Understanding Financial Management: A Practical Guide
Problems and Answers

Chapter 2
Interpreting Financial Statements

2.2 Balance Sheet

1. Gamma Umbrella Manufacturing (GUM) Inc. has recorded the following balance sheet items in alphabetical order on December 31, 2006. Prepare a balance sheet for GUM for the year ending December 31, 2006. The amounts are given in thousands of dollars.
   - Accounts payable $2,850
   - Accounts receivable 3,100
   - Cash and equivalents 1,200
   - Common stock 1,500
   - Inventories 3,200
   - Long-term debt 5,500
   - Net plant and equipment 12,500
   - Notes payable 1,250
   - Other current liabilities 2,400
   - Retained earnings 6,500
   - Total assets 20,000
   - Total current assets 7,500
   - Total liabilities and equity 20,000
   - Total current liabilities 6,500
   - Total liabilities 12,000

2. Delta Computers Inc. became a public company when it issued 10 million shares of common stock at $20 per share five years ago. The stock has a par value of $1 a share. This issuance represents Delta's only issuance of common stock. The firm has $500 million in retained earnings. Delta has no preferred stock outstanding and has not repurchased any shares of common stock. Construct the stockholders' equity portion of the firm's balance sheet.

2.3 Income Statement

3. Lambda Enterprises has recorded the items listed below in alphabetical order for the year ending December 31, 2006. Prepare an income statement for 2006 for Lambda in an appropriate format. All amounts are in millions of dollars. If Lambda has 100 million common shares outstanding, what is the firm's basic EPS?
   - Selling and administrative expenses $ 200
   - Common dividends paid 25
   - Cost of sales 675
   - Depreciation expense 150

- Interest expense 75
- Preferred dividends paid 5
- Net sales 1,350
- Taxes (40% of taxable Income)

4. Omega Foods reported EBIT of $100 million on its 2006 income statement. The firm had interest expense of $20 million and a tax rate of 40%. Omega's weighted average common shares at the end of the year were 10 million. The company paid $10 million of dividends to the common shareholders, and had 500,000 dilutive shares. Compute the net income, basic EPS, and diluted EPS for Omega Foods.

5. Given the following information for the year ending December 31, 2006 for Veit Inc., compute the firm's basic EPS and diluted EPS.
   - Net Income = $44 million
   - Common dividends = $8 million
   - Preferred dividends = $2 million
   - Total shares of common stock outstanding, year-end = 20.945 million
   - Weighted average number of common shares outstanding in 2006 = 20.821 million
   - Number of potentially dilutive shares = 0.85 million

2.4 Statement of Cash Flows

6. The cash flow data apply to Haslem Products Inc. for the year ended December 31, 2006. All amounts are in thousands of dollars.
   - Purchase of land $15,000
   - Cash payment of dividends 32,000
   - Cash payment of interest 7,000
   - Sale of equipment 42,000
   - Cash payment of salaries 40,000
   - Purchase of equipment 35,000
   - Retirement of common stock 28,000
   - Cash payment to suppliers 90,000
   - Cash collections from customers 275,000
   - Cash at the beginning of the year 60,000

   A. What is the net cash provided by operating activities?
   B. What is the net cash provided by or used in investing activities?
   C. What is the net cash provided by or used in financing activities?
   D. What is the cash balance at year end?

7. Holdover Inc. reported net income of $100 million for the year ending December 31, 2006. During the year, accounts receivable and inventory increased by $10 million and $12 million, respectively, and accounts payable increased by $8 million. Holdover reported depreciation expense of $15 million and interest expense of $5 million on its income statement for the year.
   A. Compute the firm's cash flow from operations using the indirect method.
   B. Given the information below and your answer from part A, compute the ending amount of cash and cash equivalents and the increase (decrease) in cash and cash equivalents for Holdover Inc. for the year ending December 31, 2006.

- Cash and cash equivalents at beginning of year +$800 million
- Cash flow from investing activities - $175 million
- Cash flow from financing activities + $20 million

2.5 Statement of Retained Earnings

8. Woodsy Sporting Goods reported retained earnings of $457.2 million and $482.3 million in its 2005 and 2006 financial statements, respectively. Woodsy paid out $17.9 million and $18.4 million in dividends to its common shareholders in years 2005 and 2006, respectively. What was the firm's reported net income in 2006?

Section 2.6 Common-size Statements

9. The balance sheets and income statements for 2004-2006 of Gamma Inc. are shown below. Construct a common-size balance sheet and income statement for Gamma Inc. What trends, if any, appear in these common-size statements?

Balance Sheet
(amounts in millions)

Assets	**12/31/2006**	**12/31/2005**	**12/31/2004**
Cash	300	400	300
Accounts receivable	850	900	800
Inventory	1,250	1,100	1,000
Total current assets	2,400	2,400	2,100
Net plant and equipment	2,800	2,400	2,200
Total assets	5,200	4,800	4,300
Liabilities and Equity			
Accounts payable	700	700	650
Notes payable	400	400	400
Other current liabilities	200	200	200
Total current liabilities	1,500	1,300	1,250
Long-term debt	1,400	1,200	1,050
Total common equity	2,500	2,300	2,000
Total liabilities and equity	5,200	4,800	4,300

Income Statement

	2006	**2005**	**2004**
Sales	2,900	2,400	2,150
Cost of sales	1,700	1,500	1,400
Depreciation	480	400	370
EBIT	720	500	380
Interest expense	120	100	80
EBT	600	400	300
Taxes	240	160	120
Net Income	360	240	180

Answers

1. The balance sheet of Gamma Umbrella Manufacturing (GUM) Inc. for the year ending December 31, 2006 follows:

Assets	**12/31/06**
Amounts in thousands of $	
Cash and equivalents	$1,200
Accounts Receivable	3,100
Inventories	3,200
Total current assets	7,500
Net plant and equipment	12,500
Total assets	$20,000

Liabilities and Equity	
Accounts payable	$2,850
Notes payable	1,250
Other current liabilities	2,400
Total current liabilities	6,500
Long-term debt	5,500
Total liabilities	12,000
Common stock	1,500
Retained earnings	6,500
Total common equity	8,000
Total liabilities and equity	$20,000

2. The stockholders' equity portion of Delta Computers Inc.'s balance sheet follows:

Amounts in millions of $

Common stock, par value $1	$10
Additional paid in capital	190
Retained earnings	500
Total stockholders' equity	$700

3. The income statement of Lambda Enterprises for the year ending December 31, 2006 follows.

Income Statement	2006
Amounts in millions of $	
Net sales	$1,350
Cost of sales	675
Selling and administrative expenses	200
Depreciation expense	150
Earnings before interest and taxes	325
Interest expense	75
Earnings before taxes	250
Taxes (40% of taxable income)	100
Net Income	$150

Note: Common and preferred dividends are not included on a firm's income statement under U.S. GAAP.

Basic EPS = ($150 - $5)/100 = $1.45

4. The net income, basic EPS, and diluted EPS of Omega Foods follows:

Amounts in millions of $	2006
EBIT	$100
Interest expense	20
EBT	80
Taxes	32
Net Income	$48

Net income = $48 million

Basic EPS = $48 million/10 million = $4.80

Diluted EPS = $48 million/10.5 million = $4.57

5. The basic EPS and diluted EPS for Veit Inc. follow:

Basic EPS = ($44 million - $2 million)/ 20.821 million = $2.02

Diluted EPS = ($44 million - $2 million)/21.671 million = $1.94

6A. Using the direct method, the net cash provided by operating activities is calculated as:

Cash collections from customers	$275,000
Cash payment to suppliers	(90,000)
Cash payment of salaries	(40,000)
Cash payment of interest	(7,000)
CFO	$138,000

6B. The net cash provided by or used in investing activities is calculated as:

Purchase of land	($ 15,000)
Sale of equipment	42,000
Purchase of equipment	(35,000)
CFI	($ 8,000)

6C. The net cash provided by or used in financing activities is calculated as:

Retirement of common stock	($ 28,000)
Cash payment of dividends	(32,000)
CFF	($ 60,000)

6D. The ending cash balance is equal to the beginning cash balance plus the net cash flow for the period.

CFO	$138,000
CFI	(8,000)
CFF	(60,000)
Net increase in cash	70,000
Beginning cash	60,000
Ending cash	$ 130,000

7A. Using the indirect method, the net cash flow from operations of Holder Inc. follows;

Amounts in millions of $	**2006**
Net income	$100
plus depreciation expense	15
Less: increase in accounts receivable	(10)
Less: increase in inventories	(12)
Plus: increase in accounts payable	8
	$101

7B. The ending amount of cash and the firm's ending cash balance.

Amounts in millions of $	**2006**
CFO	$101
CFI	(175)
CFF	20
Net change in cash	(54)
Beginning cash	800
Ending cash balance	746

8. The reported net income in 2006 for Woodsy Sporting Goods Inc. follows:

Net income (2006) = retained earnings (2006) + dividends paid (2006)
Net income = $482.3 million + $18.4 million = $500.7 million

9. The common-size income balance sheet and income statement for Gamma Inc. follow:

Common-Size Balance Sheet
Gamma Inc.
(Amounts in %)

Assets	**12/31/2006**	**12/31/2005**	**12/31/2004**
Cash	5.8	8.3	7.0
Accounts Receivable	16.3	18.8	18.6
Inventory	24.0	22.9	23.3
Total current assets	46.2	50.0	48.8
Plant and equipment, net	53.8	50.0	51.2
Total assets	100.0	100.0	100.0
Liabilities and Equity			
Accounts payable	13.5	14.6	15.1
Notes payable	7.7	8.3	9.3
Other current liabilities	3.8	4.2	4.7
Total current liabilities	28.8	27.1	29.1
Long-term debt outstanding	26.9	25.0	24.4
Total common equity	48.1	47.9	46.5
Total liabilities and equity	100.0	100.0	100.0

Common-Size Income Statement
Gamma Inc.
(Amounts in %)

	2006	**2005**	**2004**
Sales	100.0	100.0	100.0
Cost of sales	58.6	62.5	65.1
Depreciation	16.6	16.7	17.2
EBIT	24.8	20.8	17.7
Interest expense	4.1	4.2	3.7
EBT	20.7	16.7	14.0
Taxes	8.3	6.7	5.6
Net Income	12.4	10.0	8.4

The common-size balance sheet shows no dramatic changes over the past three years. There is a modest increase in current liabilities, which are accompanied by slight changes in both long-term debt and common equity (as a percentage of total assets).

The common-size income statement shows that net income as a percentage of sales increased steadily from 8.4% to 12.4% from 2004 to 2006. This increased is attributable mainly to the decline in cost of sales as a percentage of net income over the same period.