

CHAPTER 4

The Balance Sheet and Statement of Cash Flows

- **Balance sheet**
 - **Accounting identity**
 - **Assets**
 - **Liabilities and equity**
- **Relationship between the income statement and the balance sheet**
- **Statement of cash flows**

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*):

Assets

Current assets

Long-term assets

Total assets

Liabilities and Equity

Current liabilities

Long-term liabilities

Equity

Total liabilities and equity

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.

Sunnyvale Clinic: Assets

(in thousands)

	<u>2007</u>	<u>2006</u>
Current Assets:		
Cash	\$ 12,102	\$ 6,486
Short-term investments	10,000	5,000
Net patient accounts receivable	28,509	25,927
Inventories	3,695	2,302
Total current assets	<u>\$ 54,306</u>	<u>\$ 39,715</u>
Long-term investments	<u>\$ 48,059</u>	<u>\$ 25,837</u>
Property and Equipment:		
Land	\$ 2,954	\$ 2,035
Buildings and equipment	85,595	77,208
Gross fixed assets	\$ 88,549	\$ 79,243
Less: Accumulated depreciation	36,099	29,694
Net fixed assets	<u>\$ 52,450</u>	<u>\$ 49,549</u>
Total assets	<u><u>\$154,815</u></u>	<u><u>\$115,101</u></u>

Current Assets

- **Assets** either possess (say, cash) or create (say, buildings and equipment) economic benefit to the business.
- **Current assets** include:
 - Cash
 - 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.)

- Because current assets are expected to be quickly converted to cash, they are important to a firm's **liquidity**.
 - A traditional measure of a business's **liquidity** is **net working capital (NWC)**:
$$\text{NWC} = \text{Current assets} - \text{Current liabilities}$$
$$= \$54,306 - \$15,425 = \$38,881,000.$$
- ? How good is this measure?

Current Assets (Cont.)

- **Cash** represents actual cash in hand and money held in commercial checking accounts.
- **Short-term investments (marketable securities)** are investments in highly liquid, typically low-risk, securities:
 - One example is Treasury bills (T-bills).
 - These securities are reported *at cost*, but their current market values are given in the footnotes.
- ? **Why do businesses hold short-term investments?**

Current Assets (Cont.)

- **Net patient accounts receivable** represents revenues owed to the business but not yet collected.
- Of **\$167,013,000** in reported patient service revenue in **2007** (net of provision for bad debts), **\$28,509,000** (the receivables) are yet to be collected.
- ? Where is the $\$167,013,000 - \$28,509,000 = \$138,504,000$ 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
 - Marketable securities
 - 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.
- Often, this account is called **funded depreciation**.
- It is used more by not-for-profit businesses than by investor-owned businesses. Why?

Property and Equipment

- **Property and equipment**, or **fixed assets**, represent *real assets* (as opposed to *financial assets*) having useful lives greater than one year.
 - **Gross fixed assets** report the historical cost of property and equipment.
 - **Net fixed assets** reflect an adjustment for **accumulated depreciation**.
- The accumulated depreciation account is *increased* each year by the amount of depreciation expense shown on the income statement.

Sunnyvale Clinic: Liabilities and Equity

(in thousands)

	<u>2007</u>	<u>2006</u>
Current Liabilities:		
Notes payable	\$ 4,334	\$ 3,345
Accounts payable	5,022	6,933
Accrued expenses	6,069	5,037
Total current liabilities	<u>\$ 15,425</u>	<u>\$ 15,315</u>
Long-term debt	<u>\$ 85,322</u>	<u>\$ 53,578</u>
Total liabilities	<u>\$100,747</u>	<u>\$ 68,893</u>
Net assets (Equity)	<u>\$ 54,068</u>	<u>\$ 46,208</u>
 Total liabilities and equity	 <u><u>\$154,815</u></u>	 <u><u>\$115,101</u></u>

Liabilities

- **Liabilities** represent claims against assets that are *fixed* by contract. Failure to meet these claims can result in bankruptcy and potential closure.
- Although some liability claims are by workers, employees, and vendors, the largest claims are by *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.

Current Liabilities (Cont.)

- Note that trade credit (accounts payable) and accruals are called **spontaneous liabilities**, because their levels tend to rise and fall with a business's level of operations.
- Such liability accounts provide an important source of funding to growing businesses.

Current Liabilities (Cont.)

- Although not critical to Sunnyvale, **incurred but not reported (IBNR) expenses** is an important current liability account for providers with a high percentage of capitated revenues.
 - Payment is received before services are provided, say, in December.
 - The *matching principle* requires that expenses expected to be incurred next year that are related to a December diagnosis be reported on the balance sheet.
- Some businesses have a catchall “other current liabilities” account.

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 footnotes.

Equity

- **Equity** represents the nonliability claims against a business's assets.
 - 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.)

- You can think of the equity section of a business's balance sheet in terms of *home ownership*.
 - The left (asset) side of your house balance sheet shows its market value.
 - The right (liabilities and equity) side of the balance sheet shows:
 - The remaining balance on the mortgage (a liability).
 - The *equity* that you have in the house, which is the difference between the value of the house and the balance on the mortgage.

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:

	<u>2007</u>	<u>2006</u>
Stockholders' Equity:		
Common stock (\$1 par value, 1,500,000 shares authorized, 1,000,000 shares outstanding)	\$ 1,000	\$ 1,000
Capital in excess of par	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 retained earnings, or the entire net equity account for not-for-profit organizations, is influenced by the amount of net income shown on the income statement.
- ? How does this work for:
 - ? A not-for-profit business?
 - ? An investor-owned business?

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 contributions* are required to create more complex balance sheets according to **fund accounting** rules.
- Assets and liabilities are classified as:
 - **Unrestricted**
 - **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?

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.

Sunnyvale Clinic: Statement of CFs (1)

(in thousands)

	<u>2007</u>	<u>2006</u>
<i>Cash Flows from Operating Activities:</i>		
Net income	\$ 7,860	\$ 8,206
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>\$ 9,411</u>	<u>\$11,807</u>
<i>Cash Flows from Investing Activities:</i>		
Capital expenditures	<u>(\$ 9,306)</u>	<u>(\$ 1,953)</u>

Sunnyvale Clinic: Statement of CFs (2)

(in thousands)

	<u>2007</u>	<u>2006</u>
<i>Cash Flows from Financing Activities:</i>		
Increase in short-term investments	(\$ 5,000)	\$ 0
Increase in notes payable	989	0
Increase in long-term investments	(22,222)	(20,667)
Increase in long-term debt	<u>31,744</u>	<u>0</u>
Net cash from financing	<u>\$ 5,511</u>	<u>(\$20,667)</u>
 Net increase (decrease) in cash	 <u><u>\$ 5,616</u></u>	 <u><u>(\$10,813)</u></u>
 Cash, beginning of year	 <u>\$ 6,486</u>	 <u>\$17,299</u>
 Cash, end of year	 <u><u>\$12,102</u></u>	 <u><u>\$ 6,486</u></u>

Statement of Cash Flows (Cont.)

- **The top section of the statement of cash flows tells us that in 2007 Sunnyvale:**
 - **Had a positive net income**
 - **Increased (invested in) receivables and inventories**
 - **Decreased (paid off some) trade credit**
 - **Increased its accrual financing**
- **When all relevant flows are considered, the clinic generated a large positive cash flow from operations.**

Statement of Cash Flows (Cont.)

- **The following two sections tell us that Sunnyvale:**
 - **Invested heavily in new fixed assets.**
 - **Purchased large amounts of short-term and long-term securities.**
 - **Added a small amount of new short-term and a large amount of new long-term debt.**
- **When all flows are considered, the clinic increased its cash on hand.**
- ? **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?

Conclusion

- This concludes our discussion of ***Chapter 4*** (The Balance Sheet and Statement of Cash Flows).
- Although not all concepts were discussed in class, you are responsible for all of the material in the text.
- ? Do you have any questions?