

Problem Set 5: Due Saturday, July 10 by Noon 15.511

Deferred Taxes, Marketable Securities

I. Depreciation and deferred taxes

TJ Co uses an accelerated method of depreciation for tax purposes and straight-line for financial reporting. In 1996, TJ Co purchased a new asset for \$2,000,000. For financial reporting purposes, they will depreciate this asset over 8 years to a salvage value of \$400,000. For tax purposes, the company will depreciate the asset over 4 years to a salvage value of zero using the following annual percentage of the acquisition cost: 0.3333, 0.4445, 0.1481, and 0.0741. Net income before taxes, and taxable income are otherwise the same for financial and tax purposes, and equal \$1,000,000 before depreciation in each year. The tax rate is 35%.

Required:

- a. Determine the amount of depreciation that will take place for financial reporting and tax purposes in each of the first 5 years. Use this information to compute net income before taxes (NIBT) and taxable income, respectively, in each year. Note that NIBT is reported in the firm's financial statements. Taxable income is reported in the firm's tax filings.
- b. At the beginning of year 6, the asset is sold for \$1,000,000. Record the balance sheet equation effects of this transaction for financial statement purposes. Would the same amount of gain/loss be reported to tax authorities? Briefly explain.

II. Accounting treatment of trading and available for sale securities

Levy Company and Guyer Books made the same equity investment – 300 shares of Watson Manufacturing at a cost of \$14 per share – on November 18. On December 31, the market value of Watson had risen to \$40 per share. Guyer Books held its investment in Watson, while Levy sold the shares and immediately repurchased them at the December 31 market value.

Required:

- a. Compute the balance sheet value and income effect associated with these events recorded by the two companies, assuming that the investment was classified as trading and as available-for-sale. That is, fill in the following chart with the appropriate dollar values. Ignore taxes.

	Guyer Books		Levy Co.	
	Balance Sheet Value	Income Effect	Balance Sheet Value	Income Effect
Investment classified as:				
(a.) Trading Securities				
(b.) Available-for-sale Securities				

- b. Discuss the difference.

III. Applying the mark-to-market rule to investments in equity securities.

O'Leary Enterprises began investing in short-term equity securities in 1999. The following information was extracted from its 1999 internal financial records. Houser and Miller were classified as trading securities, while Nordic was classified as available-for-sale securities.

Security	Purchase	Sales	Total Dividends Received	12/31/99 Market Value*
Houser Company	90 shares @ \$22	60 shares @ \$25	\$40	\$25
Miller, Inc.	180 shares @ \$40	90 shares @ \$30	85	35
Nordic Equipment	170 shares @ \$70	145 shares @ \$ 95	50	90

*Per share

Required:

Record the balance sheet equation for all transactions and price changes in 1999. Assume a tax rate of 30%