

FA 5.3

EXERCISE 16-19

(a)

<u>December 31, 2011</u>	<u>Note</u>	<u>Rate</u>	<u>Amount</u>
Interest paid	\$ 10,000,000	5.8%	\$ 580,000
Cash paid on swap			20,000
Interest expense	\$ 10,000,000	6%	<u>\$ 600,000</u>

(b)

	December 31, 2011	
Interest Expense		580,000
Cash		580,000
Interest Expense		20,000
Cash		20,000

<u>December 31, 2012</u>	<u>Note</u>	<u>Rate</u>	<u>Amount</u>
Interest paid	\$ 10,000,000	6.6%	\$ 660,000
Cash received on swap			(60,000)
Interest expense	\$ 10,000,000	6%	<u>\$ 600,000</u>

December 31, 2012		
Interest Expense	660,000	
Cash		660,000
Cash	60,000	
Interest Expense		60,000

- (b) The interest rate swap is a cash flow hedge because the purpose in using the hedge is to protect Parton against variations in future cash flows caused by the changes in the LIBOR rate of interest. At the time of entering into the contract, Parton had not yet incurred the interest charges for the note. The cash flows are therefore related to future interest payments. Consequently the hedge cannot be a fair value hedge.

EXERCISE 16-20

(a)	December 31, 2012	
Cash		75,000
Interest Revenue		75,000
(\$1,000,000 X 7.5%)		

(b)	December 31, 2012	
Cash		13,000
Interest Revenue		13,000

(c)	December 31, 2012	
Derivatives – Trading		48,000
Holding Gain		48,000

(d)	December 31, 2012	
Holding Loss (FV-NI)		48,000
Investments in Bonds (FV-NI)		48,000

(e) The interest rate swap is a fair value hedge in this situation because the interest rate exposure is from an existing asset, the bonds.

(b) The interest rate swap can act as a cash flow hedge because the hedge allows Sarazan to participate in the potential for a higher return on its investment caused by an increase in variable interest rates in the future. At the time of entering into the contract, Sarazan had not yet earned the interest income from

its investment in bonds. The cash flows are therefore related to future interest receipts. Consequently the hedge can be a cash flow hedge. Sarazan decided to change from a fixed to variable rate of interest on its investment, using the hedge. Since the investment was already in place at the time of entering the hedge, it is a fair value hedge.

Problem 3
Integrated (Dependent) Operation

Calculation of Foreign Exchange Gain or Loss	DM		
Net Monetary Assets, Beginning of Year	(1,082,000.00)	0.45	(486,900.00)
Sales	3,150,000.00	0.48	1,512,000.00
Purchases	(1,512,000.00)	0.48	(725,760.00)
Other expenses	(672,000.00)	0.48	(322,560.00)
Dividends	(400,000.00)	0.50	(200,000.00)
PPE purchased	(126,000.00)	0.46	<u>(57,960.00)</u>
Net Monetary Assets, Calculated			(281,180.00)
	(642,000.00)		
Net Monetary Assets, End of Year	(642,000.00)	0.50	<u>(321,000.00)</u>
Actual			
Foreign Exchange Gain			<u><u>(39,820.00)</u></u>

	DM		
Sales	3,150,000.00	0.48	<u>1,512,000.00</u>
Inventory Beginning	525,000.00	0.45	236,250.00
Purchases (Derived)	1,512,000.00	0.48	725,760.00
Inventory, Ending	357,000.00	0.49	<u>(174,930.00)</u>
Cost of sales	1,680,000.00		787,080.00
Depreciation expense	105,000.00	0.45	47,250.00
Depreciation expense	42,000.00	0.45	18,900.00
Depreciation expense	21,000.00	0.46	9,660.00
Other expense	<u>672,000.00</u>	0.48	<u>322,560.00</u>
	<u>2,520,000.00</u>		<u>1,185,450.00</u>
Income Before Foreign Exchange	630,000.00		326,550.00
Foreign Exchange Gain	<u>-</u>		<u>(39,820.00)</u>
Net Income	630,000.00		286,730.00
Dividends Paid	(400,000.00)	0.50	(200,000.00)
Retained Earnings, Beginning of Year	<u>420,000.00</u>	0.45	<u>189,000.00</u>
Retained earning, End of Year	<u><u>650,000.00</u></u>		<u><u>275,730.00</u></u>

	2011 DM		
			-
Cash	105,000.00	0.50	52,500.00
Accounts receivable	168,000.00	0.50	84,000.00
Inventory	357,000.00	0.49	174,930.00
Land	420,000.00	0.45	189,000.00
Buildings (net)	1,050,000.00	0.45	472,500.00
Equipment (net)	210,000.00	0.45	94,500.00
Equipment (net)	<u>105,000.00</u>	<u>0.46</u>	<u>48,300.00</u>
	<u>2,415,000.00</u>		<u>1,115,730.00</u>
Current liabilities	315,000.00	0.50	157,500.00
Bonds payable -due Dec. 31, 2018	600,000.00	0.50	300,000.00
Common stock	850,000.00	0.45	382,500.00
Retained earnings	<u>650,000.00</u>	Above	<u>275,730.00</u>
	<u>2,415,000.00</u>		<u>1,115,730.00</u>

**Problem 2 3
Self Sustaining (Independent) Operation**

Calculation of Foreign Exchange Gain or Loss		DM		
Net Assets, Beginning of Year	1,270,000.00	0.45	571,500.00	
Net Income	630,000.00	0.48	302,400.00	
Dividends	(400,000.00)	0.50	<u>(200,000.00)</u>	
 Net Assets, Calculated	 			 673,900.00
Net Assets, End of Year	1,500,000.00	0.50	<u>750,000.00</u>	
Actual				
Foreign Exchange Gain (Loss)			<u><u>76,100.00</u></u>	
Sales		DM		
	3,150,000.00	0.48	<u>1,512,000.00</u>	
 Cost of sales	 1,680,000.00	 0.48	 806,400.00	
Depreciation expense	168,000.00	0.48	80,640.00	
Other expense	<u>672,000.00</u>	0.48	<u>322,560.00</u>	
	<u><u>2,520,000.00</u></u>		<u><u>1,209,600.00</u></u>	
 Net Income	 630,000.00		 302,400.00	
Dividends Paid	(400,000.00)	0.50	<u>(200,000.00)</u>	
Retained Earnings, Beginning of Year	<u>420,000.00</u>	0.45	<u>189,000.00</u>	
 Retained earning, End of Year	 <u><u>650,000.00</u></u>		 <u><u>291,400.00</u></u>	

	2012		
	DM		
Cash	105,000.00	0.50	52,500.00
Accounts receivable	168,000.00	0.50	84,000.00
Inventory	357,000.00	0.50	178,500.00
Land	420,000.00	0.50	210,000.00
Buildings (net)	1,050,000.00	0.50	525,000.00
Equipment (net)	<u>315,000.00</u>	<u>0.50</u>	<u>157,500.00</u>
	<u>2,415,000.00</u>		<u>1,207,500.00</u>
Current liabilities	315,000.00	0.50	157,500.00
Bonds payable -due Dec. 31, 2018	600,000.00	0.50	300,000.00
Common stock	850,000.00	0.45	382,500.00
Cumulative Translation Adjustment		Above	76,100.00
Retained earnings	<u>650,000.00</u>	<u>Above</u>	<u>291,400.00</u>
	<u>2,415,000.00</u>		<u>1,207,500.00</u>

Problem 4

\$1 = DM 2.5	0.40
\$1 = DM 2.1	0.48
\$1 = DM 1.9	0.53
\$1 = DM 1.7	0.59
\$1 = DM 2.2	0.45
\$1 = DM 2.7	0.37
\$1 = DM 2.9	0.34
\$1 = DM 2.4	0.42

Hedged - Fair Value Hedge				P&L	OCI
German transactions					
8/01/06	Inventory	180,000.00			
	Accounts payable		180,000.00		
A/P					
11/01/06	Forward contract receivable (spot)	214,285.71			180,000.00
	Forward contract payable (forward)		236,842.11		34,285.71
	Deferred foreign exchange	22,556.40			214,285.71
					50,420.17
11/01/06	Foreign exchange loss	34,285.71		(34,285.71)	
	Accounts payable		34,285.71		
	Unhedged to this point				264,705.88
					98,039.22
12/31/06	Forward contract receivable (spot)	50,420.17			166,666.67
	Foreign exchange gain		50,420.17	50,420.17	
	Foreign exchange loss	50,420.17		(50,420.17)	
	Accounts payable		50,420.17		
Cost of hedge		0.53	0.48		
			0.05		
			22,556.39		
	Deferred foreign exchange	32,296.65			Purchase FCUs 236,842.11
	Hedge revenue		32,296.65	32,296.65	Cost to exit the contract at year end 204,545.45
3/01/07	Accounts payable	98,039.22			
	Foreign exchange gain		98,039.22	98,039.22	32,296.65
	Foreign exchange loss	98,039.22		(98,039.22)	
	Forward contract receivable (spot)		98,039.22		
	Accounts payable	166,666.67			
	Forward contract receivable (spot)		166,667.67		
	Forward contract payable (forward)	236,842.11			
	Cash		236,842.11		
	Deferred foreign exchange		54,853.05		
	Hedge expense	54,833.05		(54,853.05)	
	Loss while unhedged	34,285.71			
	Cost of hedge	<u>22,556.39</u>			
		<u>56,842.10</u>		<u>(56,842.11)</u>	

Hedged - Cash Flow Hedge			P&L	OCI		
German transactions						
8/01/06	Inventory	180,000.00				
	Accounts payable		180,000.00			
11/01/06	Forward contract receivable (spot)	214,285.71			A/P	
	Forward contract payable (forward)		236,842.11		180,000.00	
	OCI - foreign exchange	22,556.40		(22,556.40)	34,285.71	
					214,285.71	hedged from here
11/01/06	Foreign exchange loss	34,285.71	(34,285.71)		50,420.17	
	Accounts payable		34,285.71		264,705.88	
	Unhedged to this point				-	
					98,039.22	
12/31/06	Forward contract receivable (spot)	50,420.17			166,666.67	
	Foreign exchange gain		50,420.17	50,420.17		
	Foreign exchange loss	50,420.17	(50,420.17)			
	Accounts payable		50,420.17			
						Purchase FCUs 236,842.11
						Cost to exit the contract at year end 204,545.45
Cost of hedge		0.53	0.48			
			0.05			
						32,296.65
	OCI - foreign exchange	32,296.65		(32,296.65)		
	Hedge revenue		32,296.65	32,296.65		
3/01/07	Accounts payable	98,039.22				
	Foreign exchange gain		98,039.22	98,039.22		
	Foreign exchange loss	98,039.22	(98,039.22)			
	Forward contract receivable (spot)		98,039.22			
	Accounts payable	166,666.67				
	Forward contract receivable (spot)		166,667.67			
	Forward contract payable (forward)	236,842.11				
	Cash		236,842.11			
	OCI - foreign exchange	54,853.05	(54,853.05)	54,853.05		
	Hedge expense	54,833.05				
			(56,842.11)	-		

Unhedged

German transactions

8/01/06 Inventory 180,000.00
Notes payable 180,000.00

12/31/06 Foreign exchange loss 84,705.88
Notes payable 84,705.88

12/31/06 Interest expense (30,864 x 5/12) 7,142.86
Interest payable 8,823.53
Foreign exchange loss 1,680.67
Calculated average Aug to Dec

Note payable	
180,000.00	
<u>84,705.88</u>	
264,705.88	

CV	Expense
450,000.00	8% 36,000.00
	<u>5/12</u>
	15,000.00
Average spot exchange	<u>2.10</u>
Interest expense	<u>7,142.86</u>
Interest payable	15,000.00
Year end rate	<u>1.70</u>
	<u>8,823.53</u>
