

21e

College Accounting

Chapter 23

Statement of Cash Flows



Learning Objective 1

Explain the purpose of the statement of cash flows.

Statement of Cash Flows

- **Purpose:** To provide information about how cash was generated and used during the period
- Divides cash-related activities into three categories:
 - Operating activities
 - Investing activities
 - Financing activities

Learning Objective 2

Define operating, investing, and financing activities and describe transactions for each type of activity.

Operating Activities

- Transactions and events associated with:
 - Selling a product or providing a service
 - The revenues and expenses reported on the income statement
- Represent the company's primary source of cash over the life of the business

Margin Notes

- Throughout This Chapter, colors will be used to help you recognize the three types of business activities as follows:
 - Green Operating Activities
 - Blue Investing Activities
 - Orange Financing Activities

Operating Activities (cont.)

- Inflow examples:
 - Cash receipts from the sale of goods or services
 - Interest received on loans made to outside entities
 - Dividends received on investments made in the stock of other companies

Operating Activities (cont.)

- Outflow examples:
- Payments for:
 - The acquisition of inventory
 - Interest on loans
- Payments to:
 - Employees and the government
 - Other suppliers and for other expenses

Investing Activities

- Transactions involving:
 - Long-term assets
 - Investments in debt and equity securities
 - Lending money and collecting the principal on the related loans

Investing Activities (cont.)

- Inflow examples:
- Proceeds from:
 - Collection of principal on loans made
 - Sale of property, plant, and equipment; intangibles; and other productive assets
 - Sale of investments in debt and equity securities
 - Discounting notes receivable

Investing Activities (cont.)

- Outflow examples:
 - Loans made to other parties
 - Payments to acquire property, plant, and equipment; intangibles; and other productive assets
 - Payments to acquire investments in debt and equity securities

Financing Activities

- Transactions dealing with the exchange of cash between the company and its owners and creditors

Financing Activities (cont.)

- Inflow examples:
 - Proceeds from additional investments by the owners or the issuance of stock
 - Proceeds from borrowing money through the signing of a mortgage, issuing a bond, or other long- or short-term loans

Financing Activities (cont.)

- Outflow examples:
 - Payments of dividends to stockholders or withdrawals by the owners
 - Payments to purchase treasury stock
 - Repayment of the principal on loans

Learning Objective 3

Describe the information needed to prepare a statement of cash flows.

Information Needed to Prepare A Statement of Cash Flows

- The following statements are needed to prepare a statement of cash flows:
 - Balance sheets for the:
 - Beginning of the period
 - End of the period
 - Income statement for the period
 - Statement of retained earnings for the period

Learning Objective 4

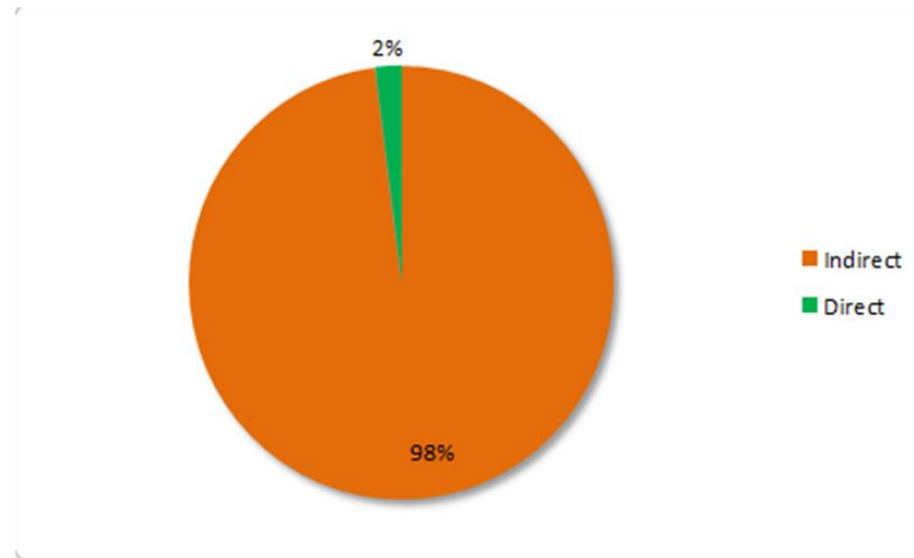
Describe the direct and indirect methods of reporting cash flows from operating activities.

Cash Flows from Operating Activities

- Two methods:
 - Direct
 - Revenues and expenses are adjusted to reflect the amount of cash received or paid for each item
 - Indirect
 - Net income is adjusted for transactions that affect net income and cash flows, but by different amounts

Method Comparison

Cash from Operating Activities: Direct vs. Indirect Methods



Pie chart is based on a recent survey of 500 companies listed with the SEC Published in the AICPA's *Accounting Trends and Techniques*.

Learning Objective 5

Describe the effects of changes in current assets and current liabilities on cash from operating activities under the indirect method.

Operating Activities: Adjustments to Net Income

- Adjustments must be made for:
 - Changes in current assets related to operating activities
 - Changes in current liabilities related to operating activities
 - Noncash expenses
 - Gains and losses on transactions not related to operating activities

Changes in Current Assets Related to Operating Activities

- Examples of current assets related to operating activities:
 - Accounts receivable
 - Inventory
 - Prepaid expenses

Current Assets

- If current assets (A/R, Inventory, Prepaid Expenses) increase, we have more money tied up in these assets, and less cash generated from operating activities. The opposite is true if current assets decrease. Thus, the following adjustments are made:

Current Assets (cont.)

Net Income	\$xxx	
Increase in A/R	(xx)	
Decrease in		
Prepaid Items	<u>xx</u>	
Net cash provided		
by operating activities		\$xx

Changes in Current Assets Related to Operating Activities

- Increases in such assets reduce cash generated from operating activities
 - Example: If a customer makes a \$100,000 purchase, paying \$95,000 in cash and the rest on account, the company records:

Cash	95,000
Accounts Receivable	5,000
Sales	100,000

Changes in Current Assets Related to Operating Activities (cont.)

- Decreases in such assets increase cash generated from operating activities
 - Example: If \$30,000 in rent expense is recognized, a payment of \$28,000 is made to the landlord, and a \$2,000 adjustment is made to the prepaid rent account (for a previously made payment), the company records:

Rent Expense	30,000	
Prepaid Rent		2,000
Cash		28,000

Changes in Current Assets Related to Operating Activities (cont.)

- The net effect of these two transactions shows an increase in net income of \$70,000, but the net increase in cash is only \$67,000:

Account	Net Income	Current Assets	Cash Flow
Cash			↑95,000 ↓28,000
Accounts Receivable		↑5,000	
Sales	↑100,000		
Prepaid Rent		↓2,000	
Rent Expense	↓ 30,000		
Net Effect	↑ 70,000	↑3,000	↑67,000

Net income minus the net increase in current assets equals the net increase in cash.

Changes in Current Liabilities Related to Operating Activities

- Examples of current liabilities related to operating activities:
 - Accounts payable
 - Income tax payable
 - Salaries payable

Current Liabilities

- If current liabilities (A/P, Salaries Payable, Interest Payable) increase, we have postponed payments to these "creditors," thus keeping more money in our pockets and increasing cash generated from operating activities. The opposite is true if current liabilities decrease. Thus, the following adjustments are made:

Current Liabilities (cont.)

Net Income	\$xxx	
Increase in		
salaries payable	xx	
Decrease in		
taxes payable	<u>(xx)</u>	
Net cash provided		
by operating activities		\$xx

Changes in Current Liabilities Related to Operating Activities (cont.)

- Increases in such liabilities increase cash generated from operating activities
 - Example: If salaries expense is \$5,000 but the cash paid is only \$4,500, the rest increases the current liability account:

Salaries Expense	5,000	
Salaries Payable		500
Cash	4,500	

Changes in Current Liabilities Related to Operating Activities (cont.)

- Decreases in such liabilities decrease cash generated from operating activities
 - Example: If income tax expense is \$40,000 and an additional \$2,000 already owed is paid in cash, the current liability account decreases:

Income Tax Expense	40,000	
Income Tax Payable	2,000	
Cash		42,000

Changes in Current Liabilities Related to Operating Activities (cont.)

- The net effect of these two transactions shows an decrease in net income of \$45,000, but the net decrease in cash is \$46,500 higher:

Account	Net Income	Current Assets	Cash Flow
Cash			↓ 4,500 ↓42,000
Salaries Payable		↑ 500	
Salaries Expense	↓ 5,000		
Income Tax Payable		↓2,000	
Income Tax Expense	↓40,000		
Net Effect	↓45,000	↓1,500	↓ 46,500

Net income minus the net decrease in current assets equals the net decrease in cash.

Learning Objective 6

Prepare a statement of cash flows under the indirect method using T accounts and including adjustments for current assets and current liabilities related to operations.

Statement of Cash Flows: Indirect

- **EXAMPLE:** Simplex Company has prepared its income statement, statement of retained earnings, and balance sheet for 20-2.

Now it needs to prepare its statement of cash flows.

Simplex Company Comparative Balance Sheet

December 31, 20-2 and 20-1

Step 1: Compute the change in cash

	<u>20-2</u>	20-1	Increase (Decrease)
Assets			
Current assets:			
Cash	\$ 90,000	\$200,000	\$(110,000)
Accounts receivable	100,000	130,000	(30,000)
Merchandise Inventory	100,000	120,000	(20,000)
Total current assets	390,000	450,000	(60,000)
Property, plant, and equipment:			
Land	0	0	0
Building	140,000	0	140,000
Equipment	100,000	0	100,000
Total property, plant, and equip.	240,000	40,000	200,000
Total assets	\$710,000	\$630,000	\$ 80,000

The statement of cash flows will explain how the cash account decreased by \$110,000 in 20-2.

Statement of Cash Flows: Indirect (cont.)

- Step 2: Set up T accounts with the beginning and ending balances for all noncash balance sheet accounts
 - The changes in the noncash balance sheet accounts indicate indirect changes to Cash for the operating, investing, or financing activities of the period
 - A Cash T account may be used to represent a simple version of the statement of cash flows
 - Divide the Cash T account into three sections for the three types of activities

Statement of Cash Flows: Indirect (cont.)

Cash	
Operating Activities	
Investing Activities	
Financing Activities	

Statement of Cash Flows: Indirect (cont.)

- Step 3(a): Compute cash flows from operating activities by reporting net income as the primary source of cash from operating activities
- Step 3(b): Compute cash flows from operating activities by adjusting net income for changes in current assets and current liabilities related to operating activities

Statement of Cash Flows: Indirect (cont.)

Cash

Operating Activities

Net income

Investing Activities

Financing Activities

In the operating section, debits represent increases to net income and credits represent decreases.

Statement of Cash Flows: Indirect (cont.)

Accounts Receivable

Beg. bal.	190,000
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Cash Received from Customers

Accounts Receivable

Beg. bal.	190,000
Sales	?

Credit sales increase
the accounts receivable
account.

Cash Received from Customers (cont.)

Accounts Receivable

Beg. bal.	190,000		
Sales	?	?	Payments received

Accounts Receivable is decreased by customers making payments.

Cash Received from Customers (cont.)

Accounts Receivable

Beg. bal.	190,000
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Sales	?
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End. bal.	160,000
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?	Payments received
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Accounts
Receivable
decreased by
\$30,000
during 20-2.

Cash Received from Customers (cont.)

Accounts Receivable

Beg. bal.	190,000		
Sales	?	?	Payments received
End. bal.	160,000		

When Accounts Receivable decreases,
Cash received from customers > Sales

Cash Received from Customers (cont.)

Accounts Receivable

Beg. bal.	190,000		
Sales	900,000	?	Payments received
End. bal.	160,000		

Sales for the year
were \$900,000.

Cash Received from Customers (cont.)

Accounts Receivable

Beg. bal.	190,000		
Sales	900,000	930,000	Payments rec'd
End. bal.	160,000		

$$\begin{aligned} &\text{Cash received from customers} \\ &= \text{Sales} + \text{Decrease in A/R} \\ &= \$900,000 + \$30,000 \end{aligned}$$

Statement of Cash Flows: Indirect (cont.)

Cash

Operating Activities

Net income

Decr. in accts. receivable

Investing Activities

Financing Activities

Cash Paid for Merchandise

Merchandise Inventory

Beg. bal.	200,000
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We need to determine
the amount of merchandise
purchased during the year.

Cash Paid for Merchandise (cont.)

Merchandise Inventory

Beg. bal. **200,000**

Purchases **?**

Purchases
increase
inventory.

Cash Paid for Merchandise (cont.)

Merchandise Inventory

Beg. bal.	200,000			
Purchases		?	?	Cost of goods sold

Selling goods
(merchandise)
reduces inventory.

Cash Paid for Merchandise (cont.)

Merchandise Inventory

Beg. bal.	200,000		
Purchases	?	?	Cost of goods sold
End. bal.	180,000		

Inventory decreased by
\$20,000 during 20-2.

Cash Paid for Merchandise (cont.)

Merchandise Inventory

Beg. bal.	200,000		
Purchases	?	?	Cost of goods sold
End. bal.	180,000		

When inventory decreases during the year,
Cost of goods sold > Purchases

Cash Paid for Merchandise (cont.)

Merchandise Inventory

Beg. bal.	200,000	
Purchases	?	600,000 Cost of goods sold
End. bal.	180,000	

Cost of Goods Sold for 20-2 is \$600,000.

Cash Paid for Merchandise (cont.)

Merchandise Inventory

Beg. bal.	200,000		
Purchases	580,000	600,000	Cost of goods sold
End. bal.	180,000		

Purchases for 20-2 = Cost of Goods Sold –
Decrease in Merchandise Inventory =
\$600,000 – \$20,000

Cash Paid for Merchandise (cont.)

Merchandise Inventory

Beg. bal.	200,000		
Purchases	580,000	600,000	Cost of goods sold
End. bal.	180,000		

Cost of merchandise
purchased

Statement of Cash Flows: Indirect

Cash

Operating Activities

Net income

Decrease in accts. receivable

Decrease in inventory

Investing Activities

Financing Activities

Cash Paid for Merchandise (cont.)

Accounts Payable

	180,000	Beg. bal.
	120,000	End. bal.

Now that we know Simplex's purchases, we need to determine how much cash was paid for these goods.

Cash Paid for Merchandise (cont.)

Accounts Payable

		180,000	Beg. bal.
Payments	?	580,000	Purchases
		120,000	End. bal.

Cash payments on these purchases decrease Accounts Payable.

Purchases increase Accounts Payable.

Cash Paid for Merchandise (cont.)

Accounts Payable

		180,000	Beg. bal.
Payments	?	580,000	Purchases
		120,000	End. bal.

Accounts Payable decrease by \$60,000
during 20-2.

Purchases < Cash Paid

Cash Paid for Merchandise (cont.)

Accounts Payable

		180,000	Beg. bal.
Payments	640,000	580,000	Purchases
		120,000	End. bal.

$$\begin{aligned} &\text{Cash Paid for Merchandise} = \\ &\text{Purchases} + \text{Decrease in Accounts Payable} = \\ &\quad \$580,000 + \$60,000 \end{aligned}$$

Statement of Cash Flows: Indirect

Cash

Operating Activities

Net income

Decrease in accts. receivable

Decrease in inventory

Investing Activities

Financing Activities

Decr. in accts. payable

Simplex Company Statement of Cash Flows

For Year Ended December 31, 20-2

Cash flows from operating activities:

Net income	\$ 80,000
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Changes in CA & CL:

Decrease in accounts receivable	30,000
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Decrease in inventory	20,000
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Decrease in accounts payable	(60,000)
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Net cash provided by operating activities	\$ 70,000
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Cash flows from investing activities:

Now that the operating section is completed, we turn our attention to the investing section.

Simplex Company Comparative Balance Sheet

December 31, 20-2 and 20-1

	20-2	20-1	Increase (Decrease)
Assets			
Current assets:			
Cash	\$ 90,000	\$200,000	\$(110,000)
Accounts receivable	160,000	190,000	(30,000)
Merchandise inventory	180,000	200,000	(20,000)
),000	\$(160,000)
Property, plant, and equipment:			
Land	\$ 40,000	\$ 40,000	\$ 0
Building	140,000	0	140,000
Equipment	100,000	0	100,000
Total property, plant, and equip.	\$280,000	\$ 40,000	\$ 240,000
Total assets	\$710,000	\$630,000	\$ 80,000

Investing activities involve the purchase and sale of plant assets.

Investing Activities

Building

Beg. bal. 0

End. bal. **140,000**

Equipment

Beg. bal. 0

End. bal. **100,000**

Simplex Company informs us the only activity in the building and equipment accounts in 20-2 was the purchase of a building and equipment for cash, just before year end.

Statement of Cash Flows: Indirect

Cash

Operating Activities

Net income

Decrease in accts. receivable

Decrease in inventory

Investing Activities

Financing Activities

Decrease in accts. payable

Cash paid for building

Cash paid for equipment

Simplex Company Statement of Cash Flows

For Year Ended December 31, 20-2

Cash flows from operating activities:

Net income	\$ 80,000
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Changes in CA & CL:

Decrease in accounts receivable	30,000
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Decrease in inventory	20,000
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Decrease in accounts payable	<u>(60,000)</u>
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Net cash provided by operating activities	\$ 70,000
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Cash flows from investing activities:

Purchased building	\$(140,000)
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Purchased equipment	<u>(100,000)</u>
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Net cash used by investing activities	(240,000)
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Cash flows from financing activities:

On to the financing section...

Simplex Company Comparative Balance Sheet

December 31, 20-2 and 20-1

	20-2	20-1	Increase (Decrease)
Assets			
Current assets:			
Cash	\$ 90,000	\$200,000	\$(110,000)
Accounts receivable	160,000	190,000	(30,000)
Merchandise inventory	180,000	200,000	(20,000)
Total current assets	\$430,000	\$590,000	\$(160,000)
Property, plant, and equipment:			
Land	0	0	\$ 0
Buildings	0	140,000	140,000
Equipment	100,000	0	100,000
Total property, plant, and equip.	\$280,000	\$ 40,000	\$ 240,000
Total assets	\$710,000	\$630,000	\$ 80,000

Financing activities involve exchanges of cash between the company and its stockholders and creditors.

Liabilities

Current liabilities:

Notes payable	\$ 60,000	\$ 50,000	\$ 10,000
Accounts payable	120,000	180,000	(60,000)
Total liabilities	\$180,000	\$230,000	\$(50,000)

Let's begin by analyzing
 the cash-related activities
 in the notes payable
 account.

Stockholders' equity:			
Common stock		\$250,000	\$ 40,000
Paid-in Capital in excess of par			
common stock	130,000	100,000	30,000
Retained earnings	110,000	50,000	60,000
Total stockholders' equity	\$530,000	\$400,000	\$130,000
Total liab. & stockholders' equity	\$710,000	\$630,000	\$ 80,000

Financing Activities

Notes Payable

	50,000	Beg. bal.
	10,000	
	60,000	End. bal.

**\$10,000 increase in 20-2
from issuing a note.**

Liabilities

Current liabilities:

Notes payable	\$ 60,000	\$ 50,000	\$ 10,000
Accounts payable	120,000	180,000	(60,000)
Total liabilities	\$180,000	\$230,000	\$(50,000)

Stockholders' equity

Common stock (\$5 par, 100,000 shares auth.; Issued 58,000 in 20-2, 50,000 in 20-1)	\$290,000	\$250,000	\$ 40,000
Paid-in capital in excess of par—common	0,000	30,000	0,000
Retained earnings	0,000	60,000	0,000
Total stockholders' equity	0,000	\$130,000	0,000
Total liab. & stockholders' equity	\$180,000	\$230,000	\$ 80,000

We will move now to the capital stock accounts.

Investing Activities

Common Stock

250,000 Beg. bal.

290,000 End. bal.

Paid-In Capital in Excess of Par—Common Stock

100,000 Beg. bal.

130,000 End. bal.

The only types of transactions that increase or decrease the capital stock accounts are issuing and retiring stock.

Investing Activities

Common Stock

250,000 Beg. bal.

40,000 Stock
issue

290,000 End. bal.

Paid-In Capital in Excess of Par—Common Stock

100,000 Beg. bal.

130,000 End. bal.

Since Common Stock increased during 20-2, we know stock with par value of \$40,000 was issued.

Investing Activities

Common Stock

250,000 Beg. bal.
40,000 Stock issue

Paid-In Capital in Excess of Par—Common Stock

100,000 Beg. bal.
30,000
130,000 End. bal.

Since Paid-In Capital increased during 20-2, we know stock was issued for a price \$30,000 above the par value.

Statement of Cash Flows: Indirect

Cash

Operating Activities

Net income

Decrease in accts. receivable

Decrease in inventory

Investing Activities

Decrease in accts. payable

Cash paid for building

Cash paid for equipment

Financing Activities

Issued notes payable

Issued common stock

Liabilities

Current liabilities:

Notes payable	\$ 60,000	\$ 50,000	\$ 10,000
Accounts payable	120,000	180,000	(60,000)
Total liabilities	\$180,000	\$230,000	\$(50,000)

Stockholders' Equity

Common stock (\$5 par, 100,000 shares auth.; issued 58,000 in 20-2, 50,000 in 20-1)	\$290,000	\$250,000	\$ 40,000
Paid-in capital in excess of par—common stock	130,000	100,000	30,000
Retained earnings	110,000	50,000	60,000
Total stockholders' equity	\$530,000	\$400,000	\$130,000

Total liab. &		630,000	\$ 80,000
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The final account to be analyzed is Retained Earnings.

Simplex Company Statement of Retained Earnings For Year Ended December 31, 20-2

Retained earnings, January 1, 20-2		\$ 50,000
Net income	\$80,000	
Less dividends	<u>20,000</u>	
Net increase in retained earnings		<u>60,000</u>
Retained earnings, December 31, 20-2		<u><u>\$110,000</u></u>

The statement of retained earnings provides us with a summary of all the activity in the account.

Simplex Company Statement of Retained Earnings For Year Ended December 31, 20-2

Retained earnings, January 1, 20-2		\$ 50,000
Net income	\$80,000	
Less dividends	20,000	
Net increase in retained earnings		60,000
Retained earnings, December 31, 20-2		\$110,000

The net income has already been analyzed for cash activities, but dividends involve the payment of cash, and therefore must be recorded on the statement of cash flows.

Statement of Cash Flows: Indirect

Cash

Operating Activities

Net income

Decrease in accts. receivable

Decrease in inventory

Investing Activities

Decrease in accts. payable

Cash paid for building

Cash paid for equipment

Financing Activities

Issued notes payable

Issued common stock

Paid dividends

Simplex Company Statement of Cash Flows

For Year Ended December 31, 20-2

Cash flows from operating activities:

Net income	\$	80,000
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Changes in CA & CL:

Decrease in accounts receivable		30,000
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Decrease in inventory		20,000
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Decrease in accounts payable		(60,000)
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Net cash provided by operating activities		\$ 70,000
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Cash flows from investing activities:

Purchased building	\$(140,000)	
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Purchased equipment	(100,000)	
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Net cash used by investing activities		(240,000)
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Cash flows from financing activities:

Issued note payable	\$	10,000
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Issued common stock		70,000
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Paid cash dividends		(20,000)
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Net cash provided by financing activities		60,000
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(Continued...)

Cash flows from financing activities:

Issued note payable	\$ 10,000
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Issued common stock	70,000
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Paid cash dividends	<u>(20,000)</u>
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Net cash provided by financing activities	<u>60,000</u>
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Net increase (decrease) in cash	<u>\$(110,000)</u>
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Operating	\$ 70,000
Investing	(240,000)
Financing	<u>60,000</u>
	<u>\$(110,000)</u>

Cash flows from financing activities:

Issued note payable	\$ 10,000	
Issued common stock	70,000	
Paid cash dividends	(20,000)	
Net cash provided by financing activities		60,000
Net increase (decrease) in cash		\$(110,000)
Cash balance, January 1, 20-2		200,000
Cash balance, December 31, 20-2		\$ 90,000

What about more complex companies?

Learning Objective 7

Prepare a statement of cash flows under the indirect method including the adjustments for the following conditions when the company:

Learning Objective 7

- a. defines cash as “cash and cash equivalents,”
- b. reports depreciation expense,
- c. reports gains or losses on transactions not related to operating activities,
- d. has noncash investing and financing activities,
- e. provides supplemental disclosures of cash flows.

Multiplex Company Comparative Balance Sheet

December 31, 20-2 and 20-1

	20-2	20-1	Increase (Decrease)
Assets			
Current assets:			
Cash	\$ 17,980	\$ 20,000	\$ (2,020)
Government notes	1,800	3,200	(1,400)
Accrued interest receivable	100	300	(200)
Accounts receivable			8,705
Merchandise inventory			(2,930)
Supplies and prepaid expenses			1,250
Total current assets			\$ 3,405
Property, plant, and equipment			
Store equipment	\$ 48,000	\$ 38,800	\$ 9,200
Less accumulated depreciation	(18,000)	(14,000)	4,000
Delivery equipment	47,000	32,000	15,000

Step #1:

Compute the change in
cash and cash equivalents

Cash and Cash Equivalents

- To qualify as a cash equivalent:
 - An investment must be readily convertible to a known amount of cash
- These are considered the same as cash when preparing the statement of cash flows

<u>20-1</u>		<u>20-2</u>
\$20,000	Cash	\$17,980
<u>3,200</u>	Government Notes	<u>1,800</u>
\$23,200		\$19,780

\$3,420 decrease



Statement of Cash Flows: Indirect

- Step 2: Set up T accounts with the beginning and ending balances for all noncash balance sheet accounts
 - The changes in the noncash balance sheet accounts indicate indirect changes to Cash for the operating, investing, or financing activities of the period
 - A Cash T account may be used to represent a simple version of the statement of cash flows
 - Divide the Cash T account into three sections for the three types of activities

Statement of Cash Flows: Indirect

Cash	
Operating Activities	
Investing Activities	
Financing Activities	

Statement of Cash Flows: Indirect

- Step 3(a): Compute cash flows from operating activities by reporting net income as the primary source of cash from operating activities
- Step 3(b): Compute cash flows from operating activities by adjusting net income for changes in current assets and current liabilities related to operating activities

Statement of Cash Flows: Indirect

Cash

Operating Activities

Net income

Increase in accounts receivable

Decrease in inventory

Decrease in accounts payable

Increase in income tax payable

Investing Activities

Financing Activities

Operating Expenses

Supplies and Prepayments

Beg. bal.	2,750
	?
End. bal.	4,000

Supplies purchased and
prepayments made

Operating Expenses (cont.)

Supplies and Prepayments

Beg. bal.	2,750	
	?	?
End. bal.	4,000	

Supplies and prepayments
consumed (operating expenses)

Operating Expenses (cont.)

Supplies and Prepayments

Beg. bal.	2,750	
	?	?
End. bal.	4,000	

The \$1,250 increase indicates more were purchased (paid) than were consumed (expensed).

Operating Expenses (cont.)

Accrued and Withheld Payroll Taxes

	1,520	Beg. bal.
?	?	
	950	End. bal.

The \$570 decrease indicates more was paid than expensed.

Interest Revenue

Accrued Interest Receivable

Beg. bal.	300	
	?	?
End. bal.	100	

The \$200 decrease indicates more was received than earned this period.

Interest Expense (cont.)

Accrued Interest Payable

	80	Beg. bal.
?	?	
	100	End. bal.

The increase indicates all but \$20 of this year's interest expense was paid.

Statement of Cash Flows: Indirect

Cash

Operating Activities

Net income

Decr. in accrued interest receiv.

Decrease in inventory

Increase in income tax payable

Incr. in accrued interest pay.

Increase in accounts receivable

Increase in supplies & prepmts.

Decrease in accounts payable

**Decr. in accrued & withheld
payroll taxes**

Investing Activities

Financing Activities

Multiplex Company Statement of Cash Flows

For Year Ended December 31, 20-2

Cash flows from operating activities:

Net income	\$ 47,755
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Changes in CA & CL:

Decrease in accrued interest receivable	200
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Increase in accounts receivable	(8,705)
--	----------------

Decrease in inventory	2,930
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Increase in supplies and prepayments	(1,250)
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Decrease in accounts payable	(12,400)
-------------------------------------	-----------------

Increase in income tax payable	1,000
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Decrease in accrued & withheld payroll taxes	(570)
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Increase in accrued interest payable	20
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Operating Expenses (cont.)

- Depreciation expense is included in determining net income on the income statement
- Multiplex informs us that the total depreciation expense of \$10,400 is included in the operating expenses reported on the income statement

Depreciation does not use or provide cash, therefore it should be added back to net income on the statement.

Gain (Loss) on Sale of Long-Term Assets

- Gains (losses) are included in determining net income on the income statement
- The amount of the gain (loss) must be subtracted from (added back to) net income on the statement of cash flows because:
 - Sales of long-term assets are investing, not operating activities
 - Thus, the net income amount must be adjusted for the effect of the gains (losses)

Statement of Cash Flows: Indirect

Cash

Operating Activities

Net income

Decr. in accrued interest receiv.

Decrease in inventory

Increase in income tax payable

Increase in accrued interest pay.

Depreciation expense

Gain on sale delivery equipment

Investing Activities

Financing Activities

Increase in accounts receivable

Increase in supplies & prepmts.

Decrease in accounts payable

Decrease in accrued & withheld
payroll taxes

Multiplex Company Statement of Cash Flows

For Year Ended December 31, 20-2

Cash flows from operating activities:

Net income	\$ 47,755
Changes in CA & CL:	
Decrease in accrued interest receivable	200
Increase in accounts receivable	(8,705)
Decrease in inventory	2,930
Increase in supplies and prepayments	(1,250)
Decrease in accounts payable	(12,400)
Increase in income tax payable	1,000
Decrease in accrued & withheld payroll taxes	(570)
Increase in accrued interest payable	20
Noncash expenses and other adjustments:	
Depreciation expense	10,400
Gain on sale of delivery equipment	(3,000)
Net cash provided by oper. activities	\$36,380

Investing Activities

Store Equipment

Beg. bal. **38,800**

End. bal. **48,000**

Office Equipment

Beg. bal. **34,000**

End. bal. **38,000**

Multiplex informs us that equipment transactions included purchases of new equipment for cash.

Investing Activities

Store Equipment

Beg. bal. **38,800**

9,200

End. bal. **48,000**

Office Equipment

Beg. bal. **34,000**

4,000

End. bal. **38,000**

Cash paid for
equipment

Investing Activities

Delivery Equipment

Beg. bal.	32,000	
		10,000
End. bal.	47,000	

Sale of equipment for \$7,000 cash

Cash

7,000

Accumulated Depreciation

6,000

Delivery Equipment

10,000

Gain on Sale of Equip.

3,000

Investing Activities

Delivery Equipment

Beg. bal.	32,000	
	12,000	10,000
End. bal.	47,000	

Purchase of equipment
for \$12,000 cash

Statement of Cash Flows: Indirect

Cash

Operating Activities

Net income

Decr. in accrued interest receiv.

Decrease in inventory

Increase in income tax payable

Incr. in accrued interest pay.

Depreciation expense

Gain on sale delivery equipment

Investing Activities

Cash rec'd. from sale of equip.

Financing Activities

Increase in accounts receivable

Increase in supplies & prepmts.

Decrease in accounts payable

Decrease in accrued & withheld
payroll taxes

Cash paid for equipment

Net cash provided by operating activities		\$ 36,380
Cash flows from investing activities:		
Purchased store equipment	\$ (9,200)	
Purchased office equipment	(4,000)	
Sold delivery equipment	7,000	
Purchased delivery equipment	(12,000)	
Net cash used by investing activities		(18,200)

Investing Activities

Delivery Equipment

Beg. bal.	32,000	
	12,000	10,000
	13,000	
End. bal.	47,000	

Purchase of new
equipment in
exchange for a note

Investing Activities (cont.)

Delivery Equipment

Beg. bal.	32,000	
	12,000	10,000
	13,000	
End. bal.	47,000	

Since this transaction does not involve cash, it will not be shown as part of a cash flow activity on the statement of cash flows.

Schedule of Noncash Investing and Financing Activities:

Purchased delivery equipment by issuing a 3-year note \$13,000

Financing Activities

Common Stock

98,000 Beg. bal.

100,000 End. bal.

Paid-In Capital

39,000 Beg. bal.

40,000 End. bal.

The stock transactions involved receipt of cash.

Financing Activities (cont.)

Common Stock

98,000 Beg. bal.

2,000

Paid-In Capital

39,000 Beg. bal.

1,000

Multiplex issued additional shares of stock for \$3,000.

End. bal.

Multiplex Company Statement of Retained Earnings For Year Ended December 31, 20-2

Retained earnings, January 1, 20-2		\$23,660
Net income	\$47,755	
Less dividends	<u>22,800</u>	
Net increase in retained earnings		<u>24,955</u>
Retained earnings, December 31, 20-2		<u><u>\$48,615</u></u>

Dividends involve the payment of cash and must be reported on the statement of cash flows.

Financing Activities (cont.)

Notes Payable

	11,800	Beg. bal.
1,800	13,000	
	23,000	End. bal.

Cash was paid to reduce the Notes Payable balance.

Statement of Cash Flows: Indirect

Cash

Operating Activities

Net income

Decr. in accrued interest receiv.

Decrease in inventory

Increase in income tax payable

Incr. in accrued interest pay.

Depreciation expense

Gain on sale delivery equipment

Investing Activities

Cash received from sale of
equipment

Financing Activities

Issued common stock

Increase in accounts receivable

Decrease in accounts payable

Decrease in accrued & withheld
payroll taxes

Cash paid for equipment

Paid cash dividends

Retired note payable

Net cash provided by operating activities		\$ 36,380
Cash flows from investing activities:		
Purchased store equipment	\$ (9,200)	
Purchased office equipment	(4,000)	
Sold delivery equipment	7,000	
Purchased delivery equipment	(12,000)	
Net cash used by investing activities		(18,200)
Cash flows from financing activities:		
Issued common stock	\$ 3,000	
Paid cash dividends	(22,800)	
Retired note payable	(1,800)	
Net cash used by financing activities		(21,600)

Net cash provided by operating activities		\$ 36,380
Cash flows from investing activities:		
Purchased store equipment	\$ (9,200)	
Purchased office equipment	(4,000)	
Sold delivery equipment	7,000	
Purchased delivery equipment	(12,000)	
Net cash used by investing activities		(18,200)
Cash flows from financing activities:		
Issued common stock	\$ 3,000	
Paid cash dividends	(22,800)	
Retired note payable	(1,800)	
Net cash used by financing activities		(21,600)
Net increase (decrease) in cash & cash equiv		\$ (3,420)

Operating	\$ 36,380
Investing	(18,200)
Financing	(21,600)
	\$ (3,420)

Net cash provided by operating activities		\$ 36,380
Cash flows from investing activities:		
Purchased store equipment	\$ (9,200)	
Purchased office equipment	(4,000)	
Sold delivery equipment	7,000	
Purchased delivery equipment	(12,000)	
Net cash used by investing activities		(18,200)
Cash flows from financing activities:		
Issued common stock	\$ 3,000	
Paid cash dividends	(22,800)	
Retired note payable	(1,800)	
Net cash used by financing activities		(21,600)
Net increase (decrease) in cash & cash equiv.		\$ (3,420)
Cash and cash equivalents, Jan. 1, 20-2		23,200
Cash and cash equivalents, Dec. 31, 20-2		\$ 19,780

Net cash provided by operating activities		\$ 36,380
Cash flows from investing activities:		
Purchased store equipment	\$ (9,200)	
Purchased office equipment	(4,000)	
Sold delivery equipment	7,000	
Purchased delivery equipment	(12,000)	
Net cash used by investing activities		(18,200)
Cash flows from financing activities:		
Issued common stock	\$ 3,000	
Paid cash dividends	(22,800)	
Retired note payable	(1,800)	
Net cash provided by financing activities		(21,600)

Noncash investing and financing activities involve no cash flow but represent a significant change in the company's financial position.

Schedule of Noncash Investing and Financing Activities:

Purchased delivery equipment by issuing a 3-year note	\$13,000
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Multiplex had one such transaction—the issuance of a note payable to purchase new delivery equipment.

Cash Paid for Interest

Interest Expense	650	
Interest Payable		20
Cash		630

Supplemental information of
the cash paid for interest

Cash Paid for Income Taxes

Income Tax Expense	24,000	
Income Tax Payable		1,000
Cash		23,000

Supplemental information of
the cash paid for income
taxes

Schedule of Noncash Investing and Financing Activities:

Purchased delivery equipment by issuing a 3-year note \$13,000

Supplemental Disclosures of Cash Flow Information:

Cash paid during the year for:

Interest \$ 630

Income taxes 23,000

Learning Objective 8

Interpret the statement of cash flows.

Interpreting the Statement

- The most important indicator of financial health of a business is “net cash used or provided by operating activities”
 - Positive cash flows are needed to purchase property, plant, and equipment
 - This could be done through borrowing, but loans must be repaid
 - This could be done through issuance of stock, but dividends may have to be paid
 - Chronic inability to generate positive cash flows is a sure sign of financial instability

A Broader View

A Broader View

Net Income versus Cash from Operating Activities: Eli Lilly Company

Since cash from operating activities (CFO) is related to revenues and expenses on the income statement, many financial statement users assume that CFO and net income (NI) are similar in value and move in the same direction. This relationship holds, except for a few considerations. For example, depreciation and amortization expenses reduce net income, but do not reduce cash. Thus, over the life of the firm, you should expect CFO to be greater than NI by the amount of depreciation and amortization expenses. This is basically true for Eli Lilly Company. However, for specific years, major differences between CFO and NI that go beyond depreciation are easy to observe. As shown in the graph, Lilly reported a net loss of \$385 million in 1997 while also reporting cash from operating activities of \$2.4 billion. This occurred because Lilly reported a major expense associated with closing facilities that did not require the use of cash. In 2000, CFO increased substantially more than NI due to a \$1.1 billion increase in accounts payable. By postponing payments to suppliers, Lilly effectively increased its CFO for 2000. In 2002, we see that cash from operating activities fell below NI. This was caused by major increases in receivables, inventories, and other current assets and a reduction in accounts payable for a combined reduction in CFO of \$1.5 billion while net income remained relatively steady. Note that CFO bounced back up in 2003. This was partially caused by changes in current assets and current liabilities that increased CFO, a reversal of the previous year's reduction. In 2008, we see the most dramatic difference between CFO and NI. CFO is \$9.4 billion higher than the net loss. This unusually large difference is driven by working capital changes (\$2.3 billion) that increased CFO. In addition, depreciation (\$1.1 billion), and a noncash expense associated with the acquisition of another company (\$4.8 billion) reduced NI, but used no cash. NI and CFO were almost identical in 2009, but then diverged again in 2010 and 2011 due to differences similar to those already discussed.

A Broader View (cont.)

A Broader View

