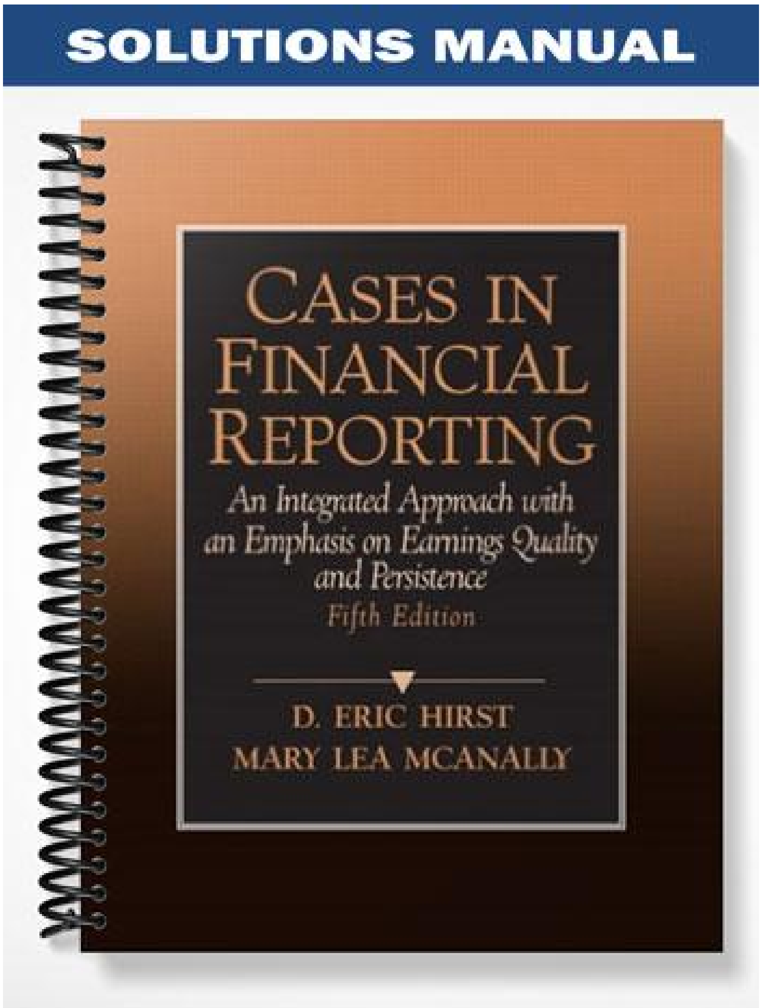
SOLUTIONS MANUAL
CASES IN FINANCIAL REPORTING
An Integrated Approach with an Emphasis on Earnings Quality and Persistence
Fifth Edition
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Nike—Basic Ratio Analysis

Teaching Notes:

This case in basic ratio analysis helps students see how financial statements can be *used* early in the course. We do not believe that financial statement analysis should be left to the end (time permitting) of a course in financial accounting. We introduce basic tools early on and add more sophisticated ones as we look at specific accounts (e.g., accounts receivable turnover when we discuss receivables).

Although most students like the user approach, a small minority become frustrated because they are still struggling with basic terminology. We win them over by making sure they understand that cases like Nike and ASICS are designed to familiarize students with financial accounting and that we do not expect them to be able to see all the subtleties at this early stage.

Nike—Basic Ratio Analysis

a. i. ROE decomposition

	NI / EBT	EBT / EBIT	EBIT / Sales	Sales / Total Assets	Total Assets / Common Equity	ROE
2001	589.7 / 921.4	921.4 / 980.1	980.1 / 9,488.8	9,488.8 / 5,819.6	5,819.6 / 3,494.5	
	0.64	0.94	0.10	1.63	1.67	16.87%
2002	668.3* / 1,017.3	1,017.3 / 1,064.9	1,064.9 / 9893	9,893 / 6,443	6,443 / 3,839	
	0.66	0.96	0.11	1.54	1.68	17.41%

* This calculation uses net income before the accounting change because it was a one-time event and a very small number. EBIT uses EBT plus interest expense (thus operating margins include ‘other income/expense’).

Return on equity has increased slightly during 2002 from 16.87% to 17.41%. Efficiency (sales / assets) dropped somewhat, but was offset by the higher margins, lower interest, and lower taxes. However, none of these component parts of the ROE calculation changed significantly. Nike is consistently profitable over the two-year period analyzed.

a. ii. Common-size income statements

	2002		2001		2000	
	$million	%	$million	%	$million	%
Sales	9,893.0	100.0%	9,488.8	100.0%	8,995.1	100.0%
Cost of sales	6,004.7	60.7%	5,784.9	61.0%	5,403.8	60.1%
Selling and admin	2,820.4	28.5%	2,689.7	28.4%	2,606.4	29.0%
Interest expense	47.6	0.5%	58.7	0.6%	45	0.5%
Other income/expense	3	< 0.1%	34.1	0.4%	20.7	0.2%
Total cost and expenses	8,875.7	89.7%	8,567.4	90.3%	8,075.9	89.8%
Income before taxes and before accounting change	1,017.3	10.3%	921.4	9.7%	919.2	10.2%
Income tax	349	3.5%	331.7	3.5%	340.1	3.8%
Income before accounting change	668.3	6.8%	589.7	6.2%	579.1	6.4%
Accounting change	5	0.1%	0	0.0%	0	0.0%
Net income	663.3	6.7%	589.7	6.2%	579.1	6.4%

Nike is marginally more profitable in 2002 than in the prior two years in both dollar and percentage terms. Nike’s most significant expense is cost of sales which has held steady at around 61% for the past two years. All other expenses have not increased or decreased significantly over the three-year period. This company is very stable.

Common-size balance sheets

	2002 $million	2002 %	2001 $million	2001 %
Current assets				
Cash	575.5	8.9%	304	5.2%
Accounts receivable	1,807.1	28.1%	1,621.4	27.9%
Inventories	1,373.8	21.3%	1,424.1	24.5%
Deferred income tax	140.8	2.2%	113.3	2.0%
Prepaid expenses	260.5	4.0%	162.5	2.8%
Total current assets	4,157.7	64.5%	3,625.3	62.3%
Property, plant, and equipment	1,614.5	25.1%	1,618.8	27.8%
Intangible assets	437.8	6.8%	397.3	6.8%
Deferred income taxes and other assets	233	3.6%	178.2	3.1%
Total assets	6,443	100.0%	5,819.6	100.0%
Current liabilities				
Current portion of long-term debt	55.3	0.9%	5.4	0.1%
Notes payable	425.2	6.6%	855.3	14.7%
Accounts payable	504.4	7.8%	432	7.4%
Accrued liabilities	768.3	11.9%	472.1	8.1%
Income taxes payable	83	1.3%	21.9	0.4%
Total current liabilities	1,836.2	28.5%	1,786.7	30.7%
Long term debt	625.9	9.7%	435.9	7.5%
Deferred income taxes & other liabilities	141.6	2.2%	102.2	1.8%
Commitments and contingencies				
Redeemable preferred stock	0.3	0.01%	0.3	0.01%
Shareholders' equity				
Common stock				
Class A	0.2	0.0%	0.2	0.00%
Class B	2.6	0.04%	2.6	0.04%
Capital in excess of stated value	538.7	8.4%	459.4	7.9%
Unearned stock compensation	-5.1	-0.1%	-9.9	-0.2%
Accumulated other comprehensive loss	-192.4	-3.0%	-152.1	-2.6%
Retained earnings	3,495	54.2%	3,194.3	54.9%
Total shareholders' equity	3,839	59.6%	3,494.5	60.1%
Total liabilities and shareholders' equity	6,443	100.0%	5,819.6	100.0%

Looking at the common-sized balance sheet, we see very few notable differences. Inventory levels are down slightly, in both dollars and percentage terms. Current and long-term liabilities are also slightly up in 2002. However, these increases are slight.

Ratio	2002 Computation	2002	2001
a. iii. return on assets	$\frac{[663.3 + 47.6 * (1 - 0.343)]}{6,443}$	10.78%	10.78%
a. iv. current ratio	$\frac{4,157.7}{1,836.2}$	2.26	2.03
a. v. working capital	4,157.7 – 1,836.2	2,321.5	1,838.6

Note: some texts calculate ROA as net income divided by average total assets. We add interest expense back to net income when we calculate ROA because the measure then reflects the return on assets earned by managers without concern for how the assets were financed. This makes particular sense if the measure is used to evaluate the performance of managers who do not control financing decisions or to compare the performance of two companies that finance their investments with different levels of debt. Our more precise measure of ROA adds back interest expense net of tax (i.e., interest expense (1 - tax rate)). This takes into account the tax savings provided by interest expense. Without interest expense, pretax income would be higher and so income tax expense would be higher.

The preceding discussion illustrates an important point: ratios are not set in stone. Different analysts (and textbook authors) calculate them in different ways. You should keep this in mind whenever you compare “precomputed” ratios from analysts’ letters or online investment sites, especially across companies.

b. Net income increased by $84,200,000 from fiscal year 2000 to fiscal year 2002. The major reason is the increase in sales (about $898 million). Nike’s gross margin percent also decreased but very slightly, from 39.93% to 39.3%. Despite this decrease in gross margin, Nike saw an improvement in income dollars and percentage. This was due to the lower taxes and SGA expenses as a percentage to sales

c. One way to measure profitability is to deflate income by shareholders’ equity or total assets so that a common measure can be compared across firms or periods. Because companies with more capital should earn more income, dividing net income by the capital base is a useful measure. Return on equity rose from 16.87% in 2001 to 17.41% in 2002, a marginal increase. Return on assets held steady at 10.78%. By these measures, Nike was modestly more profitable in 2002.

d. At May 31 2002, Nike had $575.5 million in cash.

e. The current ratio of 2.26 and positive working capital of $2,321.5 million indicate that Nike *was* in a position to pay its short-term obligations at May 31, 2002. That is, they had $2.26 of highly liquid assets for every dollar of debt due in the next year. A more stringent test of solvency is the quick ratio ([cash + marketable securities + accounts receivable] / current liabilities). This ratio was 1.30 at May 31, 2002. As many companies have a quick ratio below 1.0, Nike, Inc. is in a relatively good position to pay off its immediate obligations.

f. The statement of cash flows indicates that operations provided $1,081.5 million of cash during the fiscal year ended May 31, 2002. Note that although net income increased by about 12% between 2001 and 2002, cash flow from operations increased by 65%, mainly due to increases in accounts payable, accrued liabilities, and income taxes payable and the decrease in inventories.

g. The main source of cash was operations ($1,081.5 million) and issuances of long-term debt ($329.9 million). Significant uses of cash include acquisitions of property, plant and equipment ($282.8 million), the decrease in notes payable ($431.5 million), the repurchase of Nike stock ($226.9 million), and preferred and common dividends paid ($128.9 million). The company has a healthy cash balance and good cash flow.