

CHAPTER 1

INTRODUCTION TO BUSINESS ACTIVITIES AND OVERVIEW OF FINANCIAL STATEMENTS AND THE REPORTING PROCESS

Questions, Exercises, and Problems: Answers and Solutions

1.1 The first question at the end of each chapter asks the student to review the important terms and concepts discussed in the chapter. Students may wish to consult the glossary at the end of the book in addition to the definitions and discussions in the chapter.

1.2 *Setting Goals and Strategies:* Although a charitable organization must obtain sufficient resources to fund its operations, it would not pursue profits or wealth increases as goals. A charitable organization would direct its efforts toward providing services to its constituencies.

Financing: A charitable organization may obtain some or all of its financing from donations (contributions). A charitable organization does not issue common stock or other forms of shareholders' equity, nor does it have retained earnings.

Investing: Similar to business firms, charitable organizations acquire productive capacity (for example, buildings) to carry out their activities.

Operations: A charitable organization might prepare financial statements that compare inflows (for example, contributions) with outflows. While these statements might appear similar to income statements, there would be no calculation of net income because the purpose of the charitable organization is to provide services to its constituents, not seek profits.

1.3 The balance sheet shows assets, liabilities and, shareholders' equity as of a specific date (the balance sheet date), similar to a snapshot. The income statement and statement of cash flows report changes in assets and liabilities over a period of time, similar to a motion picture.

- 1.4 The auditor evaluates the accounting system, including its ability to record transactions properly and its operational effectiveness, and also determines whether the financial reports prepared by the firm's managers conform to the requirements of the applicable authoritative guidance. The auditor provides an audit opinion that reflects his professional conclusions. For most publicly traded firms in the U.S. the auditor also provides a separate opinion on the effectiveness of the firm's internal controls over financial reporting.
- 1.5 Management, under the oversight of the firm's governing board, prepares the financial statements.
- 1.6 Employees and suppliers of goods such as raw materials or merchandise often provide the services or goods before they are paid. The firm has the benefit of consuming or using the goods or services before it transfers cash to the employees and suppliers. The length of the financing period is the number of days between when the employees and suppliers provide goods and services and when the firm pays cash to those employees and suppliers.
- 1.7 Accounts receivable represent amounts owed by customers for goods and services they have already received. The customer, therefore, has the benefit of the goods and services before it pays cash. The length of the financing period is the number of days between when the customer receives the goods and services and when the customer pays cash to the seller of those goods and services.
- 1.8 Both kinds of capacity represent investments in long-lived assets, with useful lives (or service lives) that can extend for several or many years. They differ in that land, buildings, and equipment represent physical capital, while patents and licenses represent intangible or intellectual capital.
- 1.9 A calendar year ends on December 31. A fiscal year ends on a date that is determined by the firm, perhaps based on its business model (for example, many retailers choose a fiscal year end that is close to the end of January). A firm can choose the calendar year as its fiscal year, and many do. Both calendar years and fiscal years have 12 months.
- 1.10 Most firms report the amounts in their financial statements using the currency of the country where they are incorporated and conduct most of their business activities. Some firms use a different currency.

- 1.11 A current item is expected to result in a cash receipt (assets such as accounts receivable) or a cash payment (liabilities such as accounts payable) within approximately one year or less. A noncurrent item is expected to generate cash over periods longer than a year (assets, such as factory buildings that will be used to produce goods for sale over many years) or use cash over periods longer than a year (liabilities such as long term debt). Users of financial statements would likely be interested in this distinction because the distinction provides information about short-term cash flows separately from long-term cash flows.
- 1.12 Historical amounts reflect the amounts at which items entered the firm's balance sheet, for example, the acquisition cost of inventory. Historical amounts reflect economic conditions at the time the firm obtained assets or obtained financing. Current amounts reflect values at the balance sheet date, so they reflect current economic conditions. For example, the historical amount for inventory is the amount the firm paid to obtain the inventory, and the current amount for inventory is the amount for which the firm could replace the inventory today.
- 1.13 An income statement connects two successive balance sheets through its effect on retained earnings. Net income that is not paid to shareholders as dividends increases retained earnings. A statement of cash flows connects two successive balance sheets because it explains the change in cash (a balance sheet account) from operating, financing, and investing activities. The statement of cash flows also shows the relation between net income and cash flows from operations, and changes in assets and liabilities that involve cash flows.
- 1.14 The U.S. Securities and Exchange Commission (SEC) is the government agency that enforces the securities laws of the United States, including those that apply to financial reporting. The Financial Accounting Standards Board (FASB) is the private-sector financial accounting standard setter in the United States. The International Accounting Standards Board (IASB) is a private-sector financial accounting standard setter that promulgates accounting standards. More than 100 countries require or permit the use of IFRS, or standards based on or adapted from IFRS, for some or all firms in those countries. Neither the FASB nor the IASB has any enforcement powers.
- 1.15 U.S. GAAP must be used by U.S. SEC registrants and may be used by other firms as well. International Financial Reporting Standards (IFRS) may be used by non-U.S. firms that list and trade their securities in the United States, and these firms may also use U.S. GAAP.

- 1.16 The purpose of the IASB's and FASB's conceptual frameworks is to guide standard-setting decisions of the two Boards. For example, the conceptual framework specifies the purpose of financial reporting and the qualitative characteristics of financial information that would serve that purpose. FASB and IASB board members use this conceptual structure as they consider solutions to accounting issues.
- 1.17 The accrual basis of accounting is based on assets and liabilities, not on cash receipts and disbursements. It provides a better basis for measuring performance because it is based on revenues (inflows of assets from customers), not cash receipts from customers, and on expenses (outflows of assets from generating revenues), not cash payments. It matches revenues with the costs associated with earning those revenues and is not sensitive to the timing of expenditures.
- 1.18 (Palmer Coldgate, a consumer products firm; understanding the balance sheet.) (amounts in millions of US\$)
- a. Property, plant, and equipment, net = \$3,015.2 million.
 - b. Noncurrent assets = \$6,493.5 (= \$3,015.2 + \$2,272.0 + \$844.8 + \$361.5).
 - c. Long-term debt = \$3,221.9 million.
 - d. Current assets – Current liabilities = \$3,618.5 – \$3,162.7 = \$455.8 million.
 - e. Yes, the firm has been profitable since its inception. We know this because its Retained Earnings, \$10,627.5 million, is positive. The firm may have had a loss in one or more prior years; cumulatively, it has had positive income.
 - f. Total Liabilities/Total Assets = \$7,825.8/\$10,112.0 = 77.4%.
 - g. Total Assets = Total Liabilities + Shareholders' Equity

$$\begin{array}{rccccccc}
 \$10,112.0 & = & \$7,825.8 & + & & \$2,286.2 \\
 \end{array}$$

1.19 (Capcion, a paper and packaging firm; understanding the income statement.) (amounts in thousands of euros)

- a. Cost of goods sold = €1,331,292.1 thousand.
- b. Selling and distribution expenses = €172,033.4 thousand.
- c. Gross margin percentage = 23.4% (= €405,667.1/€1,736,959.2).
- d. Operating profit = €169,418.2 thousand.

Profit before tax = €170,863.9 thousand.

Difference equals €1,445.7 thousand (= €169,418.2 – €170,863.9). The items that constitute this difference are nonoperating sources of income (expense).

- e. Effective tax rate = €54,289.9/€170,863.9 = 31.8%.
- f. Profit = €116,574.0 thousand.

1.20 (Seller Redbud, a retailer; understanding the statement of cash flows.) (amounts in thousands of US\$)

- a. Cash inflow from operating activities = \$614,536 thousand.
- b. Cash inflow from investing activities = \$101,698 thousand.
- c. Cash used in financing activities = \$705,531 thousand outflow.
- d. Net cash flow equals \$10,703 thousand (= \$614,536 + \$101,698 – \$705,531).
- e. Change in cash balance equals \$10,703 thousand (= \$224,084 – \$213,381). The increase was attributable to the net cash inflow during the year of the same amount, \$10,703 thousand.

1.21 (EuroTel, a communications firm; balance sheet relations.) (amounts in millions of euros [€])

Current Assets	+	Noncurrent Assets	=	Current Liabilities	+	Noncurrent Liabilities	+	Shareholders' Equity
€20,000	+	€29,402	=	€15,849	+	?	+	€17,154

Noncurrent liabilities total €16,399 million.

1.22 (GoldRan, a mining company; balance sheet relations.) (amounts in millions of South African rand [R])

Current Assets	+	Noncurrent Assets	=	Current Liabilities	+	Noncurrent Liabilities	+	Shareholders' Equity
R6,085.1	+	R49,329.8	=	R4,360.1	+	R13,948.4	+	?

Shareholders' equity = R37,106.4 million.

1.23 (GrandRider, an automotive manufacturer; income statement relations.) (amounts in millions of pounds sterling)

Sales	£ 7,435
Less Cost of Sales	<u>(6,003)</u>
Gross Margin.....	1,432
Less Other Operating Expenses	(918)
Loss on Sale of Business	(2)
Net Financing Income	<u>221</u>
Profit Before Taxes	733
Less Tax Expense.....	<u>(133)</u>
Net Income	<u><u>£ 600</u></u>

1.24 (AutoCo, an automotive manufacturer; income statement relations.)
(amounts in millions of US\$)

Sales	\$ 207,349
Cost of Sales	(164,682)
Other Operating Expenses.....	(50,335)
Net Financing Income	<u>5,690</u>
Net Loss	<u>\$ (1,978)</u>

1.25 (Veldt, a South African firm; retained earnings relations) (amounts in millions of South African rand [R])

Retained Earnings at End of 2012	+	Income for 2013	-	Dividends Declared	=	Retained Earnings at End of 2013
R4,640.9	+	R2,362.5	-	?	=	R5,872.4

Dividends declared = R1,131.0 million.

1.26 (Delvico, an Indian firm; retained earnings relations.) (amounts in millions of Indian rupees [Rs])

Retained Earnings Start of Year	+	Net Income	-	Dividends Declared	=	Retained Earnings End of Year
Rs26,575	+	?	-	Rs3,544	=	Rs70,463

Net income for the year was Rs47,432 million.

1.27 (BargainPurchase, a retailer; cash flow relations.) (amounts in millions of US\$)

Cash at Start of Year	+	Cash Flow from Operations	+	Cash Flow from Investing	+	Cash Flow from Financing	=	Cash at End of Year
\$813	+	\$4,125	+	\$(6,195)	+	\$3,707	=	?

Cash at end of year = \$2,450 million.

1.28 (Buenco, an Argentinean firm; cash flow relations.) (amounts in millions of Argentinean pesos [Ps])

Cash at End of Year	+	Cash Flow from Operations	+	Cash Flow from Investing	+	Cash Flow from Financing	=	Cash at End of Year
Ps32,673	+	Ps427,182	+	?	+	Ps(21,806)	=	Ps101,198

The net cash outflow for investing for the year = Ps(336,851) million.

1.29 (Kenton Limited; preparation of simple balance sheet; current and noncurrent classifications.) (amounts in pounds sterling)

		January 31, 2013
<i>Assets</i>		
Cash.....		£ 2,000
Inventory		12,000
Prepaid Rent		<u>24,000</u>
Total Current Assets		<u>38,000</u>
Prepaid Rent		<u>24,000</u>
Total Noncurrent Assets		<u>24,000</u>
Total Assets		<u>£ 62,000</u>
<i>Liabilities and Shareholders' Equity</i>		
Accounts Payable		£ 12,000
Total Current Liabilities		12,000
Total Noncurrent Liabilities		—
Total Liabilities		<u>12,000</u>
Common Stock		<u>50,000</u>
Total Shareholders' Equity		<u>50,000</u>
Total Liabilities and Shareholders' Equity		<u>£ 62,000</u>

1.30 (Heckle Group; preparation of simple balance sheet; current and noncurrent classifications.) (amounts in euros)

		June 30, 2013
<i>Assets</i>		
Cash.....		€ <u>720,000</u>
Total Current Assets		<u>720,000</u>
Property, Plant, and Equipment.....		600,000
Patent.....		<u>120,000</u>
Total Noncurrent Assets		<u>720,000</u>
Total Assets		<u>€ 1,440,000</u>
<i>Liabilities and Shareholders' Equity</i>		
Accounts Payable		€ <u>120,000</u>
Total Current Liabilities		<u>120,000</u>
Note Payable.....		<u>400,000</u>
Total Noncurrent Liabilities		<u>400,000</u>
Total Liabilities.....		<u>520,000</u>
Common Stock		<u>920,000</u>
Total Shareholders' Equity.....		<u>920,000</u>
Total Liabilities and Shareholders' Equity		<u>€ 1,440,000</u>

1.31 (Hewston, a manufacturing firm; accrual versus cash basis of accounting.) (amounts in US\$)

a. Net Income = Sales Revenue – Expenses
= \$66,387 million– \$62,313 million = \$4,074 million.

Net Cash Flow = Cash Inflows – Cash Outflows
= \$65,995 million– \$56,411 million = \$9,584 million.

b. Cash collections may be less than revenues for at least two reasons. First, customers may have purchased on credit and have not yet paid. Second, the firm may have collected cash from customers who purchased on credit last year, but cash collections remain less than cash collected on new credit sales.

c. Cash payments may be less than expenses for at least two reasons. First, the firm may have received goods and services from suppliers, but not yet paid for those items (i.e., the amounts are to be paid in the

1.31 c. continued.

next year). Second, the firm may have accrued expenses this year that will be paid in cash in future periods; an example would be the accrual of interest expense on a bond that will be paid the next year.

1.32 (DairyLamb, a New Zealand firm; accrual versus cash basis of accounting.)
(amounts in millions of New Zealand dollars)

Calculation of net income:

Revenue	\$ 13,882
Cost of Goods Sold	(11,671)
Interest and Other Expenses	<u>(2,113)</u>
Income Before Taxes	<u>98</u>
Tax Expense	<u>(67)</u>
Net Income	<u>\$ 31</u>

Calculation of net cash flow:

Cash Receipts from Customers.....	\$ 13,894
Miscellaneous Cash Receipts.....	<u>102</u>
Total Cash Receipts	<u>13,996</u>
Cash Payments to Employees and Creditors	(5,947)
Cash Payments to Milk Suppliers	(6,261)
Cash Payments for Interest Costs	(402)
Cash Payments for Taxes	<u>(64)</u>
Total Cash Payments	<u>(12,674)</u>
Net Cash Flow	<u>\$ 1,322</u>

1.33 (ComputerCo, a Singapore manufacturer; balance sheet relations.)
(amounts in millions of Singapore dollars [\$])

The missing items appear in **boldface** type.

	2013	2012
<i>Assets</i>		
Current Assets	\$ 170,879	\$ 170,234
Noncurrent Assets	<u>28,945</u>	<u>17,368</u>
Total Assets	<u>\$ 199,824</u>	<u>\$ 187,602</u>

1.33 continued.

<i>Liabilities and Shareholders' Equity</i>		
Current Liabilities.....	\$ 139,941	\$ 126,853
Noncurrent Liabilities	<u>7,010</u>	<u>7,028</u>
Total Liabilities.....	<u>146,951</u>	<u>133,881</u>
Shareholders' Equity.....	<u>52,873</u>	53,721
Total Liabilities and Shareholders' Equity	<u>\$ 199,824</u>	<u>\$ 187,602</u>

1.34 (SinoTwelve, a Chinese manufacturer; balance sheet relations.) (amounts in thousands of US\$)

The missing items appear in **boldface** type.

	2013	2012
<i>Assets</i>		
Current Assets.....	\$ 4,705,366	\$ 3,062,449
Noncurrent Assets	<u>2,494,481</u>	<u>2,388,389</u>
Total Assets.....	<u>\$ 7,199,847</u>	<u>\$ 5,450,838</u>
<i>Liabilities and Shareholders' Equity</i>		
Current Liabilities.....	\$ 4,488,461	\$ 3,527,504
Noncurrent Liabilities	<u>1,098,123</u>	<u>789,058</u>
Total Liabilities.....	<u>5,586,584</u>	<u>4,316,562</u>
Shareholders' Equity.....	<u>1,613,263</u>	1,134,276
Total Liabilities and Shareholders' Equity	<u>\$ 7,199,847</u>	<u>\$ 5,450,838</u>

1.35 (EastonHome, a consumer products manufacturer; income statement relations.) (amounts in millions of US\$)

The missing items appear in **boldface** type.

	2013	2012	2011
Sales.....	\$ 13,790	\$ 12,238	\$ 11,397
Cost of Goods Sold	(6,042)	(5,536)	(5,192)
Selling and Administrative Expenses.....	(4,973)	(4,355)	(3,921)
Other (Income) Expense	(121)	(186)	(69)
Interest Expense, Net	(157)	(159)	(136)
Income Tax Expense.....	<u>(759)</u>	<u>(648)</u>	<u>(728)</u>
Net Income	<u>\$ 1,738</u>	<u>\$ 1,354</u>	<u>\$ 1,351</u>

- 1.36 (Yankee Fashion, a clothing retailer; income statement relations.)
(amounts in millions of US\$)

The missing items appear in **boldface** type.

	2013	2012	2011
Net Revenues	\$ 4,295.4	\$ 3,746.3	\$ 3,305.4
Cost of Goods Sold	(1,959.2)	(1,723.9)	(1,620.9)
Selling and Administrative Expenses..	<u>(1,663.4)</u>	<u>(1,476.9)</u>	<u>(1,377.6)</u>
Operating Income	672.8	545.5	306.9
Other Income (Expense)	(34.0)	(43.8)	(2.7)
Interest Income (Expense), Net.....	4.5	1.2	(6.4)
Income Tax Expense.....	<u>(242.4)</u>	<u>(194.9)</u>	<u>(107.4)</u>
Net Income	<u>\$ 400.9</u>	<u>\$ 308.0</u>	<u>\$ 190.4</u>

- 1.37 (AB Brown, a Swedish firm; statement of cash flows relations.)

Statement of Cash Flows
(amounts in millions of Swedish kronor [SEK])

	2013	2012	2011
Operations:			
Revenues, Net of Expenses	<u>SEK 19,210</u>	<u>SEK 18,489</u>	<u>SEK 16,669</u>
Cash Flow from Operations.....	<u>19,210</u>	<u>18,489</u>	<u>16,669</u>
Investing:			
Acquisition of Property and Equipment.....	(4,319)	(3,827)	(3,365)
Acquisition of Businesses.....	(26,292)	(18,078)	(1,210)
Sale of Property and Equip- ment	152	185	362
Sale of Short-Term Invest- ments.....	3,499	6,180	6,375
Other Investing Activities.....	<u>(573)</u>	<u>663</u>	<u>(1,131)</u>
Cash Flow from Investing.....	<u>(27,533)</u>	<u>(14,877)</u>	<u>1,031</u>
Financing:			
Proceeds from Borrowings	15,587	1,290	657
Repayment of Borrowings.....	(1,291)	(9,510)	(2,784)
Sale of Common Stock.....	94	124	174
Dividends Paid.....	(8,132)	(7,343)	(4,133)
Other Financing Activities	<u>406</u>	<u>58</u>	<u>(288)</u>
Cash Flow from Financing.....	<u>6,664</u>	<u>(15,381)</u>	<u>(6,374)</u>
Change in Cash	(1,659)	(11,769)	11,326
Cash, Beginning of Year.....	<u>29,969</u>	<u>41,738</u>	<u>30,412</u>
Cash, End of Year.....	<u>SEK 28,310</u>	<u>SEK 29,969</u>	<u>SEK 41,738</u>

1.38 (Jackson Corporation; statement of cash flows relations.)

JACKSON CORPORATION
Statement of Cash Flows
(amounts in millions of US\$)

	2013	2012	2011
Operations:			
Revenues Increasing Cash	\$ 19,536	\$ 19,083	\$ 17,233
Expenses Decreasing Cash	<u>(16,394)</u>	<u>(18,541)</u>	<u>(18,344)</u>
Cash Flow from Operations	<u>3,142</u>	<u>542</u>	<u>(1,111)</u>
Investing:			
Sale of Property, Plant, and Equipment	332	401	220
Acquisition of Property, Plant, and Equipment	(3,678)	(3,640)	(1,881)
Other Investing Transactions	<u>71</u>	<u>(1,501)</u>	<u>268</u>
Cash Flow from Investing	<u>(3,275)</u>	<u>(4,740)</u>	<u>(1,393)</u>
Financing:			
Proceeds of Long-Term Borrow- ing	836	5,096	3,190
Issue of Common Stock	67	37	3
Repayments of Long-Term Debt .	<u>(766)</u>	<u>(922)</u>	<u>(687)</u>
Cash Flow from Financing	<u>137</u>	<u>4,211</u>	<u>2,506</u>
Change in Cash	4	13	2
Cash, Beginning of Year	<u>117</u>	<u>104</u>	<u>102</u>
Cash, End of Year	<u>\$ 121</u>	<u>\$ 117</u>	<u>\$ 104</u>

1.39 (JetAway Airlines; preparing a balance sheet and an income statement.)

a.

JETAWAY AIRLINES
Balance Sheet
(amounts in thousands of US\$)

	Sept. 30, 2013	Sept. 30, 2012
<i>Assets</i>		
Cash.....	\$ 378,511	\$ 418,819
Accounts Receivable.....	88,799	73,448
Inventories.....	50,035	65,152
Other Current Assets.....	<u>56,810</u>	<u>73,586</u>
Total Current Assets.....	574,155	631,005
Property, Plant, and Equipment (Net)	4,137,610	5,008,166
Other Noncurrent Assets.....	<u>4,231</u>	<u>12,942</u>
Total Assets.....	<u>\$ 4,715,996</u>	<u>\$ 5,652,113</u>
<i>Liabilities and Shareholders' Equity</i>		
Accounts Payable.....	\$ 157,415	\$ 156,755
Current Maturities of Long-Term Debt	11,996	7,873
Other Current Liabilities.....	<u>681,242</u>	<u>795,838</u>
Total Current Liabilities.....	850,653	960,466
Long-Term Debt.....	623,309	871,717
Other Noncurrent Liabilities.....	<u>844,116</u>	<u>984,142</u>
Total Liabilities.....	<u>2,318,078</u>	<u>2,816,325</u>
Common Stock.....	352,943	449,934
Retained Earnings.....	<u>2,044,975</u>	<u>2,385,854</u>
Total Shareholders' Equity.....	<u>2,397,918</u>	<u>2,835,788</u>
Total Liabilities and Shareholders' Equity.....	<u>\$ 4,715,996</u>	<u>\$ 5,652,113</u>

1.39 continued.

b. **JETAWAY AIRLINES**
Income Statement
(amounts in thousands of US\$)

For the Year Ended:	Sept. 30, 2013
Sales	\$ 4,735,587
Salaries and Benefits Expense	(1,455,237)
Fuel Expense	(892,415)
Maintenance Expense	(767,606)
Other Operating Expenses	(1,938,753)
Interest Expense	(22,883)
Interest Income	<u>14,918</u>
Net Income	<u>\$ (326,389)</u>

c. Retained Earnings, September 30, 2012	\$ 2,385,854
Plus Net Loss for 2013	(326,389)
Less Dividends Declared During 2013 (Plug)	<u>(14,490)</u>
Retained Earnings, September 30, 2013	<u>\$ 2,044,975</u>

1.40 (Block's Tax and Bookkeeping Services; cash versus accrual accounting.)
(amounts in US\$)

a. **Income for July 2013:**

(1) **Cash Basis Accounting**

Sales Revenues	\$ 13,000
Rent (Office)	(6,000)
Rent Equipment	(12,000)
Office Supplies Expense	<u>(370)</u>
Income (Loss)	<u>\$ (5,370)</u>

(2) **Accrual Basis Accounting**

Sales Revenues	\$ 44,000
Rent (Office)	(2,000)
Rent (Equipment)	(2,000)
Salaries Expense	(6,000)
Office Supplies Expense	(90)
Interest Expense	<u>(133)</u>
Income (Loss)	<u>\$ 33,777</u>

1.40 continued.

b. Cash on Hand:		
Beginning Balance, July 1.....	\$	0
Financing Sources and (Uses):		
Jack Block Share Purchase.....		40,000
Bank Loan		<u>20,000</u>
Total Financing Sources.....		<u>60,000</u>
Operating Sources and (Uses):		
Cash Collected from Customers.....		13,000
Office Rent		(6,000)
Equipment Rental.....		(12,000)
Office Supplies Expense.....		<u>(370)</u>
Net Operating Uses		<u>(5,370)</u>
Ending Balance, July 31.....	\$	<u>54,630</u>

The ending balance in cash contains the effects of both operating activities, which have net cash flow of \$(5,370), and financing activities, which have net cash flow of \$60,000. The firm is financing its operating activities with a bank loan and with funds invested by its owner; both of these sources of funds represent claims on the firm's assets, not increases in net assets.

1.41 (Stationery Plus; cash basis versus accrual basis accounting.) (amounts in US\$)

a. **Income for November 2013:**

(1) **Cash Basis Accounting**

Sales.....	\$	23,000
Cost of Merchandise.....		(20,000)
Rent.....		(9,000)
Salaries.....		(10,000)
Utilities		<u>(480)</u>
Income (Loss)	\$	<u>(16,480)</u>

1.41 a. continued.

(2) Accrual Basis Accounting

Sales.....	\$ 56,000
Cost of Merchandise	(29,000)
Rent.....	(1,500)
Salaries	(10,000)
Utilities	(480)
Interest.....	<u>(1,000)</u>
Income (Loss)	<u>\$ 14,020</u>

b. Income for December 2013:

(1) Cash Basis Accounting

Sales Made in November, Collected in December	\$ 33,000
Sales Made and Collected in December	34,000
Cost of Merchandise Acquired in November and Paid in December	(20,000)
Cost of Merchandise Acquired and Paid in December ..	(27,500)
Salaries	(10,000)
Utilities	(480)
Interest.....	<u>(2,000)</u>
Income (Loss)	<u>\$ 7,020</u>

(2) Accrual Basis Accounting

Sales.....	\$ 62,000
Cost of Merchandise	(33,600)
Rent.....	(1,500)
Salaries	(10,000)
Utilities	(480)
Interest.....	<u>(1,000)</u>
Income (Loss)	<u>\$ 15,420</u>

1.42 (ABC Company; relations between net income and cash flows.) (amounts in US\$)

a.

Month	Cash Balance at Beginning of Month	+	Cash Receipts from Customers	-	Cash Disbursements for Production Costs	-	Cash Balance at End of the Month
January	\$ 875		\$ 1,000		\$ 750		\$ 1,125
February	1,125		1,000		1,500		625
March	625		1,500		1,875		250
April	250		2,000		2,250		0

b. The cash flow problem arises because of a lag between cash expenditures incurred in producing goods and cash collections from customers once the firm sells those goods. For example, cash expenditures during February (\$1,500) are for goods produced during February and sold during March. Cash is not collected from customers on these sales, however, until April (\$2,000). A growing firm must generally produce more units than it sells during a period if it is to have sufficient quantities of inventory on hand for future sales. The cash needed for this higher level of production may well exceed the cash received from the prior period's sales. Thus, a cash shortage develops.

The difference between the selling price of goods sold and the cost of those goods equals net income for the period. As long as selling prices exceed the cost of the goods, a positive net income results. As the number of units sold increases, net income increases. A firm does not necessarily recognize revenues and expenses in the same period as the related cash receipts and expenditures. Thus, cash decreases, even though net income increases.

c. The income statement and statement of cash flows provide information about the profitability and liquidity, respectively, of a firm during a period. The fact that net income and cash flows can move in opposite directions highlights the need for information from both statements. A firm without sufficient cash will not survive, even if it operates profitably. The balance sheet indicates a firm's asset and equity position at a moment in time. The deteriorating cash position is evident from the listing of assets at the beginning of each month. Examining the cash receipts and disbursements during each month, however, identifies the reasons for the deterioration.

1.42 continued.

- d. Strategies for dealing with the cash flow problem center around (a) reducing the lag between cash outflows to produce widgets and cash inflows from their sale, and (b) increasing the margin between selling prices and production costs.

To reduce the lag on collection of accounts receivable, ABC might:

- (1) Provide to customers an incentive to pay faster than 30 days, such as offering a discount if customers pay more quickly or charge interest if customers delay payment.
- (2) Use the accounts receivable as a basis for external financing, such as borrowing from a bank and using the receivables as collateral or selling (factoring) the receivables for immediate cash.
- (3) Sell only for cash, although competition may preclude this alternative.

To delay the payment for widgets, ABC might:

- (1) Delay paying its suppliers (increases accounts payable) or borrow from a bank using the inventory as collateral (increases bank loan payable).
- (2) Reduce the holding period for inventories by instituting a just-in-time inventory system. This alternative requires ordering raw materials only when needed in production and manufacturing widgets only to customer orders. Demand appears to be sufficiently predictable so that opportunities for a just-in-time inventory system seem attractive.

To increase the margin between selling price and manufacturing cost, ABC might:

- (1) Negotiate a lower purchase price with suppliers of raw materials.
- (2) Substitute more efficient manufacturing equipment for work now done by employees.
- (3) Increase selling prices.

1.42 d. continued.

The cash flow problem is short-term because it will neutralize itself by June. This neutralization occurs because the growth rate in sales is declining (500 additional units sold on top of an ever-increasing sales base). Thus, the firm needs a short-term solution to the cash flow problem. If the growth rate were steady or increasing, ABC might consider obtaining a more permanent source of cash, such as issuing long-term debt or common stock.

1.43 (Balance sheet and income statement relations.)

- a. Bushels of wheat are the most convenient in this case with the given information. This question emphasizes the need for a common measuring unit.

b.

IVAN AND IGOR
Comparative Balance Sheets
(amounts in bushels of wheat)

<i>Assets</i>	IVAN		IGOR	
	Beginning of Period	End of Period	Beginning of Period	End of Period
Wheat	20	223	10	105
Fertilizer.....	2	—	1	—
Ox.....	40	36	40	36
Plow	—	—	—	2
Land.....	<u>100</u>	<u>100</u>	<u>50</u>	<u>50</u>
Total Assets	<u>162</u>	<u>359</u>	<u>101</u>	<u>193</u>
<i>Liabilities and</i>				
<i>Owner's Equity</i>				
Accounts Payable	—	3	—	—
Owner's Equity	<u>162</u>	<u>356</u>	<u>101</u>	<u>193</u>
Total Liabilities and Owner's Equity.....	<u>162</u>	<u>359</u>	<u>101</u>	<u>193</u>

Questions will likely arise as to the accounting entity. One view is that there are two accounting entities (Ivan and Igor) to whom the Red-Bearded Baron has entrusted assets and required a periodic reporting on stewardship. The “owner” in owner’s equity in this case is the Red-Bearded Baron. Another view is that the Red-Bearded Baron

1.43 b. continued.

is the accounting entity, in which case financial statements that combine the financial statements for Ivan and Igor are appropriate. Identifying the accounting entity depends on the intended use of the financial statements. For purposes of evaluating the performance of Ivan and Igor, the accounting entities are separate—Ivan and Igor. To assess the change in wealth of the Red-Bearded Baron during the period, the combined financial statements reflect the accounting entity.

c.

IVAN AND IGOR
Comparative Income Statement
(amounts in bushels of wheat)

	IVAN	IGOR
Revenues.....	243	138
Expenses:		
Seed	20	10
Fertilizer.....	2	1
Depreciation on Ox	4	4
Plow	<u>3</u>	<u>1</u>
Total Expenses	<u>29</u>	<u>16</u>
Net Income.....	<u>214</u>	<u>122</u>

Chapter 1 does not expose students to the concept of depreciation. Most students, however, grasp the need to record some amount of expense for the ox and the plow.

d.

	IVAN	IGOR
(amounts in bushels of wheat)		
Owner's Equity, Beginning of Period.....	162	101
Plus Net Income	214	122
Less Distributions to Owner.....	<u>(20)</u>	<u>(30)</u>
Owner's Equity, End of Period	<u>356</u>	<u>193</u>

1.43 continued.

- e. We cannot compare the amounts of net income for Ivan and Igor without adjustment because the Red-Bearded Baron entrusted them with different amounts of resources. We must relate the net income amounts to some base. The possibilities include the following:

	IVAN	IGOR
Net Income/Average Total Assets	82.2%	83.0%
Net Income/Beginning Total Assets	132.1%	120.8%
Net Income/Average Noncurrent Assets.....	155.1%	137.1%
Net Income/Beginning Noncurrent Assets	152.9%	135.6%
Net Income/Average Owner's Equity	82.6%	83.0%
Net Income/Beginning Owner's Equity	132.1%	120.8%
Net Income (in bushels)/Acre	10.70	12.20

The purpose of this question is to get students to think about performance measurement. The instructor may or may not wish to devote class time at this point discussing which base is more appropriate.