

CHAPTER 12

Statement of Cash Flows

Learning Objectives

1. Indicate the usefulness of the statement of cash flows.
2. Distinguish among operating, investing, and financing activities.
3. Explain the impact of the product life cycle on a company's cash flows.
4. Prepare a statement of cash flows using the indirect method.
5. Use the statement of cash flows to evaluate a company.
- *6. Prepare a statement of cash flows using the direct method.

Summary of Questions by Learning Objectives and Bloom's Taxonomy

Item	LO	BT	Item	LO	BT	Item	LO	BT	Item	LO	BT	Item	LO	BT
Questions														
1.	1	C	6.	2	K	11.	2	C	16.	4	C	21.	6*	K
2.	1	C	7.	4	C	12.	4	C	17.	1	K	22.	6*	AP
3.	2	C	8.	3	K	13.	4	C	18.	2	C	23.	6*	C
4.	2	K	9.	3	C	14.	4	C	19.	5	C			
5.	2	C	10.	4, 6*	C	15.	4	K	20.	6*	C			
Brief Exercises														
1.	2	K	4.	3	C	7.	4	AP	10.	5	AP	13.	6*	AP
2.	2	C	5.	4	AP	8.	4	AN	11.	5	AP	14.	6*	AP
3.	2	AP	6.	4	AP	9.	5	AP	12.	5	AN	15.	6*	AP
Do It! Review Exercises														
1.	2	C	2.	4	AP	3.	5	AP						
Exercises														
1.	2	C	4.	4	AP	7.	4	AN	10.	5	AN	13.	6*	AP
2.	2	C	5.	4	AP	8.	4, 5	AP	11.	6*	AP	14.	6*	AP
3.	3	C	6.	4	AP	9.	5	AN	12.	6*	AP	15.	6*	AN
Problems: Set A														
1.	2	C	4.	6*	AP	7.	4, 5	AP	9.	4	AP	11.	4	AP
2.	4	AN	5.	4	AP	8.	5, 6*	AP	10.	6*	AP	12.	5	C
3.	4	AP	6.	6*	AP									
Problems: Set B														
1.	2	C	4.	6*	AP	7.	4, 5	AP	9.	4	AP	11.	4	AP
2.	4	AN	5.	4	AP	8.	5, 6*	AP	10.	6*	AP	12.	5	C
3.	4	AP	6.	6*	AP									

Continuing Cookie Solutions for this chapter are available online.

ASSIGNMENT CHARACTERISTICS TABLE

Problem Number	Description	Difficulty Level	Time Allotted (min.)
1A	Distinguish among operating, investing, and financing activities.	Simple	10–15
2A	Determine cash flow effects of changes in equity accounts.	Simple	10–15
3A	Prepare the operating activities section—indirect method.	Simple	20–30
*4A	Prepare the operating activities section—direct method.	Simple	20–30
5A	Prepare the operating activities section—indirect method.	Simple	20–30
*6A	Prepare the operating activities section—direct method.	Simple	20–30
7A	Prepare a statement of cash flows—indirect method, and compute cash-based ratios.	Moderate	40–50
*8A	Prepare a statement of cash flows—direct method, and compute cash-based ratios.	Moderate	40–50
9A	Prepare a statement of cash flows—indirect method.	Moderate	40–50
*10A	Prepare a statement of cash flows—direct method.	Moderate	40–50
11A	Prepare a statement of cash flows—indirect method.	Moderate	40–50
12A	Identify the impact of transactions on ratios.	Moderate	25–35
1B	Distinguish among operating, investing, and financing activities.	Simple	10–15
2B	Determine cash flow effects of changes in plant asset accounts.	Simple	10–15
3B	Prepare the operating activities section—indirect method.	Simple	20–30
*4B	Prepare the operating activities section—direct method.	Simple	20–30
5B	Prepare the operating activities section—indirect method.	Simple	20–30
*6B	Prepare the operating activities section—direct method.	Simple	20–30
7B	Prepare a statement of cash flows—indirect method, and compute cash-based ratios.	Moderate	40–50

ASSIGNMENT CHARACTERISTICS TABLE (Continued)

Problem Number	Description	Difficulty Level	Time Allotted (min.)
*8B	Prepare a statement of cash flows—direct method, and compute cash-based ratios.	Moderate	40–50
9B	Prepare a statement of cash flows—indirect method.	Moderate	40–50
*10B	Prepare a statement of cash flows—direct method.	Moderate	40–50
11B	Prepare a statement of cash flows—indirect method.	Moderate	40–50
12B	Identify the impact of transactions on ratios.	Moderate	25–35

ANSWERS TO QUESTIONS

1. (a) The statement of cash flows reports the cash receipts and cash payments from operating, investing, and financing activities during a period in a format that reconciles the beginning and ending cash balances.

(b) Disagree. The statement of cash flows is required. It is the fourth basic financial statement.
2. The statement of cash flows answers the following questions about cash: (a) Where did the cash come from during the period? (b) What was the cash used for during the period? and (c) What was the change in the cash balance during the period?
3. The three activities are:
Operating activities include the cash effects of transactions that create revenues and expenses and thus enter into the determination of net income.
Investing activities include: (a) purchasing and disposing of investments and productive long-lived assets and (b) lending money and collecting loans.
Financing activities include: (a) obtaining cash from issuing debt and repaying amounts borrowed and (b) obtaining cash from stockholders, repurchasing shares, and paying them dividends.
4. (a) The sources of cash (inflows) in the statement of cash flows come from:
 - (1) Operating activities
 - i. Sale of goods or services
 - ii. Interest and dividends received
 - (2) Investing activities
 - i. Sale of property, plant, and equipment
 - ii. Sale of investments in other entities' securities
 - iii. Collection of principal on loans to other entities
 - (3) Financing activities
 - i. Sale of common stock
 - ii. Issuance of debt (bonds and notes)
(b) The uses of cash (outflows) in the statement of cash flows come from:
 - (1) Operating activities
 - i. Payments to suppliers for inventory
 - ii. Payments to employees for services
 - iii. Payments to government for taxes
 - iv. Payments to lenders for interest
 - v. Payments to others for expenses
 - (2) Investing activities
 - i. Purchase of property, plant, and equipment
 - ii. Purchase of investments in other entities' securities
 - iii. Making loans to other entities

Questions Chapter 12 (Continued)

- (3) Financing activities
 - i. Payment of cash dividends to stockholders
 - ii. Redeeming principal of long-term debt
 - iii. Payment to reacquire capital stock (treasury stock)
- 5. The statement of cash flows presents investing and financing activities so that even noncash transactions of an investing and financing nature are disclosed in the financial statements. If they affect financial conditions significantly, the FASB requires that they be disclosed in either a separate schedule at the bottom of the statement of cash flows or in a separate note or supplementary schedule to the financial statements.
- 6. Examples of significant noncash activities are: (1) issuance of stock for assets, (2) conversion of bonds into common stock, (3) issuance of bonds or notes for assets, and (4) noncash exchanges of property, plant, and equipment.
- 7. Comparative balance sheets, a current income statement, and certain transaction data all provide information necessary for preparation of the statement of cash flows. Comparative balance sheets indicate how assets, liabilities, and equities have changed during the period. A current income statement provides information about the amount of cash provided or used by operations. Certain transactions provide additional detailed information needed to determine how cash was provided or used during the period.
- 8. (a) The phases of the corporate life cycle are the introductory phase, growth phase, maturity phase, and decline phase.
(b) During the introductory phase, net cash provided by operating and investing activities would be expected to be negative, and cash from financing would be positive.

During the growth phase, a company would be expected to show some small amounts of cash from operations while continuing to show negative cash from investing and positive cash from financing.

During the maturity phase, net cash provided by operating, investing, and financing activities would all be expected to be positive while in the decline phase, net cash provided by operating and investing activities would continue to be positive while cash from financing would be negative.

- 9. Tootsie Roll has positive net cash provided by operating activities that exceeds its net income. Net cash provided by operating exceeded its investing needs and it retired shares of stock and paid dividends. Tootsie Roll appears to be in the middle to late maturity phase.
- 10. The advantage of the **direct method** is that it presents the major categories of cash receipts and cash payments in a format that is similar to the income statement and familiar to statement users. Its principal disadvantage is that the necessary data can be expensive and time-consuming to accumulate.

The advantage of the **indirect method** is it is often considered easier to prepare, and it provides a reconciliation of net income to net cash provided by operating activities. It also tends to reveal less company information to competitors. Its primary disadvantage is the difficulty in understanding the adjustments that comprise the reconciliation.

Both methods are acceptable but the FASB expressed a preference for the direct method. However, the indirect method is the overwhelming favorite of companies.

Questions Chapter 12 (Continued)

11. When total cash inflows exceed total cash outflows, the excess is identified as a “net increase in cash” near the bottom of the statement of cash flows.
12. The indirect method involves converting accrual net income to net cash provided (used) by operating activities. This is done by starting with accrual net income and adjusting for items that do not affect cash. Examples of adjustments include depreciation and other noncash expenses, gains and losses on the sale of noncurrent assets, and changes in the balances of current asset and current liability accounts from one period to the next.
13. It is necessary to convert accrual basis net income to cash basis income because the unadjusted net income includes items that do not provide or use cash. An example would be an increase in accounts receivable. If accounts receivable increased during the period, revenues reported on the accrual basis would be higher than the actual cash revenues received. Thus, accrual basis net income must be adjusted to reflect the net cash provided by operating activities.
14. A number of factors could have caused an increase in cash despite the net loss. These are (1) high cash revenues relative to low cash expenses; (2) sales of property, plant, and equipment; (3) sales of investments; (4) issuance of debt or capital stock, and (5) differences between cash and accrual accounting, e.g. depreciation.
15. Student answers will vary, however the five items selected should come from the following list:
Depreciation/amortization/depletion expense.
Gain or loss on disposal of a noncurrent asset.
Increase/decrease in specific current assets.
Increase/decrease in specific current liabilities.
16. Under the indirect method, depreciation is added back to net income to reconcile net income to net cash provided (used) by operating activities because depreciation is an expense but not a cash payment.
17. The statement of cash flows is useful because it provides information to the investors, creditors, and other users about: (1) the company’s ability to generate future cash flows, (2) the company’s ability to pay dividends and meet obligations, (3) the reasons for the difference between net income and net cash provided by operating activities, and (4) the cash and noncash financing and investing transactions during the period.
18. This transaction is reported in the note or schedule entitled “Noncash investing and financing activities” as follows: “Acquired land through issuance of common stock, \$1,700,000.”
19. (a) The current ratio is an accrual-based ratio that measures liquidity while the current cash debt coverage is a cash-based ratio that measures liquidity.

(b) Solvency can be measured by the debt to assets ratio (accrual-based) or the cash debt coverage (cash-based).
- *20. Net cash provided (used) by operating activities under the direct approach is the difference between cash revenues and cash expenses. The direct approach adjusts the revenues and expenses directly to reflect the cash basis. This results in cash net income, which is equal to “net cash provided by operating activities.”

Questions Chapter 12 (Continued)

*21. (a) Cash receipts from customers = Revenues from sales $\begin{cases} + \text{Decrease in accounts receivable} \\ - \text{Increase in accounts receivable} \end{cases}$

(b) Purchases = Cost of goods sold $\begin{cases} + \text{Increase in inventory} \\ - \text{Decrease in inventory} \end{cases}$

Cash payments to suppliers = Purchases $\begin{cases} + \text{Decrease in accounts payable} \\ - \text{Increase in accounts payable} \end{cases}$

*22. Sales revenue	\$2,000,000
Add: Decrease in accounts receivable	<u>150,000</u>
Cash receipts from customers.....	<u>\$2,150,000</u>

*23. Depreciation expense is not listed in the direct method operating activities section because it is not a cash flow item—it does not affect cash.

SOLUTIONS TO BRIEF EXERCISES

BRIEF EXERCISE 12-1

- (a) Cash inflow from financing activity, \$200,000.
- (b) Cash outflow from investing activity, \$180,000.
- (c) Cash inflow from investing activity, \$20,000.
- (d) Cash outflow from financing activity, \$50,000.

BRIEF EXERCISE 12-2

- | | |
|-------------------------|-------------------------|
| (a) Investing activity. | (d) Operating activity. |
| (b) Investing activity. | (e) Financing activity. |
| (c) Financing activity. | (f) Financing activity. |

BRIEF EXERCISE 12-3

Cash flows from financing activities

Proceeds from issuance of bonds payable	\$300,000
Payment of dividends	<u>(40,000)</u>
Net cash provided by financing activities	<u>\$260,000</u>

BRIEF EXERCISE 12-4

- (a) Net cash provided by operating activities would be lower than net income during the growth phase because inventory must be purchased for future projected sales. Since sales during the growth phase are projected to be increasing, inventory purchases must increase and inventory expensed on an accrual basis would be less than inventory purchased on a cash basis. Also, collections on accounts receivable would lag behind sales; thus, accrual sales would exceed cash collections during the period.
- (b) Cash from investing is often positive during the late maturity phase and the decline phase because the firm may sell off excess long-term assets that are no longer needed for productive purposes.

BRIEF EXERCISE 12-5

Net cash provided by operating activities is \$2,730,000. Using the indirect approach, the solution is:

Net income		\$2,500,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$160,000	
Decrease in accounts receivable.....	350,000	
Decrease in accounts payable.....	<u>(280,000)</u>	<u>230,000</u>
Net cash provided by operating activities.....		<u>\$2,730,000</u>

BRIEF EXERCISE 12-6

Cash flows from operating activities

Net income		\$280,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$70,000	
Loss on disposal of plant assets.....	<u>28,000</u>	<u>98,000</u>
Net cash provided by operating activities.....		<u>\$378,000</u>

BRIEF EXERCISE 12-7

Net income		\$186,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Decrease in accounts receivable	\$80,000	
Increase in prepaid expenses.....	(28,000)	
Increase in inventories.....	<u>(40,000)</u>	<u>12,000</u>
Net cash provided by operating activities		<u>\$198,000</u>

BRIEF EXERCISE 12-8

Original cost of equipment sold	\$22,000
Less: Accumulated depreciation.....	<u>5,100</u>
Book value of equipment sold	16,900
Less: Loss on disposal of equipment.....	<u>3,500</u>
Cash flow from sale of equipment	<u>\$13,400</u>

BRIEF EXERCISE 12-9

(a) Free cash flow = $\$89,303,000 - \$25,823,000 - \$0 = \$63,480,000$

(b) Current cash debt coverage = $\$89,303,000 \div \$251,522,000 = .36$ times

(c) Cash debt coverage = $\$89,303,000 \div \$286,214,500 = .31$ times

BRIEF EXERCISE 12-10

(a) Free cash flow = $\$412,000 - \$200,000 - \$0 = \$212,000$

(b) Current cash debt coverage = $\$412,000 \div \$150,000 = 2.7$ times

(c) Cash debt coverage = $\$412,000 \div \$225,000 = 1.8$ times

BRIEF EXERCISE 12-11

$$\text{Free cash flow} = (\$104,539,000) - \$79,330,000 = (\$183,869,000)$$

BRIEF EXERCISE 12-12

Free cash flow is net cash provided by operating activities less capital expenditures and cash dividends paid. For Unruh Inc. this would be \$332,000 ($\$734,000 - \$310,000 - \$92,000$). Since it has positive free cash flow that far exceeds its dividend, an increase in the dividend might be possible. However, other factors should be considered. For example, it must have adequate retained earnings, and it should be convinced that a larger dividend can be sustained over future years. It should also use the free cash flow to expand its operations or pay down its debt.

*BRIEF EXERCISE 12-13

$$\text{Receipts from customers} = \text{Sales revenue} \begin{cases} + \text{ Decrease in accounts receivable} \\ - \text{ Increase in accounts receivable} \end{cases}$$

$$\$1,317,060,000 = \$1,244,023,000 + \$73,037,000 \text{ (Decrease in accounts receivable)}$$

*BRIEF EXERCISE 12-14

$$\text{Cash payment for income taxes} = \text{Income Tax Expense} \begin{cases} + \text{ Decrease in income taxes payable} \\ - \text{ Increase in income taxes payable} \end{cases}$$

$$\$119,000,000 = \$370,000,000 - \$251,000,000^*$$

$$*\$528,000,000 - \$277,000,000 = \$251,000,000 \text{ (Increase in income taxes payable)}$$

*BRIEF EXERCISE 12-15

$$\text{Cash payments for operating expenses} = \text{Operating expenses, excluding depreciation} \begin{cases} + \text{ Increase in prepaid expenses} \\ - \text{ Decrease in prepaid expenses} \end{cases} \text{ and } \begin{cases} + \text{ Decrease in accrued expenses payable} \\ - \text{ Increase in accrued expenses payable} \end{cases}$$

$$\$78,400 = \$90,000 - \$7,200 - \$4,400$$

SOLUTIONS TO DO IT! REVIEW EXERCISES

DO IT! 12-1

- (1) Financing activity
- (2) Operating activity
- (3) Financing activity
- (4) Investing activity
- (5) Investing activity

DO IT! 12-2

Cash flows from operating activities

Net income.....		\$100,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$6,300	
Patent amortization expense.....	4,000	
Gain on disposal of plant assets.....	(3,600)	
Decrease in accounts receivable	6,000	
Increase in accounts payable.....	<u>3,200</u>	<u>15,900</u>
Net cash provided by operating activities		<u>\$115,900</u>

DO IT! 12-3

- (a) Free cash flow = \$73,700 – \$24,200 – \$13,000 = \$36,500
- (b) Net cash provided by operating activities fails to take into account that a company must invest in new plant assets just to maintain the current level of operations. Companies must also maintain dividends at current levels to satisfy investors. The measurement of free cash flow provides additional insight regarding a company's cash-generating ability.

SOLUTIONS TO EXERCISES

EXERCISE 12-1

- (a) Noncash investing and financing activities.
- (b) Financing activities.
- (c) Noncash investing and financing activities.
- (d) Financing activities.
- (e) Investing activities.
- (f) Operating activities.
- (g) Operating activities.

EXERCISE 12-2

- | | |
|---|--|
| (a) Operating activity. | (h) Financing activity. |
| (b) Noncash investing and financing activity. | (i) Operating activity. |
| (c) Investing activity. | (j) Noncash investing and financing activity. |
| (d) Financing activity. | (k) Investing activity. |
| (e) Operating activity. | (l) Operating activity. |
| (f) Noncash investing and financing activity. | (m) Operating activity (loss); investing activity (cash proceeds from sale). |
| (g) Operating activity. | (n) Financing activity. |

EXERCISE 12-3

<u>Point in Time</u>	<u>Phase</u>
A	Introductory phase
B	Decline phase
C	Maturity phase
D	Growth phase

During the introductory phase (point A), net cash provided by operating and investing activities are expected to be negative while cash from financing would be positive. In the growth phase (point D), a company would continue to show negative net cash provided by operating and investing and positive cash from financing.

EXERCISE 12-3 (Continued)

During the maturity phase (point C), net cash provided by operating activities and net income would be approximately the same. Net cash provided by operating activities would exceed investing needs. In the decline phase (point B), net cash provided by operating activities would diminish while cash from financing would be negative.

EXERCISE 12-4

COSI COMPANY
Partial Statement of Cash Flows
For the Year Ended December 31, 2014

Cash flows from operating activities

Net income		\$190,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$35,000	
Loss on disposal of plant assets	5,000	
Increase in accounts receivable	(15,000)	
Increase in prepaid expenses	(4,000)	
Increase in accounts payable.....	<u>17,000</u>	<u>38,000</u>
Net cash provided by operating activities		<u>\$228,000</u>

EXERCISE 12-5

SANFORD INC.
Partial Statement of Cash Flows
For the Year Ended December 31, 2014

Cash flows from operating activities

Net income		\$153,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$27,000	
Decrease in accounts receivable.....	9,000	
Decrease in inventory	4,000	
Increase in prepaid expenses	(5,000)	
Increase in accrued expenses payable...	10,000	
Decrease in accounts payable.....	<u>(7,000)</u>	<u>38,000</u>
Net cash provided by operating activities.....		<u>\$191,000</u>

EXERCISE 12-6

RAMOS CORPORATION
Statement of Cash Flows—Indirect Method
For the Year Ended December 31, 2014

Cash flows from operating activities

Net income.....	\$284,100
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**Adjustments to reconcile net income to net cash
provided by operating activities:**

Depreciation expense	\$162,000	
Increase in accounts receivable	(8,200)	
Increase in inventory.....	(11,000)	
Increase in income taxes payable.....	4,700	
Decrease in accounts payable	<u>(3,700)</u>	<u>143,800</u>
Net cash provided by operating activities ...		427,900

Cash flows from investing activities

Sale of land	35,000	
Purchase of building	<u>(289,000)</u>	
Net cash used by investing activities.....		(254,000)

Cash flows from financing activities

Issuance of bonds	200,000	
Payment of dividend	(12,000)	
Purchase of treasury stock	<u>(26,000)</u>	
Net cash provided by financing activities....		<u>162,000</u>

Net increase in cash	335,900
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Cash at beginning of period	<u>45,000</u>
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Cash at end of period	<u><u>\$380,900</u></u>
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EXERCISE 12-7

LAUBER CORP
Partial Statement of Cash Flows
For the Year Ended December 31, 2014

Cash flows from operating activities

Net income		\$ 72,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$28,000	
Loss on disposal of plant assets.....	<u>8,000</u>	<u>36,000</u>
Net cash provided by operating activities.....		108,000

Cash flows from investing activities

Sale of equipment.....	25,000*	
Purchase of equipment	(70,000)	
Construction of equipment.....	<u>(53,000)</u>	
Net cash used by investing activities		(98,000)

Cash flows from financing activities

Payment of cash dividends		(14,000)
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*Cost of equipment sold	\$49,000
Accumulated depreciation	<u>(16,000)</u>
Book value	33,000
Loss on sale of equipment	<u>(8,000)</u>
Cash proceeds.....	<u>\$25,000</u>

EXERCISE 12-8

(a)

SCHMITT COMPANY
Statement of Cash Flows
For the Year Ended December 31, 2014

Cash flows from operating activities		
Net income		\$ 93,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense.....	\$34,000	
Increase in accounts receivable.....	(12,000)	
Decrease in inventory.....	22,000	
Decrease in accounts payable.....	<u>(4,000)</u>	<u>40,000</u>
Net cash provided by operating activities		133,000
 Cash flows from investing activities		
Sale of land	20,000	
Purchase of equipment.....	<u>(60,000)</u>	
Net cash used by investing activities		(40,000)
 Cash flows from financing activities		
Issuance of common stock	42,000	
Payment of cash dividends	(39,000)	
Redemption of bonds.....	<u>(50,000)</u>	
Net cash used by financing activities		<u>(47,000)</u>
 Net increase in cash		46,000
Cash at beginning of period.....		<u>22,000</u>
Cash at end of period.....		<u><u>\$ 68,000</u></u>

EXERCISE 12-8 (Continued)

(b) 1. Current cash debt coverage:

$$\frac{\text{Net cash provided by operating activities}}{\text{Average current liabilities}} = \frac{\$133,000}{\frac{\$43,000 + \$39,000}{2}} = 3.2 \text{ times}$$

[Per Part (a)]

2. Cash debt coverage:

$$\frac{\text{Net cash provided by operating activities}}{\text{Average total liabilities}} = \frac{\$133,000}{\frac{\$243,000^* + \$189,000^{**}}{2}} = .62 \text{ times}$$

$$^*\$43,000 + \$200,000$$

$$^{**}\$39,000 + \$150,000$$

EXERCISE 12-9

	PepsiCo	Coca-Cola
(a) <u>Liquidity</u>		
Current cash debt coverage	$\frac{\$6,796}{\$8,772} = .77 \text{ times}$	$\frac{\$8,186}{\$13,355} = .61 \text{ times}$
(b) <u>Solvency</u>		
Cash debt coverage	$\frac{\$6,796}{\$22,909} = .30 \text{ times}$	$\frac{\$8,186}{\$21,491} = .38 \text{ times}$
Free cash flow	$\$6,796 - \$2,128 - \$2,732 = \$1,936$	$\$8,186 - \$1,993 - \$3,800 = \$2,393$

PepsiCo's liquidity is higher (better) than Coca-Cola's. PepsiCo's current cash debt coverage is 26% higher than Coca-Cola's. Coca-Cola's solvency is better than PepsiCo's since its cash debt coverage is higher and its free cash flow is greater.

EXERCISE 12-10

	Patton Corporation	Sager Corporation
(a) <u>Liquidity</u>		
Current cash debt coverage	$\frac{\$80,000}{\$50,000} = 1.6 \text{ times}$	$\frac{\$100,000}{\$100,000} = 1.0 \text{ times}$
(b) <u>Solvency</u>		
Cash debt coverage	$\frac{\$80,000}{\$180,000} = .44 \text{ times}$	$\frac{\$100,000}{\$250,000} = 0.40 \text{ times}$
Free cash flow	$\$80,000 - \$40,000 - \$5,000 = \$35,000$	$\$100,000 - \$70,000 - \$10,000 = \$20,000$

Patton's liquidity and solvency ratios are higher (better) than Sager's comparable ratios. In particular, Patton's current cash debt coverage ratio is 60% higher than Sager's. This ratio indicates that Patton is substantially more liquid than Sager. Patton's solvency, as measured by the cash debt coverage ratio and free cash flow, is also better than Sager's.

*EXERCISE 12-11

Revenues	\$198,000	
Deduct: Increase in accounts receivable	<u>60,000</u>	
Cash receipts from customers*		\$138,000
Operating expenses.....	83,000	
Deduct: Increase in accounts payable.....	<u>23,000</u>	
Cash payments for operating expenses**		<u>60,000</u>
Net cash provided by operating activities		<u>\$ 78,000</u>

* Accounts Receivable

Balance, Beginning of year	0		
Revenues for the year	198,000	Cash receipts for year	138,000
Balance, End of year	60,000		

** Accounts Payable

		Balance, Beginning of year	0
Payments for the year	60,000	Operating expenses for year	83,000
		Balance, End of year	23,000

***EXERCISE 12-12**

(a) Cash payments to suppliers

Cost of goods sold.....	\$5,178.0 million
Deduct: Decrease in inventory	<u>5.3</u>
Cost of purchases.....	\$5,172.7 million
Deduct: Increase in accounts payable	<u>15.6</u>
Cash payments to suppliers	<u>\$5,157.1 million</u>

(b) Cash payments for operating expenses

Operating expenses exclusive of depreciation (\$10,725.7 – \$1,216.2).....		\$9,509.5 million
Add: Increase in prepaid expenses	\$42.2	
Deduct: Increase in accrued expenses payable	<u>199.8</u>	<u>(157.6)</u>
Cash payments for operating expenses.....		<u>\$9,351.9 million</u>

***EXERCISE 12-13**

Cash flows from operating activities

Cash receipts from

Customers	\$243,000*
Dividend revenue	<u>18,000</u>
	261,000

Less cash payments:

To suppliers for merchandise.....	\$97,000	
For salaries and wages.....	53,000	
For operating expenses.....	28,000	
For income taxes.....	12,000	
For interest	<u>10,000</u>	<u>200,000</u>
Net cash provided by operating activities.....		<u>\$ 61,000</u>

***\$48,000 + \$195,000**

***EXERCISE 12-14**

TALIAFERRO CORP.
Statement of Cash Flows—Direct Method
For the Year Ended December 31, 2014

Cash flows from operating activities		
Cash receipts from customers.....		\$566,100
Less: Cash payments:		
For goods and services.....	\$279,100	
For income taxes.....	99,000	
For operating expenses.....	77,000	
For interest	<u>22,400</u>	<u>477,500</u>
Net cash provided by operating activities.....		88,600
Cash flows from investing activities		
Sale of building	197,600	
Purchase of equipment	<u>(113,200)</u>	
Net cash provided by investing activities.....		84,400
Cash flows from financing activities		
Issuance of common stock.....	355,000	
Payment of cash dividend.....	(21,800)	
Purchase treasury stock	(48,100)	
Cash paid to redeem bonds at maturity.....	<u>(200,000)</u>	
Net cash provided by financing activities.....		<u>85,100</u>
Net increase in cash		258,100
Cash at beginning of period		<u>11,000</u>
Cash at end of period		<u>\$269,100</u>

***EXERCISE 12-15**

Cash payments for rent

Rent expense	\$ 30,000
Add: Increase in prepaid rent	<u>1,500</u>
Cash payments for rent.....	<u>\$ 31,500</u>

Cash payments for salaries

Salaries and wages expense	\$ 54,000
Deduct: Increase in salaries and wages payable.....	<u>6,000</u>
Cash payments for salaries	<u>\$ 48,000</u>

Cash receipts from customers

Revenue from sales	\$160,000
Add: Decrease in accounts receivable	<u>9,000</u>
Cash receipts from customers	<u>\$169,000</u>

SOLUTIONS TO PROBLEMS

PROBLEM 12-1A

	Transaction	SCF Activity Affected	Cash Inflow, Outflow, or No Effect?
(a)	Recorded depreciation expense on the plant assets.	O	No cash flow effect
(b)	Recorded and paid interest expense.	O	Cash outflow
(c)	Recorded cash proceeds from a sale of plant assets.	I	Cash inflow
(d)	Acquired land by issuing common stock.	NC	No cash flow effect
(e)	Paid a cash dividend to preferred stockholders.	F	Cash outflow
(f)	Paid a cash dividend to common stockholders.	F	Cash outflow
(g)	Recorded cash sales.	O	Cash inflow
(h)	Recorded sales on account.	O	No cash flow effect
(i)	Purchased inventory for cash.	O	Cash outflow
(j)	Purchased inventory on account.	O	No cash flow effect

PROBLEM 12-2A

- (a) Net income can be determined by analyzing the retained earnings account.

Retained earnings beginning of year.....	\$270,000
Add: Net income (plug)	<u>58,800*</u>
	328,800
Less: Cash dividends.....	20,000
Stock dividends.....	<u>8,800</u>
Retained earnings, end of year	<u><u>\$300,000</u></u>

*(\$300,000 + \$8,800 + \$20,000 – \$270,000)

- (b) Cash inflow from the issue of stock was \$12,000 (\$160,800 – \$140,000 – \$8,800).

Common Stock	
	140,000
	8,800
	12,000
	<u>160,800</u>

Stock Dividend

Shares Issued for Cash

Cash outflow for dividends was \$20,000. The stock dividend does not use cash.

- (c) Both of the above activities (issue of common stock and payment of dividends) would be classified as financing activities on the statement of cash flows.

PROBLEM 12-3A

PAXSON COMPANY
Partial Statement of Cash Flows
For the Year Ended November 30, 2014

Cash flows from operating activities

Net income	\$1,750,000
-------------------------	--------------------

**Adjustments to reconcile net income
to net cash provided by operating
activities:**

Depreciation expense	\$ 110,000	
Decrease in accounts receivable.....	380,000	
Decrease in inventory	300,000	
Increase in prepaid expenses	(150,000)	
Decrease in accounts payable	(350,000)	
Decrease in accrued expenses payable ...	<u>(100,000)</u>	<u>190,000</u>
Net cash provided by operating activities.....		<u>\$1,940,000</u>

***PROBLEM 12-4A**

PAXSON COMPANY
Partial Statement of Cash Flows
For the Year Ended November 30, 2014

Cash flows from operating activities		
Cash receipts from customers		\$7,980,000 (1)
Less cash payments:		
To suppliers.....	\$4,750,000 (2)	
For operating expenses.....	<u>1,290,000 (3)</u>	<u>6,040,000</u>
Net cash provided by operating activities		<u><u>\$1,940,000</u></u>

Computations:

(1) Cash receipts from customers		
Sales.....		\$7,600,000
Add: Decrease in accounts receivable		<u>380,000</u>
Cash receipts from customers		<u><u>\$7,980,000</u></u>
(2) Cash payments to suppliers		
Cost of goods sold.....		\$4,700,000
Deduct: Decrease in inventories		<u>300,000</u>
Cost of purchases.....		4,400,000
Add: Decrease in accounts payable.....		<u>350,000</u>
Cash payments to suppliers		<u><u>\$4,750,000</u></u>
(3) Cash payments for operating expenses		
Operating expenses, exclusive of depreciation		\$1,040,000*
Add: Increase in prepaid expenses	\$150,000	
Decrease in accrued expenses payable	<u>100,000</u>	<u>250,000</u>
Cash payments for operating expenses.....		<u><u>\$1,290,000</u></u>

***\$450,000 + (\$700,000 – \$110,000)**

PROBLEM 12-5A

THORNTON COMPANY
Partial Statement of Cash Flows
For the Year Ended December 31, 2014

Cash flows from operating activities		
Net income		\$229,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$55,000	
Loss on disposal of plant assets	16,000	
Increase in accounts receivable	(10,000)	
Increase in accounts payable.....	9,000	
Increase in income taxes payable.....	6,000	<u>76,000</u>
Net cash provided by operating activities		<u>\$305,000</u>

***PROBLEM 12-6A**

THORNTON COMPANY
Partial Statement of Cash Flows
For the Year Ended December 31, 2014

Cash flows from operating activities			
Cash receipts from customers			\$960,000 (1)
Less cash payments:			
For operating expenses.....	\$605,000 (2)		
For income taxes.....	<u>50,000 (3)</u>	<u>655,000</u>	
Net cash provided by operating activities			<u>\$305,000</u>
 (1) Cash receipts from customers			
Revenues.....		\$970,000	
Deduct: Increase in accounts receivable			
(\$70,000 – \$60,000)		<u>10,000</u>	
Cash receipts from customers			<u>\$960,000</u>
 (2) Cash payments for operating expenses			
Operating expenses per income statement		\$614,000	
Deduct: Increase in accounts payable			
(\$41,000 – \$32,000)		<u>9,000</u>	
Cash payments for operating expenses.....			<u>\$605,000</u>
 (3) Cash payments for income taxes			
Income tax expense per income statement.....		\$ 56,000	
Deduct: Increase in income taxes payable			
(\$13,000 – \$7,000)		<u>6,000</u>	
Cash payments for income taxes.....			<u>\$ 50,000</u>

PROBLEM 12-7A

(a)

KURTZEL COMPANY
Statement of Cash Flows
For the Year Ended December 31, 2014

Cash flows from operating activities		
Net income		\$32,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$17,500	
Increase in accounts receivable	(6,000)	
Increase in inventory	(8,000)	
Increase in accounts payable	4,000	
Decrease in income taxes payable	<u>(1,000)</u>	<u>6,500</u>
Net cash provided by operating activities		38,500
Cash flows from investing activities		
Sale of equipment		8,500
Cash flows from financing activities		
Issuance of common stock	4,000	
Redemption of bonds	(16,000)	
Payment of dividends	<u>(20,000)</u>	
Net cash used by financing activities		<u>(32,000)</u>
Net increase in cash		15,000
Cash at beginning of period		<u>20,000</u>
Cash at end of period		<u>\$35,000</u>

PROBLEM 12-7A (Continued)

(b) 1.
$$\frac{\$38,500}{[\text{Per Part (a)}]} \div \frac{\$23,000^* + \$26,000^{**}}{2} = 1.57 \text{ times}$$

$$^*\$15,000 + \$8,000 \qquad ^{**}\$19,000 + \$7,000$$

2.
$$\$38,500 \div \frac{\$56,000^* + \$43,000^{**}}{2} = .78 \text{ times}$$

$$^*\$15,000 + \$8,000 + \$33,000 \qquad ^{**}\$19,000 + \$7,000 + \$17,000$$

3.
$$\$38,500 - \$0 - \$20,000 = \$18,500$$

*PROBLEM 12-8A

(a)

KURTZEL COMPANY
Statement of Cash Flows
For the Year Ended December 31, 2014

Cash flows from operating activities		
Cash receipts from customers		\$236,000 (1)
Less cash payments:		
To suppliers	\$179,000 (2)	
For operating expenses	6,500 (3)	
For interest	3,000	
For income taxes	9,000 (4)	<u>197,500</u>
Net cash provided by operating activities		38,500
Cash flows from investing activities		
Sale of equipment.....		8,500
Cash flows from financing activities		
Issuance of common stock	4,000	
Redemption of bonds.....	(16,000)	
Payment of dividends	<u>(20,000)</u>	
Net cash used by financing activities		<u>(32,000)</u>
Net increase in cash		15,000
Cash at beginning of period.....		<u>20,000</u>
Cash at end of period.....		<u>\$ 35,000</u>

Computations:

(1) Cash receipts from customers	
Sales	\$242,000
Deduct: Increase in accounts receivable	6,000
Cash receipts from customers.....	<u>\$236,000</u>

***PROBLEM 12-8A (Continued)**

(2) Cash payments to suppliers

Cost of goods sold.....	\$175,000
Add: Increase in inventory	<u>8,000</u>
Cost of purchases.....	183,000
Deduct: Increase in accounts payable.....	<u>4,000</u>
Cash payments to suppliers	<u>\$179,000</u>

(3) Cash payments for operating expenses

Operating expenses.....	\$ 24,000
Deduct: Depreciation	<u>17,500</u>
Cash payments for operating expenses	<u>\$ 6,500</u>

(4) Cash payments for income taxes

Income tax expense	\$ 8,000
Add: Decrease in income taxes payable.....	<u>1,000</u>
Cash payments for income taxes	<u>\$ 9,000</u>

(b) 1.
$$\frac{\$38,500}{[\text{Per Part (a)}]} \div \frac{\$23,000^{**} + \$26,000^{***}}{2} = 1.57 \text{ times}$$

$$^{**}\$15,000 + \$8,000 \qquad ^{***}\$19,000 + \$7,000$$

2.
$$\$38,500 \div \frac{\$56,000^* + \$43,000^{**}}{2} = .78 \text{ times}$$

$$^*\$15,000 + \$8,000 + \$33,000 \qquad ^{**}\$19,000 + \$7,000 + \$17,000$$

3.
$$\$38,500 - \$0 - \$20,000 = \$18,500$$

PROBLEM 12-9A

ODGERS INC.
Statement of Cash Flows
For the Year Ended December 31, 2014

Cash flows from operating activities		
Net income		\$154,580
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$46,500	
Loss on disposal of plant assets	7,500	
Increase in accounts receivable	(49,800)	
Increase in inventory	(9,650)	
Increase in prepaid expenses	(2,400)	
Increase in accounts payable	34,700	
Decrease in accrued expenses payable....	<u>(4,500)</u>	<u>22,350</u>
Net cash provided by operating activities		176,930
Cash flows from investing activities		
Sale of plant assets	1,500	
Purchase of investments	(29,000)	
Purchase of plant assets	<u>(100,000)</u>	
Net cash used by investing activities		(127,500)
Cash flows from financing activities		
Sale of common stock	45,000	
Payment of cash dividends	(26,030)	
Redemption of bonds	<u>(36,000)</u>	
Net cash used by financing activities		<u>(17,030)</u>
Net increase in cash		32,400
Cash at beginning of period		<u>48,400</u>
Cash at end of period		<u>\$ 80,800</u>

*PROBLEM 12-10A

ODGERS INC.
Statement of Cash Flows
For the Year Ended December 31, 2014

Cash flows from operating activities		
Cash receipts from customers		\$338,660 (1)
Less cash payments:		
To suppliers.....	\$110,410 (2)	
For income taxes.....	27,280	
For operating expenses.....	19,310 (3)	
For interest	<u>4,730</u>	<u>161,730</u>
Net cash provided by operating activities.....		176,930
Cash flows from investing activities		
Sale of plant assets	1,500	
Purchase of investments	(29,000)	
Purchase of plant assets	<u>(100,000)</u>	
Net cash used by investing activities.....		(127,500)
Cash flows from financing activities		
Sale of common stock.....	45,000	
Payment of cash dividends	(26,030)	
Redemption of bonds.....	<u>(36,000)</u>	
Net cash used by financing activities.....		<u>(17,030)</u>
Net increase in cash.....		32,400
Cash at beginning of period		<u>48,400</u>
Cash at end of period.....		<u>\$ 80,800</u>

Computations:

(1) Cash receipts from customers		
Sales.....		\$388,460
Deduct: Increase in accounts receivable.....		<u>49,800</u>
Cash receipts from customers		<u>\$338,660</u>

***PROBLEM 12-10A (Continued)**

(2) Cash payments to suppliers

Cost of goods sold	\$135,460
Add: Increase in inventory	<u>9,650</u>
Cost of purchases	145,110
Deduct: Increase in accounts payable	<u>34,700</u>
Cash payments to suppliers.....	<u><u>\$110,410</u></u>

(3) Cash payments for operating expenses

Operating expenses exclusive of depreciation		\$12,410
Add: Increase in prepaid expenses	\$2,400	
Decrease in accrued expenses payable	<u>4,500</u>	<u>6,900</u>
Cash payment for operating expenses		<u><u>\$19,310</u></u>

PROBLEM 12-11A

YANIK COMPANY
Statement of Cash Flows
For the Year Ended December 31, 2014

Cash flows from operating activities		
Net income		\$ 37,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$42,000	
Loss on disposal of plant assets.....	2,000	
Decrease in accounts receivable.....	8,000	
Increase in inventory	(9,450)	
Decrease in prepaid expenses.....	5,720	
Increase in accounts payable	<u>8,730</u>	<u>57,000</u>
Net cash provided by operating activities.....		94,000
Cash flows from investing activities		
Sale of land (\$130,000 + \$40,000 – \$145,000)	25,000	
Sale of equipment.....	8,000	
Purchase of equipment	<u>(92,000)</u>	
Net cash used by investing activities		(59,000)
Cash flows from financing activities		
Payment of cash dividends		<u>(12,000)</u>
Net increase in cash.....		23,000
Cash at beginning of period		<u>45,000</u>
Cash at end of period.....		<u>\$68,000</u>
<u>Noncash investing and financing activities</u>		
Acquired land by issuance of common stock		<u>\$40,000</u>

PROBLEM 12-12A

	Transaction	Free Cash Flow (\$125,000)	Current Cash Debt Coverage Ratio (0.5 times)	Cash Debt Coverage Ratio (0.3 times)
(a)	Recorded credit sales \$2,500.	NE	NE	NE
(b)	Collected \$1,900 owed by customers.	I	I	I
(c)	Paid amount owed to suppliers, \$2,750.	D	D	D
(d)	Recorded sales returns of \$500 and credited the customer's account.	NE	NE	NE
(e)	Purchased new equipment \$5,000; signed a long-term note payable for the cost of the equipment.	D*	NE	D
(f)	Purchased a patent and paid \$65,000 cash for the asset.	D	NE	NE

***Note to Instructor: If only cash capital expenditures are deducted, this answer would be NE.**

PROBLEM 12-1B

	Transaction	SCF Activity Affected	Cash Inflow, Outflow, or No Effect?
(a)	Purchased shares of common treasury stock.	F	Cash outflow
(b)	Paid a cash dividend to common stockholders.	F	Cash outflow
(c)	Recorded cash sales.	O	Cash inflow
(d)	Recorded sales on account.	O	No cash flow effect
(e)	Recorded prepayment of insurance expense.	O	Cash outflow
(f)	Purchased supplies on account.	O	No cash flow effect
(g)	Recorded amortization expense on a patent.	O	No cash flow effect
(h)	Recorded and received interest revenue.	O	Cash inflow
(i)	Recorded cash proceeds from a sale of plant assets.	I	Cash inflow
(j)	Acquired land by issuing a note payable.	NC	No cash flow effect

PROBLEM 12-2B

(a) Cash inflows (outflows) related to plant assets 2014:

Equipment purchase.....	(\$85,000)
Land purchase.....	(50,000)
Proceeds from equipment sales.....	5,000*

*Cost of equipment sold \$240,000 + \$85,000 – \$300,000 = \$25,000

Accumulated depreciation removed from accounts for sale of equipment

Accumulated Depreciation—
Equipment

	96,000	
Plug 14,000	62,000	Depreciation Expense
	144,000	

Cash proceeds = Cost \$25,000 – accumulated depreciation \$14,000 –
loss \$6,000 = \$5,000

Note to instructor—some students may find journal entries helpful in understanding this exercise.

Equipment	85,000	
Cash		85,000
Land	50,000	
Cash		50,000
Cash (plug)	5,000	
Accumulated Depreciation—Equipment.....	14,000	
Loss on Disposal of Equipment	6,000	
Equipment.....		25,000

(b) Equipment purchase	Investing activities (outflow)
Land purchase	Investing activities (outflow)
Proceeds from equipment sale	Investing activities (inflow)

PROBLEM 12-3B

HUBBLE COMPANY
Partial Statement of Cash Flows
For the Year Ended December 31, 2014

Cash flows from operating activities		
Net income		\$1,245,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$105,000	
Amortization expense	15,000	
Decrease in accounts receivable	290,000	
Increase in inventory	(140,000)	
Increase in prepaid expenses	(175,000)	
Increase in accounts payable	63,000	
Increase in accrued expenses payable	145,000	
		<u>303,000</u>
Net cash provided by operating activities		<u>\$1,548,000</u>

***PROBLEM 12-4B**

HUBBLE COMPANY
Partial Statement of Cash Flows
For the Year Ended December 31, 2014

Cash flows from operating activities		
Cash receipts from customers.....		\$5,890,000 (1)
Less cash payments:		
To suppliers	\$3,367,000 (2)	
For operating expenses	<u>975,000 (3)</u>	<u>4,342,000</u>
Net cash provided by operating activities		<u>\$1,548,000</u>

Computations:

(1) Cash receipts from customers		
Sales		\$5,600,000
Add: Decrease in accounts receivable		<u>290,000</u>
Cash receipts from customers		<u>\$5,890,000</u>
(2) Cash payments to suppliers		
Cost of goods sold		\$3,290,000
Add: Increase in inventories		<u>140,000</u>
Cost of purchases		3,430,000
Deduct: Increase in accounts payable		<u>63,000</u>
Cash payments to suppliers.....		<u>\$3,367,000</u>
(3) Cash payments for operating expenses		
Operating expenses		
(\$420,000 + \$525,000)		\$ 945,000
Add: Increase in prepaid expenses	\$175,000	
Deduct: Increase in accrued expenses payable	<u>145,000</u>	<u>30,000</u>
Cash payments for operating expenses		<u>\$ 975,000</u>

PROBLEM 12-5B

MOSLEY COMPANY
Partial Statement of Cash Flows
For the Year Ended December 31, 2014

Cash flows from operating activities		
Net income		\$204,000
Adjustments to reconcile net income to net cash provided by operating activities		
Depreciation expense	\$56,000	
Loss on disposal of equipment	4,000	
Increase in accounts receivable	(7,000)	
Decrease in accounts payable.....	(8,000)	
Increase in income taxes payable	5,000	<u>50,000</u>
Net cash provided by operating activities.....		<u>\$254,000</u>

<p>*PROBLEM 12-6B</p>

MOSLEY COMPANY
Partial Statement of Cash Flows
For the Year Ended December 31, 2014

Cash flows from operating activities		
Cash receipts from customers.....		\$843,000 (1)
Less cash payments:		
For operating expenses	\$514,000 (2)	
For income taxes	<u>75,000 (3)</u>	<u>589,000</u>
Net cash provided by operating activities		<u>\$254,000</u>

(1) Computation of cash receipts from customers

Revenues	\$850,000
Deduct: Increase in accounts receivable (\$72,000 – \$65,000)	<u>7,000</u>
Cash receipts from customers	<u>\$843,000</u>

(2) Computation of cash payments for operating expenses

Operating expenses per income statement	\$506,000
Add: Decrease in accounts payable (\$35,000 – \$27,000)	<u>8,000</u>
Cash payments for operating expenses	<u>\$514,000</u>

(3) Computation of cash payments for income taxes

Income tax expense per income statement	\$80,000
Deduct: Increase in income taxes payable (\$23,000 – \$18,000)	<u>5,000</u>
Cash payments for income taxes	<u>\$75,000</u>

PROBLEM 12-7B

(a)

FILMORE COMPANY
Statement of Cash Flows
For the Year Ended December 31, 2014

Cash flows from operating activities		
Net income.....		\$47,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$ 6,000	
Increase in accounts receivable	(9,000)	
Increase in inventory	(16,000)	
Decrease in accounts payable	(23,000)	
Increase in income taxes payable	3,000	(39,000)
Net cash provided by operating activities		8,000
Cash flows from investing activities		
Sale of equipment	10,000	
Purchase of equipment	(8,000)	
Net cash provided by investing activities		2,000
Cash flows from financing activities		
Issuance of bonds.....	10,000	
Payment of cash dividends.....	(28,000)	
Net cash used by financing activities		(18,000)
Net decrease in cash		(8,000)
Cash at beginning of period		33,000
Cash at end of period		<u>\$25,000</u>

PROBLEM 12-7B (Continued)

(b) 1. $\$8,000 \div \frac{\$49,000^* + \$69,000^{**}}{2} = .136 \text{ times}$

$^*\$23,000 + \$26,000 \quad \quad ^{**}\$46,000 + \$23,000$

2. $\$8,000 \div \frac{\$69,000^* + \$79,000^{**}}{2} = .108 \text{ times}$

$^*\$23,000 + \$26,000 + \$20,000 \quad \quad ^{**}\$46,000 + \$23,000 + \$10,000$

3. $\$8,000 - \$8,000 - \$28,000 = -\$28,000$

***PROBLEM 12-8B**

(a)

FILMORE COMPANY
Statement of Cash Flows
For the Year Ended December 31, 2014

Cash flows from operating activities		
Cash receipts from customers		\$286,000 (1)
Less cash payments:		
To suppliers	\$233,000 (2)	
For operating expenses		
(\$37,000 – \$6,000)	31,000	
For interest	3,000	
For income taxes	11,000 (3)	<u>278,000</u>
Net cash provided by operating activities		8,000
Cash flows from investing activities		
Sale of equipment	10,000	
Purchase of equipment	<u>(8,000)</u>	
Net cash provided by investing activities		2,000
Cash flows from financing activities		
Issuance of bonds	10,000	
Payment of cash dividends	<u>(28,000)</u>	
Net cash used by financing activities		<u>(18,000)</u>
Net decrease in cash		(8,000)
Cash at beginning of period		<u>33,000</u>
Cash at end of period		<u>\$ 25,000</u>

Computations:

(1) Cash receipts from customers	
Sales	\$295,000
Deduct: Increase in accounts receivable	9,000
Cash receipts from customers	<u>\$286,000</u>

***PROBLEM 12-8B (Continued)**

(2) Cash payments to suppliers

Cost of goods sold	\$194,000
Add: Increase in inventory	<u>16,000</u>
Cost of purchases	210,000
Add: Decrease in accounts payable	<u>23,000</u>
Cash payments to suppliers.....	<u>\$233,000</u>

(3) Cash payments for income taxes

Income tax expense	\$ 14,000
Deduct: Increase in income taxes payable	<u>3,000</u>
Cash payments for income taxes	<u>\$ 11,000</u>

(b) 1. \$8,000 ÷ $\frac{\$49,000^* + \$69,000^{}}{2}$ = .136 times**

***\$23,000 + \$26,000 **\$46,000 + \$23,000**

2. \$8,000 ÷ $\frac{\$69,000^* + \$79,000^{}}{2}$ = .108 times**

***\$23,000 + \$26,000 + \$20,000 **\$46,000 + \$23,000 + \$10,000**

3. \$8,000 – \$8,000 – \$28,000 = –\$28,000

PROBLEM 12-9B

TURNER INC.
Statement of Cash Flows
For the Year Ended December 31, 2014

Cash flows from operating activities		
Net income		\$137,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$ 50,000	
Loss on disposal of plant assets.....	9,000	
Increase in accounts receivable	(16,000)	
Decrease in inventory	3,000	
Increase in prepaid expenses	(3,000)	
Decrease in accounts payable.....	(7,000)	
Increase in accrued expenses payable.....	<u>6,000</u>	<u>42,000</u>
Net cash provided by operating activities.....		179,000
Cash flows from investing activities		
Sale of plant assets	2,000	
Purchase of plant assets	(90,000)	
Purchase of investments	<u>(32,000)</u>	
Net cash used by investing activities.....		(120,000)
Cash flows from financing activities		
Sale of common stock.....	25,000	
Payment of cash dividends	(40,000)	
Redemption of bonds.....	<u>(40,000)</u>	
Net cash used by financing activities.....		<u>(55,000)</u>
Net increase in cash.....		4,000
Cash at beginning of period		<u>33,000</u>
Cash at end of period.....		<u><u>\$ 37,000</u></u>

*PROBLEM 12-10B

TURNER INC.
Statement of Cash Flows
For the Year Ended December 31, 2014

Cash flows from operating activities		
Cash receipts from customers.....		\$594,000 (1)
Less cash payments:		
To suppliers	\$294,000 (2)	
For operating expenses	62,000 (3)	
For income taxes	47,000	
For interest.....	<u>12,000</u>	<u>415,000</u>
Net cash provided by operating activities		179,000
Cash flows from investing activities		
Sale of plant assets.....	2,000	
Purchase of plant assets	(90,000)	
Purchase of investments.....	<u>(32,000)</u>	
Net cash used by investing activities		(120,000)
Cash flows from financing activities		
Sale of common stock	25,000	
Payment of cash dividends	(40,000)	
Redemption of bonds	<u>(40,000)</u>	
Net cash used by financing activities		<u>(55,000)</u>
Net increase in cash		4,000
Cash at beginning of period		<u>33,000</u>
Cash at end of period		<u>\$ 37,000</u>

Computations:

(1) Cash receipts from customers		
Sales		\$610,000
Deduct: Increase in accounts receivable.....		<u>16,000</u>
Cash receipts from customers		<u>\$594,000</u>

***PROBLEM 12-10B (Continued)**

(2) Cash payments to suppliers

Cost of goods sold.....	\$290,000
Deduct: Decrease in inventory	<u>3,000</u>
Cost of purchases.....	287,000
Add: Decrease in accounts payable.....	<u>7,000</u>
Cash payments to suppliers	<u><u>\$294,000</u></u>

(3) Cash payments for operating expenses

Operating expenses exclusive of depreciation		\$65,000
Add: Increase in prepaid expenses.....	\$3,000	
Deduct: Increase in accrued expenses payable	<u>(6,000)</u>	<u>(3,000)</u>
Cash payment for operating expenses		<u><u>\$62,000</u></u>

PROBLEM 12-11B

BERKLER COMPANY
Statement of Cash Flows
For the Year Ended December 31, 2014

Cash flows from operating activities		
Net income		\$46,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$48,000	
Gain on disposal of equipment	(3,000)	
Increase in accounts receivable	(6,000)	
Decrease in inventory	3,000	
Increase in prepaid expenses	(4,000)	
Decrease in accounts payable	(9,000)	<u>29,000</u>
Net cash provided by operating activities		75,000
Cash flows from investing activities		
Sale of land	34,000	
Sale of equipment	9,000	
Purchase of equipment.....	<u>(88,000)</u>	
Net cash used by investing activities.....		(45,000)
Cash flows from financing activities		
Payment of cash dividends		<u>(12,000)</u>
Net increase in cash		18,000
Cash at beginning of period		<u>78,000</u>
Cash at end of period		<u><u>\$96,000</u></u>
<u>Noncash investing and financing activities</u>		
Conversion of bonds by issuance of common stock.....		<u><u>\$50,000</u></u>

PROBLEM 12-12B

	Transaction	Free Cash Flow (\$80,000)	Current Cash Debt Coverage Ratio (0.7 times)	Cash Debt Coverage Ratio (0.4 times)
(a)	Recorded cash sales \$4,800.	I	I	I
(b)	Sold land for \$20,000 cash.	NE	NE	NE
(c)	Declared \$6,000 cash dividends.	NE	D	D
(d)	Paid \$5,800 cash dividends declared last year.	D	I	I
(e)	Paid amount owed to suppliers, \$9,400.	D	D	D
(f)	Retired \$20,000 convertible bonds payable by issuing common stock.	NE	NE	I

(a) Net cash provided by operating activities:

2011	\$50,390,000
2010	\$82,805,000

(b) The decrease in cash and cash equivalents for the year ended December 31, 2011 was \$37,364,000.

(c) Tootsie Roll uses the indirect method of computing and presenting the net cash provided by operating activities.

(d) According to the statement of cash flows, accounts receivable increased \$5,448,000 in 2011. Inventories increased \$15,631,000 in 2011. Accounts payable (and accrued liabilities) increased \$84,000 in 2011.

(e) The net cash used by investing activities in 2011 was \$51,157,000.

(f) The supplemental disclosure of cash flow information disclosed interest paid of \$38,000 and income taxes paid of \$16,906,000 in 2011.

(a)	Hershey	Tootsie Roll
1. Current cash debt coverage	$\frac{\$580,867}{(\$1,298,845 + \$1,173,775) \div 2}$ $= .47 \text{ times}$	$\frac{\$50,390}{(\$58,505 + \$58,355) \div 2}$ $= .86 \text{ times}$
2. Cash debt coverage	$\frac{\$580,867}{(\$3,335,131 + \$3,539,551) \div 2}$ $= .17 \text{ times}$	$\frac{\$50,390}{(\$190,551^* + \$191,921^{**}) \div 2}$ $= .26 \text{ times}$
	$*\$58,505 + \$132,046$ $**\$58,355 + \$133,566$	

- (b) Tootsie Roll's current cash debt coverage provides a ratio of 0.86 of net cash provided by operating activities for every dollar of current debt. It is a better representation of liquidity on an average day than the current ratio. Tootsie Roll's higher ratio (.86 vs. .47) indicates Tootsie Roll was more liquid in 2011 than Hershey but both measures are acceptable.

The cash debt coverage shows a company's ability to repay its liabilities from cash generated from operating activities without having to liquidate the assets employed in its operations. Since Tootsie Roll's cash debt coverage was 53% larger than Hershey's, Tootsie Roll's ability to repay liabilities with cash from operations was significantly greater than Hershey's in 2011.

- (a) At the end of 2009 the nonfinancial companies in the Standard and Poor's 500 had accumulated \$932 billion. This represented a 31% increase over the prior year.
- (b) First, cash (and short term investments) do not generate a very good return. Thus, having too much cash on your balance sheet can drag down the return on assets. Second, managers worry that if they accumulate too much cash it will appear that they have run out of good ideas to invest in to grow the company. Another concern is that, if you have a lot of cash on your balance sheet, another company might decide to acquire your company. If you use debt to acquire a company that has a lot of cash, you can use the acquired company's cash to pay down the debt.
- (c) In order to motivate its managers to accumulate cash, Alcoa pegged the compensation of its top executives to cash goals. In response, top management cut 28,000 jobs (32% of its workforce), and reduced capital expenditures by 53%. As a consequence, even though its revenue dropped by 31%, it nearly doubled its cash to \$1.5 billion.
- (d) At the time the article was written the stock prices of the Standard and Poor's 500 was 29% below its October 2007 peak. As a consequence, companies felt that their shares were still undervalued, so they didn't want to use them to acquire other companies. They felt that they should instead use cash.
- (e) In addition to acquisitions, companies can increase their dividends or do stock buybacks (buy treasury shares).

- (a) The stock was issued at a price of \$70 per share. A few months previously it sold for more than \$300 per share.**
- (b) The company issued shares of stock, even though its stock price was depressed, because its cash flows were not meeting its immediate needs. The company's cash flows declined because the company lost subscribers when it raised its prices.**
- (c) Netflix had used up more than \$1 billion of cash to buy back stock during the previous four years.**
- (d) The article says that growth companies should be very cautious about using cash to buy back stock. Growth companies have many ups and downs. They need to make sure they have enough cash on hand to get them through downtrends.**

- (a) Current ratio—2001: $\$1,207.9 \div \$ 921.4 = 1.31$
—2004: $\$2,539.4 \div \$1,620.4 = 1.57$

Current cash debt

- coverage—2001: $(\$119.8) \div \$ 948.2 = (.13)$ times
—2004: $\$566.6 \div \$1,436.6 = .39$ times

Both Amazon's current ratio and its current cash debt coverage improved dramatically from 2001 to 2004. Amazon's current ratio increased by 20% (from 1.31 to 1.57) during the 3-year period. In addition Amazon's current cash debt coverage improved by \$.52 per dollar of current liabilities (from a negative \$.13 per dollar in 2001 to a positive \$.39 per dollar in 2004). Amazon's liquidity improved greatly from 2001 to 2004.

- (b) Cash debt
coverage—2001: $(\$119.8) \div \$3,090.0 = (.04)$ times
—2004: $\$566.6 \div \$4,773.4 = .12$ times

Debt to

- assets ratio—2001: $\$3,077.5 \div \$1,637.5 = 1.88$
—2004: $\$5,096.1 \div \$3,248.5 = 1.57$

Amazon's solvency also improved significantly from 2001 to 2004. Its cash debt coverage increased by \$.16 per dollar of total liabilities during the 3-year period. Amazon's debt to assets ratio also improved (decreased) by 16% from 2001 to 2004.

- (c) Free cash flow—2001: $(\$119.8) - \$50.3 - \$0 = (\$170.1)$
—2004: $\$566.6 - \$89.1 - \$0 = \477.5

Amazon's free cash flow increased by almost \$650 million from 2001 to 2004. The increase was caused by Amazon finally generating a profit in 2004. If Amazon is able to continue operating at a profit and producing a large free cash flow, it should be able to finance an expansion of its operations.

BYP 12-5 (Continued)

- (d) While these measures tell us a lot about Amazon.com, they don't tell us whether the stock price is reasonable. Amazon.com's high stock price is a reflection of a belief by investors that Amazon.com will continue to grow incredibly fast. If this growth falters, its stock price will fall rather quickly. Also, Amazon.com's heavy reliance on debt financing compounds the risk of investing in its stock because it may have a difficult time paying its debts if its growth does not continue.**

Answers will vary depending on the company chosen by the student.

(a)

GILBERT COMPANY
Statement of Cash Flows
For the Year Ended January 31, 2014

Cash flows from operating activities		
Net loss		\$ (35,000)*
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$ 55,000	
Gain from disposal of investment.....	<u>(5,000)</u>	<u>50,000</u>
Net cash provided by operating activities		15,000
Cash flows from investing activities		
Sale of investment	80,000	
Purchase of investment.....	(75,000)	
Purchase of fixtures and equipment	<u>(320,000)</u>	
Net cash used by investing activities		(315,000)
Cash flows from financing activities		
Sale of capital stock.....	405,000	
Purchase of treasury stock.....	<u>(10,000)</u>	
Net cash provided by financing activities		<u>395,000</u>
Net increase in cash		95,000
Cash at beginning of period		<u>140,000</u>
Cash at end of period		<u><u>\$235,000</u></u>
<u>Noncash investing and financing activities</u>		
Issuance of note for truck		<u>\$ 20,000</u>

BYP 12-7 (Continued)***Computation of net income (loss)**

Sales of merchandise.....		\$385,000
Interest revenue.....		6,000
Gain on sale of investment (\$80,000 – \$75,000)		<u>5,000</u>
Total revenues and gains.....		396,000
Merchandise purchased	\$258,000	
Operating expenses (\$170,000 – \$55,000)	115,000	
Depreciation.....	55,000	
Interest expense	<u>3,000</u>	
Total expenses.....		<u>431,000</u>
Net loss.....		<u>\$ (35,000)</u>

- (b) From the information given, it appears that from an operating standpoint, Gilbert Company did not have a superb first year, having suffered a \$35,000 net loss. Robyn is correct; the statement of cash flows is not prepared in correct form. The correct format classifies cash flows from three activities—operating, investing, and financing; and it also presents significant noncash investing and financing activities in a separate schedule. Robyn is wrong, however, about the actual increase in cash not being \$95,000; \$95,000 is the correct increase in cash.

MEMO

To: Jack Werth

From: Student

Re: Statement of cash flows

The statement of cash flows provides information about the cash receipts and cash payments of a firm, classified as operating, investing, and financing activities. The operating activities section of the company's statement of cash flows shows that cash increased by \$172,000 as a result of transactions which affected net income. This amount is computed by adjusting net income for those items which affect net income, but do not affect cash, such as sales on account which remain uncollected at year-end.

The investing activities section of the statement reports cash flows resulting from changes in investments and other long-term assets. The company had a cash outflow from investing activities due to purchases of buildings and equipment.

The financing activities section of the statement reports cash flows resulting from changes in long-term liabilities and stockholders' equity. The company had a cash inflow from financing activities due to the issuance of common stock and an outflow due to the payment of cash dividends.

If you have any further questions, please do not hesitate to contact me.

- (a) The stakeholders in this situation are:
Rick Hanigan, president of Templeton Automotive Corporation.
Nick Korte, controller.
The Board of Directors.
The stockholders of Templeton Automotive Corporation.
- (b) The president's statement, "We must get that amount above \$1 million," puts undue pressure on the controller. This statement along with his statement, "I know you won't let me down Nick," encourages Nick to do something unethical.

Controller Nick Korte's reclassification (intentional misclassification) of a cash inflow from a long-term note (financing activity) issuance to an "increase in payables" (operating activity) is inappropriate and unethical.

- (c) It is unlikely that any board members (other than board members who are also officers of the company) would discover the misclassification. Board members generally do not have detailed enough knowledge of their company's transactions to detect this misstatement. It is possible that an officer of the bank that made the loan would detect the misclassification upon close reading of Templeton Automotive Corporation's statement of cash flows. It is also possible that close scrutiny of the balance sheet showing an increase in notes payable (long-term debt) would reveal that there is no comparable financing activity item (proceeds from note payable) in the statement of cash flows.

- (a) The article describes three factors that determine how much money you should set aside. (1) *Your willingness to take risk*. You need to evaluate how willing you are to experience wide swings in your financial position. (2) *Your needs*. You need to carefully evaluate your situation and evaluate the possibility of various events and what the financial implications would be. This is also impacted by the number of dependents you have. (3) *Your upcoming expenses*. Here you need to look further out into the horizon and consider the implications of larger events such as a big trip, a wedding, or education costs.
- (b) They recommend having at least three months of living expenses set aside, and up to six months.
- (c) Responses to this question will vary. What is most important is that students begin the process of considering their cash needs and developing a plan to set aside enough money to provide a cushion in the event of a financial “hiccup.”

- (a) Cash equivalents are short-term, highly liquid investments that have both of the following characteristics:
- a. Readily convertible to known amounts of cash
 - b. So near their maturity that they present insignificant risk of changes in value because of changes in interest rates.

Generally, only investments with original maturities of three months or less qualify under that definition. Original maturity means original maturity to the entity holding the investment. For example, both a three-month U.S. Treasury bill and a three-year U.S. Treasury note purchased three months from maturity qualify as cash equivalents. However, a Treasury note purchased three years ago does not become a cash equivalent when its remaining maturity is three months. Examples of items commonly considered to be cash equivalents are Treasury bills, commercial paper, money market funds, and federal funds sold (for an entity with banking operations).

- (b) Financing activities include obtaining resources from owners and providing them with a return on, and a return of, their investment; receiving restricted resources that by donor stipulation must be used for long-term purposes; borrowing money and repaying amounts borrowed, or otherwise setting the obligation; and obtaining and paying for other resources obtained from creditors on long-term credit.
- (c) Investing activities include making and collecting loans and acquiring and disposing of debt or equity instruments and property, plant, and equipment and other productive assets, that is, assets held for or used in the production of goods or services by the entity (other than materials that are part of the entity's inventory). Investing activities exclude acquiring and disposing of certain loans or other debt or equity instruments that are acquired specifically for resale, as discussed in paragraph 230-10-45-12 and 230-10-45-21.

BYP 12-11 (Continued)

- (d) Operating activities include all transactions and other events that are not defined as investing or financing activities (see paragraph 230-10-45-12 through 45-15). Operating activities generally involve producing and delivering goods and providing services. Cash flow from operating activities are generally the cash effects of transactions and other events that enter into the determination of net income.**
- (e) The primary objective of a statement of cash flows is to provide relevant information about the cash receipts and cash payments of an entity during a period.**

As indicated in the glossary at this same section, cash includes not only currency on hand but demand deposits with banks or other financial institutions. Cash also includes other kinds of accounts that have the general characteristics of demand deposits in that the customer may deposit additional funds at any time and also effectively may withdraw funds at any time without prior notice or penalty. All charges and credits to those accounts are cash receipts or payments to both the entity owning the account and the bank holding it. For example, a bank's granting of a loan by crediting the proceeds to a customer's demand deposit account is a cash payment by the bank and a cash receipt of the customer when the entry is made.

Thus, the basis for the statement of cash flows is cash, not broader measures of liquidity, like working capital.

- (f) Information about all *investing* and *financing activities* of an entity during a period that affect recognized assets or liabilities but that do not result in cash receipts or *cash* payments in the period shall be disclosed. Those disclosures may be either narrative or summarized in a schedule, and they shall clearly relate the cash and noncash aspects of transactions involving similar items.**

IFRS 12-1

Under IFRS bank overdrafts are treated as part of cash and cash equivalents on the balance sheet. As a result, on the statement of cash flows they are part of the change in cash and cash equivalents. In contrast, under GAAP they are treated as a liability on the balance sheet, as a source of financing on the statement of cash flows.

IFRS 12-2

The treatment of these items under IFRS and GAAP is as follows:

	IFRS	GAAP
(a) Interest paid	Operating or financing	Operating
(b) Interest received	Operating or investing	Operating
(c) Dividends paid	Operating or financing	Financing
(d) Dividends received	Operating or investing	Operating

IFRS 12-3

In the future cash equivalents will probably not be combined with cash. Instead they will most likely be reported separately, as a type of short term investment.

- (a) The company reports interest paid as an operating activity.
- (b) Zetar's balance in cash and cash equivalents is negative because the company has £4,282 thousand of cash, but it has £12,923 of bank overdrafts. Bank overdrafts are a form of negative cash, so the company reports negative cash and cash equivalents of £8,641.
- (c) Under GAAP bank overdrafts are not reported in cash and cash equivalents. Instead they are treated as a financing activity, and would be reported on the balance sheet as a liability.
- (d) The components of the "net movement in working capital" are reported on the face of the statement of cash flows as

Decrease in inventory	£ 72
Increase in receivables	(5,295)
Decrease in payables	<u>(817)</u>
	<u>(£ 6,040)</u>

