

# Chapter 12

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## Statement of Cash Flows

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Cash Equivalents - short-term, highly liquid investments that are both

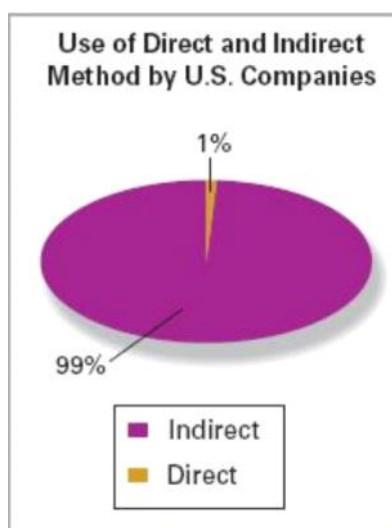
1. Readily convertible to known amounts of cash
2. So near to maturity (usually 3 months) that there's little risk for their value to change if the interest rate changes.

Cash flows reported from three categories:

1. Operating activities
2. Investing activities
3. Financing activities

## Cash Flows from Operating Activities

Inflows	Outflows
<b>Cash received from:</b>	<b>Cash paid for:</b>
Customers	Purchase of services (electricity, etc.) and goods for resale
Dividends and interest on investments	Salaries and wages
	Income taxes
	Interest on liabilities



Two alternative approaches for presenting the operating activities section:

1. Direct method
  - a. Reports the components of cash flows from operating activities as gross receipts and gross payments.
  - b. Net cash provided by operating activities - difference between inflows and outflows.\
2. Indirect method
  - a. starts with net income from the income statement and then eliminates noncash items to arrive at net cash inflow (outflow) from operating activities.

**Net income**

- b. **+/- Adjustments for noncash items**

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**Net cash inflow (outflow) from operating activities**

Note: Regardless of the method used, the amount computed for cash flow would be the same

Direct*		Indirect	
Cash collected from customers	\$ 816,645	Net income	\$ 107,045
Cash payments to suppliers	(497,565)	Depreciation and amortization	10,152
Cash payments for other expenses	(152,631)	Changes in operating assets and liabilities	(6,717)
Cash payments for interest	(189)		
Cash payments for income taxes	(55,780)		
Net cash provided by operating activities	<u>\$ 110,480</u>	Net cash provided by operating activities	<u>\$ 110,480</u>

## Cash Flows from Financing Activities

Inflows	Outflows
<b>Cash received from:</b>	<b>Cash paid for:</b>
Borrowing on notes, mortgages, bonds, etc., from creditors	Repayment of principal to creditors (excluding interest, which is an operating activity)
Issuing stock to owners	Repurchasing stock from owners
	Dividends to owners

Net cash provided by operating activities - difference between these cash inflows and outflows

## Net Increase / Decrease in Cash:

The net cash flows from all activities must equal to the net increase / decrease in cash.

Category	Transaction	Cash Effect	Other Account Affected
<b>Operating</b>	Collect accounts receivable	+Cash	–Accounts Receivable (A)
	Pay accounts payable	–Cash	–Accounts Payable (L)
	Prepay rent	–Cash	+Prepaid Rent (A)
	Pay interest	–Cash	–Retained Earnings (SE)
	Sale for cash	+Cash	+Retained Earnings (SE)
<b>Investing</b>	Purchase equipment for cash	–Cash	+Equipment (A)
	Sell investment securities for cash	+Cash	–Investments (A)
<b>Financing</b>	Pay back debt to bank	–Cash	–Notes Payable–Bank (L)
	Issue stock for cash	+Cash	+Common Stock and Additional Paid-in-Capital (SE)

## Preliminary Steps in Preparing the Cash Flow Statement

1. Determine the change in each balance sheet account. From this year's ending balance, subtract this year's beginning balance.
2. Classify each change as relating to operating (O), investing (I), or financing (F) activities by marking them with the corresponding letter.

NATIONAL BEVERAGE CORP.				
Consolidated Balance Sheets *				
(dollars in thousands)				
		April 29, 2017	April 30, 2016	
<i>Related Cash</i>	Assets			
<i>Flow Section</i>	Current assets:			<i>Change</i>
<i>Change in Cash</i>	Cash and cash equivalents	\$ 136,372	\$ 105,577	+30,795
<b>I</b>	Short-term investments	3,906	4,454	–548
<b>O</b>	Accounts receivable	71,319	61,046	+10,273
<b>O</b>	Inventories	53,355	47,922	+5,433
<b>O</b>	Prepaid expenses	7,275	4,672	+2,603
	Total current assets	272,227	223,671	
<b>I†</b>	Property, plant, and equipment, net	85,662	81,827	+3,835
	Total assets	\$ 357,889	\$ 305,498	
	Liabilities and Stockholders' Equity			
	Current liabilities:			
<b>O</b>	Accounts payable	\$ 58,100	\$ 49,391	+8,709
<b>O</b>	Accrued expenses	29,106	26,223	+2,883
	Total current liabilities	87,206	75,614	
<b>F</b>	Long-term debt	25,065	23,732	+1,333
	Stockholders' equity:			
<b>F</b>	Common stock	657	656	+1
<b>F</b>	Additional paid-in capital	17,637	16,570	+1,067
<b>O and F</b>	Retained earnings	227,324	188,926	+38,398
	Total stockholders' equity	245,618	206,152	
	Total liabilities and stockholders' equity	\$ 357,889	\$ 305,498	
†The Accumulated Depreciation account also is related to operations because it relates to depreciation.				

# Reporting and Interpreting Cash flows from Operating Activities

The general structure of reporting operating cash flows using the indirect method:

## **Operating Activities**

Net income

Adjustments to reconcile net income to cash flow from operating activities:

+Depreciation and amortization expense

–Gain on sale of investing assets

+Loss on sale of investing assets

+Decreases in operating assets

+Increases in operating liabilities

–Increases in operating assets

–Decreases in operating liabilities

## **Net Cash Flow from Operating Activities**

To keep track of all the additions and subtractions made to convert net income to cash flows from operating activities, it is helpful to set up a schedule to record the computations.

CONVERSION OF NET INCOME TO NET CASH FLOW FROM OPERATING ACTIVITIES		
Items	Amount	Explanation
Net income, accrual basis	\$107,045	From income statement.
Add (subtract) to convert to cash basis:		
Depreciation and amortization	+10,152	Add back because depreciation and amortization expense does not affect cash.
Accounts receivable increase	-10,273	Subtract because cash collected from customers is less than accrual basis revenues.
Inventory increase	-5,433	Subtract because purchases are more than cost of goods sold expense.
Prepaid expense increase	-2,603	Subtract because cash prepayments for expenses are more than accrual basis expenses.
Accounts payable increase	+8,709	Add because cash payments to suppliers are less than amounts purchased on account (borrowed from suppliers).
Accrued expenses increase	+2,883	Add because cash payments for expenses are less than accrual basis expenses.
Net cash provided by operating activities	<u>\$110,480</u>	Subtotal on the statement of cash flows.

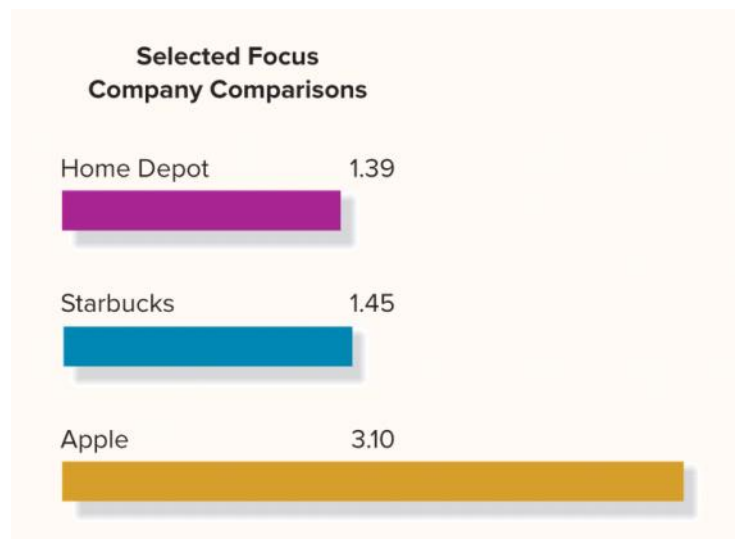
	Interest Received	Interest Paid
<b>U.S. GAAP</b>	Operating	Operating
<b>IFRS</b>	Operating or Investing	Operating or Financing

Operating working capital - operating assets and liabilities

## Quality of Income Ratio

"How much cash does each dollar of net income generate?"

$$\text{Quality of Income Ratio} = \frac{\text{Cash Flow from Operating Activities}}{\text{Net Income}}$$



## Reporting Cash Flows from Investing Activities

Related Balance Sheet Account(s)	Investing Activity	Cash Flow Effect
Property, plant, and equipment and intangible assets (patents, etc.)	Purchase of property, plant, and equipment or intangible assets for cash	Outflow
	Sale of property, plant, and equipment or intangible assets for cash	Inflow
Short- or long-term investments (stocks and bonds of other companies)	Purchase of investment securities for cash	Outflow
	Sale (maturity) of investment securities for cash	Inflow

## Capital Acquisitions Ratio

"To what degree was the company able to finance purchases of property, plant, and equipment with cash provided by operating activities?"

$$\text{Capital Acquisitions Ratio} = \frac{\text{Cash flows from operating activities}}{\text{Cash paid for property, plant, and equipment}}$$

## Free Cash Flow

Managers and analysts often calculate free cash flow as a measure of a firm's ability to pursue long-term investment opportunities.

Free Cash Flow = Cash flow from operating activities – dividends – capital expenditures

*While free cash flow is considered a positive sign of financial flexibility, it also can represent a hidden cost to shareholders. Sometimes managers use free cash flow to pursue unprofitable investments just for the sake of growth or to obtain **perquisites** (such as fancy offices and corporate jets) that do not benefit the shareholders. In these cases, the shareholders would be better off if free cash flow were paid as additional dividends or used to repurchase the company's stock on the open market.*

## Reporting Cash Flows from Financing Activities

Related Balance Sheet Account(s)	Financing Activity	Cash Flow Effect
Short-term debt (notes payable)	Borrowing cash from banks or other financial institutions	Inflow
	Repayment of loan principal	Outflow
Long-term debt	Issuance of bonds for cash	Inflow
	Repayment of bond principal	Outflow
Common stock and additional paid-in capital	Issuance of stock for cash	Inflow
	Repurchase (retirement) of stock with cash	Outflow
Retained earnings	Payment of cash dividends	Outflow

## Structure of Statement of Cash Flows



Statement of Cash Flows (Indirect Method)
<b>Operating Activities:</b>
Net Income
+ Depreciation and amortization expense
– Gain on sale of long-term assets
+ Loss on sale of long-term assets
+ Decreases in operating assets
+ Increases in operating liabilities
– Increases in operating assets
– Decreases in operating liabilities
<b>Net Cash Flow from Operating Activities</b>
<b>Investing Activities:</b>
– Purchase of property, plant, and equipment or intangible assets
+ Sale of property, plant, and equipment or intangible assets
– Purchase of investment securities
+ Sale (maturity) of investment securities
<b>Net Cash Flow from Investing Activities</b>
<b>Financing Activities:</b>
+ Borrowing from bank or other financial institution
– Repayment of loan principal
+ Issuance of bonds for cash
– Repayment of bond principal
+ Issuance of stock
– Repurchase (retirement) of stock
– Payment of (cash) dividends
<b>Net Cash Flow from Financing Activities</b>
<b>Net increase or decrease in cash and cash equivalents</b>
Cash and cash equivalents at beginning of period
Cash and cash equivalents at end of period

## Supplemental Cash Flow Info

Two additional required cash flow disclosures are normally listed at the bottom of the statement or in the notes.



	YEAR ENDED DECEMBER 31,		
	2017	2016	2015
Cash paid (refunded) during the period for:			
Interest (net of amounts capitalized)	571	584	660
Income taxes	20	14	15
Non-cash transactions:			
Net property and equipment acquired through issuance of debt	935	386	866
Other	134	103	302

#### HW Notes

✔ Answer is complete and correct.				
1.	Recorded an adjusting entry to record accrued salaries expense.	No effect	✔	
2.	Paid cash to purchase new equipment.	Outflow	✔	Net Cash Flows from Investing Activities
3.	Collected payments on account from customers.	Inflow	✔	Net Cash Flows from Operating Activities
4.	Recorded and paid interest on debt to creditors.	Outflow	✔	Net Cash Flows from Operating Activities
5.	Declared and paid cash dividends to shareholders.	Outflow	✔	Net Cash Flows from Financing Activities
6.	Sold used equipment for cash at book value.	Inflow	✔	Net Cash Flows from Investing Activities
7.	Prepaid rent for the following period.	Outflow	✔	Net Cash Flows from Operating Activities
8.	Repaid principal on revolving credit loan from bank.	Outflow	✔	Net Cash Flows from Financing Activities
9.	Purchased raw materials inventory on account.	No effect	✔	
10.	Made payment to suppliers on account.	Outflow	✔	Net Cash Flows from Operating Activities

Sharp Screen Films, Inc., is developing its annual financial statements at December 31, current year. The statements are complete except for the statement of cash flows. The completed comparative balance sheets and income statement are summarized as follows:

	Current Year	Prior Year
<b>Balance sheet at December 31</b>		
Cash	\$ 66,950	\$ 66,000
Accounts receivable	18,450	25,150
Merchandise inventory	25,150	19,600
Property and equipment	212,850	152,000
Less: Accumulated depreciation	(62,000)	(47,250)
	<u>\$ 261,400</u>	<u>\$ 216,300</u>
Accounts payable	\$ 12,200	\$ 22,400
Wages payable	4,700	5,300
Note payable, long-term	62,500	75,500
Common stock and additional paid-in capital	102,500	67,200
Retained earnings	<u>79,500</u>	<u>45,900</u>
	<u>\$ 261,400</u>	<u>\$ 216,300</u>
<b>Income statement for current year</b>		
Sales	\$ 208,000	
Cost of goods sold	105,000	
Depreciation expense	14,750	
Other expenses	<u>44,300</u>	
Net income	<u>\$ 43,950</u>	

**Additional Data:**

- Bought equipment for cash, \$60,050.
- Paid \$13,000 on the long-term note payable.
- Issued new shares of stock for \$35,300 cash.
- Dividends of \$10,350 were declared and paid.
- Other expenses all relate to wages.
- Accounts payable includes only inventory purchases made on credit.

**Required:**

- Prepare the statement of cash flows using the indirect method for the year ended December 31, current year. **(List cash outflows as negative amounts.)**

✔ Answer is complete and correct.

SHARP SCREEN FILMS, INC.		
Statement of Cash Flows		
For the Year Ended December 31, Current Year		
Cash flows from operating activities:		
Net income	✔	\$ 43,950 ✔
Adjustments to reconcile net income to net cash provided by operating activities:		
Decrease in accounts receivable	✔ \$ 6,700 ✔	
Increase in merchandise inventory	✔ (5,550) ✔	
Depreciation expense	✔ 14,750 ✔	
Decrease in accounts payable	✔ (10,200) ✔	
Decrease in wages payable	✔ (600) ✔	
		5,100
Net cash provided by operating activities	✔	49,050
Cash flows from investing activities:		
Cash payments to purchase property and equipment	✔ (60,050) ✔	
Net cash used in investing activities	✔	(60,050)
Cash flows from financing activities:		
Cash payments on long-term note	✔ (13,000) ✔	
Cash receipts from issuing stock	✔ 35,300 ✔	
Cash payments for dividends	✔ (10,350) ✔	
Net cash provided by financing activities	✔	11,950
Net increase in cash during the year	✔	950 ✔
Cash balance, January 1, current year	✔	66,000 ✔
Cash balance, December 31, current year	✔	\$ 66,950

Omega Company's accountants have just completed the income statement and balance sheet for the year and have provided the following information (dollars in thousands):

INCOME STATEMENT		
Sales revenue		\$ 20,620
Expenses		
Cost of goods sold	\$ 9,190	
Depreciation expense	3,020	
Salaries expense	4,070	
Rent expense	2,890	
Insurance expense	940	
Utilities expense	820	
Interest expense on bonds	920	
Loss on sale of investments	800	22,650
Net loss		\$ (2,030)

SELECTED BALANCE SHEET ACCOUNTS		
	Current Year	Prior Year
Merchandise inventory	\$ 96	\$ 70
Accounts receivable	450	542
Accounts payable	251	215
Salaries payable	39	18
Rent payable	14	28
Prepaid rent	19	22
Prepaid insurance	24	11

Other Data:

The company issued \$23,000, 8 percent bonds payable at par during the year.

Required:

1. Prepare the cash flows from operating activities section of the statement of cash flows using the direct method. (List cash outflows as negative amounts. Enter your answers in thousands.)

✓ Answer is complete and correct.

OMEGA COMPANY		
Cash Flows from Operating Activities		
Direct Method		
(In thousands)		
Cash flows from operating activities:		
Cash receipts from customers	✓ \$ 20,712	✓
Cash payments to suppliers	✓ (9,180)	✓
Cash payments for salaries	✓ (4,049)	✓
Cash payments for rent	✓ (2,901)	✓
Cash payments for insurance	✓ (953)	✓
Cash payments for utilities	✓ (820)	✓
Cash payments for bond interest	✓ (920)	✓
Net cash provided by operating activities	✓ \$ 1,889	

2. Prepare the cash flows from operating activities section of the statement of cash flows using the indirect method. (List cash outflows and losses as negative amounts. Enter your answers in thousands.)

✓ Answer is complete and correct.

OMEGA COMPANY		
Cash Flows from Operating Activities		
Indirect Method		
(In thousands)		
Cash flows from operating activities:		
Net loss	✓	\$ (2,030) ✓
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depreciation expense	✓ \$ 3,020	✓
Increase in merchandise inventory	✓ (26)	✓
Decrease in accounts receivable	✓ 92	✓
Increase in accounts payable	✓ 36	✓
Increase in salaries payable	✓ 21	✓
Decrease in rent payable	✓ (14)	✓
Decrease in prepaid rent	✓ 3	✓
Increase in prepaid insurance	✓ (13)	✓
Loss on sale of investments	✓ 800	✓
Total adjustments		3,919
Net cash provided by operating activities	✓	\$ 1,889