Notes

Chapter 12

Accounting 351

Spring 2011

California State University, Northridge

Investments

Less than 20%

FAS 115; ASC 320-10-25

20-50%

ASC 323-10-15 and 35

Equity Method

Significant influence

Over 50%

Consolidation

Control

What was management's intent when making the investment?

Trading Securities	Available for Sale	Held to Maturity	Cost
Mark to **Market**	Mark to **Market**	Amortized Cost	Cost
Expected to be traded within 3 months.	Not held-to-maturity or trading securities.	Debt securities	No clearly determinable market value.

Held to Maturity

Alpha purchased 10%, 10-year $100,000 Beta bonds on July 1 for $88,530 when other bonds are paying 12%. Interest is paid on June 30 and December 31.

$5,000 x 11.46992 = $57,350
$100,000 x .31180 = <u>31,180</u>
$88,530

Discount = $100,000 - $88,530 = $11,470 (future interest)

The bonds sell for $88,530 or 88.53 (88.53% of $100,000)

Investment in Held-to-Maturity Securities	100,000	
Discount on Bond Investment		11,470
Cash		88,530

Cash	88,530	
Discount on Bonds Payable	11,470	
Bonds Payable		100,000

If purchased on April 1 (in between interest payment dates):

On June 30, Alpha will receive $5,000 (6 months) of interest but will have earned only $2,500 (3 months) of interest.

Interest payments = $100,000 x 10% x $\frac{6}{12}$ = $5,000

Alpha will prepay the interest ($2,500) that won't be earned by June 30.

Investment in Held-to-Maturity Securities	100,000	
Interest Receivable ($100,000 x 10% x $\frac{1}{4}$)	2,500	
Discount on Bond Investment		11,470
Cash		91,030

June 30

Cash	5,000	
Interest Receivable		2,500
Interest Revenue		2,500

or

Investment in Held-to-Maturity Securities	100,000	
Interest Revenue	2,500	
Discount on Bond Investment		11,470
Cash		91,030

June 30

Cash	5,000	
Interest Revenue		5,000

4

Balance Sheet

Investment in HTM Securities	$100,000
Less: Discount on Bond Investment	11,470
	$ 88,530

Face Value = $100,000
Carrying Value = 88,530
Discount = $11,470

10% = face interest rate
12% = market interest rate

(Straight-line Method) $11,470 discount/20 periods = $574 Rounded

(Effective Interest Method) $88,530 x 6% = $5,312 - $5,000 = $312 Rounded

Dec 31

Discount on Bond Investment	312	
Interest Revenue		312

Cash	5,000	
Interest Revenue		5,000

or

Cash	5,000	
Discount on Bond Investment	312	
Interest Revenue		5,312

5

Face interest rate = 10%
Market interest rate = 12%

Investment in HTMS	100,000	
Discount on Bond Inv		11,470
Cash		88,530

$88,530 x 6% - $5,000 = $312 Rounded

Discount on Bond Inv	312	
Interest Revenue		312

Cash	5,000	
Interest Revenue		5,000

In 6 months

($88,530 + 312) x 6% - $5,000 = $331

Discount on Bond Inv	331	
Interest Revenue		331

Face interest rate = 12%
Market interest rate = 10%

Investment in HTMS	100,000	
Premium on Bond Inv	12,463	
Cash		112,463

$112,463 x 5% - $6,000 = $377 Rounded

Interest Revenue	377	
Premium on Bond Inv		377

Cash	6,000	
Interest Revenue		6,000

In 6 months

($112,463 - 377) x 5% - $6,000 = $396

Interest Revenue	396	
Premium on Bond Inv		396

Trading Securities

Purchased the following equity securities.

Company	Cost
A	$15,000
B	8,000
C	10,000
Total	$33,000

Investment in Trading Securities	33,000	
Cash		33,000

End of year 1

Company	Cost	Market Value
A	$15,000	$13,000
B	8,000	5,000
C	10,000	12,000
Total	$33,000	$30,000

Unrealized Loss on Trading Securities	3,000	
Fair Value Adjustment – Trading Securities		3,000

In year 2, sold the B securities for $7,000

Cash	7,000	
Loss on Sale of Trading Securities	1,000	
Investment in Trading Securities		8,000

End of year 2

Company	Cost	Market Value
A	$15,000	$19,000
C	10,000	8,000
Total	$25,000	$27,000

Fair Value Adjustment – Trading Securities

	Debit	Credit	
		3,000	Year 1 Ending Balance
Required entry in Year 2	5,000		
Year 2 Ending Balance	2,000		

Fair Value Adjustment – Trading Securities	5,000	
Unrealized Gain on Trading Securities		5,000

Income Statement (Year 1)

Other expenses and losses:
Unrealized loss on trading securities $3,000

Balance Sheet (Year 1)

Assets

Investment in trading securities	$33,000
Less: FV adjustment – trading securities	3,000
	$30,000

9

Income Statement (Year 2)

Other revenues and gains:	
Unrealized gain on trading securities	$5,000
Other expenses and losses:	
Loss on sale of trading securities	$1,000

Balance Sheet (Year 2)

Assets	
Investment in trading securities	$25,000
Add: FV adjustment – trading securities	2,000
	$27,000

10

Available for Sale

Purchased the following equity securities.

Company	Cost
A	$15,000
B	8,000
C	10,000
Total	$33,000

Investment in Available-for-Sale Securities	33,000	
Cash		33,000

End of year 1

Company	Cost	Market Value
A	$15,000	$13,000
B	8,000	5,000
C	10,000	12,000
Total	$33,000	$30,000

Unrealized Loss on Available-for-Sale Securities	3,000	
Fair Value Adjustment – Available-for-Sale Securities		3,000

In year 2, sold the B securities for $7,000

Cash	7,000	
Loss on Sale of Available-for-Sale Securities	1,000	
Investment in Available-for-Sale Securities		8,000

End of year 2

Company	Cost	Market Value
A	$15,000	$19,000
C	10,000	8,000
Total	$25,000	$27,000

Fair Value Adjustment – Available-for-Sale Securities

	Debit	Credit	
		3,000	Year 1 Ending Balance
Required entry in Year 2	5,000		
Year 2 Ending Balance	2,000		

Fair Value Adjustment – Available-for-Sale Securities	5,000	
Unrealized Gain on Available-for-Sale Securities		5,000

Comprehensive Income

All changes in equity (net assets) except those resulting from investments by and distributions to owners.

Controlled by external market conditions, not a result of operations.

Net income
+ Other Comprehensive Income (OCI)
Comprehensive Income

Net Income
- Foreign Currency Translation Adjustment
- Unrealized Gains/Losses on Available-for-Sale Securities
- Impairment of Investment in Debt Securities
- Deferred Gains/Losses on Derivative Financial Instruments
- Minimum Pension Liability

Comprehensive Income

13

Combined Statement of Comprehensive Income

Sales
Cost of goods sold
Gross profit
Operating expenses
Net income
Foreign currency translation adjustment
Unrealized gains/losses on available-for-sale securities
Impairment of investment in debt securities
Deferred gains/losses on derivative financial instruments
Minimum pension liability
Comprehensive income

Income Statement

Sales
Cost of goods sold
Gross profit
xxxxxxx
Net income

Comprehensive Income Statement

Net income
Other comprehensive income
Foreign currency translation adjustment
Unrealized gains/losses on available-for-sale securities
Impairment of investment in debt securities
Deferred gains/losses on derivative financial instruments
Minimum pension liability
Comprehensive income

Statement of Stockholders' Equity

	Total	Comp Income	Retained Earnings	Accum Other Comp Inc	Common Stock
Beginning balance	$95,000		$10,000	$15,000	$70,000
Comprehensive income					
Net income	2,000	$2,000	2,000		
Other comprehensive income					
Translation adjustment	500	500		500	
Unrealized gains/losses	300	300		300	
Impairment losses	200	200		200	
Derivative gains/losses	100	100		100	
Minimum pension liability	600	600		600	
Comprehensive income		$3,700			
Ending balance	**$98,700**		**$12,000**	**$16,700**	**$70,000**

Balance Sheet

Stockholders' equity	
Common stock	$70,000
Retained earnings	12,000
Accumulated other comprehensive income	16,700
Total stockholders' equity	**$98,700**

IAS 39 – All unrealized gains/losses are reported in net income.

<u>Income Statement</u> (Year 1)

Net income	xxxxx
Other comprehensive income	
Unrealized loss on available-for-sale securities	$3,000

<u>Balance Sheet</u> (Year 1)

Assets	
Investment in available-for-sale securities	$33,000
Less: FV adjustment – available-for-sale securities	3,000
	$30,000
Stockholders' Equity	
Capital stock	xxxxxx
Retained earnings	xxxxxx
Accumulated other comprehensive income:	
Less: Unrealized loss on available-for-sale securities	$3,000

<u>Income Statement</u> (Year 2)

Other expenses and losses:	
Loss on sale of available-for-sale securities	$1,000
Net income	xxxxx
Other comprehensive income	
Unrealized gain on available-for-sale securities	$5,000

<u>Balance Sheet</u> (Year 2)

Assets	
Investment in available-for-sale securities	$25,000
Add: FV adjustment – available-for-sale securities	2,000
	$27,000
Stockholders' Equity	
Capital stock	xxxxxx
Retained earnings	xxxxxx
Accumulated other comprehensive income:	
Add: Unrealized gain on available-for-sale securities	$2,000

<u>Facts</u>: Purchased an equity security for **$10**.

Investment – TS	10			Investment – AFSS	10		
Cash		10		Cash		10	

<u>At year-end, the value is **$15**.</u>

FV Adjustment – TS	5			FV Adjustment – AFSS	5		
Unrealized Gain		5	NI	Unrealized Gain		5	OCI

<u>The security is sold for **$12**.</u>

Unrealized Loss – TS	5		NI	Unrealized Loss	5		OCI
FV Adjustment - TS		5		FV Adjustment - AFSS		5	
Cash	12			Cash	12		
Investment – TS		10		Investment – AFSS		10	
Gain on Sale		2	NI	Gain on Sale		2	NI
or				or			
Unrealized Loss – TS	5			Unrealized Loss	5		
Cash	12			Cash	12		
FV Adjustment - TS		5		FV Adjustment - AFSS		5	
Investment – TS		10		Investment – AFSS		10	
Gain on Sale		2		Gain on Sale		2	

Equity Method

Used when the investor is able to exercise significant control or influence over the investee (20-50% guideline).

Alpha purchased 25% of the common stock of Beta for $200,000.

Investment in Beta Stock	200,000	
Cash		200,000

Beta reported net income for the year of $240,000.

Investment in Beta Stock	60,000	
Investment Revenue		60,000

Beta paid a dividend of $36,000.

Cash	9,000	
Investment in Beta Stock		9,000

19

At the time of purchase, Beta's FV = $600,000 and BV = $540,000.

Cost $200,000

FV ($600,000 x 25%) $150,000

$50,000 Goodwill

BV ($540,000 x 25%) $135,000

$15,000

Inventory $5,000

Depreciable Assets $10,000/ 5-year life

Investment Revenue	5,000	
Investment in Beta Stock		5,000

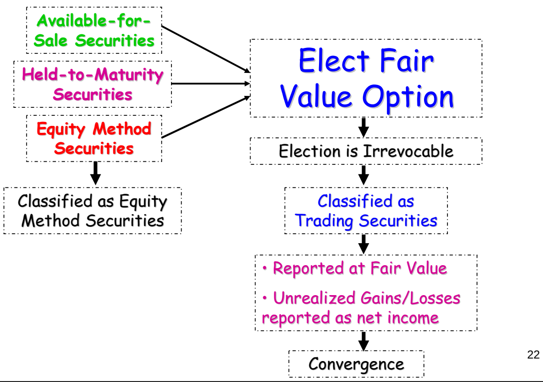
Investment Revenue	2,000	
Investment in Beta Stock		2,000

IAS 28 – Alpha would be required to change Beta's accounting policies to its own when applying the equity method.

20

	How Asset is Reported	Change in Value	Net Income
Held-to-Maturity Security	• Amortized Cost • Current or LT	Not recognized	• Interest revenue • Realized G/L
Available-for-Sale Security	• Fair value • Current or LT	Reported in SH Equity as Accum Other Comprehensive Income & I/S as Other Comp Income	• Interest/Dividends • Realized G/L
Trading Security	• Fair value • Current	Reported on I/S as unrealized G/L	• Interest/Dividends • Unrealized G/L • Realized G/L
Equity Method	Historical cost (adjusted for changes in investee net assets)	Not recognized	Investee's earnings or losses

Fair Value Option – FAS 159; ASC 825-10-25



22

Alpha purchased 25% of Beta for $200,000 and elected the fair value option. The fair value and book value of Beta's net assets were $800,000 (not $600,000 and $540,000). At year-end, Beta reported the following:

Net income = $240,000 ($240,000 x 25% = $60,000)

Dividends paid = $36,000 ($36,000 x 25% = $9,000)

Beta's fair value = $1,100,000 ($1,100,000 x 25% = $275,000)

Use the equity method the entire year and make the fair value adjustment at year-end.

(1) Find the carrying value

Cost	$200,000
Share of Beta's income	+60,000
Share of Dividends	-9,000
Carrying value	$251,000

23

(2) Find the unrealized gain/loss

Unrealized gain/loss = $275,000 - 251,000 = $24,000 gain

Fair Value Adjustment	24,000	
Unrealized Gain		24,000

(3) Find what is included in net income

Share of Beta's income	$60,000
Unrealized gain	24,000
Included in net income	**$84,000**

24

Treat as a trading security the entire year and make the entire fair value adjustment at year-end.

(1) Find the unrealized gain/loss

Unrealized gain/loss = $275,000 - 200,000 = $75,000 gain

Fair Value Adjustment	75,000	
Unrealized Gain		75,000

(2) Find what is included in net income

Dividend income	$ 9,000
Unrealized gain	75,000
Included in net income	**$84,000**

Impairment of Investments **ASC 320-10-35**

Impairment = FV is less than (amortized) cost.

Other Than Temporary Impairment (OTTI)

AFS Equity Securities (not trading securities)
- **Cannot assert the intent and ability to hold for recovery.**
- **Severity, duration, & financial condition are factors.**

→ **Recognize in earnings**

HTM or AFS Debt Securities
- **Intent to sell** (at a loss)
- **Required to sell** (more likely than not)
- **Non-Recovery** (before selling)
  - Credit loss (**recognize in earnings**)

→ **Recognize in earnings**

- **Credit loss** = amortized cost basis minus PV of expected cash flow.
- Non-credit loss (recognize in OCI)

Facts:

5%, 10-year, $10,000 bond
Cost = $10,000
Interest = $500 per year
After 5 years, FV = $6,000

Loss = $10,000 - $6,000 = $4,000

Future cash flow:
Principal = $7,000
Interest = 4% or $400

PV of principal = $7,000 x .78353 = $5,485
PV of interest = $400 x 4.32948 = 1,732
PV of future cash flow = $7,217

Credit loss = $10,000 - $7,217 = **$2,783** → Earnings

Non-credit loss = $4,000 - $2,783 = **$1,217** → **OCI**