

Lectures

Chapter 12 – Part 1 Accounting 351

California State University, Northridge

Investments

Less than 20%

ASC 320-10-25

20-50%

ASC 323-10-15 and 35

Over 50%

Equity Method

Consolidation

Significant influence

Control

For investments with less than a 20% ownership, what was management's intent when making the investment?

Trading
Securities

Mark to Market

Expected to
be traded
within 3
months.

Available
for Sale

Mark to Market

Not held-to-
maturity or
trading
securities.

Held to
Maturity

Amortized Cost

Debt
securities

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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.

$$\$5,000 \times 11.46992 = \$57,350$$

$$\$100,000 \times .31180 = 31,180$$

$$\$88,530$$

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

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

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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. [$\$100,000 \times 10\% \times \frac{3}{12} = \$2,500$]

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

April 1

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

* $\$88,530 + \$2,500 = \$91,030$

June 30

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

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Balance Sheet

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

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

(Effective Interest Method) $\$88,530 \times 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 the following compound entry:

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

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Bond interest rate = 10%
Market interest rate = 12%

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

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

Discount on Bond Inv	312
Interest Revenue	312

Cash	5,000
Interest Revenue	5,000

In 6 months

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

Discount on Bond Inv	331
Interest Revenue	331

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Bond interest rate = 12%
Market interest rate = 10%

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

$\$6,000 - (\$112,463 \times 5\%) = \$377$ Rounded

Interest Revenue	377
Premium on Bond Inv	377

Cash	6,000
Interest Revenue	6,000

In 6 months

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

Interest Revenue	396
Premium on Bond Inv	396

Issuer Name	Symbol	Coupon	Maturity	Rating Moody's/S&P Fitch	High	Low	Last	Change	Yield %
GENERAL ELECTRIC CAPITAL	GE HH	2.125%	Dec 2012	Aaa/AAA/-	102.210	100.950	101.736	0.023	1.544
FREEMONT-MCMORAN COPPER & GOLD	FCX.GK	8.250%	Apr 2015	Baa2/BBB-/BBB-	109.204	108.400	107.750	0.250	5.211
Union Carbide	DOW.HG	7.750%	Oct 2096	Baa2/BBB-/BBB-	74.500	72.500	74.500	-5.000	10.400
SVENSK EXPORTKREDIT AB	SVEX.HB	5.125%	Mar 2017	Aaa1/AAA/-	108.820	108.820	108.820	-2.250	3.728
GENERAL ELECTRIC CAPITAL	GE.HJF	2.000%	Sep 2012	Aaa1/AAA/-	101.019	101.208	101.479	0.034	1.468
DEVON ENERGY CORP	DVN.GQ	8.300%	Jan 2019	Baa1/BBB+/BBB+	113.030	111.212	112.172	-0.551	4.849
APACHE CORP	APA.GR	6.900%	Sep 2018	A3/A-JA-	119.988	119.487	119.988	-0.161	4.164
VIACOM (NEW)	VIA.HM	5.625%	Sep 2019	Baa2/BBB/BBB	106.059	105.213	106.059	1.270	4.785
PROCTER & GAMBLE CO	PG.HV	4.700%	Feb 2019	Aaa3/AAA/-	105.808	103.923	104.797	-0.199	4.070
GE GLOBAL INSURANCE HLD	GE.GG	7.750%	Jun 2030	A3/A-JA-	106.237	100.450	106.190	-3.678	7.189

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

Purchased the following equity securities.

Investment in Trading Securities33,000

Cash33,000

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

End of year 1

Unrealized Loss on Trading Securities3,000

Fair Value Adjustment - Trading Securities3,000

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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

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

End of year 2		
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Fair Value Adjustment - Trading Securities		
	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

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

Assets	
Investment in trading securities	\$33,000
Less: FV adjustment - trading securities	3,000

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

Assets	
Investment in trading securities	\$25,000
Add: FV adjustment - trading securities	2,000

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	<u>Company</u>	<u>Cost</u>
Purchased the following equity securities.	A	\$15,000
	B	8,000
	C	<u>10,000</u>
	Total	\$33,000

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

	<u>Company</u>	<u>Cost</u>	<u>Market Value</u>
End of year 1	A	\$15,000	\$13,000
	B	8,000	5,000
	C	<u>10,000</u>	<u>12,000</u>
	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
<u>Company</u>	<u>Cost</u>	<u>Market Value</u>	
End of year 2			
A	\$15,000	\$19,000	
C	10,000	8,000	
Total	\$25,000	\$27,000	
Fair Value Adjustment - Available-for-Sale Securities			
		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	

<u>Statement of Comprehensive Income</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
<u>Statement of Comprehensive Income</u> (Year 1)	
Net income	xxxxxx
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	xxxxxxx
Retained earnings	xxxxxxx
Accumulated other comprehensive income:	
Add: Unrealized gain on available-for-sale securities	\$2,000

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

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Lectures

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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	200,000
Cash		200,000

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

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

Beta paid a dividend of \$36,000.

Cash	9,000	9,000
Investment in Beta Stock		9,000

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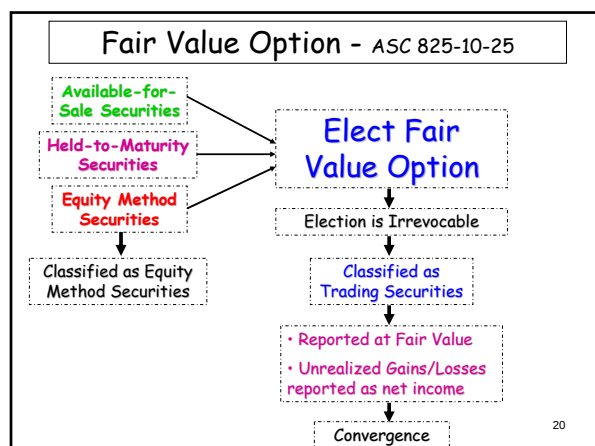
At the time of purchase, Beta's FV = \$600,000 and BV = \$540,000.

Cost	\$200,000	} \$50,000 Goodwill
FV (\$600,000 × 25%)	\$150,000	
BV (\$540,000 × 25%)	\$135,000	} \$15,000
	Inventory \$5,000	Depreciable Assets \$10,000/ 5-year life

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

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

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Alpha purchased 25% of Beta for \$200,000 and elected the fair value option. Both the fair value and book value of Beta's net assets were \$800,000. At year-end, Beta reported the following:

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

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

Fair value of Beta stock = \$1,100,000 ($\$1,100,000 \times 25\% = \$275,000$)

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

(1) Compute the carrying value at year-end.

Cost	\$200,000
Share of Beta's income	+60,000
Share of Dividends	<u>-9,000</u>
Carrying value	\$251,000

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(2) Compute the unrealized gain or loss.

Unrealized gain = \$275,000 - 251,000 = \$24,000

Fair Value Adjustment	24,000	
Unrealized Gain		24,000

(3) Compute what is included in net income.

Share of Beta's income	\$60,000
Unrealized gain	<u>24,000</u>
Included in net income	\$84,000

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

(1) Compute the unrealized gain or loss.

$$\text{Unrealized gain} = \$275,000 - 200,000 = \$75,000$$

Fair Value Adjustment	75,000
Unrealized Gain	75,000

(2) Compute what is included in net income.

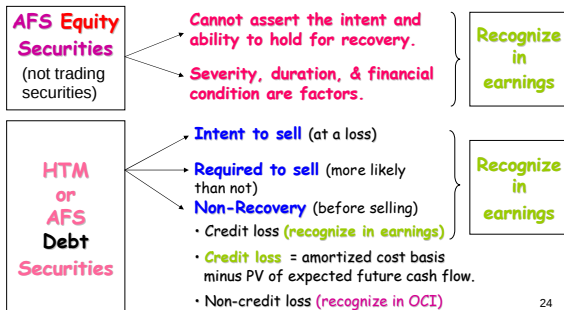
Dividend revenue	\$ 9,000
Unrealized gain	<u>75,000</u>
Included in net income	\$84,000

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Impairment of Investments ASC 320-10-35

Impairment = FV is less than (amortized) cost.

Other than Temporary Impairment (OTTI)



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Facts:

5%, 10-year, \$10,000 bond

Cost = \$10,000

Interest = \$500 per year

After 5 years, FV = \$6,000

$$\text{Loss} = \$10,000 - \$6,000 = \$4,000$$

Future cash flow:

Principal = \$7,000

Interest = 4% or \$400

$$\text{PV of principal} = \$7,000 \times .78353 = \$5,485$$

$$\text{PV of interest} = \$400 \times 4.32948 = \underline{1,732}$$

$$\text{PV of future cash flow} = \underline{\underline{\$7,217}}$$

$$\text{Credit loss} = \$10,000 - \$7,217 = \$2,783 \rightarrow \text{Earnings}$$

$$\text{Non-credit loss} = \$4,000 - \$2,783 = \$1,217 \rightarrow \text{OCI}$$

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