

CHAPTER 4

The Balance Sheet and Statement of Cash Flows

We continue our coverage of financial accounting by discussing the final two statements. The **balance sheet** presents a picture of the business's assets and liabilities, while the **statement of cash flows** uses information from the income statement and the balance sheet to reveal where a business obtains its cash and what it does with that cash.

Balance Sheet Basics

- Whereas the income statement contains information about a business's operations and profitability, the **balance sheet** contains information about:
 - The **assets** of an organization
 - The **liabilities** and **equity** of the business, or how the assets are financed
- The balance sheet presents a business's position at a *given point in time*. How does this differ from the income statement?

Balance Sheet Basics (Cont.)

The balance sheet is organized with a **left side** (or *upper section*) and **right side** (or *lower section*):

<u>Assets</u>	<u>Liabilities and Equity</u>
Current assets	Current liabilities
Long-term assets	Long-term liabilities
	Equity (Net assets)
<u>Total assets</u>	<u>Total liabilities and equity</u>

Balance Sheet Basics (Cont.)

- The basic format of the balance sheet highlights the **accounting identity**, often called the **basic accounting equation**:

$$\text{Assets} = \text{Liabilities} + \text{Equity}.$$

- Note that the accounting identity is often expressed as follows:

$$\text{Equity} = \text{Assets} - \text{Liabilities},$$

which highlights the fact that the equity amount is a residual (what remains when liabilities are subtracted from assets).

Balance Sheet Basics (Cont.)

You can think of a balance sheet in terms of home ownership:

Assets	Liabilities and Equity
Home \$300,000	Mortgage \$200,000
Total assets \$300,000	Equity 100,000
Total assets \$300,000	Total liab and equity \$300,000

Note that the values on a business balance sheet are book (GAAP) values, not market values.

But these are market values. What happens if the value of the house falls to \$250,000? \$150,000?

Sunnyvale Clinic: Assets (in thousands)

	2015	2014
Current Assets:		
Cash and cash equivalents	\$ 12,102	\$ 6,486
Short-term investments	10,000	5,000
Net patient accounts receivable	28,509	25,927
Inventories	<u>3,695</u>	<u>2,302</u>
Total current assets	\$ 54,306	\$ 39,715
Long-term investments	48,059	25,837
Net property and equipment	<u>52,450</u>	<u>49,549</u>
Total assets	\$154,815	\$115,101

Current Assets

- **Assets** either possess (say, cash) or create (say, buildings and equipment) economic benefit to the business.
- **Current assets** include:
 - Cash
 - Cash equivalents
 - Other assets that are expected to be converted into cash within the next year:
 - Short-term investments (marketable securities)
 - Net patient accounts receivable
 - Inventories

Current Assets (Cont.)

- **Cash** represents actual cash in hand and commercial checking accounts.
- **Cash equivalents** are cash-like investments with maturities of *three months or less*.
- **Short-term investments** (also called **marketable securities**) are investments in highly liquid, typically low-risk, securities having a maturity of less than one year (but greater than three months):
 - One example is Treasury bills (T-bills).
 - These securities are reported *at cost*, but their current market values are given in the notes.
- ? Why do businesses hold short-term investments?

Current Assets (Cont.)

- Because current assets are expected to be quickly converted to cash, they are important to an organization's **liquidity**.
- A traditional measure of **liquidity** is **net working capital (NWC)**:
$$\text{NWC} = \text{Current assets} - \text{Current liabilities}$$
$$= \$54,306 - \$15,425 = \$38,881$$
- ? How good is this measure?

Current Assets (Cont.)

- **Net patient accounts receivable** represents revenues owed to the business but not yet collected.
- Of **\$169,979,000** in reported patient service revenue in **2015**, **\$28,509,000** (the receivables) are yet to be collected.
- ? Where is the $\$169,979 - \$28,509 =$ **\$141,470** that has been collected?

Current Assets (Cont.)

- **Inventories** represent the dollar amount of expendable supplies on hand.
 - For providers, inventories are primarily medical supplies.
 - Only supplies actually consumed in treating patients are *expensed* on the income statement.
- Providers with small inventory balances often report them in a catchall “Other current assets” account.

Current Assets (Cont.)

- Note that current assets are listed in *order of liquidity*, or nearness to cash:
 - Cash and cash equivalents
 - Short-term investments
 - Net patient accounts receivable
 - Inventories
- Current assets are necessary to support operations, but they provide no (or little) explicit monetary return.
- ? Should businesses hold large amounts of current assets?

Long-Term Investments

- **Long-term investments** are investments in securities (*financial assets*) as opposed to buildings and equipment (*real assets*) that have maturities greater than one year.
- Sometimes this account is referred to as **funded depreciation**.
- It is used more by not-for-profit businesses than by investor-owned businesses. Why?

Property and Equipment

- **Net property and equipment** represents *real assets* (as opposed to *financial assets*) having useful lives greater than one year. Often, such assets are called *fixed assets*.
- In general, the assets reported on this line consist of land, buildings, and equipment.
- Although only a net amount is reported on the face of the balance sheet, the notes section contains the gross/net breakdown. (See next slide.)

Property and Equipment (Cont.)

When purchased, fixed assets are posted on the balance sheet at their *original (gross) cost*. Then, each year the accumulated depreciation account is increased by the amount of depreciation reported on the income statement. Thus, the net property and equipment amount is reduced each year by the annual depreciation expense.

	<u>2015</u>	<u>2014</u>
Property and Equipment:		
Land	\$ 2,954	\$ 2,035
Buildings and equipment	<u>85,595</u>	<u>77,208</u>
Gross property and equipment	\$88,549	\$79,243
Less: Accumulated depreciation	<u>36,099</u>	<u>29,694</u>
Net property and equipment	\$52,450	\$49,549

Sunnyvale Clinic: Liabilities and Equity (in thousands)

	2015	2014
Current Liabilities:		
Notes payable	\$ 4,334	\$ 3,345
Accounts payable	5,022	6,933
Accrued expenses	<u>6,069</u>	<u>5,037</u>
Total current liabilities	\$ 15,425	\$ 15,315
Long-term debt	<u>85,322</u>	<u>53,578</u>
Total liabilities	\$100,747	\$ 68,893
Net assets (Equity)	<u>54,068</u>	<u>46,208</u>
 Total liabilities and equity	 \$154,815	 \$115,101

Liabilities

- **Liabilities** represent claims against assets that are *fixed* by contract. In other words, liabilities are fixed *financial obligations* of the business. Failure to meet these claims can result in bankruptcy and potential closure.
- Although some liability obligations are to suppliers, employees, tax authorities, and vendors, the largest obligations are to *creditors*, who furnish debt capital to businesses.

Current Liabilities

- **Current liabilities** are those obligations that come due (must be paid) within one year (accounting period).
- The most common current liabilities are:
 - Notes payable
 - Accounts payable
 - Accrued expenses

Current Liabilities (Cont.)

- Notes payable** are *short-term* debt obligations, typically bank loans.
- Maturities of less than one year
 - Often takes the form of a **line of credit**
 - Usually used to finance temporary (seasonal or cyclical) increases in current assets

Current Liabilities (Cont.)

- **Accounts payable** stems from buying goods (typically medical supplies) from vendors on credit called **trade credit**.
 - Vendors often have payment terms such as *net 30*. Here, the provider has 30 days to pay the invoice.
 - The amount purchased, but not yet paid, is carried as an accounts payable.
- ? How much trade credit should be used? Why?

Current Liabilities (Cont.)

- **Accrued expenses (accruals)** are payment obligations of the business, primarily:
 - Salaries to employees
 - Taxes to government authorities
 - Interest payments to debt suppliers
- For example, wages earned during the last week of December but not paid until the first week of January would appear on the December 31 balance sheet as an accrual.

Long-Term Debt

- **Long-term debt** represents debt financing with maturities *greater than* one year.
 - Smaller businesses often obtain long-term credit from commercial banks. Such debt is called a **term loan**.
 - Larger businesses typically issue (sell) bonds.
- Detailed information is provided in the notes to the financial statements.

Equity

- **Equity (Net assets)** represents the nonliability claims against a business's assets. Equity obligations are *not* fixed by contract.
 - For *investor-owned* businesses, equity is the amount of owner-supplied financing.
 - For *not-for-profit* businesses, equity is the amount of capital supplied "by the community."
- As mentioned earlier, the equity account is really a residual:
$$\text{Equity} = \text{Total assets} - \text{Total liabilities.}$$

Equity (Cont.)

- The equity section of the balance sheet, more than anything else, distinguishes an investor-owned business from a not-for-profit business.
- In *not-for-profit* corporations, the equity account is called **net assets**—it is the dollar value of assets *net of liabilities*.

Equity (Cont.)

A for-profit equity section might look like this:

	2015	2014		
Common stock			\$ 9,000	\$ 9,000
Retained earnings			<u>44,068</u>	<u>36,208</u>
Total equity			<u>\$54,068</u>	<u>\$46,208</u>

? What do these numbers mean?

Equity (Cont.)

- Note that the retained earnings account (the entire net equity account for not-for-profit organizations) is affected by the amount of net income shown on the income statement.
- For a *not-for-profit business*, the entire amount of net income flows to the equity section of the balance sheet.
- For a *for-profit business*, some of the net income may be paid out as dividends. The remainder flows to the balance sheet.
- This relationship is detailed in the *statement of changes in equity* (discussed last week).

Equity (Cont.)

- The right side of the balance sheet gives the business's mix of debt and equity financing, which is called its **capital structure**.
- Capital structure is a key financing decision because it affects a business's:
 - Overall risk
 - Cost of financing

Fund Accounting

- Not-for-profit providers with *restricted endowment contributions* are required to create more complex balance sheets according to **fund accounting** rules.
- Assets and liabilities are classified as:
 - Unrestricted
 - Temporarily restricted
 - Permanently restricted
- Such organizations are encouraged to provide “regular” statements to outsiders.

Statement of Cash Flows

- The **statement of cash flows** combines both income statement and balance sheet data to create an income statement–like report that focuses on cash flows.
- It is designed to answer three questions:
 - Where did the business get its cash?
 - What did it do with the cash it got?
 - How did its cash position change?
- ? Is this valuable information?

Statement of Cash Flows (Cont.)

- Like the income statement, it reports transactions over some *time period*.
- The top part of the statement is divided into three sections:
 - Cash flows from operating activities
 - Cash flows from investing activities
 - Cash flows from financing activities
- The bottom part reconciles the change in cash on the statement with the cash account on the balance sheet.
- Note that there are two ways of expressing the cash flows from operating activities.

Sunnyvale Clinic: Statement of CFs (1)

(in thousands)

2015 2014

Cash Flows from Operating Activities:

Operating income	\$ 3,747	\$ 4,330
Adjustments:		
Depreciation	6,405	5,798
Increase in accounts receivable	(2,582)	(1,423)
Increase in inventories	(1,393)	(673)
Decrease in accounts payable	(1,911)	(966)
Increase in accruals	<u>1,032</u>	<u>865</u>
Net cash from operations	<u>\$ 5,298</u>	<u>\$ 7,931</u>

Sunnyvale Clinic: Statement of CFs (2)

(in thousands)

2015 2014

Cash Flows from Investing Activities:

Capital expenditures	(\$ 9,306)	(\$ 1,953)
Nonoperating income	4,113	3,876
Purchase of short-term securities	(5,000)	0
Purchase of long-term securities	<u>(22,222)</u>	<u>(20,667)</u>
Net cash from investing	<u>(\$32,415)</u>	<u>(\$18,744)</u>

Sunnyvale Clinic: Statement of CFs (3)

(in thousands)

	<u>2015</u>	<u>2014</u>		
<i>Cash Flows from Financing Activities:</i>				
Bank loan (notes payable) increase	\$ 989	\$ 0		
Long-term debt increase	<u>31,744</u>	<u>0</u>		
Net cash from financing	<u>\$32,733</u>	<u>\$ 0</u>		
Net increase (decrease) in cash	\$ 5,616	(\$10,813)		
Cash and equivalents, beginning	<u>6,486</u>	<u>17,299</u>		
Cash and equivalents, end	\$12,102	\$ 6,486	=====	=====

Statement of Cash Flows (Cont.)

- The top (operations) section of the statement of cash flows tells us that in 2015, Sunnyvale:
 - Had a positive operating income and depreciation cash flow.
 - Increased (invested in) receivables and inventories.
 - Decreased (paid off some) payables.
 - Increased its accrual financing.
- When all flows are considered, the clinic generated a large positive cash flow (\$5,298,000) from operations.

Statement of Cash Flows (Cont.)

- The middle (investment) section tells us that Sunnyvale:
 - Invested heavily in new fixed assets.
 - Earned nonoperating income.
 - Purchased (invested in) new short-term securities.
 - Purchased (invested in) a large amount of new long-term securities.
- When all investment flows are considered, on net the clinic invested **\$32,415,000** in new fixed assets and securities.

Statement of Cash Flows (Cont.)

- The bottom (financing) section tells us that Sunnyvale:
 - Used a small amount of short-term debt financing (bank loan).
 - Increased its use of long-term debt from **\$0 to \$31,744,000**.
- When all financing flows are considered, the clinic increased its use of debt financing by **\$32,733,000**.

Statement of Cash Flows (Cont.)

- When all sections are considered, in 2015 Sunnyvale had a positive cash flow (net increase in cash and equivalents) of **\$5,616,000**.
- The very bottom of the statement of cash flows reconciles this increase with the balance sheet account.
- ? What is the most important line on the statement of cash flows?

A Second Look at Financial Statement Analysis

- As mentioned in Chapter 3, **ratio analysis** uses financial statement values to form ratios that are easy to interpret.
- For example, the **debt ratio**:

$$\begin{aligned}\text{Debt ratio} &= \frac{\text{Total debt}}{\text{Total assets}} \\ &= \frac{\$100,747}{\$154,815} = 0.65 = \mathbf{65\%}.\end{aligned}$$

- ? How is this ratio interpreted?

That's all for Chapter 4!