

## (Section 2)

### International Accounting

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### Chapter 7

### Foreign Currency Transactions and Hedging Foreign Exchange Risk

#### Exercises and Problems

4. **C** The 100,000 shekel receivable has changed in dollar value from \$24,000 at 12/1/Y1 to \$22,000 at 12/31/Y1. The shekel receivable will be written down by \$2,000 and a foreign exchange loss will be reported in Year 1 income.
5. **D** The nominal value of the forward contract on December 31, Year 1 is a positive \$3,000, the difference between the amount to be received from the forward contract actually entered into, \$23,000 (\$.23 x 100,000 shekels), and the amount that could be received by entering into a forward contract on December 31, Year 1 that matures on January 15, Year 2, \$20,000 (\$.10 x 100,000 shekels). The fair value of the forward contract is the present value of \$3,000 discounted for two months ( $\$3,000 \times .9706 = \$2,911.80$ ). On December 31, Year 1, Reiter Corp. will recognize a \$2,911.80 gain on the forward contract and a foreign exchange loss of \$2,000 on the shekel receivable. The net impact on Year 1 income is + \$911.80.

#### 15. Budvar Company (Second Problem)

##### a. Forward Contract Cash Flow Hedge of Foreign Currency Payable

12/1/Y1	Inventory	\$20,000	
	Accounts payable (crown) [20,000 x \$1.00]		\$20,000
	No entry for the forward contract.		
12/31/Y1	Foreign exchange loss	\$1,000	
	Accounts payable (crown) [20,000 x (\$1.05-\$1.00)]		\$1,000
	AOCI	\$1,000	
	Gain on forward contract		\$1,000
	Forward contract	\$1,176.36	
	AOCI [20,000 x (\$1.04-\$1.10) = \$1,200 x .9803 = \$1,176.36]		\$1,176.36
	Premium expense	\$266.67	
	AOCI [20,000 x (\$1.04-\$1.00) = \$800 x 1/3 = \$266.67]		\$266.67

*Impact on Year 1 income:*

Foreign exchange loss	\$ (1,000.00)
Gain on forward contract	1,000.00
Premium expense	<u>(266.67)</u>
Total	<u>\$ (266.67)</u>

3/1/Y2	Foreign exchange loss	\$1,400	
	Accounts payable (crown) [20,000 x (\$1.12-\$1.05)]		\$1,400
	AOCI	\$1,400	
	Gain on forward contract		\$1,400
	Forward contract [20,000 x (\$1.12-\$1.04) = \$1,600 – 1,176.36]	\$423.64	
	AOCI		\$423.64
	Premium expense	\$533.33	
	AOCI [\$800 x 2/3 = \$533.33]		\$533.33
	Foreign currency (crown) [20,000 x \$1.12]	\$22,400	
	Cash [20,000 x \$1.04]		\$20,800
	Forward contract		1,600
	Accounts payable (crown)	\$22,400	
	Foreign currency (crown)		\$22,400
3/15/Y2	Cost of goods sold	\$20,000	
	Inventory		\$20,000

*Impact on Year 2 income:*

Foreign exchange loss	\$ (1,400.00)
Gain on forward contract	1,400.00
Premium expense	(533.33)
Cost of goods sold	<u>(20,000.00)</u>
Total	<u>\$ (20,533.33)</u>

*Impact on net income over both periods: \$(266.67) + (\$20,533.33) = \$20,800; equal to cash outflow.*

**b. Forward Contract Fair Value Hedge of Foreign Currency Payable**

12/1/Y1	Inventory	\$20,000	
	Accounts payable (crown) [20,000 x \$1.00]		\$20,000

No entry for the forward contract.

12/31/Y1	Foreign exchange loss	\$1,000	
	Accounts payable (crown) [20,000 x (\$1.05-\$1.00)]		\$1,000
	Forward contract	\$1,176.36	
	Gain on forward contract		\$1,176.36
	[20,000 x (\$1.04-\$1.10) = \$1,200 x .9803 = \$1,176.36]		

*Impact on Year 1 income:*

Foreign exchange loss	\$(1,000.00)
Gain on forward contract	<u>1,176.36</u>
Total	<u>\$ 176.36</u>

3/1/Y2	Foreign exchange loss	\$1,400	
	Accounts payable (crown) [20,000 x (\$1.12-\$1.05)]		\$1,400
	Forward contract	\$423.64	
	Gain on forward contract		\$423.64
	[20,000 x (\$1.12-\$1.04) = \$1,600 – 1,176.36]		
	Foreign currency (crown) [20,000 x \$1.12]	\$22,400	
	Cash [20,000 x \$1.04]		\$20,800
	Forward contract		1,600
	Accounts payable (crown)	\$22,400	
	Foreign currency (crown)		\$22,400
3/15/Y2	Cost of goods sold	\$20,000	
	Inventory		\$20,000

*Impact on Year 2 income:*

Foreign exchange loss	\$(1,400.00)
Gain on forward contract	423.64
Cost of goods sold	<u>(20,000.00)</u>
Total	<u>\$(20,976.36)</u>

*Impact on net income over both periods: \$176.36 + (\$20,976.36) = \$20,800; equal to cash outflow.*

**18. Butterworth Company**

**a. Forward Contract Fair Value Hedge of Foreign Currency Receivable**

10/01/Y1	Accounts Receivable (rupees) [\$.069 x 100,000]	\$6,900	
	Sales		\$6,900
	There is no formal entry for the forward contract.		
12/31/Y1	Account Receivable (rupees)	\$200	
	Foreign Exchange Gain [(\$.071 - \$.069) x 100,000]		\$200
	Loss on Forward Contract	\$891.09	
	Forward Contract		\$891.09
	[(.074 - \$.065) x 100,000 = \$ 900 x .9901 = \$ 891.09]		
1/31/Y2	Accounts Receivable (rupees)	\$100	
	Foreign Exchange Gain [(\$.072 - \$.071) x 100,000]		\$100

Forward Contract	\$191.09	
Gain on Forward Contract		\$191.09
[( $\$.072 - \$.065$ ) x 100,000 = \$ 700 loss - \$891.09 = \$ 191.09 gain]		
Foreign Currency (rupees) [ $\$.072 \times 100,000$ ]	\$7,200	
Accounts Receivable (rupees)		\$7,200
Cash	\$6,500	
Forward Contract	700	
Foreign Currency (rupees)		\$7,200

The impact on net income:

Sale	\$6,900.00
Foreign Exchange Gain	300.00
Loss on Forward Contract	(891.09)
Gain on Forward Contract	<u>191.09</u>
Impact on net income	\$6,500.00 = Cash Inflow

**b. Forward Contract Fair Value Hedge of Foreign Currency Firm Sales Commitment**

10/01/Y1 There is no entry to record either the sales agreement or the forward contract as both are executory contracts.

12/31/Y1	Loss on Forward Contract	\$891.09	
	Forward Contract		\$891.09
	Firm Commitment	\$891.09	
	Gain on Firm Commitment		\$891.09
1/31/Y2	Forward Contract	\$191.09	
	Gain on Forward Contract		\$191.09
	Loss on Firm Commitment	\$191.09	
	Firm Commitment		\$191.09
	Foreign Currency (rupees)	\$7,200	
	Sales		\$7,200
	Cash	\$6,500	
	Forward contract	700	
	Foreign Currency (LCU)		\$7,200
	Adjustment to Net Income	\$700	
	Firm Commitment		\$700

Impact on Net Income:

Sales	\$7,200	
Net loss on Forward Contract	(700)	
Net gain on Firm Commitment	700	
Adjustment for Net Income		<u>(700)</u>
	<u>\$6,500</u>	= Cash Inflow