preparation of a statement of cash flows, the column headings (as shown above), the titles of the balance sheet accounts, and the change in the account balance need to be entered into the worksheet (debits first, followed by credits). Directly below these accounts, add the headings that will appear on the statement of cash flows (along with a heading for noncash activities). Be sure to leave sufficient room beneath each heading to list the various cash flows

Strategy: If you will be preparing multiple statement of cash flows (e.g., for different problems when you do your homework), it may be helpful to prepare and save a template so that you will not have to rewrite the worksheet headings every time you begin a new problem.

Once the worksheet is set up, you will begin reconstructing the journal entries that caused changes in the various balance sheet accounts. Because you are using the indirect method, start with net income. The recreated journal entry will appear as a debit to the caption "Net Income" under the heading "Net Cash Flow from Operating Activities" and a credit to Retained Earnings (denoted as (a) above).

Strategy: As each "journal entry" is recreated debits must equal credits. For all cash transactions, there will be at least one entry to the statement of cash flow headings and one entry to the balance sheet accounts.

Next you will account for the changes in the current assets (except cash) and the current liability accounts. Each of these adjustments (additions or subtractions) is listed under the heading "Net Cash Flow from Operating Activities." These adjustments are denoted as (b) through (g) above.

Strategy: Inflows of cash are debits to the statement of cash flows portion of the worksheet while outflows of cash are credits.

Some current accounts are more difficult to analyze and require additional information (e.g., marketable securities). For these accounts, it is necessary to use the additional information provided in the problem.

Strategy: When additional information is given, it is often useful to reconstruct the actual journal entry (or entries) made by the company. In this case, the journal entries to record the sale of marketable securities would be:

Cash	3,000	
Marketable Securities		2,000
Gain on Sale of Marketable Securities		1,000

and an entry to record the reclassification adjustment (see Chapter 15) as follows:

Unrealized Increase in Value of Marketable Securities	1,000	
Allowance for Change in Value		1,000

The effects of this journal entry are shown in (h) above. Note that the Gain on Sale of Marketable Securities is a noncash transaction that increases net income. Because we are using the indirect method to prepare a statement of cash flows, the gain is deducted from net income in computing Net Cash Flows from Operating Activities. After posting these journal entries, we have not fully explained the decrease in the Allowance for Change in Value. Because we are given no further information regarding purchases or sales of marketable securities, we must assume that the \$500 difference is due to the fact that this difference is due entirely to a decrease in the fair value of the security. The appropriate journal entry to record this decrease in fair value is:

Unrealized Increase in Value of Marketable Securities	500	
Allowance for Change in Value		500

This journal entry is reflected as (i) above.

Strategy: The reconstructed journal entries must fully explain the change in the account balance. If it does not, then you may be required to assume the most logical cause of the change in the account balance.

Next, each noncurrent account must be reviewed to determine the journal entry responsible for its change. For the change in land, the additional information tells us that the land was purchased through the issuance of a long-term note. This transaction does not affect cash but is reported in a separate schedule (denoted as (j-1) and (j-2) above).

Strategy: In determining the journal entry responsible for the change in the noncurrent accounts, it is critical that you identify whether the transaction involves an operating, investing, or financing activity.

The change in equipment of \$50,000 was due to the net effect of two transactions, the sale of equipment and the purchase of additional equipment. The journal entry for the sale of equipment, denoted by (k) above, is:

Cash	5,000	
Accumulated Depreciation	40,000	
Loss on Sale of Equipment	5,000	
Equipment		50,000

Note that the loss is a noncash account that reduces net income and must be added back to net income to determine Net Cash Flow from Operating Activities. The cash proceeds are reported as an inflow of cash from an investing activity. The journal entry for the purchase of equipment, reflected as (l) above, is:

Equipment	100,000	
Cash		100,000

The cash paid is reported as an outflow of cash from an investing activity. Note that after this journal entry is made, the balance in Accumulated Depreciation is not fully explained. The \$60,000 difference can be assumed to be caused by depreciation expense (reflected as (m) above). Because depreciation expense is a noncash account that decreases net income, it must be added back to net income in the computation of Net Cash Flow from Operating Activities.

The final decrease in the debit accounts that has not been explained is a \$50 decrease in bonds payable. Because no bonds were retired, the \$50 decrease can be assumed to be due to the amortization of a bond discount. The amortization of a bond discount is a noncash activity that increases interest expense (reduces income) and must be added back to net income to compute Net Cash Flow from Operating Activities. This is denoted as (n) above. Also note that the increase in Bonds Payable of \$15,000 can be assumed to be due to the issuance of bonds, which is a financing activity, denoted as (o) above.

Strategy: When accounts are related, like bonds payable and discount on bonds payable, it is helpful to reconstruct the cash flow effects for both of these accounts at the same time.

The change in the Note Payable is (\$5,000). After considering the effect of (j-2), which increased note payable by \$20,000, there is a \$25,000 change that still needs to be explained. Because we are given no further information regarding the change in the note payable balance, the \$25,000 can be assumed to be a retirement of a note payable, which is reported as a financing activity (denoted by (p) above).

Because common stock increased by \$50,000 with no change in additional paid-in capital, the \$50,000 increase can be assumed to be caused by the issuance of \$50,000 of common stock at par value, which is a financing activity (denoted by (q) above).

Dividends declared and paid, a financing activity, are denoted by (r) above.

A final worksheet entry is needed to record the decrease in cash and bring the debit and credit column totals on the worksheet into balance. The change in cash can be determined as the difference between the debits and credits in the statement of cash flow portion of the worksheet. This amount is determined to be \$5,000 and is reflected as (s) above.

Strategy: Once you have analyzed all of the balance sheet accounts, you should have explained **all** of the changes in each account.

Supplemental information for 2011:

Flint purchased a parcel of land for \$40,000. As payment the company issued 300 shares of \$100 par common stock.

Flint paid for new equipment costing \$48,000 and sold obsolete equipment at a gain of \$6,000. The obsolete equipment had a cost of \$15,000 and a book value of \$11,000.

Flint paid dividends of \$4,000.

The company's depreciation expense for the year was \$6,000 for equipment and \$5,000 for buildings.

Flint issued ten shares of \$100 par common stock as a stock dividend. The market value of the stock at the date of issue was \$150 per share.

A volcano destroyed a building with a cost of \$350,000 and accumulated depreciation of \$200,000 (an extraordinary event). Insurance proceeds for the building were \$100,000.

Flint's net income for the year was \$900.

2. The information below was taken from the records of the Walker Company for the year ended December 31, 2011.

Acquisition of building	\$ 200,000
Acquisition of land	30,000
Bond payable premium amortization	3,000
Cash balance, January 1, 2011	38,000
Cash balance, December 31, 2011	113,000
Collections from customers	627,000
Common stock issued to convert bonds	50,000
Depreciation expense	25,000
Dividends declared	25,000
Extraordinary loss on building destroyed by earthquake	30,000
Gain on sale of land	15,000
Income taxes paid	55,000
Increase in income taxes payable	4,000
Increase in inventories	15,000
Decrease in prepaid expenses	4,000
Insurance proceeds from building destroyed by earthquake	115,000
Interest received on short-term investments	5,000
Miscellaneous operating expenses paid	1,500
Net income	300,000
Patent amortization expense	10,000
Payments to employees	41,000
Payments to suppliers	194,500
Payment to retire bonds	250,000
Sale of land	100,000
Sales	2,500,000

- (a) Prepare a statement of cash flows for the Walker Company, using the indirect method to present cash flows from operating activities.
- (b) Prepare the cash flows from operating activities section of the statement of cash flows, using the direct method.
- (c) Compute the cash flow from operations to sales ratio and the profit margin ratio for 2011.

Answers to Test Your Knowledge

1.

Flint Company			
Cash Flow Worksheet			
For Year Ended Dec. 31, 2011			
Account Titles	Increase (Decrease)	Worksheet Entries	
		Debit	Credit
<i>Debits</i>			
Cash	\$ 114,000	(k) 114,000	
<i>Noncash Accounts</i>			
Accounts Receivable (net)	6,000	(c) 6,000	
Inventories	3,200	(e) 3,200	
Land	40,000	(i) 40,000	
Buildings	(350,000)		(m) 350,000
Equipment	<u>33,000</u>	(g) 48,000	(d) 15,000
Totals	<u>\$ 153,800</u>		
<i>Credits</i>			
Accumulated Depreciation:			
Equipment	2,000	(d) 4,000	(b) 6,000
Accumulated Depreciation:			
Buildings	(195,000)	(m) 200,000	(b) 5,000
Accounts Payable	1,500		(l) 1,500
Salaries Payable	800		(f) 800
Common Stock, \$100 par	31,000		(j) 30,000 (n) 1,000
Additional Paid-in Capital	10,500		(j) 10,000 (n) 500
Retained Earnings	<u>(4,600)</u>	(h) 4,000 (n) 1,500	(a) 900
Totals	<u>\$ (153,800)</u>		
Net Cash Flow From Operating Activities			
Net Income		(a) 900	
Add: Depreciation Expense		(b) 11,000	
Increase in Salaries Payable		(f) 800	
Increase in Accounts Payable		(l) 1,500	
Extraordinary Loss		(m) 50,000	
Less: Increase in Accounts Receivable			(c) 6,000
Gain on Sale of Equipment			(d) 6,000
Increase in Inventory			(e) 3,200
Cash Flows From Investing Activities			
Proceeds from Sale of Equipment		(d) 17,000	
Payment for Purchase of Equipment			(g) 48,000
Proceeds from building destroyed by Volcano		(m) 100,000	
Cash Flows From Financing Activities			
Payment of Dividends			(h) 4,000
Investing and Financing Activities Not Affecting Cash			
Acquisition of Land by Issuance of Common Stock			(i) 40,000
Issuance of Common Stock for Land		(j) 40,000	
Net Increase in Cash			(k) 114,000
Totals		<u>221,200</u>	<u>221,200</u>

2.

(a)

WALKER COMPANY
Statement of Cash Flows
For Year Ended December 31, 2011

Net Cash Flow From Operating Activities		
Net income	\$ 300,000	
Adjustments for differences between income flows and cash flows from operating activities:		
Add: Depreciation expense	25,000	
Increase in income taxes payable	4,000	
Extraordinary loss from earthquake	30,000	
Patent amortization expense	10,000	
Decrease in prepaid expenses	4,000	
Less: Increase in inventories	(15,000)	
Gain on sale of land	(15,000)	
Bond premium amortization	<u>(3,000)</u>	
Net cash provided by operating activities		\$ 340,000
Cash Flows From Investing Activities		
Payment for purchase of building	\$(200,000)	
Payment for purchase of land	(30,000)	
Proceeds from building destroyed by earthquake	115,000	
Proceeds from sale of land	<u>100,000</u>	
Net cash used for investing activities		(15,000)
Cash Flows From Financing Activities		
Payment to retire bonds	<u>\$(250,000)</u>	
Net cash used for financing activities		<u>(250,000)</u>
Net Increase in Cash (see Schedule 1)		\$ 75,000
Cash, January 1, 2011		<u>38,000</u>
Cash, December 31, 2011		<u>\$ 113,000</u>
Schedule 1: Investing and Financing Activities Not Affecting Cash		
Financing Activities		
Conversion of bonds to common stock	\$ (50,000)	
Issuance of common stock to convert bonds	50,000	

(b) Cash Flows From Operating Activities		
Cash Inflows:		
Collections from customers	\$ 627,000	
Interest collected	<u>5,000</u>	
Cash inflows from operating activities	\$ 632,000	
Cash Outflows:		
Payments to suppliers	\$(194,500)	
Payments to employees	(41,000)	
Other operating payments	(1,500)	
Payments of income taxes	<u>(55,000)</u>	
Cash outflows from operating activities		<u>(292,000)</u>
Net cash provided by operating activities		<u>\$ 340,000</u>

(c) $\frac{\text{Cash Flow from Operations}}{\text{Sales}} = \frac{\$340,000}{\$2,500,000} = 13.6\%$

$\frac{\text{Net Income}}{\text{Sales}} = \frac{\$300,000}{\$2,500,000} = 12\%$