debt-to-capital ratio over the past 5 years from 75 percent to 55 percent. In addition, the firm refinanced over a billion dollars of its debt at reduced rates. A company spokesman said, "Our debt-to-capital ratio is still on the high side, and we'll keep working to bring it down. But the cost of debt is manageable, and we're beyond the point where debt overshadows everything else we do."[4]

Highlights of Phillips's financial condition from 1986 to 1992 are found in the accompanying table. These data reflect the company's financial restructuring following the downsizing and reorganization of Phillips's operations begun in the mid-1980s.

Summary Financial Information for Phillips Petroleum Corporation: 1986 to 1992 (in Millions of Dollars Except for per Share Figures)

	1986	1987	1988	1989	1990	1991	1992
Sales	$10,018.00	$10,917.00	$11,490.00	$12,492.00	$13,975.00	$13,259.00	$12,140.00
Net income	228.00	35.00	650.00	219.00	541.00	98.00	270.00
EPS	0.89	0.06	2.72	0.90	2.18	0.38	1.04
Current assets	2,802.00	2,855.00	3,062.00	2,876.00	3,322.00	2,459.00	2,349.00
Total assets	12,403.00	12,111.00	11,968.00	11,256.00	12,130.00	11,473.00	11,468.00
Current liabilities	2,234.00	2,402.00	2,468.00	2,706.00	2,910.00	2,503.00	2,517.00
Long-term debt	8,175.00	7,887.00	7,387.00	6,418.00	6,505.00	6,113.00	5,894.00
Total liabilities	10,409.00	10,289.00	9,855.00	9,124.00	9,411.00	8,716.00	8,411.00
Preferred stock	270.00	205.00	0.00	0.00	0.00	0.00	359.00
Common equity	1,724.00	1,617.00	2,113.00	2,132.00	2,719.00	2,757.00	2,698.00
Dividends per share	2.02	1.73	1.34	0.00	1.03	1.12	1.12

Source: Phillips annual reports for 1986 to 1992.

Phillips's managers are currently developing its financial plans for the next 5 years and want to develop a forecast of its financing requirements. As a first approximation, they have asked you to develop a model that can be used to make "ballpark" estimates of the firm's financing needs under the proviso that existing relationships found in the firm's financial statements remain the same over the period. Of particular interest is whether Phillips will be able to further reduce its reliance on debt financing. You may assume that Phillips's projected sales (in millions) for 1993 through 1997 are as follows: $13,000; $13,500; $14,000; $14,500; and $15,500.

a. Project net income for 1993 to 1997 using the percent of sales method based on an average of this ratio for 1986 to 1992.
b. Project total assets and current liabilities for 1993 to 1997 using the percent of sales method and your sales projections from part a.
c. Assuming that common equity increases only as a result of the retention of earnings and holding long-term debt and preferred stock equal to its 1992 balances, project Phillips's discretionary financing needs for 1993 to 1997. (Hint: Assume that total assets and current liabilities vary as a percentage of sales as per your answers to part b. In addition, assume that Phillips plans to continue to pay its dividends of $1.12 per share in each of the next 5 years.)

Self-Test Solutions

SS-1.

Calico Sales Co. Inc. Pro Forma Income Statement

Sales		$4,000,000
Cost of goods sold (70%)		(2,800,000)
Gross profit		1,200,000
Operating expense		
Selling expense (5%)	$200,000	
Administrative expense	500,000	
Depreciation expense	300,000	(1,000,000)
Net operating income		200,000
Interest expense		(50,000)
Earnings before taxes		150,000)
Taxes (40%)		(60,000)
Net income		$ 90,000

[4]From *SEC Online*, 1992.