

CHAPTER 2

BASIC ACCOUNTING CONCEPTS: THE BALANCE SHEET

Changes from Twelfth Edition

The Chapter has been updated.

Approach

It is helpful if students understand from the outset that financial accounting is being discussed in two cycles. In the first cycle, Chapters 2 through 4, we go through the entire accounting process quickly, to establish an overview. We then go through the process a second time, in Chapters 5 through 14, and go into the same topics in much greater depth. Thus, students should not be concerned if they do not understand all the fine points in Chapters 2-4, for these will be discussed again in subsequent chapters. Neither should they be permitted to belabor questions that involve fine distinctions; the objective here is to get the broad, overall picture.

Our experience invariably has been that beginning students find the introduction to accounting quite confusing. Although they may be able to do the work assigned each day, they are unable to visualize the whole structure of accounts. This leads to a feeling of frustration that may last several weeks. Then, all of a sudden, the pieces fall into place. From that time forward they have no special trouble and can fit each new concept into its proper place without difficulty. Usually, the “great awakening” comes by Chapter 6, but it may not come until even later. We do not know of any way of eliminating this initial frustration.

We go through the text briefly, mostly to encourage questions that will help clear up obscure points. We usually explain that we do not expect that all matters discussed in this chapter will immediately be clear. For this reason, students may wish to refer back to this and to other chapters in Part 1, as the need arises.

Many instructors like to emphasize the notion of balance sheet changes, and this can be done by adding more transactions to Music Mart. Transactions can be called out as fast as the instructor or students think of them, and students should see that it is possible to record any transaction whatsoever in terms of its effect on the balance sheet. This lays a foundation that is often helpful when complex or mechanical matters are discussed later on.

In this and the next two or three chapters, a fairly uniform terminology has been used in both text and cases. This is artificial since practice in companies varies widely, but it serves to reduce some of the initial confusion on the part of the student. Beginning with Chapter 6, variations in terminology appear with increasing frequency in the cases, but the text retains terminology that seems to be favored by the FASB, so far as we can glean from its pronouncements and those of predecessor bodies. Also, in the text, we have made an effort to use financial statement formats that reflect FASB preferences (although, unless specifically noted, the financial statements can be constructed equally well with other formats and format should not be overly emphasized.)

Some readers of this material have said that it tends to belittle accounting and accountants. We certainly do not intend to give such impression. It is true that the text does attempt to set forth the limitations on accounting information, and it does not imply that accounting is an exact science. This is not done to belittle the subject or its practitioners, however. Students who are permitted to get the impression that accounting is exact, or that it does give an accurate picture of a business, are in for a rude awakening when they get out into actual business situations. We think, therefore, that it is most unfortunate if such an impression is permitted to develop. Several CPAs and controllers who have participated in executive development programs have said that one of the chief values of our approach is that it *does* show the limitations as well as the usefulness of accounting. They say that one of their principal practical problems is that some uninformed people expect too much of accounting and are disappointed or disgruntled when the accountant cannot furnish them with precise or complete information. It is possible that misconceptions of these people are generated from exposure to a course in which the value of accounting was overemphasized and its limitations omitted.

The foregoing does not mean that one should ever apologize for the limitations of accounting. From time to time it should be pointed out that these limitations are inherent in the job of attempting to reduce the complexities of an actual business situation to a few monetary figures. Incidentally, we understand that physics teachers got themselves into considerable trouble some years ago by overemphasizing the accuracy and completeness of our knowledge about physical phenomena. Their current practice, we understand, is to explain what is not known.

Cases

Cases 2-1 and 2-2 provide practice work for beginning students. These two are mechanical problems to be worked as the text material is studied. *Lone Pine Cafe (A)* requires the student to think about the application of basic concepts.

Additional Cases

Some instructors like to use one of the Chapter 1 cases with this chapter. Any of the concepts described can be dealt with in the context of those cases.

Problem Solutions

Problem 2-1

Owners' equity equals \$55,000.

Liabilities equal \$25,000.

Noncurrent assets equal \$70,000.

Owners' equity is \$73,000.

Current assets \$33,000 + Noncurrent assets \$55,000 = Total assets \$88,000.

Current liabilities are \$15,000 (\$33,000 / 2.2)

Total liabilities and Owners' Equity = \$88,000.

Owners' equity \$73,000 = Total liabilities and Owners' equity \$88,000 - Current liabilities \$15,000.

Current ratio is 1.4 (\$35,000 / \$25,000)

Current assets \$35,000 = Total assets \$95,000 - Noncurrent assets \$60,000.

Current liabilities \$25,000 = Total assets \$95,000 - Owner's equity \$70,000.

This problem tests students' understanding of balance sheet relationships using the basic accounting equation and financial ratio.

Problem 2-2

J.L. GREGORY COMPANY BALANCE SHEET, JUNE 30, ----.

Assets		Liabilities	
Cash.....	\$.....89,000	Accounts payable.....	\$.....241,000
Marketable securities.....	379,000	Taxes payable.....	125,000
Accounts receivable.....	505,000	Accrued expenses.....	107,000
Inventories	513,000	Current liabilities.....	473,000
Current assets.....	1,486,000	Notes payable.....	200,000
Land.....	230,000	Bonds payable.....	700,000
Buildings.....	1,120,000	Total liabilities.....	1,373,000
Accumulated depreciation.....	(538,000)		
Equipment.....	761,000	Owners' Equity.....	
Accumulated depreciation.....	(386,000)	Capital stock.....	1,000,000
Investments.....	320,000	Retained earnings.....	620,000
		Total liabilities	
Total assets.....	<u>\$2,993,000</u>	and owners' equity.....	<u>\$2,993,000</u>

Some students may want to test the notes payable as a current liability. Notes payable are usually debt instruments longer than one year, but in the absence of any details listing them as a current liability is acceptable.

Problem 2-3

Cash + \$100,000; Capital stock + \$100,000.

Bonds payable - \$25,000; Capital stock + \$25,000.

Retained earnings (Depreciation expense) - \$8,500.

Accumulated depreciation on plant and equipment + \$8,500.

Cash - \$15,900; Inventory + \$15,900.

Inventory + \$9,400; Accounts payable + \$9,400.

Inventory - \$4,500; Accounts receivable + \$7,200; Retained earnings + \$2,700

Cash + \$3,500; Accounts receivable - \$3,500.

Dividends payable + \$3,000; Retained earnings - \$3,000.

Cash - \$3,000; Dividends payable - \$3,000.

No effect.

Some students may simply show the net effect on assets, liabilities, and owners' equity without reference to the specific accounts. While this is acceptable, students should be pushed to identify both the net effect and the particular accounts involved. This will help students to become familiar with the balance sheet account names.

Problem 2-4

**CARSON LEGATT PARTNERSHIP
BALANCE SHEET AS OF JUNE 1, ---.**

Assets		Capital Accounts	
Cash.....	\$ 50,000	Carson.....	\$ 50,000
Inventory.....	50,000	Legatt.....	50,000
Total assets.....	<u>\$100,000</u>	Total capital.....	<u>\$100,000</u>

**CARSON LEGATT PARTNERSHIP
BALANCE SHEET AS OF JUNE 30, ---.**

Assets		Liabilities	
Cash.....	\$ 22,100	Bank loan.....	\$ 50,000
Inventory.....	58,500	Capital - Carson.....	51,550
Land.....	25,000	Capital - Legatt.....	54,050
Building.....	50,000		
	<u>\$155,600</u>		<u>\$155,600</u>

**CARSON LEGATT PARTNERSHIP
ACCOUNTS, JUNE 30, ---.**

Carson

Capital - June 1.....	\$50,000
Additions.....	7,750
Withdrawals.....	(...6,200)
Capital - June 30.....	<u>\$51,550</u>

Legatt

Capital - June 1.....	\$50,000
Additions.....	7,750
Withdrawals.....	(...3,700)
Capital - June 30.....	<u>\$54,050</u>

Problem 2-5

- Jan. 4: Retained earnings (Sales) + \$12,000; Cash + \$12,000 Inventory - \$7,000 ;Retained earnings (Cost of goods sold) - \$7,000
- Jan. 6: No effect.
- Jan. 8: Inventory + \$7,000; Accounts Payable + \$7,000
- Jan. 11: Inventory - \$1,500; Cash + \$2,500; Retained earnings (Sales) + \$2,500; Retained earnings (Cost of goods sold) - \$1,500
- Jan. 16: Inventory - \$2,000; Retained earnings (Cost of goods sold) - \$2,000; Accounts receivable + \$3,400; Retained earnings (Sales) + \$3,400
- Jan. 26: Cash - \$4,200; Retained earnings (Wages) - \$4,200
- Jan. 29: Cash - \$20,000; Land + \$20,000
- Jan. 31: Cash - \$2,800; Prepaid insurance + \$2,800

MARVIN COMPANY
BALANCE SHEET AS OF JANUARY 31, ----.

Assets		Liabilities	
Cash.....	\$12,500	Accounts payable.....	\$ 7,000
Accounts receivable.....	3,400	Total current liabilities.....	\$7,000
Inventory.....	46,500		
Current assets.....	62,400	Notes payable.....	20,000
Land.....	20,000	Total liabilities.....	27,000
Prepaid insurance.....	2,800	Owner's Equity.....	
		Capital.....	55,000
		Retained earnings.....	3,200
Total assets.....	<u>\$85,200</u>	Total liabilities.....	
		and owners' equity.....	<u>\$85,200</u>

Problem 2-6

BRIAN COMPANY
CURRENT ASSETS AND LIABILITIES AS OF DECEMBER 31, ----.

Current Assets		Current Liabilities	
Cash.....	\$ 2,000	Accounts payable.....	\$5,000
Marketable securities.....	3,500	Wages payable.....	1,500
Accounts receivable.....	7,000	Bonds due -- current portion.....	2,000
Current assets.....	<u>\$12,500</u>	Current liabilities.....	<u>\$8,500</u>

$$\text{Current ratio} = \frac{\$12,500}{\$8,500} = \underline{1.47}$$

The current ratio is an indication of an entity's ability to meet its current obligations.

Cases

Case 2-1: Maynard Company (A)

Note: *This case is unchanged from Twelfth Edition.*

Answers to Questions

Question 1

Two suggested balance sheets as required by Question 1 are shown below.

Question 2

This question provides an opportunity for students to step back and think about the information in a financial statement, rather than focusing on the details of constructing a financial statement. Students can begin to analyze and use the information that the financial statements contain. Students can be asked to identify which accounts have changed significantly between the beginning and ending balance sheets. These would include accounts receivable, note receivable, equipment, accounts payable, taxes payable, and the bank note payable, in addition to the cash account. The only ratio explained in Chapter 2 of the text is the current ratio, so students should be encouraged to ascertain what has happened to the current ratio between June 1 and June 30. Cash has increased largely due to increased accounts and notes payable, as well as cash generated by operations. Cash appears to have been increased by the collection of

the note receivable, but as explained in Question 3 below, this was offset by the declaration of an identical dividend, so that the net effect on cash of these two transactions was zero. Equipment purchases were a major use of cash. As a result of these events, the June 30 current ratio has fallen to 2.15 from its June 1 level of 4.35. Even though the leverage ratios have not yet been introduced in the text, the instructor might want to encourage students to observe that the proportion of liabilities on the right-hand side of the balance sheet has increased, with a complementary decrease in the proportion of equities. The capitalization ratio Total Liabilities/Total Liabilities + Equities has increased from 4% on June 1 to 9% on June 30. While these ratios are still very low, students can be made aware of the importance of identifying trends early.

Question 3

Retained Earnings has not increased by the amount of net income for the month, \$19,635, since Diane Maynard as the sole shareholder declared a dividend of \$11,700, which she then used to cancel her loan of \$11,700 from the company. Hence, Retained Earnings increased by \$7,935 during the month of June.

Question 4

This question is intended to emphasize early in the course that shareholder's equity does not necessarily reflect what the entity is worth. Time permitting, the instructor can have students estimate the cash proceeds of piecemeal sale of the assets by a liquidation company, which, net of liabilities, will certainly be less than \$619,446. Then the value of the company as a going concern can be discussed; if June's \$19,635 net income is typical, the firm would be worth more than \$619,446 as a going concern. Capitalizing June's net income on an annual basis ($\$19,635 \times 12$) at 10 times earning gives the company a value in excess of \$2 million. The company's return on equity is very high. On an annual basis it may be as high as 32%. This figure is 12 months' income ($\$19,635 \times 12$) divided by projected year-end equity ($\$619,446 + \$19,635 \times 6$). This is not a typical business. It is better.

MAYNARD COMPANY BALANCE SHEETS AS OF JUNE 1 AND JUNE 30

	<i>Assets</i>	
<i>Current Assets:</i>	<u><i>As of June 1</i></u>	<u><i>As of June 30:</i></u>
Cash.....	\$ 34,983	\$ 66,660
Accounts receivable.....	21,798	26,505
Note receivable.....	11,700	0
Merchandise inventory.....	29,835	26,520
Supplies on hand.....	5,559	6,630
Prepaid insurance.....	3,150	2,826
Total current assets.....	\$107,025	\$129,141
<i>Noncurrent assets:</i>		
Land.....	89,700	89,700
Building.....	585,000	585,000
Less: Accumulated depreciation.....	(156,000)	(157,950)
Equipment.....	13,260	36,660
Less: Accumulated depreciation.....	(5,304)	(5,928)
Other noncurrent assets.....	4,857	5,265
Total noncurrent assets.....	531,513	552,747
Total assets.....	<u>\$638,538</u>	<u>\$681,888</u>

*Liabilities and Shareholders' Equity**Current liabilities:*

Accounts payable.....	\$8,517	\$ 21,315
Bank notes payable.....	8,385	29,250
Taxes payable.....	5,700	7,224
Accrued wages payable.....	<u>1,974</u>	<u>2,202</u>
Total current liabilities.....	\$ 24,576	\$ 59,991
Other noncurrent liabilities.....	<u>2,451</u>	<u>2,451</u>
Total liabilities.....	27,027	62,442

Shareholders' Equity:

Capital stock.....	390,000	390,000
Retained earnings.....	<u>221,511</u>	<u>229,446</u>
Total shareholder's equity.....	611,511	619,446
Total liabilities and shareholders' equity.....	<u>\$638,538</u>	<u>\$681,888</u>

Case 2-2: Music Mart, Inc.

Note: This case is unchanged from the Twelfth Edition.

Approach

This is a valuable type of problem. The student is in effect analyzing, journalizing, and posting transactions without knowing the technicalities, and hence without being encumbered by them. Some instructors prefer to make up similar transactions and give them in class, rather than, or in addition to, using the set given in this problem. If students can handle these events comfortably, they really understand the essentials of the balance sheet and of the balance sheet equation. They are urged to cross out old balances, rather than erasing them, both because this aids in tracing errors, and because this is analogous to what is done in the ledger.

Preservation of the underlying equation in each transaction and the balance sheet should be emphasized throughout.

For the accounts already established (e.g., Notes Payable), students should use the identical wording. This helps avoid sloppy habits when they start to journalize later on. For new accounts (e.g., Mortgage Payable), they should be given latitude in selecting a title, but having selected one, they must stick to it.

MUSIC MART, INC.
BALANCE SHEET AS OF _____

<i>Assets</i>		<i>Liabilities and Owners' Equity</i>	
<i>Current assets:</i>		<i>Current liabilities:</i>	
Cash.....	\$25,636	Notes payable.....	\$ 6,500
Accounts receivable.....	2,620	Accounts payable.....	5,000
Inventory.....	4,700	Total current liabilities.....	11,500
Prepaid insurance.....	1,224		
Total current assets.....	34,180	<i>Other liabilities:</i>	
		Mortgage payable.....	9,000
		Total liabilities.....	20,500
		<i>Owners' equity</i>	
<i>Property:</i>		Paid-in capital.....	25,000
Land.....	12,000	Retained earnings.....	680
Total assets.....	<u>\$46,180</u>	Total liabilities.....	
		and owners' equity.....	<u>\$46,180</u>

Answers to Questions

- Increase Inventory, \$5,000; increase Accounts Payable, \$5,000
- Decrease Inventory, \$1,500; increase Cash, \$2,300; increase Retained Earnings, \$800
- Decrease Inventory, \$1,700; increase Accounts Receivable, \$2,620; increase Retained Earnings, \$920
(Note that Retained Earnings increases whether or not the proceeds of the sale are received in cash.)
- Increase Prepaid Insurance (or similar), \$1,224; decrease Cash, \$1,224
(Note that current practice is to treat this as a current asset even though the policy is in effect three years; the basis is materiality.)
- Increase Land, \$24,000; decrease Cash, \$6,000; increase Mortgage payable (noncurrent), \$18,000
(In view of what happens subsequently, it can be argued that the land is a current asset, or that \$12,000 of it is. It depends on whether Smith plans to retain or to sell it. This point should be brought out, to avoid the tendency to classify land as a fixed asset without thinking.)
- Increase Cash, \$3,000; decrease Mortgage Payable, \$9,000; decrease Land, \$12,000
Note the decrease in the liability even though it was not "paid off" in cash.)
- No entry. Goodwill is recognized only when it is paid for.
- Decrease Retained Earnings, \$1,000; decrease Cash, \$1,000.
- Decrease Retained Earnings, \$750; decrease Inventory, \$750.
(Note the basic similarity between #8 and #9; the equity of Smith in the business decreases whenever he, as an individual, takes out assets of the business. Students can of course handle this with a drawing account if they wish to get fancy.)

10. No entry, in accordance with the basic principle of value. I think students who argue for appreciation are on weak ground. They have no support from the text. This, together with #6 may be used to contrast accounting with what some would say is the “common sense” or “logical” way to record the events, although it is too **much to expect that** the arguments in favor of the cost basis of valuation will be fully comprehended at this point.

11. Decrease Notes Payable, \$6,000; decrease Cash, \$6,000.

12. No entry. This is not a transaction of the corporation, but rather a transaction between two outside parties.

Note also that the book value of the equity is not changed, even though there is clear evidence **that book value is less** than market value or “real” value.

13. Decrease Inventory, \$850; increase Cash, \$1,310; increase Retained Earnings, \$460.

The final balance sheet is shown on the previous page, classified in perhaps more detail than is warranted for this simple set of items.

Case 2-3: Lone Pine Cafe (A)

Note: This case and its sequel in Chapter 3 are updated from the Twelfth Edition.

**LONE PINE CAFÉ
BALANCE SHEET AS OF NOVEMBER 2, 2009**

Assets

Current assets:

Cash.....	\$10,172	
Inventory.....	2,800	
Prepaid expense.....	<u>1,428</u>	
Total current assets.....		\$14,440
Cafe equipment.....		<u>54,600</u>
Total assets.....		<u>\$69,000</u>

Liabilities and Owners' Equity

Note payable.....		\$21,000
<i>Owners' equity:</i>		
Mrs. Landers.....	\$16,000	
Mr. Antoine.....	16,000	
Mrs. Antoine.....	<u>16,000</u>	<u>48,000</u>
Total liabilities and owners' equity.....		<u>\$69,000</u>

LONE PINE CAFÉ
BALANCE SHEET AS OF MARCH 30, 2010

Assets

Current assets:

Cash.....	\$ 1,341	
Accounts receivable.....	870	
Inventory.....	2,430	
Prepaid expense.....	<u>833</u>	
Total current assets.....		\$5,474

Noncurrent assets:

Cafe equipment.....	54,600	
Less: Accumulated depreciation.....	<u>(...2,445)</u>	<u>52,155</u>
Total assets.....		<u>\$57,629</u>

Liabilities and Owners' Equity

Current liabilities:

Accounts payable.....		\$1,583
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Other liabilities:

Note payable.....		<u>18,900</u>
Total liabilities.....		<u>20,483</u>

Owners' equity:

Mrs. Landers.....	\$12,382	
Mr. Antoine.....	<u>12,382</u>	
Mrs. Antoine.....	<u>12,382</u>	<u>37,146</u>
Total liabilities and owners' equity.....		<u>\$57,629</u>

Approach

This case can be handled in either of two distinctly different ways: 1) It can be played straight; that is, students can be required to give the answers to questions, and they can be discussed. 2) The balance sheet for November 2 can be developed, and then the second balance sheet can be arrived at by changing the original balance sheet for each transaction. When the latter approach is used, the beginning balance sheet is put on the board (or on a Vugraph) leaving enough room between items so that the additional accounts can be added as needed. Then each fact described in the case is discussed in order, in terms of its effect on the balance sheet. The appropriate figures on the original balance sheet are erased and new figures are put in. (Or, instead of erasing the figures for each transaction, increases and decreases can be shown opposite the proper item, thus laying the ground work for the idea of the account.) A separate item should be set up for Retained Earnings, in which all profit and loss items are entered. The balance in this account is split among the three partners as the final step in the process. This is a lot easier than attempting to split each revenue or expense item among the three partners as it is recorded initially.

The second approach is much more difficult than the first, but it has the advantage of emphasizing the effect of individual transactions on the balance sheet. It is particularly difficult to see that the decrease of \$8,831 that is necessary to bring Cash down to its known balance of \$1,341 is accompanied by a \$6,731 decrease in Retained Earnings. This is a subtle point.

Some of the points that are brought out by the case, and which either can be summed up explicitly by the instructor or left for the students to see for themselves, are the following:

Even at the beginning of our study of accounting, the student can prepare a balance sheet.

The dual aspect concept.

There are a number of places in which different words can be used to describe the same basic fact. (I think it is unwise to require or even suggest the generally approved language for any item. Any term that the student wants to propose that is an adequate description of the item should, I think, be accepted and given as much praise as a more customary term. For example, if a student wants to say “owed to vendors” instead of “accounts payable,” I wouldn’t quarrel with that at this point.)

There is also room for differences in interpretation of the facts. Even experienced accountants would disagree on how some of the items should be handled. These are mentioned below.

The business has incurred a large loss, but there is no way from the information we have of finding out why this loss came about, and therefore no way of suggesting any corrective action. This leads into the usefulness of an income statement, which is the subject of the next chapter.

It is easy to get into a discussion of the business entity idea (e.g., how about accounting for the value of the board and room of the partners?), but I doubt that it is desirable to take much time for this at this stage.

Instructors may find it interesting to read the actual case from which Lone Pine Cafe was constructed. The name is *Duncan v. Bartle* and the reference is 216 P2d 1005. It should be noted, however, that the actual case is not identical with Lone Pine Cafe since several of the facts have been omitted for purposes of simplification, and others have been changed in order to make certain teaching points. Therefore, one cannot go by the actual decision in determining a “right answer” to the case.

Comments on Questions

The following notes apply to the balance sheet as of March 30, 2010:

The net loss for the period was \$10,854. This was divided one-third to each of the partners.

The \$1,428 paid for local operating licenses is set up as a prepaid expense with 5/12 of its original cost being amortized to the partnership. Due to the questionability of the partnership being able to secure a refund on the unused portion from the local municipality, and the immateriality of the fee, some students may argue that the total cost should be treated as an expense.

Mr. Antoine’s clothes are not an asset to the business entity, and therefore are not included on the balance sheet. It might be argued, however, that these clothes included his cook’s uniforms, which could be a cafe asset; but there is no way from the information given to assign a value to such uniforms, even if they did exist.

Accounting for the cash register will be troublesome to some students, since it and its contents have been removed from the café premises. Regardless of where these items are and that they were improperly removed, they nevertheless are still assets of the entity.

The balance sheet as of March 30 shown in the manual is more detailed in format than the situation requires.

Question 3 raises the issue of balance sheet values versus real values. If the business is not liquidated, Mrs. Antoine may have no choice but to give the other two partners the amount shown as their equity, since otherwise they might force liquidation, which Mrs. Antoine does not want. This is a good time to make the point that owners' equity, which many people still refer to as "net worth," is at best only a rough approximation of the true worth of a business. If the cafe were sold as a going concern (which in this case would mean transferring the entity name, tangible assets, license and facilities lease), it might be worth more than the indicated "book value" (assuming it had gained a reputation for serving tasty food). On the other hand, in liquidation the inventory is probably virtually worthless, the prepaid expense has no value, and used restaurant equipment has a notoriously low value when sold at auction. Thus, in liquidation, the assets might scarcely bring enough cash to pay the liabilities.

Note also that it will be difficult for Mrs. Antoine to pay each of the other partners his or her \$12,382 equity. They may have to take a note payable from Mrs. Antoine and hope for the best. If the cafe assets' liquidation value is only about \$20,500 (enough to pay the liabilities), then Mr. Antoine and Mrs. Landers are no worse off with a note than if they forced liquidation.