

Problem 8.1. Marketable Securities in the Chemical Industry. Given below are the marketable securities totals and other asset information for two chemical companies for 2001 (in millions) [Note: PPG reports financial instruments, but does not break out marketable securities]:

	Du Pont	Dow
Marketable Securities	\$85	\$44
Policy	Available-for-sale & held-to-maturity	Available-for-sale and held-to-maturity
Total Current Assets	14,801	10,308
Total Assets	40,319	35,515

- a. Calculate marketable securities as a percentage of current assets and total assets.

	Du Pont	Dow
Marketable Securities / Total Current Assets	<i>0.57%</i>	<i>0.43%</i>
Marketable Securities / Total Assets	<i>0.21%</i>	<i>0.12%</i>

- b. Evaluate the use of marketable securities accounted for both companies.

Problem 8.2. Inventory in the Chemical Industry. Given below are the 2001 inventory and related information for three chemical companies (in millions).

	Du Pont	Dow	PPG
Inventory	\$4,681	\$4,440	\$904
Finished Goods, Work in Progress	3,837	3,569	622
Materials	844	871	166
Policy	LIFO, FIFO*	LIFO, FIFO, Avg.	LIFO
Total Current Assets	14,801	10,308	2,703

- a. Calculate inventory as a percent of total current assets and finished goods and materials to total inventory percentages.

	Du Pont	Dow	PPG
Inventory / Total Current Assets	32%	43%	33%
Finished Goods / Inventory	82%	80%	69%
Materials / Inventory	18%	20%	18%

- b. Analyze differences of ratios and policy based on business strategy and other financial analysis factors.

Problem 8.3. Depreciation in the Chemical Industry. Given below are 2001 depreciation-related numbers for three chemical companies (in millions).

	Du Pont	Dow	PPG
Accumulated Depreciation	\$20,491	\$22,311	\$4,101
Depreciation Expense	1,320	1,595	375
Ending Gross Investment	33,778	35,890	7,153

a. Calculate the following fixed asset age and useful life ratios:

	Du Pont	Dow	PPG
Average Age	15.52	13.99	10.94
Average Age %	61%	62%	57%
Average Depreciable Life	25.59	22.50	19.07

b. Analyze these ratios with particular focus on what they mean across the three companies in this industry.

Problem 8.4. Income Tax Allocation in the Chemical Industry.

Given below is 2001 income tax-related information for three companies in the chemical industry:

	Du Pont	Dow	PPG
Pretax Income	\$6,844	\$-613	\$666
Income Tax Expense	2,467	-228	247
Taxes Payable	1,880	-	241

- a. Calculate the reported effective tax rate and taxes payable rate for these companies.

	Du Pont	Dow	PPG
Reported Effective Tax Rate	36.1%	NA	37.1%
Taxes Payable Rate	27.5%	0%	36.2%

- b. Analyze these ratios for each company.

Problem 8.5. Operating Leases in the Chemical Industry. Given below is 2001 lease information. Calculate minimum lease payments / total assets.

	Minimum Lease Payments (millions)	Total Assets (millions)	Minimum Lease Payments / Total Assets
Du Pont	\$905	\$40,319	2.2%
Dow	1,833	35,515	5.2%
PPG	275	8,452	3.3%

b. Do any of these ratios raise a concern (10% or above)?

Case 8.1. Investment income & loss at Microsoft. Microsoft reported the following Investment Income information in the 2001 10-K:

The components of investment income/(loss) are as follows:

In Millions / Year Ended June 30	1999	2000	2001
Dividends	\$ 118	\$ 363	\$ 377
Interest	1,030	1,231	1,808
Net recognized gains/(losses) on investments	803	1,732	(2,221)
Investment income/(loss)	\$1,951	\$3,326	\$ (36)

Microsoft went from a large gain of \$3.3 billion to a \$36 million loss. This had a dramatic effect on the income statement (selectively presented):

Year Ended June 30	1999	2000	2001
Revenue	\$19,747	\$22,956	\$25,296
Operating income	\$10,010	\$11,006	\$11,720
Losses on equity investees and other	(70)	(57)	(159)
Investment income/(loss)	1,951	3,326	(36)
Income before income taxes	11,891	14,275	11,525
Provision for income taxes	4,106	4,854	3,804
Income before accounting change	7,785	9,421	7,721
Cumulative effect of accounting change (net of income taxes of \$185)	—	—	(375)
Net income	\$ 7,785	\$ 9,421	\$ 7,346

- a. The result of the investment loss in 2001 is that net income declined despite increasing operating income. Calculate common-size information below:

	1999	2000	2001
Revenue	<i>100.0%</i>	<i>100.0%</i>	<i>100.0%</i>
Operating Income	<i>50.7</i>	<i>47.9</i>	<i>46.3</i>
Investment Income (loss)	<i>-0.4</i>	<i>-14.5</i>	<i>-0.1</i>
Net income	<i>39.4</i>	<i>41.0</i>	<i>29.0</i>

- b. Evaluate the impact of Microsoft's investment income (loss) on overall operating results? Note that Microsoft also reported a \$1.2 billion unrealized holding loss (net of taxes of \$351 million) as part of comprehensive income. How important is this in determining a buy or sell equity decision?