

Advanced Accounting
Supplementary
Problems Chapter 11

1. A US based parent company purchased all of the outstanding common stock of a foreign subsidiary on January 1, 20X1. The following exchange rates pertain to 20X1:

| | |
|---------------------------------------|-------------|
| January 1, 20X1 | €1 = \$1.25 |
| December 31, 20X2 | €1 = \$1.39 |
| Weighted average | €1 = \$1.33 |
| Exchange rate when dividends declared | €1 = \$1.37 |

At January 1, 20X1, the US dollar value of the subsidiary's retained earnings is \$803,250. For the year ending December 31, 20X1, the subsidiary reports its financial statements in Euros. The Euro-based financial statements for 20X1 are as follows:

Income Statement

| | |
|--------------------|------------------------|
| Sales | €1,250,000 |
| Cost of Goods Sold | <u>(750,000)</u> |
| Gross Profit | 500,000 |
| Operating Expenses | <u>(325,000)</u> |
| Net Income | <u><u>€175,000</u></u> |

Statement of R/E

| | |
|--------------------------|------------------------|
| Retained Earnings, 1/1 | €630,000 |
| Net Income | 175,000 |
| Dividends | <u>(17,500)</u> |
| Retained Earnings, 12/31 | <u><u>€787,500</u></u> |

Balance Sheet

| | |
|----------------------------|--------------------------|
| Assets | |
| Cash | € 159,200 |
| Accounts Receivable | 290,000 |
| Inventory | 372,500 |
| PPE, net | 896,800 |
| Total Assets | <u><u>€1,718,500</u></u> |
| Liabilities and SHE | |
| Current Liabilities | € 212,000 |
| Long-term Liabilities | 494,000 |
| Common Stock | 100,000 |
| APIC | 125,000 |
| Retained Earnings | 787,500 |
| Total Liabilities & SHE | <u><u>€1,718,500</u></u> |

INSTRUCTIONS: Assume that the Euro is the functional currency of the foreign subsidiary. Translate the subsidiary's financial statements into US dollars.

2. Axel corporation owns a subsidiary operating in Germany. The subsidiary conducts most of its business activities in the EU, and maintains its books in the Euro as its functional currency. Following are the subsidiary's condensed financial statements (in €) as of December 31, 20X3:

| Income Statement | | Balance Sheet | |
|-------------------------|------------------|-----------------------|-------------------|
| Sales | €1,095,000 | Assets | |
| Cost of Goods Sold | <u>(657,000)</u> | Cash | €11,637 |
| Gross Profit | € 438,000 | Accounts receivable | 254,040 |
| Operating Expenses | <u>(284,700)</u> | Inventory | 326,310 |
| Net Income | <u>€ 153,300</u> | PPE (net) | <u>603,564</u> |
| | | Total Assets | <u>€1,495,551</u> |
| Statement of R/E | | Liabilities and SHE | |
| R/E, 1/1/X3 | € 574,875 | Current Liabilities | € 185,712 |
| Add: Net Income | 153,500 | Long-term Liabilities | 432,744 |
| Deduct: Dividends | <u>(15,330)</u> | Common Stock | 164,250 |
| R/E, 12/31/X3 | <u>€ 712,845</u> | Retained Earnings | <u>712,845</u> |
| | | Total Liab & SHE | <u>€1,495,551</u> |

Relevant exchange rates are as follows:

| | |
|--|-------------|
| January 1, 20X3 | €1 = \$0.95 |
| December 31, 20X3 | €1 = \$1.04 |
| Average rate for 20X3 | €1 = \$1.01 |
| Date of dividend declaration and payment | €1 = \$1.02 |
| Historical rate for common stock | €1 = \$0.63 |

INSTRUCTIONS: Translate the subsidiary's income statement, statement of retained earnings and balance sheet into US dollars using the current rate. Assume that the beginning of the year retained earnings is \$437,543.

3. A US based parent company purchased all of the outstanding common stock of a foreign subsidiary on January 1, 20X1. The following exchange rates pertain to 20X1:

| | |
|---|-------------|
| January 1, 20X1 | €1 = \$1.25 |
| December 31, 20X2 | €1 = \$1.39 |
| Weighted average | €1 = \$1.33 |
| Exchange rate when dividends declared | €1 = \$1.37 |
| Exchange rate on dates of purchase of PPE | |
| Land | €1 = \$1.26 |
| Buildings | €1 = \$1.27 |
| Equipment | €1 = \$1.29 |

At January 1, 20X1, the US dollar value of the subsidiary's retained earnings is \$803,250. For the year ending December 31, 20X1, the subsidiary reports its financial statements in Euros. However, the subsidiary's functional currency is the US dollar.

The subsidiary uses the FIFO cost flow assumption. The December 31, 20X1 ending inventory was purchased on December 31, 20X1. All remaining purchases of inventory occurred evenly throughout 20X1.

The Euro-based financial data for 20X1 are on the next page.

INSTRUCTIONS: Assume that the US Dollar is the functional currency of the foreign subsidiary.

- Determine the remeasured balances for Cost of Goods Sold, PPE and Depreciation Expense.
- Remeasure the subsidiary's income statement, statement of retained earnings and balance sheet into US dollars using the temporal method.

Problem 3 Continued

Inventory

| | |
|---------------------|------------------|
| Beginning inventory | € 310,417 |
| Purchases | 812,083 |
| Ending inventory | <u>(372,500)</u> |
| Cost of Goods Sold | <u>€ 750,000</u> |

| | |
|----------------------|------------------|
| Land | € 326,800 |
| Buildings | 360,000 |
| Acc Dep'n, Buildings | (30,000) |
| Equipment | 280,000 |
| Acc Dep'n, Equipment | (40,000) |
| PPE, Net | <u>€ 896,800</u> |

| | |
|-------------------------|-----------------|
| Dep'n Expense-Building | € 30,000 |
| Dep'n Expense-Equipment | 40,000 |
| Total Dep'n Expense | <u>€ 70,000</u> |

Income Statement

| | |
|----------------------|------------------|
| Sales | €1,250,000 |
| Cost of goods sold | <u>(750,000)</u> |
| Gross profit | € 500,000 |
| Operating expense | (255,000) |
| Depreciation expense | <u>(70,000)</u> |
| Net Income | <u>€ 175,000</u> |

Statement of R/E

| | |
|--------------------------|------------------|
| Retained Earnings, 1/1 | € 630,000 |
| Net Income | 175,000 |
| Dividends | <u>(17,500)</u> |
| Retained Earnings, 12/31 | <u>€ 787,500</u> |

Balance Sheet

| | |
|---------------------|-------------------|
| Assets | |
| Cash | € 159,200 |
| Accounts receivable | 290,000 |
| Inventory | 372,500 |
| PPE, net | <u>896,800</u> |
| Total Assets | <u>€1,718,500</u> |

Liabilities and SHE

| | |
|------------------------------|-------------------|
| Current liabilities | € 212,000 |
| Long-term liabilities | 494,000 |
| Common stock | 225,000 |
| Retained Earnings | 787,500 |
| Total Liab. & SHE | <u>€1,718,500</u> |

4. A US company owns a subsidiary operating in New Zealand. The subsidiary prepares its financial statements using the New Zealand Dollar (NZD). However, because of the nature of its operations, its functional currency is the US Dollar. The following exchange rates pertain to 20X1:

| | |
|---|----------------|
| January 1, 20X1 | 1 NZD = \$0.76 |
| December 31, 20X2 | 1 NZD = \$0.93 |
| Weighted average | 1 NZD = \$0.83 |
| Exchange rate when dividends declared | 1 NZD = \$0.92 |
| Beginning inventory exchange rate | 1 NZD = \$0.76 |
| Common stock historical rate | 1 NZD = \$0.48 |
| Exchange rate on dates of purchase of PPE | |
| Land | 1 NZD = \$0.60 |
| Buildings | 1 NZD = \$0.61 |
| Equipment | 1 NZD = \$0.62 |

At January 1, 20X1, the US dollar value of the subsidiary's retained earnings is \$1,578,336. For the year ending December 31, 20X1, the subsidiary reports its financial statements in NZD. However, the subsidiary's functional currency is the US dollar.

The subsidiary uses the FIFO cost flow assumption. The December 31, 20X1 ending inventory was purchased on December 31, 20X1. All remaining purchases of inventory occurred evenly throughout 20X1.

The NZD-based financial data for 20X1 are on the next page.

INSTRUCTIONS: Assume that the US Dollar is the functional currency of the foreign subsidiary.

- Determine the remeasured balances for Cost of Goods Sold, PPE and Depreciation Expense.
- Remeasure the subsidiary's income statement, statement of retained earnings and balance sheet into US dollars using the temporal method.

Problem 4 Continued

All Values are in the New Zealand Dollar (NZD)

Inventory

| | |
|---------------------|-------------------------|
| Beginning inventory | 1,117,500 |
| Purchases | 2,923,500 |
| Ending inventory | <u>(1,341,000)</u> |
| Cost of Goods Sold | <u><u>2,700,000</u></u> |

| | |
|----------------------|-------------------------|
| Land | 980,400 |
| Buildings | 1,800,000 |
| Acc Dep'n, Buildings | (900,000) |
| Equipment | 1,200,000 |
| Acc Dep'n, Equipment | <u>(600,000)</u> |
| PPE, Net | <u><u>2,480,400</u></u> |

| | |
|-------------------------|-----------------------|
| Dep'n Expense-Building | 90,000 |
| Dep'n Expense-Equipment | <u>120,000</u> |
| Total Dep'n Expense | <u><u>210,000</u></u> |

Income Statement

| | |
|----------------------|-----------------------|
| Sales | 4,500,000 |
| Cost of goods sold | <u>(2,700,000)</u> |
| Gross profit | 1,800,000 |
| Operating expense | (960,000) |
| Depreciation expense | <u>(210,000)</u> |
| Net Income | <u><u>630,000</u></u> |

Statement of R/E

| | |
|--------------------------|-------------------------|
| Retained Earnings, 1/1 | 2,362,500 |
| Net Income | 630,000 |
| Dividends | <u>(63,000)</u> |
| Retained Earnings, 12/31 | <u><u>2,929,500</u></u> |

Balance Sheet

| | |
|---------------------|-------------------------|
| Assets | |
| Cash | 1,280,700 |
| Accounts receivable | 1,044,000 |
| Inventory | 1,341,000 |
| PPE, net | <u>2,480,400</u> |
| Total Assets | <u><u>6,146,100</u></u> |

Liabilities and SHE

| | |
|-----------------------|-------------------------|
| Current liabilities | 763,200 |
| Long-term liabilities | 1,778,400 |
| Common stock | 675,000 |
| Retained Earnings | <u>2,929,500</u> |
| Total Liab. & SHE | <u><u>6,146,100</u></u> |