

Marketable Securities and Deferred Taxes

- 15.501/516 Accounting
- Spring 2004

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1

Marketable Securities and Deferred Taxes: Agenda

- Understand when accounting departs from the "transactions- based" model and towards market-driven valuations
- Illustrate the role of judgment in applying the lower-of-cost- or-market (LCM) rule for inventory
- Understand how marketable securities are valued on companies' Balance Sheets
- Understand the Income Statement effects of valuation adjustments

2

Should changes in market value be recognized?

- Accounts receivable
 - Estimates of uncollectibles
 - Changes in credit risk
- Inventory
 - Purchase/production cost
 - Changes in input prices, obsolescence
- Fixed Assets
 - Acquisition cost (historical basis)
 - Obsolescence

3

Lower of cost or market rule for Inventory

- When Market Value of Inventory < Capitalized Cost
 - Loss on inventory writedown = Capitalized cost - Market Value
 - This is added to Cost of Goods Sold, expense increases, income decreases
 - Market value = Lower of the replacement cost and selling price
- Once inventory is written down in the balance sheet, it cannot be "written up" in subsequent periods
 - Reliable evidence is absent to write up inventory
- Issues
 - Susceptibility to writedowns of LIFO vs. FIFO
 - "Hidden reserves" and income smoothing

4

Valuation Adjustments: K-Mart

On July 25, 2000, Kmart announced a series of strategic actions designed to enhance the productivity of its store base, inventory and information systems." "A pretax charge of \$290 million was taken to state the inventory at its net realizable value" "...and \$75 million to reflect the anticipated loss in value of inventory at the closed locations..." Total is \$365 million.

13 Weeks Ended July 26, 2000 (\$ in millions)	As Reported	Charge For Strategic Actions	Excluding Charge
Sales	\$ 8,998	\$ -	\$ 8,998
Cost of sales, buying and occupancy	7,518	365	7,153
Gross margin	1,480	(365)	1,845

5

Should changes in market value of Marketable Securities be recognized?

- Marketable securities
 - Corporate and government bonds, treasuries
 - Common stock
 - Derivative instruments: options, swaps, etc.
- What is different about marketable securities such that both gains and losses can be recognized?
 - Objective (i.e., reliable, verifiable) market values of the assets are easily available
 - Enron troubles due in part to the reliance on prices of illiquid securities

6

New Accounting Rules (adopted in 1994) SFAS 115

- Prior to 1994, marketable securities involving stock and bonds are valued at “lower of cost or market” on a portfolio basis
- SFAS 115: Mark-to-market accounting: gains and losses treated similarly
- New classifications
 - Trading securities (debt and equity)
 - Available for sale (debt and equity)
 - Held-to-maturity (debt only)

7

New Accounting Rules (adopted in 1994) SFAS 115

- Controversy: where should changes in market value be reported?
 - Taxes are paid/credited only on realized gains/losses
 - Deferred taxes on unrealized (paper) gains/losses

8

Marketable Securities

- Trading securities (debt and equity)
 - Acquired for short-term profit potential
 - Changes in market value reported in the income statement (net of taxes), investment marked to market in the balance sheet
 - Purchases and disposals reported in operating section of SCF
- Held to maturity (debt only)
 - Acquired with ability and intent to hold to maturity
 - No changes in market value reported in the income statement, thus investment carried at historical cost in the balance sheet
 - Interest income reported in operating section of SCF
- Available for sale (debt and equity)
 - Securities not classified as either of above
 - Changes in market value reported in “Other Equity” (net of taxes), instead of the income statement!
 - Purchases and disposals reported in investing section of SCF

9



What Is "Other Equity"?

- So far, what have we seen in class?
- Stockholders' Equity (SE) = Contributed capital (CC) + Retained Earnings (RE)
- The above is a simplification! It is known as the "Clean Surplus Equation".
- In fact, Clean Surplus is often violated
- SE = CC + RE + Other Equity
- What causes changes in "Other Equity"?
 - Changes in the market value of AFS securities, for one!

10

An Illustration: Acquisition and Dividends (2002)

On Jan. 1, 2002, Ace acquired 500 common shares of security MITCo for \$25/share.

	C	MS	+MS _{adj}	=	DTL	OE	RE
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Trading:

AFS:

"Adjunct"
account

On Nov. 30, 2002, Ace received \$625 in dividends (\$1.25/share of MITCo)

	C	MS	+MS _{adj}	=	DTL	OE	RE
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Trading:

AFS:

An Illustration: Acquisition and Dividends (2002)

On Jan. 1, 2002, Ace acquired 500 common shares of security MITCo for \$25/share.

	C	MS	+MS _{adj}	=	DTL	OE	RE
Trading:	(12,500)	12,500					

AFS: Same as above

On Nov. 30, 2002, Ace received \$625 in dividends (\$1.25/share of MITCo)

	C	MS	+MS _{adj}	=	DTL	OE	RE
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Trading:

AFS:

An Illustration: Acquisition and Dividends (2002)

On Jan. 1, 2002, Ace acquired 500 common shares of security MITCo for \$25/share.

	C	MS	+MS _{adj}	=	DTL	OE	RE
Trading:	(12,500)	12,500					

AFS: Same as above

On Nov. 30, 2002, Ace received \$625 in dividends (\$1.25/share of MITCo)

	C	MS	+MS _{adj}	=	DTL	OE	RE
Trading:	625						625

AFS: Same as above "Investment income" on I/S ↗

Unrealized Gains and Losses (2002)

On Dec. 31, 2002, MITCo is trading at \$30/share. Ace elected to keep the shares, and has a tax rate of 30%.

	C	MS	+MS _{adj}	=	DTL	OE	RE
Trading:		12,500					
BB:							

EB:

	C	MS	+MS _{adj}	=	DTL	OE	RE
AFS:		12,500					
BB:							

EB:

Unrealized Gains and Losses (2002)

On Dec. 31, 2002, MITCo is trading at \$30/share. Ace elected to keep the shares, and has a tax rate of 30%.

	C	MS	+MS _{adj}	=	DTL	OE	RE
Trading:		12,500					
BB:			2,500				2,500

(\$30 - 25) x 500 "Investment income" on I/S ↗

EB:

	C	MS	+MS _{adj}	=	DTL	OE	RE
AFS:		12,500					
BB:							

EB:

Unrealized Gains and Losses (2002)

On Dec. 31, 2002, MITCo is trading at \$30/share. Ace elected to keep the shares, and has a tax rate of 30%.

Trading:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500					
			2,500				2,500
					750		(750)
					2,500 x 0.3 "Income tax expense" on I/S		
EB:							

AFS:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500					

EB:

Unrealized Gains and Losses (2002)

On Dec. 31, 2002, MITCo is trading at \$30/share. Ace elected to keep the shares, and has a tax rate of 30%.

Trading:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500					
			2,500				2,500
					750		(750)
EB:		12,500	2,500		750		

AFS:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500					

EB:

Unrealized Gains and Losses (2002)

On Dec. 31, 2002, MITCo is trading at \$30/share. Ace elected to keep the shares, and has a tax rate of 30%.

Trading:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500					
			2,500				2,500
					750		(750)
EB:		12,500	2,500		750		

AFS:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500					
			2,500		750	1,750	

No I/S effect

EB:

Unrealized Gains and Losses (2002)

On Dec. 31, 2002, MITCo is trading at \$30/share. Ace elected to keep the shares, and has a tax rate of 30%.

Trading:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500					
			2,500				2,500
					750		(750)
EB:		12,500	2,500		750		
AFS:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500					
			2,500		750		1,750
EB:		12,500	2,500		750		1,750

Unrealized Gains and Losses (2003)

On Dec. 31, 2003, MITCo is trading at \$27/share. Ace elected to keep the shares.

Trading:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500	2,500		750		
EB:							
AFS:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500	2,500		750	1,750	
EB:							

Unrealized Gains and Losses (2003)

On Dec. 31, 2003, MITCo is trading at \$27/share. Ace elected to keep the shares.

Trading:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500	2,500		750		
			(1,500)				(1,500)
EB:							
AFS:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500	2,500		750	1,750	
EB:							

(\$27 - \$30) x 500
"Investment income" on I/S

Unrealized Gains and Losses (2003)

On Dec. 31, 2003, MITCo is trading at \$27/share. Ace elected to keep the shares.

Trading:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500	2,500		750		
			(1,500)				(1,500)
					(450)		(450)
EB:							
							(\$1,500) x 0.30 "Income tax benefit" on I/S
AFS:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500	2,500		750	1,750	
EB:							

Unrealized Gains and Losses (2003)

On Dec. 31, 2003, MITCo is trading at \$27/share. Ace elected to keep the shares.

Trading:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500	2,500		750		
			(1,500)				(1,500)
					(450)		(450)
EB:		12,500	1,000		300		
AFS:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500	2,500		750	1,750	
EB:							

Unrealized Gains and Losses (2003)

On Dec. 31, 2003, MITCo is trading at \$27/share. Ace elected to keep the shares.

Trading:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500	2,500		750		
			(1,500)				(1,500)
					(450)		(450)
EB:		12,500	1,000		300		
AFS:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500	2,500		750	1,750	
			(1,500)		(450)	(1,050)	
EB:							
							No I/S effect

Unrealized Gains and Losses (2003)

On Dec. 31, 2003, MITCo is trading at \$27/share. Ace elected to keep the shares.

Trading:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500	2,500		750		
			(1,500)		(450)		(1,500)
							(450)
EB:		12,500	1,000		300		
AFS:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500	2,500		750	1,750	
			(1,500)		(450)		(1,050)
EB:		12,500	1,000		300	700	

Realized Gains and Losses (2004)

On Feb. 14, 2004, Ace sold all of its investment in MITCo, then trading at \$36/share.

Trading:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500	1,000		300		
EB:							
AFS:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500	1,000		300	700	
EB:							

Realized Gains and Losses (2004)

On Feb. 14, 2004, Ace sold all of its investment in MITCo, then trading at \$36/share.

Trading:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500	1,000		300		
		18,000	(12,500)		(1,000)		4,500
EB:							
AFS:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500	1,000		300	700	
EB:							

\$36 x 500 → Remove existing accounts → "Plug" that equals (\$36 - \$27) x 500 "Investment income" on I/S

Realized Gains and Losses (2004)

On Feb. 14, 2004, Ace sold all of its investment in MITCo, then trading at \$36/share.

Trading:	C	MS	+MSadj	=	DTL	OE	RE
BB:	18,000	12,500	1,000		300		4,500
	(1,650)	(12,500)	(1,000)		(300)		(1,350)
EB:	Pay tax on the full gain (\$18,000 - \$12,500) x 0.30		Recognize tax expense for gain in this year's I/S, \$4,500 x 0.30				
AFS:	C	MS	+MSadj	=	DTL	OE	RE
BB:		12,500	1,000		300	700	
EB:							

Realized Gains and Losses (2004)

On Feb. 14, 2004, Ace sold all of its investment in MITCo, then trading at \$36/share.

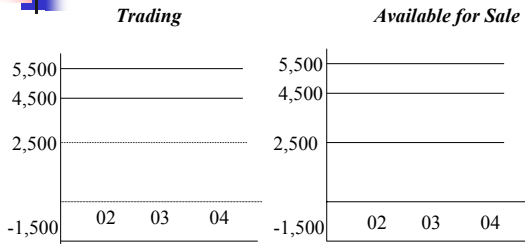
Trading:	C	MS	+MSadj	=	DTL	OE	RE
BB:	18,000	12,500	1,000		300		4,500
	(1,650)	(12,500)	(1,000)		(300)		(1,350)
EB:							
AFS:	C	MS	+MSadj	=	DTL	OE	RE
BB:	18,000	12,500	1,000		300	700	5,500
EB:	Remove existing accounts		"Plug" that equals (\$36 - \$25) x 500 "Investment income" on I/S				

Realized Gains and Losses (2004)

On Feb. 14, 2004, Ace sold all of its investment in MITCo, then trading at \$36/share.

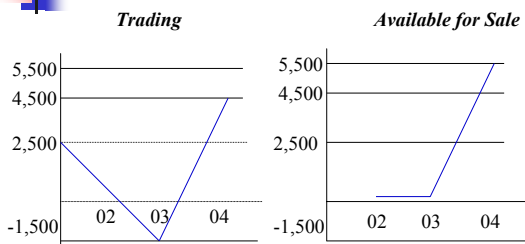
Trading:	C	MS	+MSadj	=	DTL	OE	RE
BB:	18,000	12,500	1,000		300		4,500
	(1,650)	(12,500)	(1,000)		(300)		(1,350)
EB:							
AFS:	C	MS	+MSadj	=	DTL	OE	RE
BB:	18,000	12,500	1,000		300	700	5,500
EB:	Pay tax on the full gain (\$18,000 - \$12,500) x 0.30		Recognize tax expense for the gain in this year's I/S, \$5,500 x 0.30				

Marketable Securities: Income patterns



31

Marketable Securities: Income patterns



32

Reclassifications of Marketable Securities

- Trading to Available for sale
 - Gains or losses of the period recognized on reclassification date
 - Subsequent market value changes reported in "Other Equity"

- Available for sale to Trading
 - Cumulative gains or losses, including those of current period, recognized on reclassification date
 - Subsequent market value changes reported in the income statement

33

Why does recognition of gains/losses matter?

Former SEC Chairman Breeden, on mark-to-market (ca 1990):

If you are in a volatile business, then your balance sheet and income statement should reflect that volatility. Furthermore, we have seen significant abuse of managed earnings. Too often companies buy securities with an intent to hold them as investments, and then miraculously, when they rise in value, the companies decide it's time to sell them. Meanwhile, their desire to hold those securities that are falling in value grows ever stronger. So companies report the gains and hide the losses.

Current SEC Chairman Arthur Levitt, Jr (1997):

It is unacceptable to allow American investors to remain in the dark about the consequences of a \$23 trillion derivatives exposure. We support the independence of the FASB as they turn on the light.

Federal Reserve Chairman Greenspan, on derivatives (ca 1997):

Putting the unrealized gains and losses of open derivatives contracts onto companies' income statements would introduce "artificial" volatility to their earnings and equity. Shareholders would become confused; management might forego sensible hedging strategies out of purely window dressing concerns.

34

A compromise in GAAP?

- Recognize all unrealized gains/losses for "trading securities" in Net Income

- Mark "available for sale" securities to market value, but don't report changes in the income statement
 - Reduces earnings volatility
 - Managers dislike income volatility
 - They complain similarly about other accounting method changes that increase reported earnings volatility even though underlying cash flows are unaffected

- Ignore value changes for "held to maturity" category

35

Marketable Securities in other countries

- Canada: LCM for investments classified as current assets; historical cost for noncurrent assets, but recognize "permanent" declines in value
- Mexico: Carry marketable securities at net realizable value, report gains/losses in the income statement; LCM for other investments
- Japan: LCM for marketable securities
- Others: Typically either LCM or mark-to-market, exclusively
- International Accounting Standards: Similar to US GAAP

36



Summary

- Valuation adjustment necessary when changes in market values are objectively measurable
- Lower of cost or market applied to inventory valuation
- New GAAP in marketable securities: mark-to-market treats gains and losses equally
- Disclosure vs. Recognition in mark-to-market accounting:
 - Not all gains and losses are reported in the income statement
- A compromise!
