

Long-Term Assets Exercises I

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Problem 1

Copenhagen Corporation obtained an investment in the stock of Amsterdam Corporation. The intent of the investment was not to obtain control or to exert significant influence. Winsloe has no plans to trade the investment for near-term profits. Following is a description of the activity related to the investment in Amsterdam Corporation:

- March 5 Purchased 15,000 shares of Amsterdam Corporation at \$7 per share.
- March 31 The fair value of Amsterdam Corporation's stock was \$10 per share.
- April 30 The fair value of Amsterdam Corporation's stock was \$6.50 per share.
- May 15 Received a dividend from Amsterdam Corporation of \$0.50 per share.
- May 31 The fair value of Amsterdam Corporation's stock was \$8 per share.

- a) What method should be used to account for this investment? Does management intent influence this decision? If the investment were obtained with the objective of near-term trading for profit, what would be done differently?

- b) Prepare journal entries for the activity pertaining to the investment in Amsterdam Corporation.

Worksheet

a)

b)

GENERAL JOURNAL			
Date	Accounts	Debit	Credit
5-Mar			
31-Mar			
30-Apr			
15-May			
31-May			

Solution

- a) The investment should be accounted for as an “available-for-sale” investment. Management intent is crucial to this outcome. If the intent were to trade for a near-term profit, the investment would be accounted for as a trading security, and gains/losses would be part of “operating income” rather than “other comprehensive income.”
- b)

GENERAL JOURNAL			
Date	Accounts	Debit	Credit
5-Mar	Available for Sale Securities	105,000	
	Cash		105,000
	<i>To record the purchase of 15,000 shares of Amsterdam Corporation at \$7</i>		
31-Mar	Available for Sale Securities	45,000	
	Unrealized Gain/Loss - OCI		45,000
	<i>To record a \$3 per share increase in the value Amsterdam Corporation shares</i>		
30-Apr	Unrealized Gain/Loss - OCI	52,500	
	Available for Sale Securities		52,500
	<i>To record a \$3.50 per share decrease in the value Amsterdam Corporation shares</i>		
15-May	Cash	3,750	
	Dividend Income		3,750
	<i>To record a \$0.50 per share cash dividend on the investment in Amsterdam Corporation stock</i>		
31-May	Available for Sale Securities	22,500	
	Unrealized Gain/Loss - OCI		22,500
	<i>To record a \$1.5 per share increase in the value Amsterdam Corporation shares</i>		

Problem 2

Span Forklift invested in \$100,000 of face amount of 8-year bonds issued by Harris BioResearch Company on January 1, 20X1. The bonds were purchased at 102, and bear interest at a stated rate of 6% per annum, payable semiannually.

- a) Prepare the journal entry to record the initial investment on January, 20X1.
- b) Prepare the journal entry that Span Forklift would record on each interest date.
- c) Prepare the journal entry that Span Forklift would record at maturity of the bonds.
- d) How much cash flowed “in” and “out” on this investment, and how does the difference compare to total interest income that was recognized?

Worksheet

a), b), c)

GENERAL JOURNAL			
Date	Accounts	Debit	Credit
Issue			
Interest			
Maturity			

d)

Solution

a), b), c)

GENERAL JOURNAL			
Date	Accounts	Debit	Credit
Issue	Investment in Bonds	102,000	
	Cash		102,000
	<i>To record the purchase of \$100,000, 6%, 8-year bonds at 102 -- interest semiannually</i>		
Interest	Cash	3,000	
	Investment in Bonds		125
	Interest Income		2,875
	<i>To record the receipt of an interest payment (\$100,000 par X .06 interest X 6/12 months = \$3,000; \$2,000 premium X 6 months/96 months = \$125 amortization)</i>		
Maturity	Cash	100,000	
	Investment in Bonds		100,000
	<i>To record the redemption of bond investment at maturity</i>		

d) Total cash outflow was \$102,000, and total cash inflow was \$148,000 ($(\$3,000 \times 16 \text{ periods}) + \$100,000$). The \$46,000 difference is equivalent to the interest income that would be recognized over time ($\$2,875 \times 16 \text{ periods}$).

Problem 3

Preston Country Store invested in \$100,000 of face amount of 8-year bonds issued by Hampton Food Supply Company on January 1, 20X1. The bonds were purchased at 98, and bear interest at a stated rate of 6% per annum, payable semiannually.

- a) Prepare the journal entry to record the initial investment on January, 20X1.
- b) Prepare the journal entry that Preston would record on each interest date.
- c) Prepare the journal entry that Preston would record at maturity of the bonds.
- d) How much cash flowed “in” and “out” on this investment, and how does the difference compare to total interest income that was recognized?

Worksheet

a), b), c)

GENERAL JOURNAL			
Date	Accounts	Debit	Credit
Issue			
Interest			
Maturity			

d)

Solution

a), b), c)

GENERAL JOURNAL			
Date	Accounts	Debit	Credit
Issue	Investment in Bonds	98,000	
	Cash		98,000
	<i>To record the purchase of \$100,000, 6%, 8-year bonds at 98 - interest semiannually</i>		
Interest	Cash	3,000	
	Investment in Bonds	125	
	Interest Income		3,125
	<i>To record the receipt of an interest payment (\$100,000 par X .06 interest X 6/12 months = \$3,000; \$2,000 discount X 6 months/96 months = \$125 amortization)</i>		
Maturity	Cash	100,000	
	Investment in Bonds		100,000
	<i>To record the redemption of bond investment at maturity</i>		

d)

Problem 4

Achen Company acquired 30% of the stock of Rheinland Minerals Company. Achen acquired this investment for purposes of being able to exert significant influence over the strategic plans and operations of Rheinland. Following are events pertaining to this investment:

- Sept 1 Purchased 150,000 shares of Rheinland for \$17 per share.
- Sept 30 The fair value of Rheinland's stock was \$27 per share, and the company reported June income of \$330,000.
- Oct 15 The fair value of Rheinland's stock was \$32 per share, and the company declared and paid a dividend of \$1.25 per share.
- Oct 31 The fair value of Rheinland's stock was \$28 per share, and the company reported July income of \$270,000.

- a) What method should be used to account for this investment?
- b) Prepare journal entries to account for the activity pertaining to the investment in Rheinland Metals.
- c) If the investment in Rheinland Metals was insufficient to allow Achen to exert significant influence, how would the accounting approach differ?

Worksheet

a)

b)

GENERAL JOURNAL			
Date	Accounts	Debit	Credit

c)

Solution

a) The investment should be accounted for via the equity method. The equity method is used for investments where the investor has the ability to exert significant influence over the investee. The presumption is that the ability to exert significant influence occurs at investment levels generally at the 20% and above level (however, this presumption can be overcome and the equity can be used for investments at lower levels, and vice versa). Note that market value adjustments are generally not recorded for investments accounted for under the equity method.

b)

GENERAL JOURNAL			
Date	Accounts	Debit	Credit
1-Sep	Investment in Rheinland	2,550,000	
	Cash		2,550,000
	<i>To record the purchase of 150,000 shares of Rheinland at \$17</i>		
30-Sep	Investment in Rheinland	99,000	
	Investment Income		99,000
	<i>To record share of Rheinland's reported income (30% X \$330,000)</i>		
15-Oct	Cash	187,500	
	Investment in Rheinland		187,500
	<i>To record a \$1.25 per share cash dividend on the investment</i>		
31-Oct	Investment in Rheinland	81,000	
	Investment Income		81,000
	<i>To record share of Rheinland's reported income (30% X \$270,000)</i>		

c) In the absence of significant influence, the investment would initially be recorded at cost. Subsequent adjustments would be made based on changes in market value of the stock. The manner of recognizing these value changes would depend on whether the intent of the investment was "trading" or "available for sale." In either case, the dividends would be recorded as dividend income.

Problem 5

Euro Corporation had excess cash on hand on January 1, 20X1, and invested in three separate bond issues on that date. Each bond investment had a maturity date of December 31, 20X5, and a maturity value of \$100,000. The bond issues each pay interest on June 30 and December 31 of each year, and it is intended that these investments be held to maturity. Additional information about each investment follows:

Austria Company bonds were purchased at par and pay 8% annual interest.

Spain Company bonds were purchased for \$95,752.44 and pay 6% annual interest.

Italy Company bonds were purchased for \$104,247.56 and pay 10% annual interest.

- a) Prepare journal entries for the Austria Company bonds to record the initial investment, a periodic interest payment, and the maturity.
- b) Prepare journal entries for the Spain Company bonds to record the initial investment, a periodic interest payment, and the maturity.
- c) Prepare journal entries for the Italy Company bonds to record the initial investment, a periodic interest payment, and the maturity.

Worksheet

a)

GENERAL JOURNAL			
Date	Accounts	Debit	Credit
Issue			
Interest			
Maturity			

b)

GENERAL JOURNAL			
Date	Accounts	Debit	Credit
Issue			
Interest			
Maturity			

c)

GENERAL JOURNAL			
Date	Accounts	Debit	Credit
Issue			
Interest			
Maturity			

Solution

a)

GENERAL JOURNAL			
Date	Accounts	Debit	Credit
Issue	Investment in Bonds	100,000	
	Cash		100,000
	<i>To record the purchase of \$100,000, 8%, 5-year bonds at par -- interest semiannually</i>		
Interest	Cash	4,000	
	Interest Income		4,000
	<i>To record the receipt of an interest payment (\$100,000 par X .08 interest X 6/12 months = \$4,000)</i>		
Maturity	Cash	100,000	
	Investment in Bonds		100,000
	<i>To record the redemption of bond investment at maturity</i>		

b)

GENERAL JOURNAL			
Date	Accounts	Debit	Credit
Issue	Investment in Bonds	95,752.44	
	Cash		95,752.44
	<i>To record the purchase of \$100,000, 6%, 5-year bonds at a discount -- interest semiannually</i>		
Interest	Cash	3,000.00	
	Investment in Bonds	424.76	
	Interest Income		3,424.76
	<i>To record the receipt of an interest payment (\$100,000 par X .06 interest X 6/12 months = \$3,000; \$4,247.56 discount /12 periods = \$424.76 amortization)</i>		
Maturity	Cash	100,000	
	Investment in Bonds		100,000
	<i>To record the redemption of bond investment at maturity</i>		

c)

GENERAL JOURNAL			
Date	Accounts	Debit	Credit
Issue	Investment in Bonds	104,247.56	
	Cash		104,247.56
	<i>To record the purchase of \$100,000, 6%, 6-year bonds at a premium -- interest semiannually</i>		
Interest	Cash	5,000.00	
	Investment in Bonds		424.76
	Interest Income		4,575.24
	<i>To record the receipt of an interest payment (\$100,000 par X .10 interest X 6/12 months = \$5,000; \$4,247.56 premium/10 periods = \$424.76 amortization)</i>		
Maturity	Cash	100,000	
	Investment in Bonds		100,000
	<i>To record the redemption of bond investment at maturity</i>		

Problem 6

Summer Fun Corporation acquired 30% of the stock of Island Adventures. Summer Fun’s investment is a long-term strategic investment. Summer Fun anticipates that its investment will permit it to elect certain board members and otherwise exercise influence over the plans and policies implemented by Island Adventures.

Summer Fun paid \$5,000,000 for its 30% interest. The acquisition occurred on January 1, 20X3. On that date, Island Adventures had total stockholders’ equity of \$25,000,000. During 20X3, Island Adventures earned \$6,000,000 and paid \$1,000,000 in dividends. Both companies have December 31 year ends.

- a) Prepare Summer Fun’s entries to account for the activity pertaining to the investment in Island Adventures.
- b) Calculate the change in Island Adventure’s total equity during the year, and compare this to the change in Summer Fun’s Investment in Island Adventure’s account. Are they correlated, and does this help explain the term “equity” method of accounting.

Worksheet

a)

GENERAL JOURNAL			
Date	Accounts	Debit	Credit

b)

Solution

a)

GENERAL JOURNAL			
Date	Accounts	Debit	Credit
1-Jan	Investment in Island Adventures	5,000,000	
	Cash		5,000,000
	<i>To record the purchase of 30% of the shares of Delta</i>		
31-Dec	Investment in Island Adventures	1,800,000	
	Investment Income		1,800,000
	<i>To record share of Island Adventure's income (30% X \$6,000,000)</i>		
31-Dec	Cash	300,000	
	Investment		300,000
	<i>To record share of Island Adventure's dividends (30% X \$1,000,000)</i>		

- b) Island Adventure's equity increased from \$25,000,000 to \$30,000,000 (\$25,000,000 + \$6,000,000 - \$1,000,000). This \$5,000,000 correlates with the \$4,000,000 increase (30%) in the Investment in Island Adventure account on Coastal's books (\$5,000,000 beginning balance + \$1,800,000 debit - \$300,000 credit = \$6,500,000 ending balance). This correlation between the equity of the investee and Investment account of the investor is expected, and help explains why the term "equity" method is used to describe the accounting approach.

Problem 7

Warrick Corporation purchased all of the stock of London Corporation on July 1. Warrick paid \$6,000,000 for this investment. London's buildings had a fair value of \$3,100,000. All other assets and liabilities of London had fair values that were equivalent to their recorded amounts. Any excess purchase differential is attributable to goodwill. The separate balance sheets of Warrick and London follow. Prepare the consolidated balance sheet that would be reported to Warrick's shareholders.

WARRICK CORPORATION			
Balance Sheet			
July 1, 20X3			
Assets			
Current assets			
Cash	\$	1,130,000	
Accounts receivable		467,578	
Inventories		511,818	\$ 2,109,396
Long-term Investments			
Investment in London			6,000,000
Property, plant & equipment			
Land	\$	757,580	
Building (net of accumulated depreciation)		1,723,838	
Equipment (net of accumulated depreciation)		952,272	3,433,690
Intangible assets			
Patent			1,080,000
Total assets			<u>\$ 12,623,086</u>
Liabilities			
Current liabilities			
Accounts payable	\$	475,550	
Salaries payable		250,000	\$ 726,350
Long-term liabilities			
Loan payable			5,000,000
Total liabilities			<u>\$ 5,726,350</u>
Stockholders' equity			
Capital stock	\$	4,600,000	
Retained earnings		2,296,736	
Total stockholders' equity			<u>6,896,736</u>
Total Liabilities and equity			<u>\$ 12,623,086</u>

LONDON CORPORATION			
Balance Sheet			
July 1, 20X3			
Assets			
Current assets			
Cash	\$	69,090	
Accounts receivable		361,600	
Inventories		687,374	\$ 1,118,067
Property, plant & equipment			
Land	\$	275,552	
Building (net of accumulated depreciation)		1,376,198	
Equipment (net of accumulated depreciation)		1,315,774	2,967,524
Total assets			<u>\$ 4,085,588</u>
Liabilities			
Current liabilities			
Accounts payable	\$	237,996	
Salaries payable		46,882	\$ 284,878
Long-term liabilities			
Loan payable			1,264,358
Total liabilities			<u>\$ 1,549,236</u>
Stockholders' equity			
Capital stock	\$	1,600,000	
Retained earnings		936,352	
Total stockholders' equity			2,536,352
Total Liabilities and equity			<u>\$ 4,085,588</u>

Worksheet

WARRICK CORPORATION AND CONSOLIDATED SUBSIDIARY			
Balance Sheet			
July 1, 20X3			
Assets			
Current assets			
Cash	\$	-	
Accounts receivable		-	
Inventories		-	\$ -
Property, plant & equipment			
Land	\$	-	
Building (net of accumulated depreciation)		-	
Equipment (net of accumulated depreciation)		-	-
Intangible assets			
Goodwill	\$	-	
Patent		-	-
Total assets			\$ -
Liabilities			
Current liabilities			
Accounts payable	\$	-	
Salaries payable		-	\$ -
Long-term liabilities			
Loan payable			-
Total liabilities			\$ -
Stockholders' equity			
Capital stock	\$	-	
Retained earnings		-	
Total stockholders' equity			-
Total Liabilities and equity			\$ -

Solution

The following are summed from the separate statements except:

Building is the parent's building + \$3,100,000 (fair value of sub's building).

Goodwill is the excess of the \$6,000,000 purchase price over the equity of the sub (\$2,536,352) and additional amount assigned to the building (\$3,100,000 fair value - \$1,376,198 book value of sub's building).

Equity is the parent's equity only.

WARRICK CORPORATION AND CONSOLIDATED SUBSIDIARY			
Balance Sheet			
July 1, 20X3			
Assets			
Current assets			
Cash	\$	1,199,090	
Accounts receivable		829,178	
Inventories		1,199,192	\$ 3,227,460
Property, plant & equipment			
Land	\$	1,033,132	
Building (net of accumulated depreciation)		4,823,838	
Equipment (net of accumulated depreciation)		2,268,046	8,125,016
Intangible assets			
Goodwill	\$	1,739,846	
Patent		1,080,000	2,819,846
Total assets			<u>\$ 14,172,322</u>
Liabilities			
Current liabilities			
Accounts payable	\$	713,546	
Salaries payable		297,682	\$ 1,011,228
Long-term liabilities			
Loan payable			6,264,358
Total liabilities			<u>\$ 7,275,586</u>
Stockholders' equity			
Capital stock	\$	4,600,000	
Retained earnings		2,296,736	
Total stockholders' equity			6,896,736
Total Liabilities and equity			<u>\$ 14,172,322</u>