8.3 How Accountants Use Balance Sheets

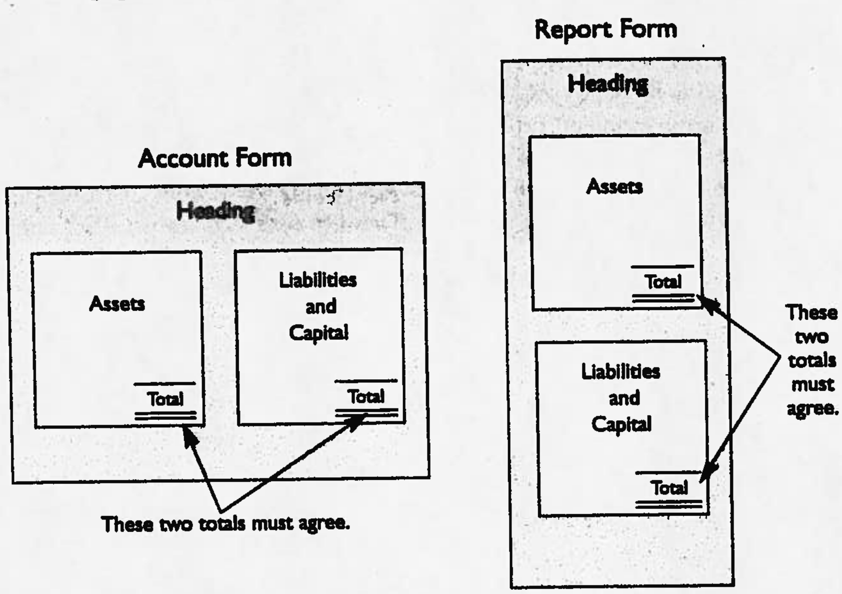
Balance Sheet—Account Form and Report Form

The same methods used to analyze the income statement can also be applied to the balance sheet. The format of the balance sheets that you are going to work with in this chapter is different from the one you studied earlier. The previous balance sheets were shown in account form. The **account form of the balance sheet** is one on which the information is presented in a side-by-side, or horizontal, format.

In this chapter, you will use a style of balance sheet known as the report form. The **report form of the balance sheet** is one on which the information is presented in a one-above-the-other, or vertical format. The two styles are contrasted in Figure 8.11 below. The report form of the balance sheet is common because it uses standard-sized paper.

FIGURE 8.11

Two forms of the balance sheet.



Classified Balance Sheet

Accountants prefer to organize balance sheet data in a format referred to as a classified balance sheet. A **classified balance sheet** has the data grouped according to major categories. This organization makes it easier to analyze the information on the balance sheet. A sample classified balance sheet is shown in Figure 8.12 on page 270. Observe the overall appearance of the balance sheet in Figure 8.12 carefully. Explanations for the circled numbers appear below the sample balance sheet and continue on page 271. In particular, note the meanings of the terms "current assets," "fixed assets," "current liabilities," and "long-term liabilities."

FIGURE 8.12

The classified balance sheet of Peoples' Security Company.

PEOPLES' SECURITY COMPANY
BALANCE SHEET
DECEMBER 31, 20—

ASSETS			
Current Assets			
Bank		$ 1 750	
Accounts Receivable		35 879	
Supplies		1 350	$ 38 979
Fixed Assets			
Land		$40 000	
Building		55 000	
Equipment		15 070	
Automobiles		33 350	143 420
Total Assets			$182 399
LIABILITIES AND OWNER'S EQUITY			
Current Liabilities			
Accounts Payable		$ 9 088	
Bank Loan		25 000	
GST Payable	$ 641		
Less GST Recoverable	279	362	
PST Payable		752	
Mortgage Instalment (current)		850	$ 36 052
Long-Term Liability			
Mortgage Payable			80 000
J. Otto, Capital			
Balance January 1		$50 287	
Net Income	$38 560		
Drawings	22 500		
Increase in Equity		16 060	
Balance December 31			66 347
Total Liabilities and Owner's Equity			$182 399

1. The **Heading** gives:
   - name of business;
   - name of statement;
   - date on which the balance is taken.
2. **Current assets:** assets that will be converted into cash (or used up) during the next year.
3. **Fixed assets (or plant and equipment):** long-term assets held for their usefulness in producing goods or services.
4. **Current liabilities:** short-term debts, payment of which is expected to occur within one year of the date of the balance sheet.

5 **Long-term liabilities:** debts of the business that are not due within one year.

6 **Capital:** the owner's claim on assets.
This section is organized to show clearly the beginning balance, the increase or decrease through profit or loss, the decrease through owner's withdrawals, and the ending balance.

7 **Inner columns:** are used to list individual items building up to subtotals.

8 The two **balancing totals:** total assets, and total liabilities plus owner's equity.

The classified balance sheet provides useful totals for comparison. For example, in Figure 8.12, the current assets of the People's Security Company are $38 979; the current liabilities are $36 052. These totals match up well because the time frame for both is one year or less. (The current assets amount mainly represents the assets that will be turned into cash within one year. The current liabilities amount shows the debts due within one year.)

The totals for current assets and current liabilities for People's Security Company are almost equal. Accountants use these two amounts to calculate "working capital." **Working capital** is the difference between the current assets and the current liabilities of a business. For example, for People's Security Company, the working capital is $2 927, that is $38 979 − $36 052. Obviously, the more working capital there is, the better off a business is. If People's Security Company had working capital of $20 000 instead of $2 927, they would be in a better position to pay their liabilities and would have more freedom to use their current assets for business improvements.

The fixed assets and long-term liabilities also match up well. The fixed assets for People's Security Company are $143 420, while the long-term liabilities are $80 000. This means the business has used debt to finance the purchase of fixed assets, and the amount of debt remaining is quite large (over half the total of fixed assets.) As you can see, accountants can draw many useful conclusions from studying the relationships of these key figures on a classified balance sheet.

Comparative Statements, Trend Analysis, and Common-Size Statements

In section 8.2, you worked with percentage changes, trend analysis, and common-size income statements. Accountants apply the same techniques when they analyze balance sheet data.

To display their calculations for changes in amounts and percentages, accountants prepare comparative financial statements. A **comparative financial statement** presents figures for successive years in side-by-side columns. Both income statements and balance sheets may be shown in comparative form. The comparative balance sheet for Apollo Printing is displayed in Figure 8.13.

FIGURE 8.13

A comparative balance sheet for Apollo Printing.

APOLLO PRINTING
COMPARATIVE BALANCE SHEET
DECEMBER 31, 2002 AND 2001

ASSETS	*2002*	*2001*	*Increase (I) or Decrease (2)*	*Percent Change*
Current Assets				
Bank	$ 9 270	$ 5 711	$ 3 559	62.3%
Accounts Receivable	42 100	17 500	24 600	140.6%
Printing Supplies	25 300	22 600	2 700	11.9%
Total Current Assets	$ 76 670	$ 45 811	$ 30 859	67.4%
Fixed Assets				
Land	$ 40 000	$ 40 000		0.0%
Buildings	57 500	60000	($2 500)	−4.2%
Equipment	104 650	109 400	(4 750)	−4.3%
Total Fixed Assets	$202 150	$209 400	($7 250)	−3.5%
Total Assets	$278 820	$255 211	$ 23 609	9.3%
LIABILITIES				
Current Liabilities				
Accounts Payable	$ 36 700	$ 19 050	$ 17 650	92.7%
Bank Loan	20 000	10 000	10 000	100.0%
Total Current Liabilities	$ 56 700	$ 29 050	27 650	95.2%
Long-Term Liabilities				
Mortgage Payable	$ 45 000	$ 50 000	($5 000)	
Total Liabilities	$101 700	$ 79 050	22 650	28.7%
OWNER'S EQUITY				
D. Fan, Capital	$177 120	$176 161	$ 959	0.5%
Total Liabilities and Equity	$278 820	$255 211	$ 23 609	9.3%

When analyzing comparative financial statements, first look for items showing unusual change. These could signal difficult situations. For example, accounts receivable grew by 140.6%. This could be a good sign if there was a corresponding increase in sales. However, if there had been a significant increase in sales, why did the business find it necessary to double its bank loan? More investigation is needed.

Perhaps the increase in accounts receivable was due to customers taking longer to pay. And if they took longer to pay, there might be insufficient cash for Apollo to pay its suppliers. This possibility seems supported by the fact that accounts payable increased by 92.7%.

Sometimes, little or no change should be flagged as a cause for concern. For instance, perhaps Apollo Printing spent a good deal of time and money trying to boost sales through advertising. Yet the equity grew by only 0.5%. Did the advertising really boost sales? Did factors other than sales limit the growth of equity? Should the advertising effort be continued?

Comparative financial statements are valuable not only for the answers they provide, but also for the questions they generate.

Trend Analysis

You saw in Section 8.2 that information from income statements is especially suited for trend analysis. Similarly, certain data obtained from the balance sheets also lend themselves to being presented over a number of consecutive periods.

The working capital for Apollo Printing is shown over a five-year period in Figure 8.14.

FIGURE 8.14

The trend analysis for the working capital of Apollo Printing.

APOLLO PRINTING
WORKING CAPITAL
1998 TO 2002

1998	1999	2000	2001	2002
$19 626	$18 993	$20 584	$16 761	$19 970
100.0%	96.8%	104.9%	85.4%	101.8%

To review how working capital is calculated, use amounts from Figure 8.13 to subtract Current Liabilities from Current Assets, and see if you can find your answers in Figure 8.14.

This trend analysis seems to point out problems with the sharp increase in working capital from 2001 to 2002. When the five years are analyzed, you can see that there has been minimal growth. In fact, even though the amount of working capital improved in 2002, it is still below the level reached in the year 2000.

Common-Size Statements

When constructing a common-size income statement, every figure is expressed as a percentage of sales. Therefore, if rent expense is 46 percent, one can say that for each dollar of sales, 46 cents goes to pay the rent. For common-size balance sheets, *every figure is expressed as a percentage of total assets.*

For example, the Accounts Receivable percentage is calculated as follows:

$$\frac{\text{Accounts Receivable } 42\ 100}{\text{Total Assets } 278\ 820} = 15\%$$

For Apollo Printing, the common size balance sheet appears in Figure 8.15.

FIGURE 8.15

The common-size balance sheet for Apollo Printing.

APOLLO PRINTING
COMMON-SIZE BALANCE SHEET
DECEMBER 31, 2001 AND 2002

ASSETS		
Current Assets		
Bank	$ 9 270	3.3%
Accounts Receivable	42 100	15.1%
Printing Supplies	25 300	9.1%
Total Current Assets	$ 76 670	27.5%
Fixed Assets		
Land	$ 40 000	14.3%
Buildings (Net)	57 500	20.6%
Equipment (Net)	104 650	37.5%
Total Fixed Assets	$202 150	72.5%
Total Assets	$278 820	100.0%
LIABILITIES		
Current Liabilities		
Accounts Payable	$ 36 700	13.2%
Bank Loan	20 000	7.2%
Total Current Liabilities	$ 56 700	20.3%
Long-Term Liability		
Mortgage Payable	$ 45 000	16.1%
Total Liabilities	$101 700	36.5%
OWNER'S EQUITY		
D. Fan, Capital	$177 120	63.5%
Total Liabilities and Equity	$278 820	100.0%

Since every figure is divided by the total assets, accountants can communicate explanations in everyday language. For example, an accountant can point out most of Apollo Printing's assets consist of fixed assets — 72 and one-half cents out of every dollar, to be precise.

Common-size balance sheets become even more useful when comparing businesses of unequal size.

Section 8.3 Exercises

1. Shown below is the unclassified balance sheet for The Boat Repair Centre, owned by Anna Rodriguez of Halifax, Nova Scotia. **In your workbook do the following.**
   - A. **Give the total of the current assets.**
   - B. **Give the total of the fixed assets.**
   - C. **Give the total of the current liabilities.**
   - D. **Give the total of the long-term liabilities.**
   - E. **Calculate the working capital.**
   - F. **What is the total amount of the mortgage payable?**

THE BOAT REPAIR CENTRE
BALANCE SHEET
SEPTEMBER 30, 20-2

Assets			
Bank			$ 2 125.00
Accounts Receivable			15 256.36
Office Supplies			1 500.00
Repair Supplies and Materials			15 236.00
Land			36 000.00
Building			48 000.00
Equipment			16 250.00
Truck			22 356.90
Total Assets			$156 724.26
Liabilities			
Accounts Payable			$ 4 309.14
GST Payable		$ 520.02	
Less GST Recoverable		216.90	303.12
PST Payable			604.09
Bank Loan			10 000.00
Mortgage Instalment due within one year			2 000.00
Mortgage Payable			48 000.00
			$ 65 216.35
Owner's Equity			
A. Rodriguez, Capital			
Balance October 1, 20-1		$80 356.00	
Net Income	$35 615.20		
Drawings	24 463.29		
Increase In Capital		11 151.91	
Balance September 30, 20-2			91 507.91
Total Liabilities and Owner's Equity			$156 724.26

2. Given below is a completed partial work sheet.
From this work sheet, prepare a classified balance sheet in report form in the space provided in your workbook.

Stanley Park Enterprises Work Sheet 6 Months Ended June 30, 20—	Balance Sheet	
Accounts	Debit	Credit
Bank	3 050.15	
Accounts Receivable	26 750.85	
Supplies	3 500.00	
Equipment	75 352.00	
Automobiles	42 500.00	
Land	100 000.00	
Building	124 364.00	
Accounts Payable		3 900.95
GST Payable		460.50
GST Recoverable	235.90	
PST Payable		650.00
J. Hori, Capital		366 485.95
J. Hori, Drawings	56 000.00	
Commissions Earned		
Advertising Expense		
Car Expense		
Telephone Expense		
Utilities Expense		
Wages Expense		
	431 752.90	371 497.40
Net Income		60 255.50
	431 752.90	431 752.90

3. The current assets and the current liabilities of Goodenough Company for a five-year period are given below.

Goodenough Company
Balance Sheet Data

	Year 1	*Year 2*	*Year 3*	*Year 4*	*Year 5*
Current Assets	$50 000	$55 500	$59 500	$64 000	$68 500
Current Liabilities	35 000	38 000	40 000	42 500	45 000
Working Capital	?	?	?	?	?

In your workbook:

A. **Complete the above schedule by calculating the working capital figures for the five years.**

B. **Convert the above data into a Trend Analysis chart.**

C. **Show the above data in the form of a bar graph.**

4. The balance sheets for Neon Company and Radon Company as at December 31, 20 — are shown below.

A. **Convert the two balance sheets into common-size form.**

B. **Comment briefly on the ability of each of these companies to pay their accounts payable.**

C. **Comment briefly on the total debt of each of these companies.**

BALANCE SHEETS
DECEMBER 31, 20—

	Neon Company	*Radon Company*
Assets		
Bank	$ 3 000	$14 500
Accounts Receivable	10 000	5 500
Plant and Equipment	132 000	53 000
Automobiles	38 000	26 000
Total Assets	$183 000	$99 000
Liabilities and Equity		
Accounts Payable	$ 19 000	$ 2 200
Mortgage Payable	92 500	18 000
Owner's Equity	71 500	78 800
Total Liabilities and Equity	$183 000	$99 000

5. Given below are the balance sheets for Leo Company and Capricorn Company.

A. **Convert the two balance sheets into common-size form.**

B. **Examine the financial positions shown by these balance sheets and discuss the positive and negative aspects of each company's position.**

BALANCE SHEETS
DECEMBER 31, 20—

	Leo Company	*Capricorn Company*
Assets		
Bank	$ 1 000	$ 31 000
Accounts Receivable	25 000	—
Plant and Equipment	150 000	160 000
Automobiles	50 000	29 000
Total Assets	$226 000	$220 000
Liabilities and Equity		
Accounts Payable	$ 25 000	$ 11 000
Loan Payable—Automobile	20 000	20 000
Mortgage Payable	—	150 000
Owner's Equity	181 000	39 000
Total Liabilities and Equity	$226 000	$220 000