CASE 15

Nike, Inc.: Cost of Capital

On July 5, 2001, Kimi Ford, a portfolio manager at NorthPoint Group, a mutual-fund management firm, pored over analysts' write-ups of Nike, Inc., the athletic-shoe manufacturer. Nike's share price had declined significantly from the beginning of the year. Ford was considering buying some shares for the fund she managed, the NorthPoint Large-Cap Fund, which invested mostly in Fortune 500 companies, with an emphasis on value investing. Its top holdings included ExxonMobil, General Motors, McDonald's, 3M, and other large-cap, generally old-economy stocks. While the stock market had declined over the last 18 months, the NorthPoint Large-Cap Fund had performed extremely well. In 2000, the fund earned a return of 20.7%, even as the S&P 500 fell 10.1%. At the end of June 2001, the fund's year-to-date returns stood at 6.4% versus –7.3% for the S&P 500.

Only a week earlier, on June 28, 2001, Nike had held an analysts' meeting to disclose its fiscal-year 2001 results.[1] The meeting, however, had another purpose: Nike management wanted to communicate a strategy for revitalizing the company. Since 1997, its revenues had plateaued at around $9 billion, while net income had fallen from almost $800 million to $580 million (see **Exhibit 1**). Nike's market share in U.S. athletic shoes had fallen from 48%, in 1997, to 42% in 2000.[2] In addition, recent supply-chain issues and the adverse effect of a strong dollar had negatively affected revenue.

At the meeting, management revealed plans to address both top-line growth and operating performance. To boost revenue, the company would develop more athletic-shoe products in the midpriced segment[3]—a segment that Nike had overlooked in recent years. Nike also planned to push its apparel line, which, under the recent leadership of

[1]Nike's fiscal year ended in May.

[2]Douglas Robson, "Just Do . . . Something: Nike's insularity and Foot-Dragging Have It Running in Place," *BusinessWeek,* (2 July 2001).

[3]Sneakers in this segment sold for $70–$90 a pair.

This case was prepared from publicly available information by Jessica Chan, under the supervision of Robert F. Bruner and with the assistance of Sean D. Carr. The financial support of the Batten Institute is gratefully acknowledged. It was written as a basis for class discussion rather than to illustrate effective or ineffective handling of an administrative situation.

industry veteran Mindy Grossman,[4] had performed extremely well. On the cost side, Nike would exert more effort on expense control. Finally, company executives reiterated their long-term revenue-growth targets of 8% to 10% and earnings-growth targets of above 15%.

Analysts' reactions were mixed. Some thought the financial targets were too aggressive; others saw significant growth opportunities in apparel and in Nike's international businesses.

Kimi Ford read all the analysts' reports that she could find about the June 28 meeting, but the reports gave her no clear guidance: a Lehman Brothers report recommended a strong buy, while UBS Warburg and CSFB analysts expressed misgivings about the company and recommended a hold. Ford decided instead to develop her own discounted cash flow forecast to come to a clearer conclusion.

Her forecast showed that, at a discount rate of 12%, Nike was overvalued at its current share price of $42.09 (**Exhibit 2**). However, she had done a quick sensitivity analysis that revealed Nike was *undervalued* at discount rates below 11.17%. Because she was about to go into a meeting, she asked her new assistant, Joanna Cohen, to estimate Nike's cost of capital.

Cohen immediately gathered all the data she thought she might need (**Exhibits 1** through **4**) and began to work on her analysis. At the end of the day, Cohen submitted her cost-of-capital estimate and a memo (**Exhibit 5**) explaining her assumptions to Ford.

[4]Mindy Grossman joined Nike in September 2000. She was the former president and chief executive of Jones Apparel Group's Polo Jeans division.

EXHIBIT 1 | Consolidated Income Statements

Year Ended May 31 (in millions of dollars except per-share data)	1995	1996	1997	1998	1999	2000	2001
Revenues	$4,760.8	$6,470.6	$9,186.5	$9,553.1	$8,776.9	$8,995.1	$9,488.8
Cost of goods sold	2,865.3	3,906.7	5,503.0	6,065.5	5,493.5	5,403.8	5,784.9
Gross profit	**1,895.6**	**2,563.9**	**3,683.5**	**3,487.6**	**3,283.4**	**3,591.3**	**3,703.9**
Selling and administrative	1,209.8	1,588.6	2,303.7	2,623.8	2,426.6	2,606.4	2,689.7
Operating income	**685.8**	**975.3**	**1,379.8**	**863.8**	**856.8**	**984.9**	**1,014.2**
Interest expense	24.2	39.5	52.3	60.0	44.1	45.0	58.7
Other expense, net	11.7	36.7	32.3	20.9	21.5	23.2	34.1
Restructuring charge, net	—	—	—	129.9	45.1	(2.5)	—
Income before income taxes	**649.9**	**899.1**	**1,295.2**	**653.0**	**746.1**	**919.2**	**921.4**
Income taxes	250.2	345.9	499.4	253.4	294.7	340.1	331.7
Net income	**$ 399.7**	**$ 553.2**	**$ 795.8**	**$ 399.6**	**$ 451.4**	**$ 579.1**	**$ 589.7**
Diluted earnings per common share	$1.36	$1.88	$2.68	$1.35	$1.57	$2.07	$2.16
Average shares outstanding (diluted)	294.0	293.6	297.0	296.0	287.5	279.8	273.3
Growth (%)							
Revenue		35.9	42.0	4.0	(8.1)	2.5	5.5
Operating income		42.2	41.5	(37.4)	(0.8)	15.0	3.0
Net income		38.4	43.9	(49.8)	13.0	28.3	1.8
Margins (%)							
Gross margin		39.6	40.1	36.5	37.4	39.9	39.0
Operating margin		15.1	15.0	9.0	9.8	10.9	10.7
Net margin		8.5	8.7	4.2	5.1	6.4	6.2
Effective tax rate (%)*		38.5	38.6	38.8	39.5	37.0	36.0

*The U.S. statutory tax rate was 35%. The state tax varied yearly from 2.5% to 3.5%.

Sources of data: Company filing with the Securities and Exchange Commission (SEC), UBS Warburg.

EXHIBIT 2 | Discounted Cash Flow Analysis

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Assumptions:										
Revenue growth (%)	7.0	6.5	6.5	6.5	6.0	6.0	6.0	6.0	6.0	6.0
COGS/sales (%)	60.0	60.0	59.5	59.5	59.0	59.0	58.5	58.5	58.0	58.0
SG&A/sales (%)	28.0	27.5	27.0	26.5	26.0	25.5	25.0	25.0	25.0	25.0
Tax rate (%)	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0
Current assets/sales (%)	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0
Current liabilities/sales (%)	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
Yearly depreciation and capex equal each other.										
Cost of capital (%)	12.00									
Terminal value growth rate (%)	3.00									
Discounted Cash Flow (in millions of dollars except per-share data)										
Operating income	$ 1,218.4	$1,351.6	$1,554.6	$1,717.0	$1,950.0	$2,135.9	$2,410.2	$2,554.8	$2,790.1	$2,957.5
Taxes	463.0	513.6	590.8	652.5	741.0	811.7	915.9	970.8	1,060.2	1,123.9
NOPAT	755.4	838.0	963.9	1,064.5	1,209.0	1,324.3	1,494.3	1,584.0	1,729.9	1,833.7
Capex, net of depreciation	—	—	—	—	—	—	—	—	—	—
Change in NWC	8.8	(174.9)	(186.3)	(198.4)	(195.0)	(206.7)	(219.1)	(232.3)	(246.2)	(261.0)
Free cash flow	764.1	663.1	777.6	866.2	1,014.0	1,117.6	1,275.2	1,351.7	1,483.7	1,572.7
Terminal value										17,998.3
Total flows	764.1	663.1	777.6	866.2	1,014.0	1,117.6	1,275.2	1,351.7	1,483.7	19,571.0
Present value of flows	$ 682.3	$ 528.6	$ 553.5	$ 550.5	$ 575.4	$ 566.2	$ 576.8	$ 545.9	$ 535.0	$6,301.2
Enterprise value	$11,415.4									
Less: current outstanding debt	$ 1,296.6									
Equity value	$10,118.8									
Current shares outstanding	271.5									
Equity value per share	**$ 37.27**		Current share price:		**$ 42.09**					

Sensitivity of equity value to discount rate:

Discount rate	Equity value
8.00%	$ 75.80
8.50%	67.85
9.00%	61.25
9.50%	55.68
10.00%	50.92
10.50%	46.81
11.00%	43.22
11.17%	**42.09**
11.50%	40.07
12.00%	37.27

Source: Case writer's analysis.

EXHIBIT 3 | Consolidated Balance Sheets

(in millions of dollars)	As of May 31, 2000	2001
Assets		
Current assets:		
Cash and equivalents	$ 254.3	$ 304.0
Accounts receivable	1,569.4	1,621.4
Inventories	1,446.0	1,424.1
Deferred income taxes	111.5	113.3
Prepaid expenses	215.2	162.5
Total current assets	3,596.4	3,625.3
Property, plant and equipment, net	1,583.4	1,618.8
Identifiable intangible assets and goodwill, net	410.9	397.3
Deferred income taxes and other assets	266.2	178.2
Total assets	**$ 5,856.9**	**$ 5,819.6**
Liabilities and shareholders' equity		
Current liabilities:		
Current portion of long-term debt	$ 50.1	$ 5.4
Notes payable	924.2	855.3
Accounts payable	543.8	432.0
Accrued liabilities	621.9	472.1
Income taxes payable	—	21.9
Total current liabilities	2,140.0	1,786.7
Long-term debt	470.3	435.9
Deferred income taxes and other liabilities	110.3	102.2
Redeemable preferred stock	0.3	0.3
Shareholders' equity:		
Common stock, par	2.8	2.8
Capital in excess of stated value	369.0	459.4
Unearned stock compensation	(11.7)	(9.9)
Accumulated other comprehensive income	(111.1)	(152.1)
Retained earnings	2,887.0	3,194.3
Total shareholders' equity	3,136.0	3,494.5
Total liabilities and shareholders' equity	**$ 5,856.9**	**$ 5,819.6**

Source of data: Company filing with the Securities and Exchange Commission (SEC).

EXHIBIT 4 | Capital-Market and Financial Information On or Around July 5, 2001

Current Yields on U.S. Treasuries

3-month	3.59%
6-month	3.59%
1-year	3.59%
5-year	4.88%
10-year	5.39%
20-year	5.74%

Historical Equity Risk Premiums (1926-1999)

Geometric mean	5.90%
Arithmetic mean	7.50%

Current Yield on Publicly Traded Nike Debt*

Coupon	6.75% paid semi-annually
Issued	07/15/96
Maturity	07/15/21
Current Price	$95.60

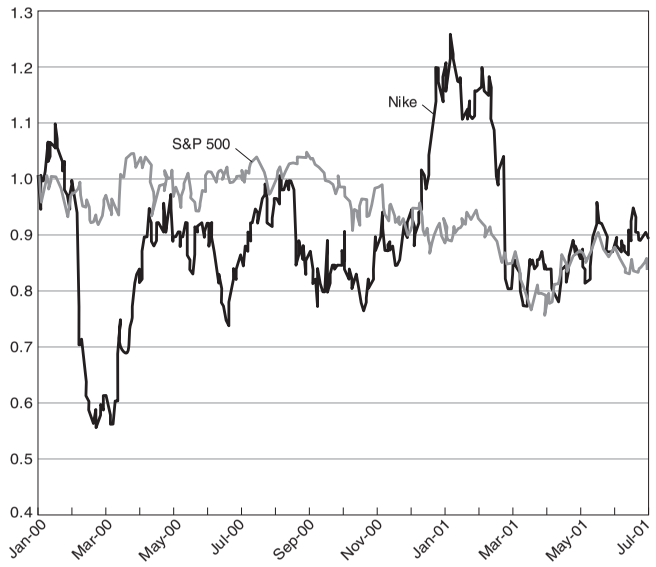
Nike Historic Betas

1996	0.98
1997	0.84
1998	0.84
1999	0.63
2000	0.83
YTD 6/30/01	0.69
Average	0.80

Consensus EPS estimates:

FY 2002	FY 2003
$2.32	$2.67

Nike Share Price Performance Relative to S&P500:
January 2000 to July 5, 2001



Nike share price on July 5, 2001: $ 42.09

Dividend History and Forecasts

Payment Dates	31-Mar	30-Jun	30-Sep	31-Dec	Total
1997	0.10	0.10	0.10	0.10	0.40
1998	0.12	0.12	0.12	0.12	0.48
1999	0.12	0.12	0.12	0.12	0.48
2000	0.12	0.12	0.12	0.12	0.48
2001	0.12	0.12			

Value Line Forecast of Dividend Growth from '98-'00 to '04-'06: 5.50%

*Data have been modified for teaching purposes.

Sources of data: Bloomberg Financial Services, Ibbotson Associates Yearbook 1999, Value Line Investment Survey, IBES.

EXHIBIT 5 | Joanna Cohen's Analysis

TO: Kimi Ford
FROM: Joanna Cohen
DATE: July 6, 2001
SUBJECT: Nike's cost of capital

Based on the following assumptions, my estimate of Nike's cost of capital is 8.4%:

I. Single or Multiple Costs of Capital?

The first question that I considered was whether to use single or multiple costs of capital, given that Nike has multiple business segments. Aside from footwear, which makes up 62% of its revenue, Nike also sells apparel (30% of revenue) that complements its footwear products. In addition, Nike sells sport balls, timepieces, eyewear, skates, bats, and other equipment designed for sports activities. Equipment products account for 3.6% of its revenue. Finally, Nike also sells some non-Nike-branded products such as Cole Haan dress and casual footwear, and ice skates, skate blades, hockey sticks, hockey jerseys, and other products under the Bauer trademark. Non-Nike brands accounted for 4.5% of revenue.

I asked myself whether Nike's business segments had different enough risks from each other to warrant different costs of capital. Were their profiles really different? I concluded that it was only the Cole Haan line that was somewhat different; the rest were all sports-related businesses. Since Cole Haan makes up only a tiny fraction of revenues, however, I did not think that it was necessary to compute a separate cost of capital. As for the apparel and footwear lines, they are sold through the same marketing and distribution channels and are often marketed in other collections of similar designs. Since I believe they face the same risk factors, I decided to compute only one cost of capital for the whole company.

II. Methodology for Calculating the Cost of Capital: WACC

Since Nike is funded with both debt and equity, I used the WACC method (weighted-average cost of capital). Based on the latest available balance sheet, debt as a proportion of total capital makes up 27.0% and equity accounts for 73.0%:

Capital Sources	Book Values (in millions)	
Debt		
Current portion of long-term debt	$ 5.4	
Notes payable	855.3	
Long-term debt	435.9	
	$1,296.6	➔ 27.0% of total capital
Equity	$3,494.5	➔ 73.0% of total capital

III. Cost of Debt

My estimate of Nike's cost of debt is 4.3%. I arrived at this estimate by taking total interest expense for the year 2001 and dividing it by the company's average debt balance.[1] The rate is lower than Treasury yields, but that is because Nike raised a portion of its funding needs through Japanese yen notes, which carry rates between 2.0% and 4.3%.

After adjusting for tax, the cost of debt comes out to 2.7%. I used a tax rate of 38%, which I obtained by adding state taxes of 3% to the U.S. statutory tax rate. Historically, Nike's state taxes have ranged from 2.5% to 3.5%.

[1]Debt balances as of May 31, 2000 and 2001, were $1,444.6 million and $1,296.6 million, respectively.

EXHIBIT 5 | (*continued*)

IV. Cost of Equity

I estimated the cost of equity using the capital-asset-pricing model (CAPM). Other methods, such as the dividend-discount model (DDM) and the earnings-capitalization ratio, can be used to estimate the cost of equity. In my opinion, however, the CAPM is the superior method.

My estimate of Nike's cost of equity is 10.5%. I used the current yield on 20-year Treasury bonds as my risk-free rate, and the compound average premium of the market over Treasury bonds (5.9%) as my risk premium. For beta, I took the average of Nike's betas from 1996 to the present.

Putting it All Together

Inputting all my assumptions into the WACC formula, my estimate of Nike's cost of capital is 8.4%.

$$\begin{aligned} \text{WACC} &= K_d(1 - t) \times D/(D + E) + K_e \times E/(D + E) \\ &= 2.7\% \times 27.0\% + 10.5\% \times 73.0\% \\ &= 8.4\% \end{aligned}$$