

Ralph's Equity Investment

Ralph is evaluating the following merger. Acquiring Co. proposes to exchange 45 shares of its common stock that is currently trading at \$42/share, a total value of \$1,890, for 90 percent of the outstanding common stock of Acquired Co. Current Balance Sheets and projected pro forma Income Statements for the first year following the merger are below.

	Book values		Current values
	Acquiring Co.	Acquired Co.	Acquired Co.
Balance Sheets			
Assets			
Cash and equivalents	\$500	\$150	\$150
Inventory	1,000	300	300
Current assets	\$1,500	\$450	\$450
PPE less accum. depreciation	1,700	450	850
Total assets	\$3,200	\$900	
Equities			
Liabilities	\$1,300	\$450	\$450
Minority interest			45
Common stock (\$5 par)	500	100	
Additional paid-in capital	200	150	
Retained earnings	1,200	200	
Total equities	\$3,200	\$900	
Income Statement (ignoring income taxes)			Nonconsolidated equity method reporting
Precombination income:			
Revenues	\$5,000	\$1,600	\$5,000
Cost of goods sold	3,500	1,000	3,500
Depreciation expense	500	200	500
Selling, general and admin. expense	700	240	700
Own	\$300	\$160	\$300
Combination adjustments:			
Equity in Acquired's income			144
Net income	\$300	\$160	\$444
Number of shares outstanding	100	20	145
Earnings per share	\$3.00	\$8.00	\$3.06

Acquiring Co.'s management is concerned both about the value of the merger and the impact of the merger on their consolidated reports.

Required:

Part A

1. Prepare pro forma Consolidated Balance Sheets at the time of the merger and after one year, and pro forma Consolidated Income Statements for the first year based on (a) purchase accounting, (b) pooling-of-interests accounting, and (c) equity method accounting. Assume that there are no intercompany eliminations, that the depreciation rate on property, plant & equipment is 1/5, and that the amortization period for goodwill is the maximum of 40 years. (Ralph regards the FASB cautiously and wishes to identify the pro forma results if the FASB should again change their attitude toward the reporting of mergers).
2. Repeat 1 assuming that Acquiring Co. sells merchandise to Acquired for \$1,000 (Acquiring Co. recognizes cost of sales in the amount of \$700 on this merchandise), and Acquired Co. sells the same merchandise to customers for \$1,200.

Part B

Evaluate the terms of the merger for Acquiring Co. Acquired Co. has a low cost of equity capital since its cash flows covary negligibly with other risky assets; assume the cost of equity capital is 8 percent per annum. Below are the expected values of annual transactions for the companies (before combination) in perpetuity:

	Acquiring Co.	Acquired Co.
Revenues	\$5,000	\$1,600
Purchases of inventory	\$3,500	\$1,000
Investments in PPE	\$ 500	\$ 200
Selling, general & admin. costs	\$ 700	\$ 240
Accruals:		
Cost of goods sold	$7/9(\text{Inventory}_{t-1} + \text{Purchases}_t)$	$10/13(\text{Inventory}_{t-1} + \text{Purchases}_t)$
Depreciation expense	$5/22(\text{PPE}_{t-1} + \text{Investments}_t)$	$4/13(\text{PPE}_{t-1} + \text{Investments}_t)$

1. Estimate the incremental value of Acquired Co. to Acquiring Co. based on PVAE (current book value of owners' equity plus the present value of future abnormal earnings, also called residual income).
2. Estimate the incremental value of Acquired Co. to Acquiring Co. based on DCF (discounted value of future free cash flows to equity).
3. Is the proposal a value-increasing investment to Acquiring Co.?