

## Chapter 13: Reporting and Interpreting Statement of Cash Flows

### CHAPTER SUMMARY

The Statement of Cash Flows is one of the required financial statements. Its primary purpose is to provide cash flow information in a manner that maximizes its usefulness to investors, creditors, and others in projecting future cash flows related to the enterprise.

The Statement of Cash Flows has three main sections:

- (a) cash flows from operating activities which are related to earning income from normal operations;
- (b) cash flow from investing activities which are related to the acquisition and sale of productive assets;  
and
- (c) cash flows from financing activities which are related to the sources of financing the enterprise.

The net cash inflow or outflow for the year is the same amount as the increase or decrease in cash and cash equivalents for the year. Cash equivalents are highly liquid investments with original maturities of less than three months.

Two different methods for reporting cash flows from operating activities are permitted. They are called the direct and indirect methods. Investing and financing activities are reported in exactly the same manner under both methods. Only the Operating section is presented differently. The direct method reports the gross cash flows for the main classifications of revenues and expenses. In contrast, the indirect method reports operating activities by showing a reconciliation of net income to net cash flows from operating activities. The amount of net cash flow from operations reported is the same under both methods.

### CHAPTER OBJECTIVES

- LO1 Classify cash flow statement items as part of net cash flows from operating, investing, and financing activities.
- LO2 Report and interpret cash flows from operating activities using the indirect method.
- LO3 Analyze and interpret the quality of income ratio.
- LO4 Report and interpret cash flows from investing activities.
- LO5 Analyze and interpret the capital acquisitions ratio.
- LO6 Report and interpret cash flows from financing activities.
- LO7 Understand the format of the cash flow statement and additional cash flow disclosures.
- Supplement A Report and interpret Cash Flows from operating activities using the direct method.

## CHAPTER OUTLINE

- I. UNDERSTANDING THE BUSINESS**
  1. Net income on the Income Statement indicates that revenues exceeded costs and expenses for the accounting period.
  2. Net income does not pay bills. Cash pays bills.
    - a. The Statement of Cash Flows is an indication of a company's ability to pay bills.
    - b. It presents the sources of a company's cash inflows and the uses of cash outflows. The statement highlights the generation of cash. It also details investments and external financing.
  3. The Statement of Cash Flows is an important statement to use to predict the going concern ability (continuity) of a business. Both managers and analysts are interested in the Statement of Cash Flows for a business. It helps to assess the "health" of a company in regard to expanding operations, replacing operational assets, taking advantage of market opportunities, and paying dividends.
  
- II. LO1 CLASSIFY CASH FLOW STATEMENT ITEMS AS PART OF NET CASH FLOWS FROM OPERATING, INVESTING, AND FINANCING ACTIVITIES.**
  - A. What is cash?**
    1. The Statement of Cash Flows demonstrates how the beginning of the year cash balance changed to become the end of the year cash balance. Cash balance, in this instance, includes cash and cash equivalents.
    2. Cash equivalents are short-term, highly liquid investments. They possess two characteristics:
      - a. Readily convertible to known amounts of cash by the holder.
      - b. So near their maturity that the risk of change in value (because of interest rates) is insignificant. The "so near" characteristic considers maturities of less than three months from the investor's acquisition date.
    3. Examples of cash equivalents include Treasury bills, money market funds, and commercial paper.
  
  - B. Classifications on the Statement of Cash Flows**
    1. There are three broad classifications of cash inflows and outflows presented on the Statement of Cash Flows:
      - a. Operating activities
      - b. Investing activities
      - c. Financing activities.
  
  - C. Cash Flows from Operating Activities**
    1. The operating activities (operations) section of the Statement of Cash Flows reports cash inflows and outflows directly associated with revenues and expenses from normal operations reported on the Income Statement.
      - a. Note that a company can report net income even when the cash account has decreased over the year.
      - b. It can report a net loss even when the cash account has increased over the year.
    2. There are two alternative approaches for preparing the operating activities section of the Statement of Cash Flows.
      - a. The direct method reports the components of cash flows from operating activities as gross cash receipts and gross cash payments.
        1. The Financial Accounting Standards Board recommends this method, but it is rarely used in practice in the U.S. because managers say it is more costly (cost/benefit constraint) to use than the indirect method.
        2. Cash receipts and cash expenditures are used to compute cash inflows and cash outflows from operations. The difference is called net cash inflow (outflow) from operating activities.

3. This classification includes:

Inflows

Receipts from customers  
Receipts of interest  
Receipts of dividends

Outflows

Purchases of goods/services  
Payments of interest  
Payments to employees  
Payments of income taxes  
Payments of operating expenses

b. The indirect method adjusts net income (net loss) to derive net cash flows from operating activities.

1. This method is widely used in practice. Adjustments are made to net income to compute the net cash inflow (outflow) from operating activities.

2. The operating activities section of the Statement of Cash Flows describes cash flows related to the profit making activities of a business.

3. The Income Statement presents net income on an accrual basis without regard to when the related cash flows occur.

4. The Statement of Cash Flows, on the other hand, provides information on a cash basis. For example:

a. Depreciation expense is a common difference in net income on the Income Statement and net cash flows from operating activities on the Statement of Cash Flows.

b. Depreciation expense is deducted from revenues on the Income Statement to arrive at net income. However, depreciation expense does not require a cash outlay so it is added back to net income under the indirect method.

**D. Cash Flows from Investing Activities**

1. Cash flows from investing activities report cash inflows and outflows associated with the acquisition and disposal of long-lived productive assets and investment assets.

2. This classification includes:

Inflows

Sales of plant, property, & equipment  
Sales or maturity of investments

Outflows

Purchases of plant, property, & equipment  
Purchases of investments

3. Cash flows from investing activities involve the analysis of changes in long-term asset accounts (for example: plant, property, and equipment).

4. The difference between cash inflows and cash outflows from this category is the net cash inflow (outflow) from investing activities.

**E. Cash Flows from Financing Activities**

1. Cash flows from financing activities report cash inflows and outflows associated with owners and creditors. This category relates to the external sources of financing a business.

2. This classification includes:

Inflows

Borrowing on notes, mortgages, bonds, etc. –  
from creditors  
Issuing stock to owners

Outflows

Repayments of principal to creditors (excluding  
interest – which is part of operations)  
Repurchase of stock from owners  
Payment of dividends to owners

3. For cash flows from financing activities, analysis for changes in liabilities and owners' equity accounts is performed (for example: notes payable, retained earnings, and capital stock).

4. The difference between cash inflows and cash outflows from this category is the net cash inflow (outflow) from financing activities.

**F. Net Increase (Decrease) in Cash**

1. The combination of net cash flows from operating activities, investing activities, and financing activities must equal the net change in cash for the reporting period.

2. When the overall net increase (or decrease) in cash is determined, it should be added to (or subtracted from) the beginning cash balance. The ending cash balance derived should agree with the cash balance reported on the current Balance Sheet.

#### H. Relationships to the Balance Sheet and Income Statement

1. The Statement of Cash Flows helps financial statement users understand the causes of the cash flows of a business. It demonstrates how the company got from the *beginning* cash balance to the *ending* cash balance (presented on the current Balance Sheet).
  - a. The investing activities section of the Statement of Cash Flows provides information related to the *long-term investment strategy* of a company.
  - b. The financing activities section of the Statement of Cash Flows provides information about the *financing strategy* of a company.
2. General ledger (or T-account) balances are used to prepare the Income Statement and the Balance Sheet since these balances are based on accrual accounting.
  - Although the General Ledger account balances are used to determine the amounts on the Cash Flow Statement, the General Ledger amounts must be adjusted in order to convert them to cash.
3. The following data is needed to prepare the Statement of Cash Flows:
  - a. Comparative Balance Sheets at the end of the *current* period and at the end of the *previous* period.
    1. These are used in determining the changes from the beginning to the end of the accounting period for each Balance Sheet item.
    2. Using this approach, cash flows from *all* activities (operating, investing, and financing) can be determined.
  - b. An Income Statement for the *current* period. This is used primarily in determining cash flows from operating activities.
  - c. Additional details are needed about some of the accounts that may reflect several transactions/events during the period. This information is necessary to determine which amounts resulted from cash flows and which amounts were noncash events.
4. The focus for preparing and interpreting the changes in the Balance Sheet accounts is the Balance Sheet equation:  $A = L + SE$ 
  - a. This basic equation can be modified to reflect changes in Balance Sheet accounts:  
Changes in A = Changes in L + Changes in SE
  - b. Cash and noncash events need to be separated:  
Changes in Cash + Changes in Noncash Assets = Changes in L + Changes in SE
  - c. Finally, the change in cash can be explained by the changes in other Balance Sheet accounts:  
Changes in Cash = Changes in L + Changes in SE - Changes in Noncash Assets
  - d. These changes are then classified as they relate to operating (O), investing (I), or financing (F) activities.

### III. LO2 REPORT AND INTERPRET CASH FLOWS FROM OPERATING ACTIVITIES USING THE INDIRECT METHOD.

#### A. Overview

1. The operating activities section of the Statement of Cash Flows can be prepared in one of two formats:
  - a. The indirect method of presenting cash flows follows a reconciliation approach. Adjustments are added to and subtracted from net income to derive "cash income".
  - b. The direct method presents gross cash inflows and gross cash outflows related to operating activities. Unlike the indirect method, this method provides the statement user a sense of the magnitude of dollars flowing in and out of the day-to-day operations of the business.
2. The amount of "net" cash flow from operating activities is the *same* under *either* method. It is just the presentation of the details that differs. Just the details in the presentation of the Operating section vary. The investing and financing sections are only presented in one format.

- B. Reporting Cash Flows From Operating Activities - Indirect Method**
1. Start with net income.
  2. There are two basic steps to follow when adjusting net income to prepare the operating activities section under this method:
    - a. Step 1: Adjust net income for noncash revenues and expenses.
      1. Add back depreciation and amortization expense.
        - a. These were deducted to determine net income, but did not result in an outflow of cash.
      2. Add back bad debt expense. This did not result in a decrease in cash.
      3. Adjust for gain/loss on the sale of a plant asset.
        - a. Add back a loss or subtract a gain.
        - b. The total cash provided by the sale will be accounted for in the investing section.
    - b. Step 2: Review the Balance Sheet and determine the change of each of the current asset and current liability accounts. Compare year end balance with beginning of the year balance and account for the increase or decrease as follows:
      1. If a current asset account increases, subtract the increase from Net Income
      2. If a current asset account decreases, add the decrease to Net Income
      3. If a current liability account increases, add the increase to Net Income
      4. If a current liability account decreases, subtract the decrease from Net Income

- IV. LO3 ANALYZE AND INTERPRET THE QUALITY OF INCOME RATIO.**
1. Answers the question: How much cash does every dollar of net income generate?
  2. All other things being equal, a higher ratio indicates greater ability to finance operating and other cash needs from operating cash inflows.

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

- V. LO4 REPORT AND INTERPRET CASH FLOWS FROM INVESTING ACTIVITIES.**
- A. Reporting Cash Flows From Investing Activities**
1. The investing activities section of the Statement of Cash Flows includes purchases (cash outflows) and sales (cash inflows) of long-lived productive assets and investments in securities of other companies.
    - a. Cash outflows relate to capital expenditures, such as the purchase of property, plant, and equipment, intangibles and investments.
    - b. Cash inflows relate to the sale of these assets. Any gain or loss on the sale is removed from the operating activities section if using the indirect method so that the entire sales proceeds can be presented in the investing activities section.
- B. Interpreting Cash Flows From Investing Activities**
1. Two common ways to assess a company's ability to internally finance its expansion needs are the capital acquisitions ratio and free cash flow.
    - a. Free Cash Flow is a measurement of a company's ability to engage in long-term investments activities. It provides an indication of whether a company can pursue investments without external funding. It implies that excess cash from operations can support such investments

**Free Cash Flow = Cash Flows from Operating Activities - Dividends - Capital Expenditures**

2. The capital acquisitions ratio is discussed below.

**VI. LO5 ANALYZE AND INTERPRET THE CAPITAL ACQUISITIONS RATIO.**

1. The capital acquisitions ratio reflects the portion of purchases of PP&E financed by cash from operations.

$$\text{Capital Acquisitions Ratio} = \frac{\text{Cash Flow from Operating Activities}}{\text{Cash Paid for PP \& E}}$$

**VII. LO6 REPORT AND INTERPRET CASH FLOWS FROM FINANCING ACTIVITIES.**

**A. Reporting Cash Flows From Financing Activities**

1. The financing activities section of the Statement of Cash Flows is associated with generating funds from creditors and owners.
  - a. Cash outflows include repayments of debt principal to creditors (any interest paid is presented under operating activities). Outlays of cash associated with owners include dividend payments, purchases of treasury stock shares, and purchases of shares for retirement.
  - b. Cash inflows include the proceeds of borrowing and the sale of stock (including the resale of treasury shares).
2. This type of activity is impacted by contributed capital accounts, long-term as well as short-term debt from borrowings, and retained earnings to the extent impacted by cash dividends.
3. If debt or stock is issued for something other than cash, they are not included in this section. This would be a significant noncash activity, and would be reported either in the Notes or in a separate section following the Statement of Cash Flows.
4. Although interest payments are associated with debt, they are reported in the operating section, not the financing section. One way to remember this is that interest expense is found on the Income Statement (otherwise known as the Statement of Operations) and therefore is shown in the Operating section of the Cash Flow Statement.

**B. Interpreting Cash Flows From Financing Activities**

1. The long-term expansion of a company is normally financed from three sources: internally generated funds (from operations), the issuance of stock, and money borrowed on a long-term basis.
2. The financing sources that management uses to fund expansion will have an important impact on the firm's risk and return characteristics. The Statement of Cash Flows shows how management has elected to fund its expansion.

**VIII. LO7 UNDERSTAND THE FORMAT OF THE CASH FLOW STATEMENT AND ADDITIONAL CASH FLOW DISCLOSURES.**

**A. After the amount and category for each cash flow items is determined, the preparation of the Statement of Cash Flows is basically a formatting issue.**

1. The heading should include the date "for the year ended \_\_\_\_." That is, the amounts presented under operating, investing, and financing activities are inflows and outflows of cash during the accounting period.
2. If the direct method for presenting cash flows from operating activities is used, a reconciliation of net income to cash income is required as a supplemental schedule.

**B. Noncash Investing and Financing Activities**

1. Certain transactions are important investing and financing activities, but they do not affect cash flows during the current accounting period. Often these events involve significant amounts.
2. Noncash disclosure of investing and financing activities is required on a schedule or in the notes to the financial statements. This disclosure helps users of the statement to forecast the impacts of future cash flows.
3. Examples of noncash items include the purchase of a building in exchange for common stock, the retirement of bonds payable by issuing stock, and the purchase of equipment by signing a note payable.

**C. Supplemental Cash Flow Information**

1. When the indirect method of presenting cash flows from operations is used, two figures must be derived for presentation about the operating activities of a company. They are interest PAID and income taxes PAID.
2. If they are not included on the face of the Statement of Cash Flows, these amounts should be disclosed in the notes.

**IX. LO8 Supplement A. REPORT AND INTERPRET CASH FLOWS FROM OPERATING ACTIVITIES USING THE DIRECT METHOD.**

**A. Reporting Cash Flows From Operating Activities - Direct Method**

1. The direct method presents a summary of all operating transactions that result in either a debit or a credit to cash. This approach is prepared by adjusting each item on the Income Statement from an accrual basis to a cash basis.
2. There are three basic steps to follow when preparing the operating activities under this method:
  - a. Step 1: Convert revenue amounts on the Income Statement to cash receipts or inflows. These involve receipts from customers and from investments.

Income Statement Account	+/- Change in Balance sheet Account(s)	= Operating Cash Flow
Sales Revenue	+ Decrease in A/R - Increase in A/R	Collections from customers
Interest or Dividend Revenue	+ Decrease in Interest/Dividends Receivable - Increase in Interest/Dividends Receivable	Collections of interest/ dividends from investments

- b. Step 2: Convert accrual cost of goods sold to cash paid to suppliers.

Income Statement Account	+/- Change in Balance sheet Account(s)	= Operating Cash Flow
Cost of Goods Sold	+ Increase in Inventory - Decrease in Inventory - Increase in A/P + Decrease in A/P	Payments to suppliers of inventory

- c. Step 3: Convert accrual operating expenses to cash payments for operating expenses.

Income Statement Account	+/- Change in Balance sheet Account(s)	= Operating Cash Flow
Other Expenses	+ Increase in Prepaids - Decrease in Prepaids - Increase in Accruals + Decrease in Accruals	Payments to suppliers of services such as rent, utilities, wages, interest, etc.
Income Tax Expense	+ Increase in Prepaid Taxes - Decrease in Prepaid Taxes - Increase in Taxes Payable + Decrease in Taxes Payable	Collections of interest/ dividends from investments

**X.** CHAPTER SUPPLEMENT B: SPREADSHEET APPROACH – STATEMENT OF CASH FLOWS: INDIRECT METHOD

1. The preparation of the Statement of Cash Flows can become complex for a company with an extensive chart of accounts. The spreadsheet approach uses a worksheet for a systematic way to analyze, organize, and summarize data. Comparative Balance Sheet amounts are needed.
2. The four money column worksheet is organized as follows:
  - a. On the far left at the top, each Balance Sheet account title is listed.
  - b. The first money column lists Balance Sheet account balances at the beginning of the year.
  - c. The next two money columns are for the debit/credit analysis of changes in the Balance Sheet accounts during the year.
  - d. The fourth money column (on the far right) lists Balance Sheet account balances at the end of the year.
  - e. On the far left at the bottom, the name of each item that will be reported on the Statement of Cash Flows is entered. These items should be listed by category (operating, investing, and financing).
3. As the debit/credit entries for the Balance Sheet accounts are made in the top half of the worksheet, offsetting debit/credit entries are made for Statement of Cash Flows items at the bottom of the worksheet. When all of the Balance Sheet items have been analyzed and footed across (reconciled), the information at the bottom of the worksheet is accumulated for the Statement of Cash Flows preparation.
4. The worksheet is an efficient tool for analysis of both cash and noncash events. It provides assurance to the Statement of Cash Flows preparer that all items (cash and noncash) have been properly considered for reporting and disclosure purposes.
5. The Income Statement and the Balance Sheet can be prepared directly from general ledger account balances. The Statement of Cash Flows requires further analytical procedures for its preparation. The worksheet (spreadsheet) is helpful in that regard.