**EXHIBIT A3.2.4** THE HOME DEPOT AND LOWE'S OPERATING CYCLE MANAGEMENT.

DATA FROM THE FIRMS' INCOME STATEMENTS AND MANAGERIAL BALANCE SHEETS

| Fiscal Year | The Home Depot 2006 | The Home Depot 2007 | The Home Depot 2008 | Lowe's 2006 | Lowe's 2007 |
|---|---|---|---|---|---|
| Working capital requirement / Net revenues | 1.6% | 3.0% | 3.5% | 2.3% | 3.1% |
| Cost of goods sold / Inventories | 4.1 times | 4.4 times | 4.4 times | 4.3 times | 4.1 times |
| Accounts payable[1,2] / Average daily purchases | 49.8 days | 39.9 days | 36.4 days | 41.2 days | 43.6 days |

[1]Daily averages are computed on the basis of 365 days a year.
[2]Purchases are computed as the sum of cost of goods sold plus change in inventories.

the two companies at year-end 2008 explains why Lowe's ratio of WCR sales is lower than that of The Home Depot, despite a lower inventory ratio.

## FURTHER READING


1. Brealey, Richard, Stewart Myers, and Franklin Allen. *Principles of Co Finance*, 9th ed. McGraw-Hill, 2008. See Chapters 29 to 31.
2. Damodaran, Aswath. *Corporate Finance: Theory and Practice*, 2nd ed. Wiley & Sons, 2001. See Chapter 13.
3. Damodaran, Aswath. *Damodaran on Valuation*, 2nd ed. John Wiley & 2006. See Chapter 10.
4. Koller, Tim, Marc Goedhart, and David Wessels. *Valuation: Measuring Managing the Value of Companies*, 4th ed. John Wiley & Sons, 2005.
5. Ross, Stephen, Randolph Westerfield, and Jeffrey Jaffe. *Corporate Fina* ed. McGraw Hill Irwin, 2008. See Chapters 26 to 28.


Chapter 3: Self test problems 3.1 and 3.2

## SELF-TEST PROBLEMS

### 3.1 EVALUATING MANAGERIAL PERFORMANCE.

Allied & Consolidated Clothier (ACC), a clothing manufacturer, launched a gressive marketing program aimed at raising the *growth rate* in sales in 201 least 50 percent compared with the *growth rate* achieved in 2009. The company's financial statements from 2008 to 2010 are shown below and on the following page. The income statements span a calendar year and balance sheets are dated December 31. All figures are in millions of dollars.

a. Has ACC achieved its marketing objective?
b. Restate ACC's balance sheets in their managerial form. What does working capital requirement (WCR) measure? Is it a long-term or a short-term investment?
c. Examine the structures of invested capital and capital used in the managerial balance sheets prepared in the previous question (state each component as a percentage of the total). What do you observe?
d. Compare the 2008 balance sheet with the 2010 balance sheet. Are these balance sheets matched or unmatched?
e. Analyze ACC's operational efficiency from 2008 to 2010. Calculate and compare the following efficiency ratios for the three-year period. What can you conclude?

    1. WCR-to-sales ratio
    2. Average collection period
    3. Inventory turnover
    4. Average payment period (use cost of goods sold)

f. Analyze ACC's liquidity position from 2008 to 2010. Calculate and compare the following liquidity ratios over the three-year period. What can you conclude?

    1. The liquidity ratio (net long-term financing to WCR)
    2. The current ratio
    3. The quick ratio

g. What general conclusion can you draw from your analysis?

**Balance Sheets (in millions)**

| | 2008 | 2009 | 2010 | | 2008 | 2009 | 2010 |
|---|---|---|---|---|---|---|---|
| | $100 | $ 90 | $ 50 | Short-term debt | $ 80 | $ 90 | $ 135 |
| eivables | 200 | 230 | 290 | Trade payables | 170 | 180 | 220 |
| es | 160 | 170 | 300 | Accrued expenses | 40 | 45 | 50 |
| xpenses | 30 | 30 | 35 | Long-term debt | 140 | 120 | 100 |
| l assets | 390 | 390 | 365 | Owners' equity | 450 | 475 | 535 |
| ets | $880 | $910 | $1,040 | Total liabilities & owners' equity | $880 | $910 | $1,040 |

| Income Statements (in millions) | 2008 | 2009 | 2010 |
|---|---|---|---|
| Net sales | $1,200 | $1,350 | $1,600 |
| Cost of goods sold | 860 | 970 | 1,160 |
| Selling, general, and administrative expenses | 150 | 165 | 200 |
| Depreciation expense | 40 | 50 | 55 |
| Earnings before interest and tax (EBIT) | 150 | 165 | 185 |
| Net interest expense | 20 | 20 | 25 |
| Earnings before tax (EBT) | 130 | 145 | 160 |
| Income tax expense | 40 | 45 | 50 |
| Earnings after tax (EAT) | $ 90 | $ 100 | $ 110 |
| Dividends | $ 75 | $ 75 | $ 50 |

### 3.2 WORKING CAPITAL MANAGEMENT FOR A RETAILER.

The consolidated financial statements of Carrefour, the French retailer, for the years 2007 and 2008, are shown below and on the following page.

a. Calculate working capital requirement at year-ends 2007 and 2008. Interpret your results.
b. Calculate the ratio of working capital requirement to sales. What is the effect of faster growth on Carrefour's liquidity position?
c. What were Carrefour's average collection periods, inventory turnover, and average payment periods (based on cost of sales) in 2007 and 2008? What can you conclude about the effect of these parameters on the magnitude of Carrefour's working capital requirement?
d. Calculate Carrefour's current ratios and quick ratios. What can you conclude about the reliability of these liquidity ratios for the case of retailers such as Carrefour?

| Income Statements (in millions) | 2007 | 2008 |
|---|---|---|
| Net sales | €82,149 | €86,967 |
| Cost of goods sold | 64,609 | 68,709 |
| Selling, general, and administrative expenses | 12,526 | 13,096 |
| Depreciation, amortization, and provisions | 1,723 | 1,816 |
| Financial income, net of expenses | 526 | 562 |
| Net profit of affiliated companies | 2,765 | 2,738 |
| Income tax expense | 807 | 743 |
| Net income[1] | € 1,958 | € 1,995 |

[1] Excluding nonrecurring income, nonrecurring expenses, and discontinued operations.

| Balance Sheets (in millions) | | | | | |
|---|---|---|---|---|---|
| Year end | 2007 | 2008 | | 2007 | 2008 |
| Current assets | | | Liabilities | | |
| Cash and securities | € 4,164 | € 5,317 | Short-term borrowings | € 3,247 | € 2,709 |
| Trade receivables[2] | 863 | 779 | Accounts payable | 17,077 | 17,276 |
| Inventories | 6,867 | 6,891 | Accrued expenses | 2,848 | 2,947 |
| Other current assets[3] | 6,231 | 6,190 | Other current liabilities[4] | 4,866 | 4,800 |
| | | | Long-term borrowings | 11,542 | 12,725 |
| Long-term assets | 33,224 | 32,232 | Stockholders' equity | 11,770 | 10,952 |
| Total assets | € 51,349 | € 51,409 | Total liabilities and owners' equity | € 51,349 | € 51,409 |

Mainly from the group's franchisees.
Receivables from suppliers for rebates and commercial incentives plus short-term consumer credit.
Mainly short-term consumer credit refinancing.

## REVIEW PROBLEMS

1. Transactions.

Indicate the effects of the following transactions on *net long-term financing (NLF)*, *working capital requirement (WCR)*, *net short-term financing (NSF)*, and *net profit*. Use + to indicate an increase, – to indicate a decrease, and 0 to indicate no effect.

| | NLF | WCR | NSF | NET PROFIT |
|---|---|---|---|---|
| Shares are issued for cash | | | | |
| Goods from inventory are sold for cash | | | | |
| Goods from inventory are sold on account | | | | |
| A fixed asset is sold for cash for less than book value | | | | |
| A fixed asset is sold for cash for more than book value | | | | |
| Corporate income tax is paid | | | | |
| Payment is made to trade creditors | | | | |
| Cash is obtained through a short-term bank loan | | | | |
| Cash is obtained through a long-term bank loan | | | | |
| A cash dividend is declared and paid | | | | |
| Accounts receivable are collected | | | | |
| Merchandise is purchased on account | | | | |
| Cash advances are made to employees | | | | |
| Minority interest in a firm is acquired for cash | | | | |
| Equipment is acquired for cash | | | | |