14-13. (*Forecasting net income*) In November of each year the CFO of Barker Electronics begins the financial forecasting process to determine the firm's projected needs for new financing during the coming year. Barker is a small electronics manufacturing company located in Moline, Illinois, which is best known as the home of the John Deere Company. The CFO begins the process with the most recent year's income statement, projects sales growth for the coming year, and then estimates net income and finally the additional earnings he can expect to retain and reinvest in the firm. The firm's income statement for 2010 follows (in $000):

Income Statement ($000)

	YEAR ENDED DECEMBER 31, 2010
Sales	$ 1,500
Cost of goods sold	(1,050)
Gross profit	$ 450
Operating costs	(225)
Depreciation expense	(50)
Net operating profit	$ 175
Interest expense	(10)
Earnings before taxes	$ 165
Taxes	(58)
Net income	$ 107
Dividends	$ 20
Addition to retained earnings	$ 87

The electronics business has been growing rapidly over the past 18 months as the economy recovers, and the CFO estimates that sales will expand by 20 percent in the next year. In addition, he estimates the following relationships between each of the income statement expense items and sales:

COGS/sales	70%
Operating expenses/sales	15%
Depreciation expense ($000)	$50
Interest expense ($000)	$10
Tax rate	35%

Note that for the coming year both depreciation expense and interest expense are projected to remain the same as in 2010.

a. Estimate Barker's net income for 2011 and its addition to retained earnings under the assumption that the firm leaves its dividends paid at the 2010 level.

b. Reevaluate Barker's net income and addition to retained earnings where sales grow at 40 percent over the coming year. However, this scenario requires the addition of new plant and equipment in the amount of $100,000, which increases annual depreciation to $58,000 per year, and interest expense rises to $15,000.

Mini Case

Phillips Petroleum is an integrated oil and gas company with headquarters in Bartlesville, Oklahoma, where it was founded in 1917. The company engages in petroleum exploration and production worldwide. In addition, it engages in natural gas gathering and processing, as well as petroleum refining and marketing primarily in the United States. The company has three operating groups: Exploration and Production, Gas and Gas Liquids, and Downstream Operations, which encompasses Petroleum Products and Chemicals.

In the mid-1980s, Phillips engaged in a major restructuring following two failed takeover attempts, one led by T. Boone Pickins and the other by Carl Ichan.[3] The restructuring resulted in a $4.5 billion plan to exchange a package of cash and debt securities for roughly half the company's shares and to sell $2 billion worth of assets. Phillips's long-term debt increased from $3.4 billion in late 1984 to a peak of $8.6 billion in April 1985.

During 1992, Phillips was able to strengthen its financial structure dramatically. Its subsidiary Phillips Gas Company completed an offering of $345 million of Series A 9.32% cumulative preferred stock. As a result of this action and prior years' debt reductions, the company lowered its long-term

[3]This discussion is based on a story in the *New York Times*, January 7, 1986.