

B8101 Corporate Financial Reporting II Lecture 8

Agenda:

- (1) Cover accounting for speculating in a foreign currencies using forward exchange contracts (see Lecture 7 Notes).
- (2) Accounting for foreign currency (FX) options.
- (3) Hedging anticipated transactions using FX options. Written Assignment #6 – P&M Problem 17-10.
- (4) Discussion of P&M Financial Analysis Problem 17-1. Evaluating footnote disclosure of hedging activities by Apple Computer (Written Ass. #6).
- (5) Discussion of Quaker 1995 footnote disclosure (Written Ass. #6).

(2) Accounting for foreign currency options.

Use of options.

- Used by companies in addition to forward exchange contracts to hedge foreign currency risk.
- More costly than forward exchange contracts, but allows company to not use the derivative if exchange rates are favorable on the hedged transaction.

Accounting for FX Options.

- See Illustration 17-2 in P&M, page 570. Hedging an exposed asset or liability with FX options.
- Split accounting used. If at inception, option is out of the money or at the money, premium paid is considered to relate to the time value of the option.
- If at inception, option is in the money, portion of premium is considered to relate to the intrinsic value. This is measured by the difference between the strike price and the spot rate at the date the option is acquired. The remaining premium is considered to relate to time value.
- Similar to FX forward contract, the value of the option is carried in the balance sheet, except that an option cannot be a liability.
- Intrinsic value is measured at each balance sheet date and at the date of settlement. It is measured by the difference between the strike price and the spot rate. Increases or decreases in intrinsic value result in FX gains or losses in the income statement. The intrinsic value of an option cannot be less than –0-.
- If a perfect hedge, any FX loss on the hedged transaction (exposed asset or liability) will be counterbalanced by an FX gain on the hedging transaction.
- The original time value at the date the option is acquired is amortized over the life of the option. The decline in value results in hedge expense (a reduction in net income).

(3) Hedging anticipated transactions using FX options.

What is an anticipated transaction.

- Planned or budgeted transactions (sales or purchases) to be denominated in foreign currency.
- Accounting for hedges of anticipated transactions is similar but different than hedging firm commitments.
- Anticipated transactions (like committed transactions) are not recorded in the accounting records until there is an exchange (purchase or sale).

Accounting for the hedging transaction using FX options.

- Current accounting rules do not permit hedge accounting if an FX forward contract is used to hedge an anticipated transaction. Under the new rules (FASB133), hedge accounting can be used regardless of whether an option or forward contract is used.
- Split value accounting is used. Changes in the intrinsic value of the option are added or deducted from the value of the Option, and the gain or loss is deferred (liability or asset) until the anticipated transactions take place.
- Reductions in the time value are expensed in calculating net income. Deferral is not permitted because of the “speculative nature” of hedging a transaction which may not occur and the risk of overhedging.
- When the anticipated transactions occur, deferred FX gains or losses are released and used to value the hedged transaction. FX gains increase hedged sales revenue or reduce the cost of items purchased.
- If the hedge is to cover purchase or sale transactions over several accounting periods, then the portion of the deferred gain or loss that is released is based on the extent to which the “anticipated transactions” have occurred in relation to what is still anticipated.
- To get special hedge accounting (deferral) on anticipated transactions, the hedge transaction must be designated as a hedge and identified with a specific anticipated transaction or type of transactions.

P&M Problem 17-10

Hedged Anticipated Transaction	Hedging Transaction
Purchases denominated in Francs	Purchase of Call Option
1/1/91 Concern is that FF will strengthen, making purchases more costly. Therefore, purchase call option. If FF strengthens, Co can buy 1Million FF's at strike price of .39. Option cost of \$16,000. Since spot rate is above strike price, portion of option is considered intrinsic value. The remaining cost is the time value of the option.	
• Intrinsic value $(.40-.39=.01 \times \text{FF}1\text{M})$	10,000 Asset
• Time value (Cost-intrinsic value)	<u>6,000</u> Asset
Total value (cost of option)	16,000 Asset

Entry to record transaction:

No entry	(Asset) FX Option (increases) 16,000
	(Asset) Cash (decreases) 16,000

6/30/91

Purchases recorded at spot rate in effect at time of transaction.	(Asset) FX Option (increases) 70,000
	(Liab) Deferred FX Gain (incr) 70,000

	(I/S) Hedge Expense 3,000
	(Asset) FX Option (decreases) 3,000

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| • Intrinsic value (.47-.39=.08 x FF1M) | 80,000 Asset |
| • Time value (Cost-intrinsic value) | <u>3,000</u> Asset |
| Total value (cost of option) | 83,000 Asset |

The increase in the intrinsic value of \$70,000 increases the value of the option. The gain is deferred, to match against the anticipated purchases. The decrease in the time value (6/12 months) is recorded as an expense in the income statement.

6/30/91 Recognition of portion of increase in intrinsic value:

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|----------------------------------|-------------|
| • French franc purchases to date | FF 600,000 |
| • Anticipated for year | FF1,000,000 |
| • Portion completed | 60% |

Therefore, should release 60% of deferred FX gain in the option's value to offset the higher purchase prices paid on the FF denominated purchases. Since 5/6 of the purchases have been sold, their cost is included in Cost of Goods Sold in the income statement. The remaining 1/6 of the purchases are still in inventory at 6/30.

(Liab) Deferred FX Gain (decr)	42,000
(I/S) CGS (decr)	35,000
(Asset) Inventory (decr)	7,000

At December 31, the FX option change in intrinsic value will be recorded and temporarily deferred. The remaining \$3,000 of time value will be expensed. The option will be exercised, resulting in cash inflow and a corresponding reduction in the Option asset. The deferred gain or loss will be used to value the purchases made during the 2nd 6 months of the year.

(4) Discussion of P&M Financial Analysis Problem 17-1. Evaluating footnote disclosure of hedging activities by Apple Computer.**

(5) Discussion of Quaker 1995 footnote disclosure (Written Ass. #6).**

**Solutions to these problems distributed in class.

