

**15.501/516**

**Problem Set 6 Solution**

**1. Inferring cash flows from depreciation disclosures**

Proceeds from sale of PPE = \$14,000

	Cash	PPE at cost	-Acc Depr	RE
BB		400,000	180,000	
Purchase of PPE	-230,000	230,000		
Depreciation			50,000	-50,000 Depr exp
Sale of PPE	<b>14,000</b>	-80,000	-70,000	4,000 Gain
EB		550,000	160,000	

**2. TJ Company**

- a. Depreciation for financial statements is  $(2,000,000 - 500,000)/10 = 150,000$  per year.  
 Tax depreciation is  $2,000,000 * \text{ratio}$  for that year.

	1996	1997	1998	1999	2000
Income before depr	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Depr. exp (finl report)	-150,000	-150,000	-150,000	-150,000	-150,000
Earnings b4 tax (EBT)	850,000	850,000	850,000	850,000	850,000
Income before depr	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Depr. deduction (tax)	-666,600	-889,000	-296,200	-148,200	0
Taxable income	333,400	111,000	703,800	851,800	1,000,000

- b. The sale will generate a loss of \$250,000 for financial reporting purposes. Ignoring taxes, the entry would be:

	Cash	PPE at cost	-Acc Depr	RE
Balance b4 sale		2,000,000	750,000	
Sale of PPE	1,000,000	-2,000,000	-750,000	250,000 Loss

For tax purposes, there would be a gain of 1,000,000 since the asset is been fully depreciated on the tax books at the time of sale.

### 3. Levy Company and Guyer Books

a.	Guyer Books		Levy Co.	
	Balance Sheet Value	Income Effect	Balance Sheet Value	Income Effect
Investment classified as:				
Trading securities	\$9,000	\$6,600	\$9,000	\$6,600
Available-for-sale	\$9,000	0	\$9,000	\$6,600

b. Guyer and Levy's income statements would differ only if the security is classified as available for sale. The reason: unrealized gains for AFS securities flow directly to the stockholders' equity section (other equity). Guyer's gains remain unrealized at December 31, whereas Levy realized the gain by selling on December 31 (and then repurchasing). Only when AFS securities are sold is the income statement affected.

### 4. O'Leary Enterprises

Houser and Miller are classified as trading; Nordic is AFS. The balance sheet equation entries are as follows:

	Cash	MS (Trdng)	MS <sub>adj</sub> (Trdng)	MS (AFS)	MS <sub>adj</sub> (AFS)	=	DTL	OE	RE
Purch Houser	-1980	1980							
Purch Miller	-7200	7200							
Purch Nordic	-11900			11900					
Div received	175								175
Tax exp	-52.5								-52.5
<i>Sales of securities:</i>									
Houser	1500	-1320							+180
Tax	-54								-54
Miller	2700	-3600							-900
Tax	270								270
Nordic	13775			-10150					3625
Tax	-1087.5								-1087.5
<i>Dec 31 Mark-to-market adjustments:</i>									
Houser			90						90
Tax							27		-27
Miller			-450						-450
Tax							-135*		135
Nordic					500			500	
Tax							150	-150	
Dec 31 Bal	-3854	4260	-360	1750	500		42	350	1904

\*For this assignment, tax benefit on unrealized loss from Trading Securities rate, may be recorded as DTA or -DTL.