CHAPTER 4
The Balance Sheet and Statement of Cash Flows

This chapter focuses on the second two financial statements: the balance sheet and the statement of cash flows. In addition, the chapter discusses links between the income statement and the balance sheet and explains how underlying transactions are posted on the balance sheet.

 10/26/11 Version

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	Liabilities and Equity
Current assets	Current liabilities
Long-term assets	Long-term liabilities
	Equity
Total assets	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:**

  Assets = Liabilities + Equity.

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

  Equity = Assets – Liabilities,

which highlights the fact that the equity amount is a residual.

Balance Sheet Basics (Cont.)

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

Assets	
Home	$300,000
Total assets	$300,000

Liabilities and Equity	
Mortgage	$200,000
Equity	100,000
Total liab and eqty	$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)

	2011	2010
Current Assets:		
Cash and equivalents	$ 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	$ 54,306	$ 39,715
Long-term investments	$ 48,059	$ 25,837
Net property and equipment	$ 52,450	$ 49,549
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**
  - **Other assets that are expected to be converted into cash within the next year:**
    - **Cash equivalents**
    - **Short-term investments**
    - **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**):

NWC = Current assets - Current liabilities

= $54,306 - $15,425 = **$38,881,000**.

? How good is this measure?

Current Assets (Cont.)

- **Cash** represents actual cash in hand and commercial checking accounts.
- **Cash equivalents** are cash-like investments with maturities of ***3 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:
  - 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** lists revenues owed to the business but not yet collected.

- Of the $166,900,000 in net patient service and premium revenue in 2011 (net of the provision for bad debts), $28,509,000 (the receivables) are yet to be collected.

? Where is the $166,900,000 - $28,509,000 = $138,391,000 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 account titled *Other current assets*.**

Current Assets (Cont.)

- Note that current assets are listed in ***order of liquidity***, or nearness to cash:
  - Cash (plus 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.

Discussion Item

What policy should businesses follow regarding current asset holdings. Should they hold a large amount, medium amount, or small amount?

Current Assets

Cash and equivalents
Short-term investments
Accounts receivable
Inventories

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, because it is funded primarily by *depreciation cash flow*.**
- **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 contain the gross/net breakdown. (See next slide.)**

Property and Equipment (Cont.)

- The footnotes to Sunnyvale's financial statements contain the following information:

	2011	2010
Property and Equipment:		
Land	$ 2,954	$ 2,035
Buildings and equipment	85,595	77,208
Gross property and equipment	$88,549	$79,243
Less: Accumulated depreciation	36,099	29,694
Net property and equipment	$52,450	$49,549

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

Sunnyvale Clinic: Liabilities and Equity

(in thousands)

	2011	2010
Current Liabilities:		
Notes payable	$ 4,334	$ 3,345
Accounts payable	5,022	6,933
Accrued expenses	6,069	5,037
Total current liabilities	$ 15,425	$ 15,315
Long-term debt	$ 85,322	$ 53,578
Total liabilities	$100,747	$ 68,893
Net assets (Equity)	$ 54,068	$ 46,208
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 *one year or less***
- **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 section.**

Equity

- **Equity represents the non-liability 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:**

Equity = Total assets - 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:

	2011	2010
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	44,068	36,208
Total equity	$54,068	$46,208

Equity (Cont.)

- **Note that the retained earnings account, or the entire net equity account for not-for-profit organizations, is influenced 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.**

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

Discussion Item

Sunnyvale's balance sheet reported about $54 million in equity for 2011. One of the physicians has proposed that the equity be tapped (used) to build a new clinic on the north side of town. Is $54 million available for this purpose?

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)

	2011	2010
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	1,032	865
Net cash from operations	$ 5,298	$ 7,931

Sunnyvale Clinic: Statement of CFs (2)

(in thousands)

	2011	2010
Cash Flows from Investing Activities:		
Capital expenditures	($ 9,306)	($ 1,953)
Investment income	4,113	3,876
Purchase of short-term securities	(5,000)	0
Purchase of long-term securities	(22,222)	(20,667)
Net cash from investing	($32,415)	($18,744)

Sunnyvale Clinic: Statement of CFs (3)

(in thousands)

	2011	2010
Cash Flows from Financing Activities:		
Bank loan (notes payable) increase	$ 989	$ 0
Long-term debt increase	31,744	0
Net cash from financing	$32,733	$ 0
Net increase (decrease) in cash	$ 5,616	($10,813)
Cash and equivalents, beginning	$ 6,486	$17,299
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 2011 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 investment 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 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 a large amount.
- 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 2011 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?**

An 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:**

$$\text{Debt ratio} = \frac{\text{Total debt}}{\text{Total assets}}$$

$$= \frac{\$100{,}747}{\$154{,}815} = 0.65 = 65\%.$$

? **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?**