FAS 133 Reporting and Foreign Currency Transactions

Participating Forwards

An opinion on the Appropriate Accounting & Authority with Relevant Accounting Citations



© 2007 Risk Limited Corporation

Prepared for the exclusive informational use of the clients and affiliates of Risk Limited Corporation



This paper is presented for informational purposes only and is not to be considered a solicitation or advice. The appropriate accounting and reporting for each individual company depends on specific situations and requires the assessment and decisions of company management in conjunction with their accounting professionals and independent auditors. Companies should seek independent tax advice concerning the treatment of these products. Risk Limited Corporation is not acting as an accountant, auditor or tax expert of the company and accepts no liability arising from the use of information contained in this paper.

© 2007 Risk Limited Corporation

Report Topics

	Page
• FAS 133 and Foreign Currency Transactions	1
 Description of Transaction Structure A Participating Forward 	7
 Opinion on the Appropriate Accounting & Authority with Relevant Accounting Citations Example Illustrating Accounting Treatment 	8

Derivative Instruments are designed as a risk management tool that allows companies to "hedge" their financial risk by locking in their downside risk or taking an opposite direction on the movement of an underlying. They are principally designed to remove financial risk of the present value of their assets/liabilities or of their future cash inflows or outflows.

The accounting standards for Derivative and Hedging transactions are found in FAS 133, FAS 138, and FAS 149 for US based companies and IAS 39 for companies complying with International Accounting Standards.¹ The accounting guidance found in these standards can be extremely complex to apply to the financial transactions that companies enter into in order to "hedge" their exposure to market forces. The guidance that follows applies to *ONLY* the class of derivatives known as Participating Forwards. Analogizing from the following accounting guidance to other similar derivative transactions is not recommended.

¹ See Statement of Financial Accounting Standard No. 133, *Accounting for Derivative Instruments and Hedge Activities*, issued by the Financial Accounting Standards Board (FASB), June 1998, and Statements of Financial Accounting Standards Nos. 138 and 139. Also, see IAS 39 *Financial Instruments: Recognition and Measurement*, issued by the International Accounting Standards Board (IASB).

Derivatives are defined by their characteristics. The following brief description is meant to familiarize readers with the basic concepts of derivatives. It is not intended to be definitive in the correct accounting for derivatives. It is written to provide general background for derivative and hedging transactions involving foreign currencies.

A derivative has five primary characteristics:

1. Underlying — a variable whose changes are observable (foreign currency exchange rate).

2. Notional Amount — a number of units (number of currency units). Generally, the notional amount is multiplied by the underlying to determine the settlement amount.

3. Payment Provisions — a specified payment that occurs based on a change in an underlying. This typically determines the settlement amount when the notional is not specified.

4. No or Small Initial Net Investment — either no cash investment was required to enter into the contract (the contract has no value at inception to either party) or a small investment is required to enter into the contract (payment of time value component of an option).

5. Net Settlement — the ability to settle a contract based on changes in the value of the underlying (option goes in-themoney and the holder can settle the option without taking delivery of the asset/liability attached to the option).

Accounting for derivative is based on the following fundamental concepts.

- All derivatives are measured at fair value (price that would be received for an asset or paid to transfer a liability in a current transaction between marketplace participants in the reference market for the asset or liability)
- All derivatives impact the accounts of companies by the requirement of mark to market accounting for changes in fair value of the derivative
- Hedge Accounting allows companies to designate their risk management activities, at inception of the financial contract, in such a way as to mitigate the variability of income reported (variability is caused by the requirement to record fair value changes in the accounts) by either of the following two methods:
 - 1. The change in fair value of the derivative is offset by the changes in the hedged item. Since they move in the opposite directions if the hedge is designed properly there is no earnings (or very little) variability
 - 2. The change in fair value of the derivative and the hedged item is deferred in the Capital Accounts of the Company until the transaction is settled
- Accounting Standards define three types of hedges:
 - Cash Flow Hedge writing derivative contracts on forecasted transactions of future cash receipts or cash payments
 - Fair Value Hedge writing derivative contracts on existing assets and liabilities and unrecognized firm commitments
 - 3. Net Investment Hedge contracts written on the companies foreign net assets

For a derivative contract to qualify as a **Fair Value Hedge** (advantage is the non-variability of earnings) the following characteristics must exist for the (1) derivative and (2) for the hedged item:

- (1) Derivative
- At inception there is formal documentation of the hedging relationship and the company's risk management objective and strategies for undertaking the hedge, including:
- Both at inception and on an ongoing basis the hedging relationship is expected to be highly effective in achieving offsetting changes in fair value attributable to the hedged risk during the hedging period.
- If a written option is designated as a hedge on a recognized asset or liability or an unrecognized firm commitment, the combination of the hedged item and the written option provides at least as much potential for gains as a result of a favorable change in fair value of the hedged item (no cap is placed on the upside potential for gains) as exposure to losses from an unfavorable change in the combined fair value of the hedged item and the written option.

> A combination of options e.g. a written call and purchased put on a foreign exchange contract entered into simultaneously shall be considered a written option if either at inception or over the life of the contracts a net premium is received in cash or as a favorable rate or other term. Thus a collar can be designated a hedging instrument in a fair value hedge, unless a net premium is received.

(2) Hedged Item

The hedged item is a single asset or liability or a specific portion thereof or is a portfolio of similar assets or similar liabilities.

The hedged item presents an exposure to changes in fair value attributable to the hedged risk that could affect reported earnings.

If the hedged item is a financial asset or liability (interest bearing debt) the designated risk being hedged is:

> The risk of changes in the overall fair value of the hedged item

> The risk of changes in fair value attributable to changes in the designated benchmark interest rate interest rate risk

> The risk of changes in its fair value attributable to changes in related foreign currency exchange rates foreign currency risk

> The risk of changes in its fair value attributable to changes in the obligor's creditworthiness and changes in the spread over the benchmark interest rate with respect to the hedged items credit risk at inception credit derivatives

For a Cash Flow Hedge:

(1) Derivative

Formal documentation shall include all relevant details, including the date on or period within which the forecasted transaction is expected to occur, the specific nature of the asset or liability involved, and the expected currency amount or quantity of forecasted transaction.

Both at inception and on an ongoing basis, the hedging relationship is expected to be highly effective in achieving offsetting cash flows attributable to the hedged risk during the terms of the hedge. An assessment is required whenever earnings are reported, and at least every 3 months. If the hedging instrument provides only onesided offset against the hedged risk (an at the money option contact), the cash flows from the hedging instrument must be expected to be highly effective on offsetting the corresponding change in the cash flows of the hedged item.

(2) Hedged Forecasted Transaction

The occurrence of the forecasted transaction is probable

If the hedged transaction is the forecasted purchase or sale of a financial asset or liability — or the interest payments — or the variable cash flow of an existing asset or liability the designated risk being hedged is:

The risk of changes in the functional currency equivalent cash flows attributable to changes in the related foreign currency exchange rates - exchange risk.

Description of Transaction Structure

A Participating Forward

In this transaction the company buys a Call Option — for your short currency — for 100% of the notional amount and simultaneously sells a Put Option for a percentage of the notional, usually 50%. These transactions are done for common dates and at a common strike level that equates to zero premiums payable or receivable.

The above strategy entitles you to a Transaction rate to protect exposure that arises in respect to the movement of foreign currencies. This allows you to participate in the potential for gains resulting from a favorable move in the exchange rate on an agreed portion of the total exposure while committing to a fixed rate on the balance.

Opinion on the Appropriate Accounting and Authority with Relevant Accounting Citations

A Participating Forward contains two options, a call option (purchased option contract) and a put option (written option contract). The accounting treatment favored is to treat the contract as a net purchased option or a zero-cost collar.

In order to qualify as a net purchased option or zero cost collar and therefore not be required to comply with the provisions of FAS 133, namely paragraph 20.c² for a fair value hedge or paragraph 28.c for a cash flow hedge, the following conditions must be met as illustrated in FAS 133 Implementation Issue No. E2 Combination of Options:

- 1. No net premium is received.
- 2. The components of the combination of options are based on the same underlying.
- 3. The components of the combination of options have the same maturity date.
- 4. The notional amount of the written option is not greater than the notional amount of the purchased option component.

The Participating Forward contract considered by Risk Limited for this analysis meets the above requirements and the proper accounting treatment is to account for the contract as a net purchased option. As a result, the Company entering into the contract would not be required to comply with FAS 133, paragraph 20.c or 28.c.

 $^{^{2}}$ A written option is designated as hedging a recognized asset/liability of the combination if the hedged item and the written option provides at least as much potential for gains as a result of a favorable change in fair value of the combined instruments as exposure to losses as a result of unfavorable changes in the fair value of the combined instruments.

Accounting Treatment Using a Hypothetical Example

Pricing Param Spot: Forward: Maturity Amount Currency Pair	neters EUR 1M EUR/US	1.2130 1.2254 6 months
Structure Transaction Ra % Participation	te 50%	1.2479

Fact Set:

Company forecasts that it will purchase inventory that will cost 1M EUR. The company's functional currency is the US\$. To limit its variability in USD equivalent cash flows associated with changes in the in the EUR/USD exchange rate, the Company constructs the following with its bank:

- A purchased call option providing the Company the right to purchase EUR 1M at an exchange (transaction) rate of EUR 1.0 per US\$ 1.2497
- A written put option potentially obligating the Company to purchase EUR .5M at the contract rate of 1.2479
- The remaining EUR .5M can be purchased at the transaction rate of US\$ 1.2479 or the prevailing spot rate

The purchased call option provides the Company with protection when the EUR/USD exchange rate increases above the transaction rate of 1.2479 or \$ equivalent of \$.80135. The written put will offset the premium on the call, resulting in a zero cost structure.

Hedge Effectiveness Documentation

A hedging relationship in which a zero cost structure that comprises a single purchased option and a single written option that have different notional amounts is designated as the hedging instrument and the hedge's effectiveness is based on changes in the structure's intrinsic value (changes in exchange rates), based on the strike price specified in which the structure's intrinsic value is greater than zero. (The quantities being hedged may be different).

The hedging strategy above, is used by companies that seek protection of downside risk (Transaction rate locks in protection of rising EUR versus the declining \$) while partially paying for this protection by selling some upside potential.

Foreign currency structure is hedging the variability of \$ cash flows for 100% of the forecasted inventory purchase of EUR 1M for exchange movements above 1.2479 and variability of \$ equivalent cash flows for 50% of the EUR 1M for movements below 1.2479

Since the hedge effectiveness is based on changes in the structure's intrinsic value, the effectiveness must be assessed based on the exchange rate changes by comparing the change in intrinsic value of the structure with the change in the specified quantity of the forecasted transaction for those changes in the underlying.

Accounting Entries (Fair Value of Net Purchased Option is Based on EUR 500,000)

Assume the following data

	Exchange Rate	Fair Value of Options	Change in Fair Value
Inception	1.2130		
3 Months Later	1.2548	13,731	13,731
6 Months Later (Settlement)	1.2389*	(5,114)	(18,845)
Transaction Rate	1.2479	(2,203)	(15,934)

* Below Transaction Rate

Entries for entering into the Participating Forward

EUR Exchange	1,247,900	
Cash	1,247,900	
Total record of \$'s for EUR at the transaction rate		
EUR Purchase	623,950	
EUR Purchase	606,500	
EUR Exchange	1,230,450	

<u>At inception of the hedge for the Hedging Instrument</u> No entry made because the combination of options results in zero premium due at inception.

3 Months Later on a Financial Reporting Date

Net Purchased Option 13, 731

OCI*

13, 731

To defer the change in value of the Net Purchased Option to Stockholders Equity

*OCI - Other Comprehensive Income

6 Months Later on a Settlement Date

OCI

15, 934

Net Purchased Option

15,934

To defer the change in value of the Net Purchased Option to Stockholders Equity at the Transaction Rate (Since the spot rate is below the transaction rate, we use the transaction rate. Use of the transaction rate would have produced a charge to OCI of \$18,845)

Net Purchased Option 2, 204

Cash

2,204

To record settlement of the Net Purchased Option. The Net Purchased Option is closed using the transaction rate. (Use of the Spot rate would have resulted in a charge to cash of \$5,114)

Inventory	1, 247,900
EUR	1, 247 ,900
OCI	15, 934
Inventory	15 934

To record the purchase of Inventory and to write off the OCI account against the inventory account

Analysis

The Inventory purchase at the transaction rate is offset by the gain in Fair Value of the Net Written Option as the FX rate moves outside the transaction rate, thereby, offsetting the increase that would have been required in purchasing inventory at the FX rate on date of settlement.

The Gain in Fair Value is \$2,911 greater because of the lock-in of the transaction rate.



For more information regarding FAS 133 application for foreign exchange products and other capital market transactions, contact Risk Limited Corp representatives as listed below



2300 West 32nd Street Box 610001 Dallas, TX 75261-0001 USA

> Tel: 972.245.8300 Fax: 972.245.8318

www.RiskLimited.com

© 2007 Risk Limited Corporation