
Financial Reporting and Analysis (5th Ed.)
Chapter 2 Solutions
Accrual Accounting and Income Determination
Exercises

Exercises**E2-1. Determining accrual and cash basis revenue**
(AICPA adapted)

Since the subscription begins with the first issue of 2012, no revenue can be recognized in 2011 on an accrual basis. No product or service has been exchanged between Gee Company and its customers. Therefore, no subscription revenue has been earned.

On a cash basis, Gee would recognize the full amount of cash received of \$36,000 as revenue in 2011.

E2-2. Determining unearned subscription revenue
(AICPA adapted)

Since subscription revenue is not earned until the customer has received the jellies, unearned subscription revenue should be equal to the amount of subscriptions sold but not yet expired.

| | |
|--------------------------------|-------------------------|
| Sold in 2011/Expiring in 2012 | \$250,000 |
| Sold in 2011/Expiring in 2013 | 180,000 |
| Sold in 2010*/Expiring in 2012 | <u>85,000</u> |
| Unearned subscription revenue | <u>\$515,000</u> |

*(The subscriptions sold in 2010 that did not expire in 2010 or in 2011 must be carried over to 2012 where they will be earned and recognized.)

E2-3. Determining unearned revenue
(AICPA adapted)**Year 2010 Sales:**

| | |
|-------------------------------|------------------------|
| Unredeemed at 12/31/10 | \$ 75,000 |
| Sold in 2010/redeemed in 2011 | (25,000) |
| Sold in 2010/Expired in 2011 | <u>(50,000)</u> |
| Unearned revenue at 12/31/11 | <u>\$ - 0 -</u> |

Year 2011 Sales:

| | |
|-------------------------------|------------------|
| Sales of gift certificates | \$ 250,000 |
| Less: 10% not to be redeemed | (25,000) |
| Sold in 2011/redeemed in 2011 | <u>(175,000)</u> |
| Unearned revenue at 12/31/11 | <u>\$ 50,000</u> |

Total unearned revenue at 12/31/11 is \$50,000.

E2-4. Determining when to recognize revenue

(AICPA adapted)

Generally, sales revenue is recognized at the date of delivery, because that generally is the time at which a sale (title has passed) has occurred. At that point the two criteria for revenue recognition were met; the revenue is (1) realized or realizable and (2) it is earned. Therefore, the amount of sales revenue recognized in 2011 is \$600,000 (200,000 gallons x \$3 = \$600,000).

E2-5. Converting from accrual to cash basis revenue

(AICPA adapted)

Under the cash basis of income determination, the company would not regard its ending accounts receivable as revenue but it would include beginning accounts receivable that are assured to be collected in cash during the current year(except for accounts written off). To find cash basis revenue, we have to subtract the increase in accounts receivable from the revenue figure:

| | |
|--|---------------------------|
| Accrual basis revenue | \$1,750,000 |
| + Beginning accounts receivable balance | 375,000 |
| - Ending accounts receivable balance | (505,000) |
| - Write-offs of accounts receivable | <u>(20,000)</u> |
| Cash basis revenue (cash collections on accounts receivable) | <u>\$1,600,000</u> |

Alternate Solution:

| | | Accounts Receivable |
|---|-----------|---|
| Beginning balance | \$375,000 | |
| Sales on account (Accrual basis revenue) | 1,750,000 | |
| | | \$20,000 Accounts receivable write-off |
| | | \$1,600,000 Solve for: Cash collections |
| Ending balance | \$505,000 | |

$$\begin{aligned}
 & \$375,000 + \$1,750,000 - \$20,000 - X = \$505,000 \\
 & \mathbf{X = \$1,600,000}
 \end{aligned}$$

E2-6. Converting from cash to accrual basis revenue
(AICPA adapted)

To change Dr. Hamilton's revenue from cash basis to an accrual basis, we have to add the earned but uncollected accounts receivable and subtract the beginning accounts receivable collected in 2011 but earned in 2010. We also need to subtract fees collected in 2011 but not earned until 2012 (unearned fees on 12/31/11):

| | |
|--|-------------------------|
| Cash basis revenue | \$200,000 |
| - Beginning accounts receivable (12/31/10) | (18,000) |
| + Ending accounts receivable (12/31/11) | 25,000 |
| - Unearned fees on 12/31/11 | <u>(8,000)</u> |
| Accrual basis revenue | <u>\$199,000</u> |

E2-7. Converting from accrual to cash basis expense
(AICPA adapted)

The total amount of insurance premiums paid in 2011 is equal to the insurance expense for 2011 plus the ending balance in prepaid insurance and less the beginning balance in prepaid insurance.

| | |
|---|-------------------------|
| 2011 Insurance expense | \$875,000 |
| + Ending balance in prepaid insurance 12/31/11 | 245,000 |
| - Beginning balance in prepaid insurance 12/31/10 | <u>(210,000)</u> |
| Insurance premiums paid in 2011 | <u>\$910,000</u> |

Alternate Solution:

The amount of premiums paid can be determined from a T-account analysis of prepaid insurance.

| Prepaid Insurance | | | |
|----------------------|-----------|-----------|--------------------------------------|
| Beginning balance | \$210,000 | | |
| Premiums paid | X | \$875,000 | Amounts charged to insurance expense |
| Ending balance | \$245,000 | | |

$$\begin{aligned}
 & \$210,000 + X - \$875,000 = \$245,000 \\
 & X = \$875,000 + \$245,000 - \$210,000 \\
 & X = \underline{\underline{\$910,000}}
 \end{aligned}$$

E2-8. Determining Gain (loss) from discontinued operations

| Munnster Corporation | | |
|---|--------------------|--------------------|
| Partial Income Statement | | |
| For the Years Ended December 31 | | |
| | <u>2011</u> | <u>2010</u> |
| **Income from continuing operations, before taxes | \$ 1,405,000 | \$ 920,000 |
| Income tax expenses | <u>421,500</u> | <u>276,000</u> |
| Income from continuing operations after taxes | 983,500 | 644,000 |
| Discontinued operations: | | |
| Loss from discontinued division, net of tax benefits of \$151,500 in 2011 and \$51,000 in 2010 | (353,500) | (119,000) |
| Gain from sale of discontinued division, net of taxes expense of \$105,000 | <u>245,000</u> | <u>- 0 -</u> |
| Net income | <u>\$ 875,000</u> | <u>\$ 525,000</u> |
| **Income from continuing operations, before taxes excludes the losses from discontinued division and is calculated as follows: | | |
| | <u>2011</u> | <u>2010</u> |
| Income from continuing operations, before taxes | \$ 900,000 | \$ 750,000 |
| Loss from discontinued division, before taxes | <u>505,000</u> | <u>170,000</u> |
| Income from continuing operations, before taxes (excluding losses from discontinued division): | \$ 1,405,000 | \$ 920,000 |

E2-9. Determining loss on discontinued operations

Under, results of operations on an operating segment or component of an entity classified as held for sale are to be reported in discontinued operations in the periods in which they occur (net of tax effects). For Revsine, the loss from operations for the discontinued segment would be \$350,000 determined as follows:

| | |
|------------------------------------|--------------------|
| Loss from 1/1/11 to 8/31/11 | (\$300,000) |
| Loss from 9/1/11 to 12/31/11 | (\$200,000) |
| Total pre-tax loss | (\$500,000) |
| Tax benefit at 30% | <u>150,000</u> |
| Operating loss, net of tax effects | <u>(\$350,000)</u> |

None of the expected profit from operating the segment or component for Revsine in 2012 or the estimated gain on sale is recognized in 2011. These amounts will be recognized in 2012 as they occur.

E2-10. Determining period vs. product costs

| | Period Cost | Product Cost |
|--|-------------|--------------------------------------|
| | | Matched with sales as inventory cost |
| Depreciation on office building | X | |
| Insurance expense for factory building | | X |
| Product liability insurance premium | X | |
| Transportation charges for raw materials | | X |
| Factory repairs and maintenance | | X |
| Rent for inventory warehouse* | X | |
| Cost of raw materials | | X |
| Factory wages | | X |
| Salary to chief executive officer | X | |
| Depreciation on factory | | X |
| Bonus to factory workers | | X |
| Salary to marketing staff | X | |

| | | |
|--------------------------|---|---|
| Administrative expenses | X | |
| Bad debt expense** | X | |
| Advertising expense | X | |
| Research and development | X | |
| Warranty expense*** | X | |
| Electricity for plant | | X |

*Rent for inventory warehousing can be argued to be product costs and included as part of inventory costs. However, many companies expense this cost as a period expense because of materiality considerations.

** Bad debt expense is typically deducted from sales to arrive at Net Sales. We show it as a period cost because it is not shown as an inventory cost that is shown as part of Cost of goods sold.

***Warranty expense is matched against sales in the period in which the products subject to warranties are sold, not when the warranty costs are incurred. However, it is not an inventory cost that becomes part of cost of goods sold. Therefore, we show it as a period expense.

E2-11. Cash versus accrual analysis

To report Kelly Plumbing Supply's revenues on an accrual basis, we need to subtract the accounts receivable collected in December but earned in November and add the sales on account made during December to the cash received from customers during December 2011.

To report Kelly Plumbing's expenses on an accrual basis, we have to subtract the cash paid to suppliers in December for inventory purchased and used in November and add inventory that was purchased in November and used in December to the cash paid to suppliers for inventory during December 2011.

| | |
|--|------------------|
| Cash received from customers during December 2011 | \$387,000 |
| Cash received in December for November accounts receivable | (139,000) |
| December sales made on account-collected in January | <u>141,000</u> |
| Accrual basis revenues | <u>\$389,000</u> |
| | |
| Cash paid to suppliers for inventory during December 2011 | \$131,000 |
| Payments for inventory purchased and used in November | (19,000) |
| Inventory purchased in November but used in December | <u>39,000</u> |
| Accrual basis expenses | <u>\$151,000</u> |

| | |
|--|------------------|
| Accrual basis revenues | \$389,000 |
| Less: Accrual basis expenses | <u>(151,000)</u> |
| Gross profit for the month of December | <u>\$238,000</u> |

E2-12. Determining effect of omitting year-end adjusting entries

OS = overstated
 US = understated
 NE = no effect

| <u>Item</u> | <u>Assets</u> | <u>Liabilities</u> | <u>Net Income</u> |
|------------------------------|----------------------|--------------------|-------------------|
| 1. Supplies Inventory | | | |
| Direction of effect | OS | NE | OS |
| Dollar amount of effect | \$9,000 ¹ | | \$9,000 |

¹Expense not recorded = \$12,000 - \$3,000

| | | | |
|----------------------------|----|----------------------|---------|
| 2. Unearned Revenue | | | |
| Direction of effect | NE | OS | US |
| Dollar amount of effect | | \$6,000 ² | \$6,000 |

²Revenue not recorded = \$6,000 from July 1, 2011 to December 31, 2011

| | | | |
|----------------------------|----|----------------------|---------|
| 3. Gasoline Expense | | | |
| Direction of effect | NE | US | OS |
| Dollar amount of effect | | \$2,500 ³ | \$2,500 |

³Gasoline expense not recorded = \$2,500

| | | | |
|----------------------------|----|----------------------|---------|
| 4. Interest Expense | | | |
| Direction of effect | NE | US | OS |
| Dollar amount of effect | | \$4,500 ⁴ | \$4,500 |

⁴Interest expense for 9 months not accrued = \$50,000 x 0.12 x 9/12 = \$4,500

| | | | |
|--------------------------------|-----------------------|----|----------|
| 5. Depreciation Expense | | | |
| Direction of effect | OS | NE | OS |
| Dollar amount of effect | \$10,000 ⁵ | | \$10,000 |

⁵Depreciation expense not recorded = \$30,000/3 = \$10,000

E2-13. Preparing a multiple-step income statement

| Hardrock Mining Co. | |
|---|--------------------|
| Income Statement | |
| Year Ended December 31, 2011 | |
| (\$ in 000) | |
| Net sales | \$5,281,954 |
| Cost of products sold | <u>(4,765,505)</u> |
| Gross Profit | \$516,449 |
| Marketing, administrative and other expenses | (193,147) |
| Interest expense | (17,143) |
| Investment losses* | (57,752) |
| Restructuring charges | <u>(8,777)</u> |
| Earnings before income taxes | \$239,630 |
| Provision for income taxes | <u>(71,889)</u> |
| Income before extraordinary item | \$167,741 |
| Extraordinary gain, net of income tax effect of \$3,600** | <u>8,400</u> |
| Net income | <u>\$176,141</u> |
| Earnings per common share: | |
| Income before extraordinary item | \$16.77 |
| Extraordinary gain, net of income tax effect | <u>0.84</u> |
| Net income | <u>\$17.61</u> |

The “Other, net” caption as originally reported is broken down as follows:

| | |
|---|-----------------|
| * “Other, net” as originally reported (\$ in 000) | \$54,529 |
| Less: Restructuring charge | (8,777) |
| Plus: Extraordinary gain | <u>12,000</u> |
| Investment losses | <u>\$57,752</u> |

The gain related to the property taken by the government under its “eminent domain” rights qualifies for extraordinary gain treatment because such takings meet the unusual and infrequent test. Extraordinary items are presented “net of tax” as calculated below. The “restructuring loss” may be infrequent, but would not be considered unusual, thus it is not extraordinary and should be separately disclosed as a component of operating income. Removing these two items from “Other, net” leaves only the investment losses in the original caption, which should be relabeled “investment losses.”

| | |
|---|----------------|
| ** Extraordinary item | \$12,000 |
| Income taxes on extraordinary item (30% tax rate) | <u>3,600</u> |
| Extraordinary item net of taxes | <u>\$8,400</u> |

The foreign currency loss (\$55,000) does not surpass any reasonable materiality threshold (e.g., greater than 1% of net income) so it may remain in “marketing, administrative and other expenses.” Had this loss been material, separate disclosure as a component of operating income would be warranted.

Per share disclosures are required on the face of the income statement for income from operations and items that follow on the income statement.

E2-14. Preparing income statement with irregular items

| KEW Corporation Partial Income Statement For the Year Ended December 31, 2011 | |
|--|---------------------|
| Income from continuing operations before income taxes | \$ 4,344,000** |
| Income tax expense | <u>(1,520,400)</u> |
| Income from continuing operations | \$ 2,823,600 |
| Discontinued operations: | |
| Loss from operation of discontinued division, net of tax benefit of \$227,500 | (422,500) |
| Loss from disposal of discontinued division, net of tax benefit of \$84,000 | <u>(156,000)</u> |
| Income before extraordinary item | \$ 2,245,100 |
| Extraordinary loss, net of income tax benefit of \$138,250 | <u>(256,750)</u> |
| Net income | <u>\$ 1,988,350</u> |
| Earnings per common share: | |
| Income from continuing operations | \$ 5.65 |
| Discontinued operations: | |
| Loss from operation of discontinued division | \$ (0.85) |
| Loss from disposal of discontinued division | <u>\$ (0.31)</u> |
| Income before extraordinary item | \$ 4.49 |
| Extraordinary loss | <u>\$ (0.51)</u> |
| Net income | <u>\$ 3.98</u> |

| | |
|-------------------------------------|------------------|
| *Cost of machinery sold during 2011 | \$ 300,000 |
| Less: Accumulated depreciation | <u>(225,000)</u> |
| Book value of machinery | <u>\$ 75,000</u> |

continued

| | |
|---|----------------------------|
| Selling price of machinery | \$ 85,000 |
| Less: Book value of machinery | <u>(75,000)</u> |
| Gain on sale of machinery | <u>\$ 10,000</u> |
| | |
| **Income from continuing operations as reported | 4,350,000 |
| Write off uncollectible note | (16,000) |
| Gain on sale of machinery | <u>10,000*</u> |
| Income from continuing operations before taxes | <u><u>\$ 4,344,000</u></u> |

Note to the instructor: Because KEW occasionally sells used machinery, the machinery sale described in the problem should be separately disclosed as a component of operating income, not as an irregular item. The expropriation loss is among the items cited in the text as typically being extraordinary items. The stated fact that KEW had no other foreign operations reinforces—from KEW’s perspective—the unusual and infrequent nature of this loss.

E2-15. Change in inventory methods

Requirement 1:

| | |
|---|---------------------------|
| Retained earnings balance at January 1, 2011, using LIFO | \$1,750,000 |
| Increased pretax income prior to 2011 using FIFO | \$80,000 |
| Less: income tax at 30% | <u>(24,000)</u> |
| Cumulative net income and thus retained earnings would have been higher by | <u>56,000</u> |
| Retained earnings balance at January 1, 2011, using FIFO | <u><u>\$1,806,000</u></u> |

Requirement 2:

| | |
|--|----------|
| 1/1/2011 To record a change in inventory method | |
| DR Inventory (increase inventory to FIFO) | \$80,000 |
| CR Retained earnings (additional income If FIFO had been used) | \$56,000 |
| CR Deferred tax liability (30% x \$80,000) | 24,000 |

E2-16. Income statement presentation

Event 1 is a discontinued operation and would appear on the income statement below income from continuing operations. To qualify for discontinued operation treatment, the sold component must be separable, both operationally and financially, from the rest of the operation. Further, Krewatch cannot have any significant continuing involvement in the operations of the sold component. These conditions appear to be met. Although Krewatch is still carrying the accessory line, the company is buying these products from the plant's new owners and is not involved in the plant's operations.

Event 2 would be reported as a special, nonrecurring or unusual item and thus would be included in income from continuing operations. Restructurings may be infrequent, but they are not that unusual in today's business environment so this event is not an extraordinary item.

Event 3 is an extraordinary item and would appear on the income statement below income from continuing operations. Pre-codification FAS 145 eliminated the requirement that all gains/losses from early extinguishment of debt be treated as extraordinary items. Consequently, to qualify for extraordinary treatment, an extinguishment now must meet the unusual and infrequent test. Given that the retired bonds were the only ones issued in the company's history, this test appears to be met.

Event 4 is a change in accounting principle and would require retrospective application (i.e., prior year income statement numbers presented for comparative purposes would be restated to reflect the average cost method of inventory costing. The current year income statement numbers would be based on applying the average cost method. The effect of the accounting principle change on the current period income numbers would be disclosed in a note to the financial statements explaining the accounting change.

Event 5 is a change in accounting estimate and thus would be included in income from continuing operations. No special income statement disclosure of this event is required. Depreciation expense in 2011 (and beyond) will be calculated using the (new) shorter lives. The range of equipment lives used for depreciation purposes may need to be adjusted in the notes to Krewatch's financial statements.

Event 6 is a special, nonrecurring or unusual item and thus would be included in income from continuing operations. Inventory write-offs may be infrequent, but they are not unusual so this event is not an extraordinary item.

Event 7 is a special, nonrecurring or unusual item and thus would be included in income from continuing operations. Equipment sales are considered a normal part of ongoing business activity.

E2-17. Comprehensive income

| JDW Corporation Income Statement and Statement of Comprehensive Income For the Year Ended December 31, 2011 | |
|--|--------------------|
| Sales | \$ 2,929,500 |
| Cost of goods sold | <u>(1,786,995)</u> |
| Gross profit | 1,142,505 |
| Selling and administrative expenses | <u>(585,900)</u> |
| Income from operations, before income taxes | 556,605 |
| Income taxes | <u>(166,982)</u> |
| Net income | <u>\$ 389,623</u> |
| Net income | \$ 389,623 |
| Unrealized holding loss, net of tax of \$6,600 | (15,400) |
| Foreign currency translation adjustment, net of tax of \$11,250 | 26,250 |
| Unrealized loss from pension adjustment, net of tax of \$2,100 | <u>(4,900)</u> |
| Comprehensive income | <u>\$ 395,573</u> |

E2-18. Comprehensive income

| Andrew's Extreme Sports Income Statement For the Year Ended December 31, 2011 | |
|--|--------------------|
| Sales | \$ 1,680,000 |
| Cost of goods sold | <u>(1,041,600)</u> |
| Gross profit | 638,400 |
| Selling and administrative expenses | <u>(369,600)</u> |
| Income from operations, before income taxes | 268,800 |
| Income taxes | <u>(94,080)</u> |

| | |
|--------------------|-----------------------|
| Net income | \$ <u>174,720</u> |
| Earnings per share | \$ <u><u>0.70</u></u> |

$$\begin{aligned} \text{Income taxes} &= (\text{income from operations} \times \text{tax rate}) = (\$268,800 \times .35) \\ &= \$94,080 \end{aligned}$$

$$\begin{aligned} \text{Earnings per share} &= (\text{net income} / \text{average shares outstanding}) \\ &= (\$174,720 / 250,000) = \$0.70 \end{aligned}$$

**Andrew's Extreme Sports
Statement of Changes in
Stockholder's Equity
For the Year Ended
December 31, 2011**

| | Total Equity | Common Stock | Retained Earnings | Other Compre- hensive Income |
|---|-------------------------|-------------------------|------------------------------|---|
| Balance December 31, 2010 | \$ <u>2,470,300</u> | \$ 1,500,000 | \$ 985,100 | \$ (14,800) |
| Comprehensive income: | | | | |
| Net income | 174,720 | | 174,720 | |
| Other comprehensive income: | | | | |
| Unrealized holding gain from foreign currency translations | - <u>4,900</u> | | | <u>4,900</u> |
| Total comprehensive income | - <u>179,620</u> | | | |
| Dividends | (25,000) | | <u>(25,000)</u> | |
| Issued common stock | <u>500,000</u> | <u>500,000</u> | | |
| Balance December 31, 2011 | <u>\$ 3,124,920</u> | <u>\$ 2,000,000</u> | <u>\$ 1,134,820</u> | <u>\$ (9,900)</u> |

E2-19. Calculating EPS

1. Net income – Preferred stock dividend = \$10.5 - \$2 = \$8.5 million
2. Weighted Average number of common shares
= 0.25 x 20 + 0.75 x 26 = 24.5 million shares
3. EPS = \$8.5/24.5 = \$0.347 per share

E2-20. Financial Statement Presentation under FASB/IASB Proposal

Procter & Gamble
Statement of Comprehensive Income
For the year ended 30 June 2009
(\$ in millions)

BUSINESS**Operating**

| | |
|--|----------------------|
| Net sales | \$ 79,029 |
| Cost of products sold | <u>(38,898)</u> |
| <i>Gross profit</i> | 40,131 |
| Selling, general and administrative | (13,591) |
| Research and development | (2,044) |
| Advertising costs | <u>(7,579)</u> |
| Operating before financing arising from operating | 16,917 |
| Interest cost component of pension provision | (551) |
| Interest cost component of other retiree benefits | (243) |
| Interest costs related to capital lease commitments | <u>(22)</u> |
| Total operating income | <u>16,101</u> |

Investing

| | |
|---------------------------------|-------------------|
| Other non-operating income, net | <u>560</u> |
| Total investing income | <u>560</u> |
| TOTAL BUSINESS INCOME | 16,661 |

FINANCING

| | |
|------------------|---------|
| Interest expense | (1,336) |
|------------------|---------|

INCOME TAXES

| | |
|--|----------------------|
| Income tax expense | <u>(4,032)</u> |
| Net income from continuing operations | <u>11,293</u> |

DISCONTINUED OPERATIONS:

| | |
|--|---------------------|
| Earnings from discontinued operation | 212 |
| Income tax expense | (80) |
| Gain on sale of discontinued operation | 1,896 |
| Deferred tax benefit on sale | <u>115</u> |
| Net earnings from discontinued operations | <u>2,143</u> |
| NET INCOME | 13,436 |

OTHER COMPREHENSIVE INCOME

| | |
|--|-----------------------|
| Financial statement translation | (6,151) |
| Hedges and investment securities, net of \$452 tax | 748 |
| Defined benefit retirement plans, net of \$879 tax | <u>(1,701)</u> |
| TOTAL OTHER COMPREHENSIVE INCOME | <u>(7,104)</u> |

TOTAL COMPREHENSIVE INCOME**6,332**

The FASB's exposure draft on financial statement presentation sets forth two core presentation principles: (1) cohesiveness, and (2) disaggregation.

A *cohesive financial picture* means that the relationship between items across financial statements is clear and that an entity's financial statements complement each other as much as possible. Financial statements that are consistent with the cohesiveness objective would display data in a way that clearly associates related information across the statements so that the information is understandable. The cohesiveness objective responds to the existing lack of consistency in the way information is presented in an entity's financial statements. For example, cash flows from operating activities are separated in the statement of cash flows, but there is no similar separation of operating activities in the statements of comprehensive income and financial position. This makes it difficult for a user to compare operating income with operating cash flows—a comparison often made in assessing earnings quality. Similarly, separating operating assets and liabilities in the statement of financial position will provide users with more complete data for calculating some key financial ratios, such as return on net operating assets.

Thus, the new statement of comprehensive income (SCI) format is designed to be more cohesive with the statement of cash flows and uses many of the same presentation categories. Other differences between current income statements and the new format exhibited by P&G's recast financial statements follow:

- Other comprehensive income is included in a separate section on the SCI.
- The FASB/IASB project intends that financial information be “disaggregated.” P&G, like many U.S. public companies, presents highly aggregated captions on its financial statements. Based on information in P&G's notes, research and development and advertising have been “disaggregated” in keeping with the requirements of the new presentation format. (If P&G were to undertake this reformatting exercise, additional disaggregation would likely occur.)
- The “investing” category does not appear on P&G's income statement. On the SCI, this category includes other non-operating income (primarily net divestiture gains and interest and investment income) listed by P&G as a separate “uncategorized” item after operating income.
- P&G does not report “financing arising from operating” as a separate category, but rather includes the items that the FASB/IASB suggests should appear in this category among its other financial statement captions.

Financial Reporting and Analysis (5th Ed.)

Chapter 2 Solutions

Accrual Accounting and Income Determination Problems

Problems

P2-1. Determining royalty revenue (AICPA adapted)

Royalty revenue should be recognized when earned, regardless of when the cash is collected. Royalty revenue earned from 12/1/10 to 5/31/11 is \$240,000 (30% x \$800,000). Since 12/31/10 Royalties receivable was \$40,000, that portion of the \$240,000 was earned in 2010. Therefore, royalty revenue earned from 1/1/11 to 5/31/11 is \$200,000 (\$240,000 - \$40,000). Royalty revenues earned from 6/1/11 to 11/30/11 were \$180,000 (30% x 600,000), and the amount earned from 12/1/11 to 12/31/11 was \$30,000 (30% x 100,000). The total 2011 revenue is \$410,000 as shown below.

| | |
|--|-------------------------|
| Earned 12/1/10 to 5/31/11 (30% x \$800,000) | \$240,000 |
| Less amount earned 12/1/10 to 12/31/10 | <u>(40,000)</u> |
| Earned 1/1/11 to 5/31/11 | 200,000 |
| Earned 6/1/11 to 11/30/11 (30% x \$600,000) | 180,000 |
| Earned 12/1/11 to 12/31/11 (30% x \$100,000) | <u>30,000</u> |
| Amount earned in 2011 | <u>\$410,000</u> |

P2-2. Preparing Journal entries and statement

Requirement 1: Journal Entries

1/1/11: To record entry for cash contributed by owners

| | | |
|------------------------|-----------|-----------|
| DR Cash | \$200,000 | |
| CR Contributed capital | | \$200,000 |

1/1/11: To record entry for rent paid in advance

| | | |
|-----------------|----------|----------|
| DR Prepaid rent | \$24,000 | |
| CR Cash | | \$24,000 |

3/1/11: No entry upon signing of contract

7/1/11: To record entry for purchase of office equipment

| | | |
|--------------|-----------|-----------|
| DR Equipment | \$100,000 | |
| CR Cash | | \$100,000 |

11/30/11: To record entry for salary paid to employees

| | | |
|----------------------------|----------|----------|
| DR Salaries expense | \$66,000 | |
| CR Cash | | \$66,000 |

12/31/11: To record entry for advance-consulting fees received from Norbert Corp. which are unearned at year-end.

| | | |
|----------------------------------|----------|----------|
| DR Cash | \$20,000 | |
| CR Advances from customer | | \$20,000 |

Requirement 2: Adjusting Entries

| | | |
|------------------------|----------|----------|
| DR Rent expense | \$12,000 | |
| CR Prepaid rent | | \$12,000 |

Only one year's rent is expensed in the income statement for 2011. The balance will be expensed in next year's income statement.

| | | |
|--|-----------|-----------|
| DR Accounts receivable | \$150,000 | |
| CR Revenue from services rendered | | \$150,000 |

The income was earned this year because Frances Corp. has completed its obligation.

| | | |
|------------------------------------|----------|----------|
| DR Depreciation expense | \$10,000 | |
| CR Accumulated depreciation | | \$10,000 |

Annual depreciation is $\$100,000/5 = \$20,000$. Since the equipment was used for only 6 months, the depreciation charge for this year is only $\$20,000/2 = \$10,000$.

| | | |
|----------------------------|---------|---------|
| DR Salaries expense | \$6,000 | |
| CR Salaries payable | | \$6,000 |

To accrue salaries expense for December 2011.

Requirement 3: Income statement

| Frances Corporation | | |
|---|-----------------|-----------------|
| Income Statement | | |
| For Year Ended December 31, 2011 | | |
| Revenue from services rendered | | \$150,000 |
| Less: Expenses | | |
| Salaries | (\$72,000) | |
| Rent | (12,000) | |
| Depreciation | <u>(10,000)</u> | <u>(94,000)</u> |
| Net income | | <u>\$56,000</u> |

Requirement 4: Balance sheet

| Frances Corporation | | |
|---|-----------------|-------------------------|
| Balance Sheet | | |
| December 31, 2011 | | |
| Assets | | |
| Cash | | \$30,000 |
| Accounts receivable | | 150,000 |
| Prepaid rent | | 12,000 |
| Equipment | \$100,000 | |
| Less: Accumulated depr. | <u>(10,000)</u> | |
| Net equipment | | <u>90,000</u> |
| Total assets | | <u>\$282,000</u> |
| Liabilities | | |
| Salaries payable | | \$6,000 |
| Advances from customers | | 20,000 |
| Stockholders' Equity | | |
| Capital stock | | 200,000 |
| Retained earnings | | <u>56,000</u> |
| Total liabilities and stockholders' equity | | <u>\$282,000</u> |

P2-3. Converting accounting records from cash basis to accrual basis
(AICPA adapted)

Requirement 1:

| Stein Flowers | | | | | | |
|--|-------------------|------------------|--------------------|------------------|----------------------|------------------|
| Conversion from Cash basis to Accrual basis | | | | | | |
| December 31, 2011 | | | | | | |
| | <u>Cash basis</u> | | <u>Adjustments</u> | | <u>Accrual basis</u> | |
| | Dr. | Cr. | Dr. | Cr. | Dr. | Cr. |
| Cash | \$23,200 | | | | \$23,200 | |
| Accounts receivable | 16,200 | | \$11,300 (1) | | 27,500 | |
| Inventory | 58,000 | | 13,900 (4) | | 71,900 | |
| Furniture and fixtures | 128,500 | | | | 128,500 | |
| Land improvements | 50,000 | | | | 50,000 | |
| Accumulated depreciation and amortization | | \$32,400 | | \$14,875 (6) | | \$47,275 |
| Accounts payable | | 21,000 | | 12,500 (3) | | 33,500 |
| Stein, drawings | | | 73,000 (9) | | 73,000 | |
| Stein, capital | | 124,900 | 2,000 (7) | 2,900 (5) | | 125,800 |
| Allowance for uncollectibles | | | | 2,800 (2) | | 2,800 |
| Prepaid insurance | | | 3,000 (5) | | 3,000 | |
| Contingent liability | | | | 40,000 (8) | | 40,000 |
| Utilities payable | | | | 1,500 (7) | | 1,500 |
| Payroll taxes payable | | | | 1,600 (7) | | 1,600 |
| Sales | | 660,000 | | 11,300 (1) | | 671,300 |
| Purchases | 307,300 | | 12,500 (3) | | 319,800 | |
| Salaries | 174,000 | | | 60,000 (9) | 114,000 | |
| Payroll taxes | 12,400 | | 500 (7) | | 12,900 | |
| Insurance expense | 9,000 | | 2,900 (5) | 3,000 (5) | 8,900 | |
| Rent expense | 34,200 | | | | 34,200 | |
| Utilities expense | 12,500 | | 600 (7) | | 13,100 | |
| Living expense | 13,000 | | | 13,000 (9) | | |
| Bad debt expense | | | 2,800 (2) | | 2,800 | |
| Amortization for land improvement | | | 1,875 (6) | | 1,875 | |
| Depreciation expense | | | 13,000 (6) | | 13,000 | |
| Loss pending litigation | | | 40,000 (8) | | 40,000 | |
| Cost of goods sold | | | | 13,900 (4) | | 13,900 |
| | <u>\$838,300</u> | <u>\$838,300</u> | <u>\$177,375</u> | <u>\$177,375</u> | <u>\$937,675</u> | <u>\$937,675</u> |

Journal entries:

- 1) **DR** Accounts receivable \$11,300
CR Sales \$11,300
 To adjust accounts receivable to \$27,500

- 2) **DR** Bad debt expense \$2,800

| | | | |
|----|--|----------|----------|
| | CR Allowance for uncollectibles | | \$2,800 |
| | Allowance for uncollectable accounts | | |
| 3) | DR Purchases | \$12,500 | |
| | CR Accounts payable | | \$12,500 |
| | To adjust accounts payable to \$33,500 | | |
| 4) | DR Inventory | \$13,900 | |
| | CR Cost of goods sold | | \$13,900 |
| | To adjust inventory to \$71,900 | | |
| 5) | DR Prepaid insurance ¹ (\$9,000 x 4/12) | \$3,000 | |
| | DR Insurance expense ² | 2,900 | |
| | CR Insurance expense | | \$3,000 |
| | CR Stein, capital | | 2,900 |
| | ¹ To allocate \$9,000 insurance between this year and next. | | |
| | ² To record the first 4 months of expense for 2011 (\$8,700/12 mos. = \$725/mo. x 4 = \$2,900). | | |
| 6) | DR Amortization of land improvements | \$1,875 | |
| | DR Depreciation expense | 13,000 | |
| | CR Accumulated depreciation and amortization | | \$14,875 |
| | To record depreciation and amortization expense | | |
| 7) | DR Stein, capital | \$2,000 | |
| | DR Payroll taxes | 500 | |
| | DR Utilities | 600 | |
| | CR Utilities payable | | \$1,500 |
| | CR Payroll taxes payable | | 1,600 |
| | To record year-end accrual expenses and adjust expenses and capital at the beginning of the year | | |
| 8) | DR Loss from pending litigation | \$40,000 | |
| | CR Contingent liability | | \$40,000 |
| | To accrue a contingent liability | | |
| 9) | DR Stein, drawings | \$73,000 | |
| | CR Salaries | | \$60,000 |
| | CR Living expenses | | 13,000 |
| | To adjust drawings account for personal expenses | | |

Requirement 2:

To: Stein Flowers

Re: Reconciliation from cash to accrual basis

When acquiring information about a potential debtor, a lending bank will often request financial statements prepared under the accrual basis. In comparison with cash-basis financial statements, accrual-basis financial statements provide a bank with more relevant information about a potential debtor's ability to meet its obligations as they become due. The accrual basis of accounting attempts to match expenses with their related revenues. Thus, revenues and expenses are recognized when earned or incurred rather than when cash is received or paid. Financial statements based on the accrual basis of accounting provide a better indication of a company's performance. In addition, the accrual basis of accounting provides information that allows more reliable comparisons to be made from period to period.

Accrual-basis financial statements also provide information that would not be recognized under the cash basis, such as noncash expenses or accrued liabilities. The contingent liability arising from the pending litigation against Stein is relevant information that would not have been reflected in cash-basis financial statements. The accrual of this contingency alerts the bank to a future cash outflow that may affect Stein's ability to meet principal or interest payments in the future.

P2-4. Adjusting entries and statement preparation

Requirement 1:

| | | |
|---|----------|----------|
| DR Advance to employee | \$5,000 | |
| CR Salaries expense | | \$5,000 |
| DR Prepaid insurance | \$5,000 | |
| CR Insurance expense | | \$5,000 |
| DR Bad debt expense | \$2,950 | |
| CR Allowance for doubtful accounts | | \$2,950 |
| DR Dividends | \$20,000 | |
| CR Dividends payable | | \$20,000 |

Note: It is customary for companies to record dividends declared after the fiscal year end. This is typically the case with fourth quarter dividends, i.e., the fourth quarter dividends are declared in the 1st quarter of the following year.

Before preparing the financial statements, let us re-construct the trial balance after incorporating all the adjusting entries:

| Ralph Retailers, Inc. | | |
|------------------------------------|------------------|------------------|
| Adjusted Trial Balance | | |
| As of December 31, 2011 | | |
| | Debit | Credit |
| Cash | \$38,700 | |
| Accounts receivable | 71,600 | |
| Prepaid rent | 12,000 | |
| Inventory | 125,000 | |
| Equipment | 50,000 | |
| Building | 125,000 | |
| Allowance for doubtful accounts | | \$5,950 |
| Accumulated depreciation—equipment | | 40,000 |
| Accumulated depreciation—building | | 12,000 |
| Advance from customers | | 18,000 |
| Accounts payable | | 26,000 |
| Salaries payable | | 5,500 |
| Capital stock | | 70,000 |
| Retained earnings 1/1/11 | | 264,850 |
| Sales revenue | | 425,000 |
| Cost of goods sold | 276,250 | |
| Salaries expense | 55,000 | |
| Bad debt expense | 21,250 | |
| Rent expense | 40,000 | |
| Insurance expense | 10,000 | |
| Depreciation expense—building | 6,000 | |
| Depreciation expense—equipment | 3,000 | |
| Dividends | 43,500 | |
| Advance to employee | 5,000 | |
| Prepaid insurance | 5,000 | |
| Dividends payable | | <u>20,000</u> |
| | <u>\$887,300</u> | <u>\$887,300</u> |

Requirement 2:

| Ralph Retailers, Inc. Income Statement For Year Ended December 31, 2011 | | |
|--|--------------|-----------------|
| Sales revenue | | \$425,000 |
| Less: Cost of goods sold | | <u>276,250</u> |
| Gross margin | | 148,750 |
| Less: Operating expenses | | |
| Salaries expense | \$55,000 | |
| Bad debt expense | 21,250 | |
| Rent expense | 40,000 | |
| Insurance expense | 10,000 | |
| Depreciation expense—building | 6,000 | |
| Depreciation expense—equipment | <u>3,000</u> | |
| | | <u>135,250</u> |
| Net income | | <u>\$13,500</u> |

Requirement 3:

| Ralph Retailers, Inc. Balance Sheet December 31, 2011 | | |
|--|-----------------|------------------|
| Assets | | |
| Cash | | \$38,700 |
| Accounts receivable | \$71,600 | |
| Less: Allowance for doubtful accounts | <u>(5,950)</u> | |
| Net accounts receivable | | 65,650 |
| Prepaid rent | | 12,000 |
| Prepaid insurance | | 5,000 |
| Advance to employee | | 5,000 |
| Inventory | | 125,000 |
| Equipment | 50,000 | |
| Less: Accumulated depreciation | <u>(40,000)</u> | |
| Net equipment | | 10,000 |
| Building | 125,000 | |
| Less: Accumulated depreciation | <u>(12,000)</u> | |
| Net building | | <u>113,000</u> |
| Total assets | | <u>\$374,350</u> |

continued

| | |
|---|-------------------------|
| Liabilities | |
| Advance from customers | \$18,000 |
| Accounts payable | 26,000 |
| Salaries payable | 5,500 |
| Dividends payable | <u>20,000</u> |
| Total liabilities | 69,500 |
| Shareholders' equity | |
| Common stock | 70,000 |
| Retained earnings | <u>234,850</u> |
| Total liabilities and stockholders' equity | <u>\$374,350</u> |

P2-5. Understanding the accounting equation

| Flaps Inc. Balance Sheet | | | | | |
|------------------------------|------------------|------------------|------------------|------------------|------------------|
| | Year | | | | |
| | 2010 | 2011 | 2012 | 2013 | 2014 |
| Assets | | | | | |
| Current assets | \$ 5,098 | \$ 5,130 | \$ 5,200 | \$ 5,275 | \$ 5,315 |
| Non-current assets | 8,667 | 8,721 | 8,840 | 8,968 | 9,036 |
| Total assets | <u>13,765</u> | <u>13,851</u> | 14,040 | <u>14,243</u> | 14,351 |
| Liabilities | | | | | |
| Current liabilities | 3,399 | 3,420 | 3,467 | 3,517 | 3,543 |
| Non-current liabilities | 5,231 | 5,263 | 5,335 | 5,412 | 5,454 |
| Total liabilities | <u>8,630</u> | <u>8,683</u> | 8,802 | <u>8,929</u> | 8,997 |
| Stockholders' Equity | | | | | |
| Common stock | 138 | 139 | 140 | 142 | 144 |
| Additional paid-in capital | 2,202 | 2,216 | 2,247 | 2,280 | 2,296 |
| Contributed capital | 2,340 | 2,355 | 2,387 | 2,422 | 2,440 |
| Retained earnings | 2,795 | 2,813 | 2,851 | 2,892 | 2,914 |
| Total stockholders' equity | <u>5,135</u> | <u>5,168</u> | 5,238 | <u>5,314</u> | <u>5,354</u> |
| Total liabilities and equity | <u>\$ 13,765</u> | <u>\$ 13,851</u> | <u>\$ 14,040</u> | <u>\$ 14,243</u> | <u>\$ 14,351</u> |

Items in bold are unknowns solved below.

Requirement 1:

Recasting the December 31, 2011 balance sheet. The following steps are needed to calculate the unknowns. The correct balance sheet appears above. (Note that there are other possible ways of determining the correct answer for these solutions.)

Item A: 2010 Current liabilities:

Current liabilities plus noncurrent liabilities equals total liabilities. Therefore, total liabilities (\$8,630) less noncurrent liabilities (\$5,231) equals current liabilities (\$3,399).

Item B: 2010 Total assets:

Total assets are equal to total liabilities and stockholders' equity (\$13,765).

Item C: 2010 Additional paid-in capital:

Common stock plus additional paid-in capital is equal to contributed capital. Therefore, contributed capital (\$2,340) less common stock (\$138) equals additional paid-in capital (\$2,202).

Item D: 2010 Current assets:

Current assets plus noncurrent assets equals total assets. So total assets (\$13,765) less noncurrent assets (\$8,667) equals current assets (\$5,098).

Item E: 2010 Total stockholders' equity:

Contributed capital (\$2,340) plus retained earnings (\$2,795) equals total stockholders' equity (\$5,135).

Item F: 2011 Total liabilities and stockholders' equity:

Total liabilities (\$8,683) plus total stockholders' equity (\$5,168) equals total liabilities and stockholders' equity (\$13,851).

Item G: 2011 Contributed capital:

Common stock (\$139) plus additional paid-in capital (\$2,216) equals contributed capital (\$2,355).

Item H: 2011 Total assets:

Total assets are equal to total liabilities and stockholders' equity (\$13,851) which was solved in (F).

Item I: 2011 Noncurrent liabilities:

Current liabilities plus noncurrent liabilities is equal to total liabilities. Therefore, total liabilities (\$8,683) less current liabilities (\$3,420) is equal to non-current liabilities (\$5,263).

Item J: 2011 Current assets:

Current assets plus noncurrent assets equals total assets. Accordingly, total assets (\$13,851) less noncurrent assets (\$8,721) equals current assets (\$5,130).

Item K: 2012 Total liabilities and stockholders' equity:

Total liabilities and stockholders' equity is equal to total assets (\$14,040).

Item L: 2012 Common stock:

Common stock plus additional paid-in capital equals contributed capital. So contributed capital (\$2,387) less additional paid-in capital (\$2,247) equals common stock (\$140).

Item M: 2012 Noncurrent assets:

Current assets plus noncurrent assets equals total assets. Therefore, total assets (\$14,040) less current assets (\$5,200) equals non-current assets (\$8,840).

Item N: 2012 Total liabilities:

Current liabilities (\$3,467) plus noncurrent liabilities (\$5,335) equals total liabilities (\$8,802).

Item O: 2012 Total stockholders' equity:

Contributed capital (\$2,387) plus retained earnings (\$2,851) equals total stockholders' equity (\$5,238).

Item P: 2013 Total liabilities and stockholders' equity:

Total liabilities (\$8,929) plus total stockholders' equity (\$5,314) equals total liabilities and stockholders' equity (\$14,243).

Item Q: 2013 Retained earnings:

Contributed capital plus retained earnings equals total stockholders' equity. Accordingly, total stockholders' equity (\$5,314) less contributed capital (\$2,422) equals retained earnings (\$2,892).

Item R: 2013 Total assets:

Total assets are equal to total liabilities and stockholders' equity (\$14,243) which was solved in (P).

Item S: 2013 Noncurrent liabilities:

Current liabilities plus noncurrent liabilities is equal to total liabilities. Therefore, total liabilities (\$8,929) less current liabilities (\$3,517) is equal to non-current liabilities (\$5,412).

Item T: 2013 Additional paid-in capital:

Common stock plus additional paid-in capital is equal to contributed capital. Therefore, contributed capital (\$2,422) less common stock (\$142) equals additional paid-in capital (\$2,280).

Item U: 2014 Total liabilities and stockholders' equity:

Total liabilities and stockholders' equity is equal to total assets (\$14,351).

Item V: 2014 Current liabilities:

Take total liabilities and stockholders' equity (\$14,351) which was calculated in (U), less total stockholders' equity (\$5,354). This equals total liabilities (\$8,997). Total liabilities (\$8,997) less noncurrent liabilities (\$5,454) equals current liabilities (\$3,543).

Item W: 2014 Contributed Capital:

Common stock (\$144) plus additional paid-in capital (\$2,296) equals contributed capital (\$2,440).

Item X: 2014 Noncurrent assets:

Current assets plus noncurrent assets equals total assets. Then total assets (\$14,351) less current assets (\$5,315) equals noncurrent assets (\$9,036).

Item Y: 2014 Retained earnings:

Contributed capital plus retained earnings equals total stockholders' equity. Accordingly, total stockholders' equity (\$5,354) less contributed capital (\$2,440) equals retained earnings (\$2,914).

Item Z: 2014 Total liabilities:

Take total liabilities and stockholders' equity (\$14,351) which was calculated in (U), less total stockholders' equity (\$5,354). This equals total liabilities (\$8,997).

P2-6. Understanding the accounting equation

| Bob Touret, Inc. | | | | | |
|---|------------------------|------------------------|------------------------|---------------------|------------------------|
| Select Information from Financial Statements | | | | | |
| | Year | | | | |
| | 2010 | 2011 | 2012 | 2013 | 2014 |
| Assets | | | | | |
| Current assets | \$ 2,746 | \$ 2,736 | \$ 3,016 | \$ 2,778 | \$ 2,234 |
| Non-current assets | 4,002 | 4,501 | 3,900 | 4,230 | 4,805 |
| Total assets | <u>\$ 6,748</u> | <u>\$ 7,237</u> | <u>\$ 6,916</u> | <u>\$ 7,008</u> | <u>\$ 7,039</u> |
| Liabilities | | | | | |
| Current liabilities | 1,536 | 1,801 | 1,685 | 1,701 | 1,463 |
| Non-current liabilities | 2,212 | 2,345 | 2,175 | 2,206 | 2,252 |
| Total liabilities | <u>3,748</u> | <u>4,146</u> | <u>3,860</u> | <u>3,907</u> | <u>3,715</u> |
| Stockholders' Equity | | | | | |
| Contributed capital | 1,250 | 1,250 | 1,300 | 1,300 | 1,400 |
| Retained earnings | 1,750 | 1,841 | 1,756 | 1,801 | 1,924 |
| Total stockholders' equity | <u>3,000</u> | <u>3,091</u> | <u>3,056</u> | <u>3,101</u> | <u>3,324</u> |
| Total liabilities and equity | <u>\$ 6,748</u> | <u>\$ 7,237</u> | <u>\$ 6,916</u> | <u>\$ 7,008</u> | <u>\$ 7,039</u> |
| Other Information | | | | | |
| Beginning retained earnings | \$ NA | \$ 1,750 | \$ 1,841 | \$ 1,756 | \$ 1,801 |
| Net income (loss) | NA | 105 | (76) | 55 | 135 |
| Dividends | NA | (14) | (9) | (10) | (12) |
| Ending retained earnings | <u>\$ 1,750</u> | <u>\$ 1,841</u> | <u>\$ 1,756</u> | <u>\$ 1,801</u> | <u>\$ 1,924</u> |
| Working capital | \$ 1,210 | \$ 935 | \$ 1,331 | \$ 1,077 | \$ 771 |

Items in **bold** are unknowns solved below.

Requirement 1:

Following are the steps needed to calculate the unknowns. The correct information appears above. Note that there are other possible ways of determining the correct answer for these solutions.

Item A: 2010 Current assets:

Current assets plus noncurrent assets equals total assets. Therefore, total assets (\$6,748) less non-current assets (\$4,002) equals current assets (\$2,746).

Item B: 2010 Noncurrent liabilities:

First we must solve for (C) total stockholders' equity. We know that Total liabilities and stockholders' equity is equal to Total assets (\$6,748). Therefore, total liabilities and stockholders' equity (\$6,748) less total stockholders equity (\$3,000) is equal to total liabilities (\$3,748). Current liabilities plus noncurrent liabilities is equal to total liabilities. Therefore, total liabilities (\$3,748) less current liabilities (\$1,536) is equal to noncurrent liabilities (\$2,212).

Item C: 2010 Total stockholders' equity:

Contributed capital (\$1,250) plus retained earnings (\$1,750) equals total stockholders' equity (\$3,000).

Item D: 2010 Total liabilities and stockholders' equity:

Total liabilities and stockholders' equity is equal to total assets (\$6,748).

Item E: 2010 Working capital:

Current assets (\$2,746) less current liabilities (\$1,536) equals working capital (\$1,210).

Item F: 2011 Noncurrent assets:

Solve for (G) total assets first. Current assets plus noncurrent assets equals total assets. Then total assets (\$7,237) less current assets (\$2,736) equals noncurrent assets (\$4,501).

Item G: 2011 Total assets:

First we need to solve for (H) current liabilities. We then can determine that current liabilities (\$1,801) plus noncurrent liabilities (\$2,345) is equal to total liabilities (\$4,146). Total liabilities (\$4,146) plus total stockholders' equity (\$3,091) is equal to total liabilities and stockholders' equity (\$7,237). Total liabilities and stockholders' equity is equal to total assets (\$7,237).

Item H: 2011 Current liabilities:

Current assets less current liabilities equals working capital. Hence, current assets (\$2,736) less working capital (\$935) equals current liabilities (\$1,801).

Item I: 2011 Contributed capital:

First we need to solve for (J) retained earnings. Contributed capital plus retained earnings equals total stockholders' equity. Accordingly, total stockholders' equity (\$3,091) less retained earnings (\$1,841) equals contributed capital (\$1,250).

Item J: 2011 Retained earnings:

Beginning of the year retained earnings (\$1,750) plus net income (\$105) less dividends (\$14) equals end of the year retained earnings (\$1,841).

Item K: 2011 Total liabilities and stockholders' equity:

Current liabilities (\$1,801) plus noncurrent liabilities (\$2,345) is equal to total liabilities (\$4,146). Total liabilities (\$4,146) plus total stockholders' equity (\$3,091) is equal to total liabilities and stockholders' equity (\$7,237).

Item L: 2012 Current assets:

First solve for (M) total assets. Current assets plus noncurrent assets equals total assets. Therefore, total assets (\$6,916) less noncurrent assets (\$3,900) equals current assets (\$3,016).

Item M: 2012 Total assets:

Total assets are equal to total liabilities and stockholders' equity (\$6,916).

Item N: 2012 Current liabilities:

Current assets less current liabilities equals working capital. Hence, current assets (\$3,016) less working capital (\$1,331) equals current liabilities (\$1,685).

Item O: 2012 Noncurrent liabilities:

First solve for total liabilities. Total liabilities and stockholders' equity (\$6,916) less total stockholders' equity (\$3,056) equals total liabilities (\$3,860). Current liabilities plus noncurrent liabilities equals total liabilities. So total liabilities (\$3,860) less current liabilities (\$1,685) equals noncurrent liabilities (\$2,175).

Item P: 2012 Contributed capital:

Contributed capital plus retained earnings equals total stockholders' equity. Therefore, total stockholders' equity (\$3,056) less retained earnings (\$1,756) equals contributed capital (\$1,300).

Item Q: 2012 Net income (loss):

Beginning of the year retained earnings plus net income less dividends equals end of the year retained earnings. Therefore, end of the year retained earnings (\$1,756) plus dividends (\$9) less beginning of the year retained earnings (\$1,841) equals net loss (\$76).

Item R: 2013 Noncurrent assets:

Current assets plus noncurrent assets equals total assets. Therefore, total assets (\$7,008) less current assets (\$2,778) equals noncurrent assets (\$4,230).

Item S: 2013 Current liabilities:

First solve for (U) total stockholders' equity. Total liabilities and stockholders' equity (\$7,008) less total stockholders' equity (\$3,101) equals total liabilities (\$3,907). Current liabilities plus noncurrent liabilities equals total liabilities. Therefore, total liabilities (\$3,907) less noncurrent liabilities (\$2,206) equals current liabilities (\$1,701).

Item T: 2013 Retained earnings:

Beginning of the year retained earnings plus net income less dividends equals end of the year retained earnings. Therefore, end of the year retained earnings from 2014 (\$1,924) plus dividends from 2014 (\$12) less net income from 2014 (\$135) equals beginning of the year retained earnings (\$1,801) which is also the end of the year retained earnings for 2013.

Item U: 2013 Total stockholders' equity:

Contributed capital (\$1,300) plus retained earnings (\$1,801) equals total stockholders' equity (\$3,101).

Item V: 2013 Working capital:

Current assets (\$2,778) less current liabilities (\$1,701) equals working capital (\$1,077).

Item W: 2013 Dividends:

Beginning of the year retained earnings plus net income, less dividends, equals end of the year retained earnings. Accordingly, end of the year retained earnings (\$1,801) less net income (\$55) and beginning of the year retained earnings (\$1,756) equals dividends (\$10).

Item X: 2014 Current assets:

Current assets less current liabilities equals working capital. So working capital (\$771) plus current liabilities (\$1,463) equals current assets (\$2,234).

Item Y: 2014 Total assets:

Current assets (\$2,234) plus noncurrent assets (\$4,805) equals total assets (\$7,039).

Item Z: 2014 Contributed capital:

First solve for (AA) total stockholders' equity. Contributed capital plus retained earnings equals total stockholders' equity. Therefore, total stockholders' equity (\$3,324) less retained earnings (\$1,924) equals contributed capital (\$1,400).

Item AA: 2014 Total stockholders' equity:

First solve for (BB) total liabilities and stockholders equity. Next solve for total liabilities. Current liabilities (\$1,463) plus noncurrent liabilities (\$2,252) equals total liabilities (\$3,715). Total liabilities and stockholders' equity (\$7,039) less total liabilities (\$3,715) equals total stockholders' equity (\$3,324).

Item BB: 2014 Total liabilities and stockholders' equity:

Total liabilities and stockholders' equity is equal to total assets (\$7,039).

P2-7. Converting from cash to accrual

Requirement 1:

| Accounts receivable | |
|--|------------------|
| Beginning accounts receivable | \$128,000 |
| Solve for: sales on account | \$326,000 |
| Ending accounts receivable | \$135,000 |

\$319,000 Cash received on account

$$\$128,000 + X - \$319,000 = \$135,000$$

$$X = \$326,000$$

Requirement 2:

| Salaries payable | |
|-------------------------|---|
| Cash paid for salaries | \$47,000 |
| | Solve for: \$44,000 salary expense |
| | \$5,000 Ending salaries payable |

$$\$8,000 + X - \$47,000 = \$5,000$$

$$X = \$44,000$$

Requirement 3:

To solve for cost of goods sold we must first determine what our purchases for August were by analyzing Accounts payable.

| Accounts payable | | |
|-------------------------|-----------|--|
| | | \$21,000 Beginning accounts payable |
| Cash paid to suppliers | \$130,000 | \$134,000 Solve for: purchases on account |
| | | \$25,000 Ending accounts payable |

$$\begin{aligned}
 & \$21,000 + X - \$130,000 = \$25,000 \\
 & \mathbf{X = \$134,000}
 \end{aligned}$$

We can now solve for Cost of good sold by plugging the purchases into the Inventory account.

| Inventory | | |
|--------------------------|-----------|--|
| Beginning inventory | \$33,000 | |
| purchases (solved above) | \$134,000 | \$142,000 Solve for: cost of goods sold |
| Ending inventory | \$25,000 | |

$$\begin{aligned}
 & \$33,000 + \$134,000 - X = \$25,000 \\
 & \mathbf{X = \$142,000}
 \end{aligned}$$

P2-8. Journal entries and statement preparation

Requirement 1:

| | | |
|------------------------------------|--------------|----------|
| a. DR Cash | \$90,000 | |
| CR Contributed Capital | | \$90,000 |
| b. DR Equipment | \$30,000 | |
| CR Cash | | \$30,000 |
| DR Depreciation expense | \$ 417 | |
| CR Accumulated depreciation | | \$ 417 |
| (\$30,000 - \$5,000/ 60 months) | | |

| | | |
|----------------------------|----------|----------|
| c. DR Inventory | \$15,000 | |
| CR Accounts payable | | \$15,000 |
| DR Accounts payable | \$10,000 | |
| CR Cash | | \$10,000 |
| d. DR Rent expense | \$ 500 | |
| DR Prepaid rent | 1,000 | |
| CR Cash | | \$ 1,500 |
| e. DR Utilities expense | \$ 800 | |
| CR Cash | | \$ 800 |
| f. DR Accounts receivable | \$35,000 | |
| CR Revenue | | \$35,000 |
| DR Cash | \$26,000 | |
| CR Accounts receivable | | \$26,000 |
| DR Cost of goods sold | \$9,000 | |
| CR Inventory | | \$ 9,000 |
| (\$15,000 x .60 = \$9,000) | | |
| g. DR Wages expense | \$ 5,600 | |
| CR Wages payable | | \$ 400 |
| CR Cash | | 5,200 |
| h. DR Cash | \$12,000 | |
| CR Notes payable | | \$12,000 |
| DR Notes payable | \$ 3,000 | |
| CR Cash | | \$ 3,000 |
| DR Interest expense | \$ 450 | |
| CR Interest payable | | \$ 450 |

| Bob's Chocolate Chips and More Income Statement For Month Ended October 31, 2011 | | |
|---|------------|-------------------------|
| Sales revenue | | \$ 35,000 |
| Less: Cost of goods sold | | 9,000 |
| Gross margin | | <u>26,000</u> |
| Less: Operating expenses | | |
| Wage expense | \$ 5,600 | |
| Rent expense | 500 | |
| Utility expense | 800 | |
| Depreciation expense | 417 | |
| Interest expense | <u>450</u> | <u>7,767</u> |
| Net income | | <u><u>\$ 18,233</u></u> |

| Bob's Chocolate Chips and More Balance Sheet October 31, 2011 | | |
|--|------------|--------------------------|
| Assets | | |
| Cash | | \$ 77,500 |
| Accounts receivable | | 9,000 |
| Inventory | | 6,000 |
| Prepaid rent | | 1,000 |
| Equipment | \$ 30,000 | |
| Less: Accumulated depreciation | <u>417</u> | |
| Net equipment | | <u>29,583</u> |
| Total assets | | <u><u>\$ 123,083</u></u> |
| Liabilities | | |
| Accounts payable | | \$ 5,000 |
| Interest payable | | 450 |
| Wages payable | | 400 |
| Notes payable | | <u>9,000</u> |
| Total liabilities | | 14,850 |
| Shareholders' equity | | |
| Contributed capital | | 90,000 |
| Retained earnings | | <u>18,233</u> |
| Total liabilities and shareholders' equity | | <u><u>\$ 123,083</u></u> |

P2-9. Determining missing amounts on income statement

| AJAX Corporation | |
|--|-------------------|
| Income Statement | |
| For the Year Ended December 31, 2011 | |
| (\$ in thousands) | |
| Net revenues | \$ 1,275,700 |
| Cost of goods sold | 793,358 |
| Gross profit | <u>482,342</u> |
| Operating expenses | |
| Selling | 159,016 |
| General and administrative | 176,868 |
| Research and development | 97,230 |
| Amortization of intangible assets | 7,346 |
| Restructuring costs and asset write-downs | 24,444 |
| Total operating expenses | <u>464,904</u> |
| Operating income | 17,438 |
| Interest income | 23,944 |
| Interest expense | (13,714) |
| Other income, net | 41,660 |
| Income from continuing operations before taxes | <u>69,328</u> |
| Provision for income taxes | (20,094) |
| Income from continuing operations | 49,234 |
| Income from discontinued operations, net of taxes | 97,808 |
| Income before extraordinary item | <u>147,042</u> |
| Extraordinary gain on extinguishment of debt, net of taxes | 2,242 |
| Net income | <u>\$ 149,284</u> |

Requirement 1:

Recasting the Year 1 income statement. Following are the steps needed to calculate the unknowns. The correct income statement appears above.

a) Net revenue:

Gross profit and gross profit percentage are given as \$482,342 and 37.81%, respectively. Therefore, net revenue equals gross profit divided by the gross profit percentage, or $\$482,342 / 37.81\% = \underline{\$1,275,700}$.

b) Costs of goods sold:

Net revenues less cost of goods sold equals gross profit (\$482,342). Therefore, cost of goods sold equals net revenues (\$1,275,700) less gross profit (\$482,342) or cost of goods sold equals $\underline{\$793,358}$.

c) Amortization of intangible assets:

Amortization of intangible assets can be determined by subtracting the known operating expenses from total operating expenses of \$464,904. Known operating expenses are: selling (\$159,016), general and administrative (\$176,868), research and development (\$97,230), and restructuring costs and asset write-downs (\$24,444). Or amortization equals \$7,346 ($\$464,904 - \$457,558$).

d) Operating income:

Is simply gross profit (\$482,342) less total operating expenses (\$464,904) or \$17,348.

e) Interest expense:

Income from continuing operations before income taxes (\$69,328) equals operating income (\$17,438) plus interest income (\$23,944), plus other income (\$41,660) less interest expense. Interest expense is \$13,714 ($\$69,328 - \$17,438 - \$23,944 - \$41,660$).

f) Income from continuing operations:

Income from continuing operations before income taxes (\$69,328) less the provision for income taxes (\$20,094) equals income from continuing operations, or $\$69,328 - \$20,094 =$ \$49,234.

g) Income before extraordinary:

Net income is given as \$149,284 less extraordinary gain on extinguishment of debt given as \$2,242, or \$147,042.

Requirement 2:

While it may not be immediately obvious to students, this item had no direct impact on AJAX's Year 1 cash flows. This item represents the accrual of various expenses that AJAX expects to incur in the future. Examples include severance pay and health-care benefits for employees that left the firm as part of the restructuring, plant closing costs, etc.

A copy of AJAX's Year 1 cash flow statement is included as part of the solution so that students can see that the restructuring charge had no impact on its cash flows.

Requirement 3:

Agree: If you agree, you might suggest that R&D costs be carried on the balance sheet as an asset and be charged (i.e., expensed or written off) in

future periods as the new products they produce are brought to market. The idea behind this approach is the matching principle. Moreover, since these expenditures are made to benefit future operations and sales, they should be charged to the future periods that benefit.

Disagree: If you disagree, you might argue that many R&D projects fail, while only a small number succeed. If all R&D costs were carried on the balance sheet as an asset, then assets would likely be overstated because some of the projects will fail, and the projected increase in future sales once expected because of them may never materialize. The idea behind this approach is that future benefits to current R&D expenditures are so uncertain, they cannot be reliably measured and reported on the balance sheet.

Requirement 4:

To forecast next period's earnings you need to examine what has transpired during the current period. Any unusual and non-recurring gains (revenues) and or expenses (losses) should be disregarded, since they are not expected to be repeated.

Utilizing AJAX's Year 2011 income statement we can make the following observations:

- Assuming that Net revenues and **normal** operating expenses will remain constant, then projected Year 2 operating income would be \$40,982. (Year 2011 operating income of \$17,438 plus restructuring costs (considered a special or unusual charge that would normally not be repeated) of \$24,444.)
- Interest income and expense and other income would be analyzed and revised if necessary and added to operating income. Projected tax rates would be applied to estimate Year 2012 net earnings.
- All items below AJAX's Year 2011 *Income from continuing operations* line would be considered unusual and non-recurring and therefore not included in Year 2012 projected net earnings.

AJAX Corporation's Statement of Cash Flows for the year ending December 31, Year 2011 follows:

| AJAX Corporation Statement of Consolidated Cash Flows Year Ending December 31, 2011 (\$ in thousands) | |
|---|-------------------|
| Cash Flows from Operating Activities | |
| Net income | \$ 149,284 |
| Adjustments to reconcile net income to net cash provided by operating activities: | |
| Restructuring costs and asset write-downs | 24,444 |
| Depreciation and amortization | 65,104 |
| Deferred tax provision | 7,246 |
| Provision for allowance for doubtful accounts | 15,300 |
| Minority interest | (806) |
| Gain on sale of product rights | (30,000) |
| Losses on disposal of assets, net | 1,688 |
| Gains on extinguishment of debt | (2,242) |
| Income from discontinued operations | (97,808) |
| Changes in assets and liabilities: | |
| Increase in accounts receivables | (19,172) |
| Decrease in inventories | 27,398 |
| Increase in other current assets | (21,134) |
| Decrease in other assets | 16,000 |
| Decrease in accounts payable, accrued expenses and other current liabilities | (5,734) |
| Increase in other long-term liabilities | 1,814 |
| Other, net | 1,782 |
| Net cash provided by operating activities of discontinued operations | 10,056 |
| Net cash provided by operating activities | <u>\$ 143,220</u> |
| Cash Flows from Investing Activities | |
| Proceeds from divestitures | 175,770 |
| Capital expenditures | (129,244) |
| Proceeds from sales of assets | 44,318 |
| Acquisition of intangibles | (35,086) |
| Net investing activities of discontinued operations | (404) |
| Net cash provided by investing activities | <u>\$ 55,354</u> |
| <i>continued</i> | |

| | |
|---|--------------------------|
| Cash Flows from Financing Activities | |
| Borrowings on long-term debt and loans payable | 7,790 |
| Payments on long-term debt and loans payable | (58,304) |
| Issuance of common stock | 5,916 |
| Repurchase of common stock | (131,862) |
| Net financing activities of discontinued operations | 20 |
| Net cash used for financing activities | <u>(\$176,440)</u> |
| Effect of Exchange Rate changes on Cash | (3,418) |
| Net Increase in Cash and Cash Equivalents | <u>18,716</u> |
| Cash and Cash Equivalents at Beginning of Year | <u>398,470</u> |
| Cash and Cash Equivalents at End of Year | <u><u>\$ 417,186</u></u> |

P2-10. Determining income from continuing operations and gain (loss) from discontinued operations
(AICPA adapted)

Requirements:

| Helen Corporation | | |
|---|---------------------|---------------------|
| Partial Income Statement | | |
| For the Years Ended December 31 | | |
| 1) The amounts to be reported for income from continuing operations after taxes excludes the losses from operation of discontinued division and is calculated as follows: | | |
| | <u>2011</u> | <u>2010</u> |
| Income from continuing operations, before taxes | \$ 1,600,000 | \$ 1,200,000 |
| Loss from operation of discontinued division, before taxes, added back | 640,000 | 500,000 |
| Income from continuing operations, before taxes (excluding discontinued division): | <u>\$ 2,240,000</u> | <u>\$ 1,700,000</u> |
| Income tax expenses | <u>1,120,000</u> | <u>850,000</u> |
| Income from continuing operations, after taxes | 1,120,000 | 850,000 |
| | | <i>continued</i> |

| 2) | 2011 | 2010 |
|---|---------------------|-------------------|
| Income from continuing operations, after taxes | \$ 1,120,000 | \$ 850,000 |
| Discontinued operations: | | |
| Loss from operation of discontinued division, net of taxes benefits of \$320,000 in 2011 and \$250,000 in 2010 | (320,000) | (250,000) |
| Gain from sale of discontinued division, net of taxes expense of \$450,000 | 450,000 | - 0 - |
| Net income | <u>\$ 1,250,000</u> | <u>\$ 600,000</u> |

P2-11 Income statement preparation with irregular items

Jordan Wing, Inc.

Partial Income Statement

For the Year Ended December 31, 2011

| | |
|---|---------------------|
| Income from continuing operations before income taxes | \$ 5,184,900 ** |
| Income tax expense | <u>(1,814,715)</u> |
| Income from continuing operations | \$ 3,370,185 |
| Discontinued operations: | |
| Loss from discontinued operations, net of tax benefit of \$120,750 | <u>(224,250)</u> |
| Income before extraordinary item | \$ 3,145,935 |
| Extraordinary loss, net of tax benefit of \$29,225 | <u>(54,275)</u> |
| Net income | <u>\$ 3,091,660</u> |

Earnings per common share:

| | |
|---|---------------|
| Income from continuing operations | \$ 22.47 |
| Discontinued operations: | |
| Loss from discontinued operations, not of net of tax | <u>(1.50)</u> |

| | |
|--|---------------------|
| Income before extraordinary item | 20.97 |
| Extraordinary loss, net of income tax effect | <u>(0.36)</u> |
| Net income | <u>\$ 20.61</u> |
| **Net income | \$ 3,091,660 |
| Pretax income = (Net income / (1 - tax rate)) | 4,756,400 |
| Add: Loss on discontinued operations | 345,000 |
| Add: Extraordinary loss | <u>83,500</u> |
| Income from continuing operations before taxes | <u>\$ 5,184,900</u> |

Note to the instructor: Several items are described in the problem data that should not be separately disclosed among the irregular items that follow income from continuing operations. These include:

- The trademark infringement gain, while infrequent, is not unusual so the gain should be included in income from continuing operations and separately disclosed.
- The gain from selling Xerox stock should be among the items comprising income from continuing operations and separately disclosed.
- The unrecorded impairment loss (although discovered in 2011) constitutes an error in a prior year's financial statements, and thus, is reported as a prior period adjustment by restating the 2010 financial statements if presented. If 2010 financial statements are not presented, the opening balance of retained earnings should be adjusted.
- In accordance with GAAP, the change in depreciation method is treated as a change in accounting estimate effected by a change in accounting principle. Thus, income from continuing operations (correctly in 2011) reflects the new method; no restatement or retrospective adjustment of amounts reported in prior years is permitted.

P2-12. Components held for sale

| Silvertip Construction, Inc. Partial Income Statement For the Year Ended December 31, 2011 | |
|---|--------------|
| Income from continuing operations | \$ 1,650,000 |
| Discontinued operations: | |
| Loss from operation of held for sale business component, net of tax benefit of \$33,250 | *(61,750) |
| Impairment loss on held for sale component, | |

| | |
|---|---------------------|
| net of tax benefit of \$24,185 | **(44,915) |
| Net income | <u>\$ 1,543,335</u> |
| Earnings per share: | |
| Income from continuing operations | \$ 1.65 |
| Discontinued operations: | |
| Loss from operation of held for sale business component, net of tax | (0.06) |
| Impairment loss on held for sale component, net of tax | (0.04) |
| Net income | <u>\$ 1.54</u> |
| Fair value of component | <u>\$ 735,000</u> |
| -Expected cost to sell component (FV x .06) | <u>(44,100)</u> |
| Fair value of component minus cost to sell | 690,900 |
| -Book value of component | (760,000) |
| Impairment loss on held for sale component | <u>\$ (69,100)</u> |

* Operating loss on component
 = pretax loss x (1 – tax rate) = \$95,000 x (1 – .35) = \$61,750

** Impairment loss on component
 = pretax loss x (1 – tax rate) = \$69,100 x (1 – .35) = \$44,915

P2-13. Preparing comprehensive income under single-step format

| Liz’s Theatrical Supplies, Inc. | |
|---|------------------|
| Statement of Income and Comprehensive Income | |
| For the Year Ended December 31, 2011 | |
| Revenues and gains: | |
| Net sales | \$ 791,650 |
| Rent revenue | 16,000 |
| Interest income | <u>4,650</u> |
| Total revenue and gains | <u>812,300</u> |
| Expenses and losses: | |
| Cost of goods sold | (490,823) |
| Selling and administrative | (158,330) |
| Loss on write-off of obsolete inventory | <u>(23,500)</u> |
| Total expenses | <u>(672,653)</u> |
| Income from continuing operations, before taxes | 139,647 |

| | |
|---|------------------|
| Income taxes | (53,066) |
| Income from continuing operations | 86,581 |
| Discontinued operations: | |
| Income from discontinued operations, net of tax | 43,400 |
| Loss from disposal of discontinued component, net of tax | <u>(58,900)</u> |
| Income before extraordinary item | 71,081 |
| Extraordinary loss, net of tax | <u>(31,000)</u> |
| Net income | 40,081 |
| Other comprehensive income (loss), net of tax: | |
| Unrealized holding loss on available-for-sale securities, net of tax | <u>(9,300)</u> |
| Comprehensive income | <u>\$ 30,781</u> |

$$\text{Income taxes} = \$139,647 \times .38 = \$53,066$$

$$\begin{aligned} &\text{Income from discontinued operations} \\ &= \$70,000 \times (1 - \text{tax rate}) = \$70,000 \times .62 = \$43,400 \end{aligned}$$

$$\begin{aligned} &\text{Loss from disposal of discontinued component} \\ &= \$95,000 \times (1 - \text{tax rate}) = \$95,000 \times .62 = \$58,900 \end{aligned}$$

$$\text{Extraordinary loss} = \$50,000 \times (1 - \text{tax rate}) = \$50,000 \times .62 = \$31,000$$

$$\begin{aligned} &\text{Unrealized holding loss on available-for-sale securities} \\ &= \$15,000 \times (1 - \text{tax rate}) = \$15,000 \times .62 = \$9,300 \end{aligned}$$

P2-14. Extinguishing debt early

Requirement 1:

When management makes early debt extinguishment a part of the company's risk management strategy, such extinguishments are deemed to be part of the company's ongoing operations. Accordingly, Smithfield should separately disclose the gain as a component of income from operations. Only earnings per share on net income need be presented.

Requirement 2:

The stated facts strongly imply that Smithfield does not regularly retire debt before it matures. Doing so once in 65 years would make this extinguishment a prime candidate for extraordinary item treatment as it appears to meet the "unusual and infrequent" test. Accordingly, an "income before extraordinary

item” subtotal would be inserted before net income, to be followed by the extraordinary item (presented net of income taxes). Earnings per share would be presented on the new subtotal, the extraordinary item, and net income.

P2-15. Reporting discontinued operations

| | |
|---|---------------------|
| **Income from continuing operations, before taxes | 2,355,600 |
| Income taxes | <u>(824,460)</u> |
| Income from continuing operations | 1,531,140 |
| Discontinued operations: | |
| Income from operations of discontinued residential service component, net of taxes of \$64,890 | 120,510 |
| Gain from sale of discontinued residential service component, net of taxes of \$8,050 | 14,950 |
| Income from operations of held-for-sale commercial service component, net of taxes of \$75,250 | 139,750 |
| Loss on impairment of held-for-sale assets of commercial service component, net of tax benefit of \$2.100 | <u>(3,900)</u> |
| Net income | <u>\$ 1,802,450</u> |

| | |
|---|------------------|
| Income before taxes | \$ 2,756,000 |
| Residential service income | (185,400) |
| Commercial service income | <u>(215,000)</u> |
| **Income from continuing operations, before taxes | 2,355,600 |

| | |
|---|-------------------|
| Estimated selling price of commercial service component | \$ 87,000 |
| Selling costs | <u>(2,500)</u> |
| Net sales price for commercial service component | 84,500 |
| Book value of commercial service component | <u>(90,500)</u> |
| Pretax loss on write-down of assets to net FMV | <u>\$ (6,000)</u> |

Note to the instructor: The best bid received to date is deemed to be a reasonable estimate of the component’s selling price. If the component later sells at a higher (or lower) price, the difference would be reported in 2012 (the year of the sale) as would be any income (loss) from operating the component until its date of sale.

| | |
|---|----------------|
| Selling price of residential service component | \$ 99,500 |
| Selling costs | <u>(2,000)</u> |
| Net sales price for residential service component | 97,500 |

| | |
|---|------------------|
| Book value of residential service component | <u>(74,500)</u> |
| Pretax gain on sale | <u>\$ 23,000</u> |

P2-16 Accounting Change

Requirement 1:

GAAP requires that an entity report a change in accounting principle through retrospective application of the new accounting principle to all prior periods, unless it is impracticable to do so, as is the case here. When it is impracticable to determine the cumulative effect of applying a change in accounting principle to any prior period, the new accounting principle shall be applied as if the change was made prospectively as of the earliest date practicable. Because Barden did not maintain inventory records on a LIFO basis in prior periods, which would have been necessary to apply LIFO retrospectively, the December 31, 2010 FIFO ending inventory becomes the beginning inventory on January 1, 2011 when LIFO was adopted.

Requirement 2:

Effective January 1, 2011 the Company adopted the LIFO cost flow assumption for valuing its inventories. The Company believes that the use of the LIFO method better matches current costs with current revenues. The cumulative effect of the change on retained earnings at the beginning of the year is not determinable, nor are the effects of retrospective application of LIFO to prior years because inventory records in prior years were not maintained on a LIFO basis. The effect of this change on current year fiscal results was to decrease net income by \$45,500, or \$4.55 per share. If the LIFO method of valuing inventories was not used, inventories at December 31, 2011 would have been \$70,000 higher.

Note to the instructor: The effect on the change in inventory method on 2011 income is determined as follows:

| | |
|--|--------------------|
| December 31, 2008 LIFO Inventory | \$ 275,000 |
| December 31, 2008 FIFO Inventory | <u>\$ 345,000</u> |
| Change in pretax income due to use of LIFO | \$ (70,000) |
| Tax effect | <u>\$ 24,500</u> |
| Change in net income due to use of LIFO | <u>\$ (45,500)</u> |

P2-17. Disclosures for change in accounting principle**Requirement 1:**

| ABBA Fabrics, Inc. | | | |
|---|--|--------------------------|--------------------------|
| Balance Sheets | | (Restated) | |
| December 31, | | 2011 | 2010 |
| (in thousands) | | | |
| Current assets: | | | |
| Cash and cash equivalents | | \$ 2,338 | \$ 2,280 |
| Receivables, less allowance for doubtful accounts | | 3,380 | 4,453 |
| Inventories, net | | 104,156 | 114,289 |
| Other current assets | | <u>1,735</u> | <u>9,866</u> |
| Total current assets | | 111,609 | 130,888 |
| Long-term assets | | <u>53,065</u> | <u>56,438</u> |
| Total assets | | <u><u>164,674</u></u> | <u><u>187,326</u></u> |
| | | | |
| Total liabilities | | 117,325 | 123,888 |
| Common stock | | 88,348 | 75,650 |
| Retained earnings | | 124,907 | 137,335 |
| Treasury stock | | (153,684) | (153,622) |
| Other comprehensive income | | <u>(12,222)</u> | <u>4,075</u> |
| Total liabilities & shareholders' equity | | <u><u>\$ 164,674</u></u> | <u><u>\$ 187,326</u></u> |

| ABBA Fabrics, Inc. | | | |
|--|--|------------------------|--------------------------|
| Statements of Operations | | (Restated) | |
| Years Ended December 31, | | 2011 | 2010 |
| (in thousands) | | | |
| Sales | | \$ 276,381 | \$ 276,247 |
| Cost of goods sold | | <u>156,802</u> | <u>158,667</u> |
| Gross profit | | 119,579 | 117,580 |
| Selling, general and administrative expenses | | 112,106 | 117,815 |
| Depreciation and amortization | | <u>4,409</u> | <u>3,815</u> |
| Operating income (loss) | | <u><u>\$ 3,064</u></u> | <u><u>\$ (4,050)</u></u> |

Restated cost of goods sold is determined as follows (italicized = items given in the problem):

| | 2010 LIFO As reported | LIFO Adjustment | 2010 WAC Adjusted |
|--------------------------|-----------------------------|--------------------|-------------------------|
| Beginning inventory | <i>127,574</i> | <i>37,432</i> | 165,006 |
| Purchases | <i>107,970</i> | | 107,970 |
| Goods available for sale | 235,524 | | 272,956 |
| Less: Ending inventory | <i>(77,907)</i> | <i>36,382</i> | 114,289 |
| Cost of Goods sold | <u><i>157,617</i></u> | | <u>158,667</u> |

Requirement 2:

Retrospective Application of a Change in Accounting Principle

During the fourth quarter of 2011, the Company elected to change its method of valuing inventory to the weighted average cost ("WAC") method, whereas in all prior years inventory was valued using the last-in, first-out (LIFO) method. The Company has determined that the WAC method of accounting for inventory is preferable as the method better reflects our inventory at current costs and enhances the comparability of our financial statements by changing to the predominant method utilized in our industry. The Company has applied this change retrospectively to the consolidated financial statements for the years 2010 and 2009 as defined within Pre-codification SFAS No. 154: Accounting Changes and Error Corrections. Accordingly, the previously reported retained earnings as of December 31, 2010 increased by \$36.4 million. The effect of the change on the previously reported Consolidated Statement of Operations and Consolidated Balance Sheet are reflected in the tables below (in thousands):

Consolidated Statements of Operations for the fiscal year ended December 31, 2010

| | 2010 | | 2010 |
|--------------------|-------------|-----------------|------------------------|
| (in thousands) | As restated | LIFO Adjustment | As previously reported |
| Cost of goods sold | \$ 158,667 | \$ 1,050 | \$ 157,617 |
| Gross profit | 117,580 | (1,050) | 118,630 |
| Operating loss | (4,050) | (1,050) | (3,000) |

Consolidated Balance Sheet as of December 31, 2010

| (in thousands) | As restated | LIFO Adjustment | As previously reported |
|--|-------------|--------------------|---------------------------|
| Assets | | | |
| Current assets: | | | |
| Inventories | \$ 114,289 | \$ 36,382 | \$ 77,907 |
| Total current assets | 130,888 | 36,382 | 94,506 |
| Total assets | 185,084 | 36,382 | 148,702 |
| Shareholders' Equity | | | |
| Shareholders' equity: | | | |
| Retained earnings | \$ 137,335 | \$ 36,382 | \$ 100,953 |
| Total shareholders' equity | 63,438 | 36,382 | 27,056 |
| Total liabilities and shareholders' equity | 185,084 | 36,382 | 148,702 |

P2-18. Financial Statement Presentation under FASB/IASB Proposal

Stanley Furniture Company, Inc.
 Statement of Comprehensive Income
 For the year ended December 31, 2009
 (in thousands)

BUSINESS

Operating

| | |
|---|------------------------|
| Net sales | \$ 160,451 |
| Cost of sales | <u>(149,757)</u> |
| Gross profit | 10,694 |
| Selling, general and administrative expenses | (29,387) |
| Income from Continued Dumping and Subsidy Offset Act, net | 9,340 |
| Restructuring and related charges | (6,107) |
| Other income | 160 |
| Operating before financing arising from operating activities | (15,300) |
| Interest costs on pension plans | <u>(110)</u> |
| Total operating income | <u>(15,410)</u> |

Investing

| | |
|-------------------------------|------------------|
| Interest income | <u>45</u> |
| Total investing income | <u>45</u> |

TOTAL BUSINESS INCOME (15,365)

FINANCING

| | |
|------------------|---------|
| Interest expense | (3,748) |
|------------------|---------|

INCOME TAXES

| | |
|------------------------------|--------------|
| Income tax (expense) benefit | <u>7,362</u> |
|------------------------------|--------------|

NET INCOME (11,751)

OTHER COMPREHENSIVE INCOME (after tax)

| | |
|--|-------------------------|
| Negative plan amendment, net of deferred income tax benefit of \$130 | 209 |
| Prior service cost, net of deferred tax benefit of \$326 | 526 |
| Actuarial loss, net of deferred income tax expense of \$138 | <u>(84)</u> |
| TOTAL OTHER COMPREHENSIVE INCOME | <u>651</u> |
| TOTAL COMPREHENSIVE INCOME | <u>\$ 11,100</u> |

Note to instructor: Given the emphasis in the FASB/IASB exposure draft on assisting the user of financial statements to make predictions of future cash flows, it seems appropriate to utilize the information in the “restructuring” footnote and reclassify these charges.

The FASB’s exposure draft on financial statement presentation states that (1) an entity should present information in its financial statements in a manner that portrays a cohesive financial picture of its activities, and (2) an entity should disaggregate information in its financial statements in a manner that makes it useful in assessing the amount, timing, and uncertainty of its future cash flows.

A cohesive financial picture means that the relationship between items across financial statements is clear and that an entity’s financial statements complement each other as much as possible. Financial statements that are consistent with the cohesiveness objective would display data in a way that clearly associates related information across the statements so that the information is understandable. The cohesiveness objective responds to the existing lack of consistency in the way information is presented in an entity’s financial statements. For example, cash flows from operating activities are separated in the statement of cash flows, but there is no similar separation of operating activities in the statements of comprehensive income and financial position. This makes it difficult for a user to compare operating income with operating cash flows—a comparison often made in assessing earnings quality. Similarly, separating operating assets and liabilities in the statement of financial position will provide users with more complete data for calculating some key financial ratios, such as return on net operating assets.

Thus, the new statement of comprehensive income (SCI) format is designed to be more cohesive with the statement of cash flows and uses many of the same presentation categories. Other differences between current income statements and the new format exhibited by Stanley follow:

- Other comprehensive income is included in a separate section on the SCI.
- The FASB/IASB project intends that financial information be “disaggregated.” Accordingly, to fully comply with the spirit of the proposal, captions such as “selling, general and administrative” would need to be disaggregated; unfortunately, this task is impossible with the information that Stanley currently reports beyond breaking restructuring charges out of cost of goods sold and selling, general and administration where originally reported.
- The “investing” category does not appear on Stanley’s income statement. On the SCI, this category includes interest income classified by Stanley as other, non-operating income.

P2-19. Financial Statement Presentation under FASB/IASB Exposure Draft

Qantas

Statement of Comprehensive Income

For the year ended 30 June 2008

(Australian \$ in millions)

BUSINESS**Operating**

| | |
|--|----------------|
| Net passenger revenue | 12,664.4 |
| Net freight revenue | 947.3 |
| Tours and travel revenue | 745.8 |
| Contract work revenue | 453.5 |
| Other | 1,380.9 |
| Manpower and staff related [\$3,533.4 - \$99.0] | (3,434.4) |
| Aircraft operating variable | (2,588.1) |
| Fuel | (3,602.1) |
| Selling and marketing | (755.6) |
| Property | (346.4) |
| Computer and communications | (382.4) |
| Tours and travel | (608.4) |
| Capacity hire | (269.8) |
| Ineffective and non-designated derivatives--closed positions | (42.8) |
| Other | (847.0) |
| Depreciation and amortization | (1,469.3) |
| Non-cancellable operating lease rentals | (399.9) |
| Ineffective and non-designated derivatives--open positions | <u>(12.3)</u> |
| Operating before financing arising from operating | 1,433.4 |
| Interest cost component of pension provision | (99.0) |
| Interest costs related to finance [capital] leases | <u>(31.2)</u> |
| Total operating income | 1,303.2 |

Investing

| | |
|--|---------------------|
| Share of net profit of associates and jointly controlled entities | 27.6 |
| Finance [interest] income: | |
| Related parties--associates and jointly controlled entities | 10.2 |
| Unwinding of discount on receivables | 22.6 |
| Other parties--interest income on financial assets at amortized cost | <u>251.9</u> |
| Total investing income | <u>312.3</u> |

| | |
|--|-----------------------|
| TOTAL BUSINESS INCOME | 1,615.5 |
| FINANCING | |
| Finance costs [\$239.1 - \$31.2] | (207.9) |
| INCOME TAXES | |
| Income tax expense | <u>(437.9)</u> |
| NET INCOME | 969.7 |
| OTHER COMPREHENSIVE INCOME (after tax) | |
| Hedge reserve [unrealized gain on futures contracts] (operating) | 300.9 |
| Employee compensation reserve [fair value of equity plans granted] (operating) | 25.7 |
| Foreign currency translation of controlled entities (operating) | (13.4) |
| Foreign currency translation of associates and jointly controlled entities (operating) | <u>(7.1)</u> |
| TOTAL OTHER COMPREHENSIVE INCOME | <u>306.1</u> |
| TOTAL COMPREHENSIVE INCOME | <u><u>1,275.8</u></u> |

The FASB's exposure draft on financial statement presentation sets forth two core presentation principles: (1) cohesiveness, and (2) disaggregation.

A *cohesive financial picture* means that the relationship between items across financial statements is clear and that an entity's financial statements complement each other as much as possible. Financial statements that are consistent with the cohesiveness objective would display data in a way that clearly associates related information across the statements so that the information is understandable. The cohesiveness objective responds to the existing lack of consistency in the way information is presented in an entity's financial statements. For example, cash flows from operating activities are separated in the statement of cash flows, but there is no similar separation of operating activities in the statements of comprehensive income and financial position. This makes it difficult for a user to compare operating income with operating cash flows—a comparison often made in assessing earnings quality. Similarly, separating operating assets and liabilities in the statement of financial position will provide users with more complete data for calculating some key financial ratios, such as return on net operating assets.

Thus, the new statement of comprehensive income (SCI) format is designed to be more cohesive with the statement of cash flows and uses many of the same presentation categories. Other differences between current income statements and the new format exhibited by Qantas' recast financial statements follow:

- Other comprehensive income is included in a separate section on the SCI.
- The FASB/IASB project intends that financial information be “disaggregated.” Qantas already does this to a much greater extent than typical U.S. public companies.
- The “investing” category does not appear on Qantas’ income statement. On the SCI, this category includes finance income (primarily interest revenue) classified by Qantas as part of net finance income.
- The “ineffective and non-designated derivatives—open positions” relate to various operating hedges (e.g., fuel prices; cash flow) and are thus classified in the operating section.
- Qantas does not report “financing arising from operating” as a separate category, but rather includes the items that the FASB/IASB suggests should appear in this category among its other financial statement captions.

Note to instructor: The following (redacted) footnote explanation of Qantas’ “reserves” may be helpful in understanding the changes in shareholders’ equity attributable to other comprehensive income.

Nature and purpose of reserves

Employee compensation reserve

The fair value of equity plans granted is recognized in the employee compensation reserve over the vesting period. This reserve will be reversed against treasury shares when the underlying shares vest in the employee. No gain or loss is recognized in the Qantas Group Income Statement on the purchase, sale, issue or cancellation of Qantas’ own equity instruments.

Hedge reserve

The hedge reserve comprises the effective portion of the cumulative net change in the fair value of cash flow hedging instruments related to hedged forecast transactions that are still expected to occur.

Foreign currency translation reserve

The foreign currency translation reserve comprises all foreign exchange differences arising from the translation of the Financial Statements of foreign controlled entities and foreign jointly controlled entities and associates where their functional currency is different to the presentation currency of the reporting entity, as well as from the translation of liabilities that form part of the Qantas Group’s net investment in a foreign controlled entity.

Financial Reporting and Analysis (5th Ed.)

Chapter 2 Solutions

Accrual Accounting and Income Determination Cases

Cases

C2-1. Discontinued operations

Requirement 1:

FASB ASC Paragraph 360-10-45-9 specifies the following criteria to be met in order to classify assets as held for sale:

- a. Management commits to a plan to sell the assets.
- b. The assets are available for immediate sale in their present condition subject only to terms that are usual and customary for sales of such assets.
- c. An active program to locate a buyer and other actions required to complete the plan to sell the assets have been initiated.
- d. The sale of the assets is probable, and transfer of the assets is expected to qualify for recognition as a completed sale within one year.
- e. The assets are being actively marketed for sale at a price that is reasonable in relation to their current fair value.
- f. Actions required to complete the plan indicate that it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn.

Management's classification of the business units in question as discontinued operations indicates that these conditions were met.

Requirement 2:

At issue is whether the regulatory approval delay violates the requirement that assets be transferred within one year to qualify for "held for sale" treatment. FASB ASC Paragraph 360-10-45-11 lists several exceptions to the "one-year" requirement for completing the sale. Waiting for pending regulatory approval would qualify as such an exception if management reasonably expected approval ultimately to be granted. Thus, the intended sale of the Rohrback Cosasco Systems division should be treated as a discontinued operation.

Requirement 3:

The scenario for this requirement implies that management's plans have changed since the original disposal plan was adopted. Clearly, the unit in

question is no longer available for immediate sale. While it is permissible to continue to classify assets as held for sale when conditions are unexpectedly imposed that delay transfer of the assets, actions must have been initiated—or will be on a timely basis—to respond to the conditions. Management’s decision to defer remediation until it is less expensive to do so leads to the conclusion that this business unit should be reclassified as held and used.

Requirement 4:

Corrpro’s net income would not be affected by denying discontinued operations treatment to these business units. However, Corrpro has suffered losses from continuing operations in each of the last three years. These operating losses would appear even more severe if the losses from operations now classified as discontinued were included. Given the focus of many analysts on continuing operations, management should prefer that these non-core business units remain classified as they were in 2011.

C2-2. McDonalds Corporation: Identifying critical events for revenue recognition

Requirement 1:

1. Sales by Company-operated stores are recognized on a cash basis at the time of sale. Revenue recognition does not get any more conservative than this. Goods have been provided and collection has occurred so both critical events have clearly occurred.

2. Franchise revenue consists of (a) rents and royalties and (b) initial franchise fees. Initial fees are recognized upon opening of a restaurant or granting of a new franchise term, which is when McDonalds has performed substantially all initial services required by the franchise arrangement. Here the critical event is “store opening” because by that time substantial performance has occurred. Whether realizability is an issue depends on whether the fees are collected upon signing a franchise agreement or at some later date. McDonald’s annual report does not provide an answer to this question and the Company does not list “unearned franchise fees” among its liabilities; it does, however, report “accounts and notes receivable” but provides no breakdown of this caption’s contents. This matter needs to be clarified before a definitive judgment can be formed on this issue.

Rents and royalties are recognized in the period earned thus the critical events would be sales by the franchisees (the basis for royalties) or the passage of time (the basis for time-based rents or minimum royalty payments

where applicable). Realizability is presumably not an issue as McDonalds makes no mention of bad debts in its annual report. While McDonald's approach to recognizing franchise revenue is arguably slightly less conservative than for sales by Company-owned stores, it is certainly in accordance with generally accepted accounting principles.

Requirement 2:

Refranchising impacts McDonald's consolidated financial statements as follows:

- Consolidated revenues are initially reduced because McDonalds collects rent and royalty as a percent of sales from a refranchised restaurant instead of 100% of its sales.
- Company-operated margin dollars decline while franchised margin dollars increase.
- Margin percentages are affected depending on the sales and cost structures of the restaurants refranchised.
- Other operating (income) expense fluctuates as McDonalds recognizes gains and/or losses resulting from sales of restaurants.
- Combined operating margin percent improves.
- Return on average assets increases primarily due to a decrease in average asset balances.

C2-3. Retrospective Application of a Change in Accounting Principle

Requirement 1:

| Income Statements | As adjusted | |
|---|-----------------|-----------------|
| | 2010 | 2009 |
| Sales | \$ 6,000 | \$ 6,000 |
| Cost of Goods Sold | 2,200 | 1,880 |
| Selling, general, & administrative expenses | <u>1,800</u> | <u>1,800</u> |
| Income before income taxes | 2,000 | 2,320 |
| Income taxes | <u>700</u> | <u>812</u> |
| Net Income | <u>\$ 1,300</u> | <u>\$ 1,508</u> |

Requirement 2:

On January 1, 2011, Neville Company elected to change its method of valuing its inventory to the FIFO method; in all prior years the LIFO method was used to value inventory. The new method of accounting was adopted to bring Neville Company into conformity with prevailing practices in its industry and comparative financial statements of prior years have been adjusted to apply

the new method retrospectively. The following financial statement line items for fiscal years 2011 and 2010 were affected by the change in accounting principle.

| Income Statements 2010 | As Computed under LIFO | As Reported under FIFO | Effect of Change |
|---|-----------------------------------|-----------------------------------|-----------------------------|
| Sales | \$ 6,000 | \$ 6,000 | \$ - |
| Cost of Goods Sold | 2,260 | 2,200 | \$ (60) |
| Selling, general, & administrative expenses | <u>1,800</u> | <u>1,800</u> | <u>\$ -</u> |
| Income before income taxes | 1,940 | 2,000 | \$ 60 |
| Income taxes | <u>679</u> | <u>700</u> | <u>\$ 21</u> |
| Net Income | <u>\$ 1,261</u> | <u>\$ 1,300</u> | <u>\$ 39</u> |

| 2009 | As Originally Reported | As Adjusted | Effect of Change |
|---|-----------------------------------|------------------------|-----------------------------|
| Sales | \$ 6,000 | \$ 6,000 | \$ - |
| Cost of Goods Sold | 2,000 | 1,880 | \$ (120) |
| Selling, general, & administrative expenses | <u>1,800</u> | <u>1,800</u> | <u>\$ -</u> |
| Income before income taxes | 2,200 | 2,320 | \$ 120 |
| Income taxes | <u>770</u> | <u>812</u> | <u>\$ 42</u> |
| Net Income | <u>\$ 1,430</u> | <u>\$ 1,508</u> | <u>\$ 78</u> |

C2-4. Baldwin Piano II : Analyzing and interpreting of income statement

Instructor Note: Data in this problem are prior to adoption of Pre-codification SFAS NO. 154, "Accounting Changes and Error Corrections" which became effective in 2006. Prior to SFAS NO. 154, the cumulative effect of change (net of the effects) in accounting principles was shown on the income statement as shown here for Baldwin Piano.

To analyze the change in Baldwin's profitability, we compute the year-to-year change in several of the income statement items.

| | <u>Year 2 to Year 3</u> |
|--------------------------------------|--------------------------------|
| Net sales | 9.61% |
| Gross profit | 0.81% |
| Income on the sale of installment | 9.31% |
| Interest income on installment | 43.87% |
| Other operating income, net | -7.16% |
| Operating expenses: | |
| Selling, general, and administrative | 4.26% |
| Provision for doubtful accounts | -17.09% |

| | |
|--|---------|
| Operating profit | -0.94% |
| Interest expense | -14.49% |
| Income from before income taxes | 2.59% |
| Income taxes | 0.73% |
| Income before cumulative effects of changes in accounting principles | 3.86% |
| Cumulative effect of changes in postretirement and postemployment | NA |
| Net income | -23.16% |

Although Baldwin's net sales increased by 9.6%, its net income decreased by about 23%. One of the main reasons for this decline is due to the cumulative effect of adopting the new accounting standard for postretirement benefits. However, even earnings before income taxes and change in accounting principles increased by only about 2.6%.

Several factors have contributed to the less than proportionate increase in profits.

1. It is straightforward to show that the gross margin rate has decreased from 27.7% to 25.4%. Given the Year 3 net sales of \$120,657,455, this drop translates into more than \$2.6 million of lower operating profits. The decrease in GM rate, if it is not transitory, is likely to severely impact the future performance of Baldwin.

2. Other operating income (net) has decreased by 7.2% from Year 2 to Year 3. However, the case identifies two nonrecurring items that are included in the Year 3 "other operating income, net." We first eliminate these two nonrecurring items as follows:

| | |
|--|--------------------|
| Other operating income, net | \$ 3,530,761 |
| - Eliminate gain on insurance settlement | (1,412,000) |
| + Eliminate expenses relating to Peridot | 1,105,000 |
| Revised operating income, net | <u>3,223,761</u> |
| Additional decrease in other income | <u>(\$307,000)</u> |

The elimination of the nonrecurring items further magnifies the drop in other operating income. To understand the reason for this decrease, let us focus on the main component of other operating income. It seems that the display fees paid by the dealers on the consigned inventory comprise the majority of other

operating income. Consequently, the decline in this component of income is likely due to the decrease in the level of consigned inventory. Although we cannot be certain about this, the evidence is consistent with this possibility. As provided in the case, the level of finished goods inventory has decreased by more than 8%. This decrease may be an indication of reduced demand for consigned inventory from the dealers, and consequently, has resulted in lower display fees during Year 3. This is, once again, likely to impact future profitability.

However, the following positive “factors” have had a mitigating effect on the income statement.

1. SG&A expenses increased by only 4.3%. This could be due to scale economies. In Year 2, the SG&A expenses were 22.82% of sales revenue. By controlling the level of the SG&A expenses, Baldwin has been able to improve its pre-tax profits by about \$1.3 million (see below).

| | |
|---|---------------------|
| Selling, general, and administrative | (\$26,187,629) |
| Selling, general, and administrative at 22.82% of sales | <u>(27,534,031)</u> |
| Additional profit due to lower SG&A | <u>\$1,346,402</u> |

2. Provision for doubtful accounts decreased by 17% from Year 2 to Year 3; i.e., it has decreased from 1.87% of net sales to about 1.41%. This decrease is consistent with a change in management’s estimate. There is very little information in the case to help us understand the reasons for the revision in the management’s estimate. Has Baldwin changed its credit evaluation and extension policies? Have the past bad debt expenses been consistently higher than the historical write-offs? There is some evidence to indicate that the composition of Baldwin’s sales revenue has changed from Year 2 to Year 3. While musical products’ share of the total revenue has decreased from 81.5% to 72.6%, that of electronic contracting has increased substantially from 13.3% to 22.2%. One possibility is that the electronic

contracting business has lower bad debt expense compared to the other business segments, thereby explaining the lower overall bad debt expense. Without a convincing explanation, the decrease in the bad debt expense needs further scrutiny. Note that if the management had maintained the same level of bad debt expense in Year 3 as it had in Year 2, then the operating income of Baldwin would have decreased by about \$555,000 [i.e., $\$120,657,455 \times (0.0187 - 0.0141)$].

3. Interest expense decreased by 14.5%. The statement of cash flows indicates that Baldwin has repaid more than \$8.6 million of long-term debt during Year 3, which could explain the decrease in the interest expense.

4. As discussed earlier, there are significant differences in the inter-segment growth rates in revenues. The musical products segment now accounts for only 72.7% revenue as opposed to 81.5% in Year 2. In addition, the operating profitability of this segment has decreased substantially from 7.6% to 5.0%. However, the electronic contracting segment, whose revenue has been growing at a greater rate, has a higher operating margin. Given that the musical products segment is slowing down and that the electronic contracting business is likely to face severe competition (Baldwin may not have any unique technical advantage here), Baldwin's ability to maintain growth and operating margin in the electronic contracting segment may be a key factor for its future prospects.

Comment on inventory liquidation:

In addition to the above items, Baldwin's income statements were favorably impacted from realization of inventory holding gains (or inflationary profits). The following paragraph is excerpted from the company's financial statements:

During the past three years, certain inventories were reduced, resulting in the liquidation of LIFO inventory layers carried at lower costs prevailing in prior years as compared with the current cost of inventories. The effect of these inventory liquidations was to increase net earnings for Year 3, Year 2, and Year 1 by approximately \$694,000 (\$.20 per share), \$519,000 (\$.15 per share), and \$265,000 (\$.08 per share), respectively.

Chapter 9 discusses some of the implications of LIFO liquidations for financial analysis.