

**Financial & Managerial Accounting for MBAs, 5<sup>th</sup> Edition**  
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**Practice Quiz Solutions**

**Module 4 – Analyzing and Interpreting Financial Statements**

1. Following is the balance sheet for 3M Company.

| <b>At December 31</b>                        | <b>2015</b>      | <b>2014</b>      |
|--|------------------|------------------|
| Cash and cash equivalents                    | \$ 1,798         | \$ 1,897         |
| Marketable securities—current                | 118              | 1,439            |
| Accounts receivable, net                     | 4,154            | 4,238            |
| Inventories                                  | 3,518            | 3,706            |
| Other current assets                         | <u>1,398</u>     | <u>1,023</u>     |
| Total current assets                         | 10,986           | 12,303           |
| Marketable securities—noncurrent             | 126              | 117              |
| Property, plant and equipment—net            | 8,515            | 8,489            |
| Goodwill                                     | 9,249            | 7,050            |
| Intangible assets—net                        | 2,601            | 1,435            |
| Prepaid pension benefits                     | 188              | 46               |
| Other assets                                 | <u>1,053</u>     | <u>1,769</u>     |
| Total assets                                 | <u>\$ 32,718</u> | <u>\$ 31,209</u> |
| Short-term debt & current portion of LT debt | \$ 2,044         | \$ 106           |
| Accounts payable                             | 1,694            | 1,807            |
| Accrued payroll                              | 644              | 732              |
| Accrued income taxes                         | 332              | 435              |
| Other current liabilities                    | <u>2,404</u>     | <u>2,884</u>     |
| Total current liabilities                    | 7,118            | 5,964            |
| Long-term debt                               | 8,753            | 6,705            |
| Pension and postretirement benefits          | 3,520            | 3,843            |
| Other liabilities                            | <u>1,580</u>     | <u>1,555</u>     |
| Total liabilities                            | 20,971           | 18,067           |
| 3M Company shareholders' equity:             |                  |                  |
| Common stock                                 | 9                | 9                |
| Additional paid-in capital                   | 4,791            | 4,379            |
| Retained earnings                            | 36,575           | 34,317           |
| Treasury stock                               | (23,308)         | (19,307)         |
| Accumulated other comprehensive loss         | <u>(6,359)</u>   | <u>(6,289)</u>   |
| Total 3M Company shareholders' equity        | 11,708           | 13,109           |
| Noncontrolling interest                      | <u>39</u>        | <u>33</u>        |
| Total equity                                 | <u>11,747</u>    | <u>13,142</u>    |
| Total liabilities and equity                 | <u>\$ 32,718</u> | <u>\$ 31,209</u> |

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Identify and compute its fiscal year-end 2015 net operating assets.

- a. \$24,077 million
- b. \$20,502 million
- c. \$ 4,334 million
- d. \$14,205 million

Answer: b

$$\text{NOA 2015} = (\$32,718 - \$1,798 - \$118 - \$126) - (\$1,694 + \$644 + \$332 + \$2,404 + \$3,520 + \$1,580) = \$20,502 \text{ million}$$

*Note:* In the absence of information about other current and long-term assets and liabilities, we assume that these are operating in nature.

2. Following is the income statement for Nordstrom Company. Assume that the combined federal and state statutory tax rate is 37%.

| (\$ millions)  | 2016           |
|--|----------------|
| Net sales  | \$14,095       |
| Credit card revenues                                 | <u>342</u>     |
| Total revenues                                       | 14,437         |
| Cost of sales and related buying and occupancy costs | (9,168)        |
| Selling, general and administrative expenses         | <u>(4,168)</u> |
| Earnings before interest and income taxes            | 1,101          |
| Interest expense, net                                | <u>(125)</u>   |
| Earnings before income taxes                         | 976            |
| Income tax expense                                   | <u>(376)</u>   |
| Net earnings   | <u>\$ 600</u>  |

Compute NOPAT for Nordstrom for 2016. (*Hint:* Treat credit card revenues as operating.)

- a. \$ 679 million
- b. \$1,136 million
- c. \$ 851 million
- d. \$ 725 million

Answer: a

$$\text{NOPAT} = \$1,101 - (\$376 + [\$125 \times 0.37]) = \$679 \text{ million}$$

3. Selected balance sheet and income statement information for Value-Mart Corporation, a discount store retailer, follows (\$ millions).

| Company    | 2017 Revenues | 2017 NOPAT | 2017 Net Operating Assets | 2016 Net Operating Assets |
|------------|---------------|------------|---------------------------|---------------------------|
| Value-Mart | \$42,315      | \$2,988    | \$22,320                  | \$19,010                  |

Compute its 2017 return on net operating assets (RNOA).

- a. 48.84%
- b. 7.06%
- c. 13.39%
- d. 14.46%

Answer: d

$$\begin{aligned}
 \text{RNOA} &= \text{NOPAT} / \text{Average net operating assets (NOA)} \\
 &= \$2,988 / [(\$22,320 + \$19,010) / 2] \\
 &= 14.46\%
 \end{aligned}$$

4. Assume Verizon reports the following selected balance sheet and income statement information.

| (\$ millions)                           | 2014      | 2013      |
|---|-----------|-----------|
| Current assets                          | \$ 16,448 | \$ 19,479 |
| Current liabilities                     | 25,063    | 23,129    |
| Total liabilities                       | 101,696   | 103,345   |
| Equity                                  | 66,434    | 62,613    |
| Earnings before interest and taxes      | 12,787    | 12,496    |
| Interest expense                        | 2,180     | 2,384     |
| Net cash flow from operating activities | 22,012    | 21,820    |

Compute the current ratio for 2014.

- a. 0.16
- b. 0.66
- c. 1.29
- d. 1.52

Answer: b

$$\text{2014 current ratio: } \$16,448 / \$25,063 = 0.66$$

5. Selected fiscal year balance sheet and income statement information for a fast-food chain, Cluck-in-a-Bucket, Corp. follows (\$ millions).

| Company           | 2017 Sales | 2017 Net Income | 2017 Net Operating Profit After Tax | 2017 Net Operating Assets | 2016 Net Operating Assets | 2017 Stockholders' Equity | 2016 Stockholders' Equity |
|-------------------|------------|-----------------|-------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Cluck-in-a-Bucket | \$38,826   | \$8,664         | \$8,487                             | \$21,157                  | \$19,092                  | \$36,182                  | \$38,579                  |

Compute the 2017 return on equity (ROE).

- a. 23.95%
- b. 22.70%
- c. 23.18%
- d. 23.46%

Answer: c

2017 ROE:  $\$8,664 / [(\$36,182 + \$38,579) / 2] = 23.18\%$

6. Selected balance sheet and income statement information from Easton's, Inc. follows (\$ millions).

| Company     | 2017 Sales | 2017 Net Income | 2017 Net Operating Profit After Tax | 2017 Net Operating Assets | 2016 Net Operating Assets | 2017 Stockholders' Equity | 2016 Stockholders' Equity |
|-------------|------------|-----------------|-------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Easton's... | \$16,079   | \$834           | \$832                               | \$3,389                   | \$3,205                   | \$4,425                   | \$4,115                   |

Compute the 2017 return on equity (ROE).

- a. 5.21%
- b. 19.10%
- c. 19.53%
- d. 18.85%

Answer: c

2017 ROE:  $\$834 / [(\$4,425 + \$4,115) / 2] = 19.53\%$

7. Assume that Verizon Communications, Inc. reports the following selected balance sheet and income statement information for 2012 through 2014 (\$ millions).

|      | <b>Total<br/>Current<br/>Assets</b> | <b>Total<br/>Current<br/>Liabilities</b> | <b>Pretax<br/>Income</b> | <b>Interest<br/>Expense</b> | <b>Total<br/>Liabilities</b> | <b>Stockholders'<br/>Equity</b> |
|------|-------------------------------------|--|--------------------------|-----------------------------|------------------------------|---------------------------------|
| 2012 | \$18,293                            | \$26,570                                 | \$6,344                  | \$2,797                     | \$108,154                    | \$57,814                        |
| 2013 | 19,479                              | 23,159                                   | 12,521                   | 2,384                       | 103,345                      | 62,613                          |
| 2014 | 16,448                              | 25,063                                   | 13,652                   | 2,180                       | 74,942                       | 66,434                          |

Compute times interest earned for 2014.

- a. 7.26
- b. 6.26
- c. 5.26
- d. 4.26

Answer: a

2014 times interest earned:  $(\$13,652 + \$2,180) / \$2,180 = 7.26$

8. Assume that Abercrombie & Fitch and TJX Companies reports the following selected balance sheet and income statement information (\$ millions).

| <b>Company</b>      | <b>Ticker</b> | <b>2014<br/>Sales</b> | <b>2014<br/>NOPAT</b> | <b>2014 Net<br/>Operating<br/>Assets</b> | <b>2013 Net<br/>Operating<br/>Assets</b> |
|---------------------|---------------|-----------------------|-----------------------|--|--|
| Abercrombie & Fitch | ANF           | \$ 2,784.7            | \$324.7               | \$ 565.0                                 | \$ 361.7                                 |
| TJX Companies       | TJX           | 16,057.9              | 708.5                 | 2,235.9                                  | 2,139.5                                  |

Compute the 2014 return on net operating assets (RNOA) for both companies.

- a. ANF 52.75%, TJX 26.23%
- b. ANF 70.08%, TJX 32.39%
- c. ANF 22.11%, TJX 16.82%
- d. ANF 36.33%, TJX 21.76%

Answer: b

ANF RNOA =  $\$324.7 / [(\$565.0 + \$361.7) / 2] = 70.08\%$

TJX RNOA =  $\$708.5 / [(\$2,235.9 + \$2,139.5) / 2] = 32.39\%$

9. Selected balance sheet and income statement information for Hill Corp. and May Inc., follows (\$ millions).

| Company   | 2017 Sales | 2017 NOPAT | 2017 Net Operating Assets | 2016 Net Operating Assets |
|-----------|------------|------------|---------------------------|---------------------------|
| Hill Corp | \$3,785    | \$526.4    | \$785.0                   | \$461.5                   |
| May Inc.  | 16,023     | 1,047.7    | 2,951.0                   | 3,760.0                   |

Compute the 2017 net operating profit margin (NOPM) for each company.

- Hill 52.74%, May 21.01%
- Hill 27.33%, May 19.17%
- Hill 18.14%, May 8.23%
- Hill 13.91%, May 6.54%

Answer: d

$$\text{Hill NOPM} = \$526.4 / \$3,785 = 13.91\%$$

$$\text{May NOPM} = \$1,047.7 / \$16,023 = 6.54\%$$

10. Selected balance sheet and income statement information for EKG Corporation and AMP Company follows (\$ millions).

| Company     | 2017 Sales | 2017 NOPAT | 2017 Net Operating Assets | 2016 Net Operating Assets |
|-------------|------------|------------|---------------------------|---------------------------|
| EKG Corp    | \$37,006   | \$1,292    | \$10,007                  | \$9,437                   |
| AMP Company | 47,409     | 1,716      | 8,781                     | 7,818                     |

Compute the 2017 net operating asset turnover (NOAT) for each company.

- EKG 3.81, AMP 5.71
- EKG 3.52, AMP 5.03
- EKG 12.70, AMP 20.14
- EKG 3.49, AMP 3.65

Answer: a

$$\text{EKG NOAT} = \$37,006 / [(\$10,007 + \$9,437) / 2] = 3.81$$

$$\text{AMP NOAT} = \$47,409 / [(\$8,781 + \$7,818) / 2] = 5.71$$