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January 31, 2007

LETTER OF COMMENT NO. 2

Mr. Lawrence Smith
Director of Technical Application & Implementation Activities
Financial Accounting Standards Board
401 Merritt 7
P.O. Box 5116
Norwalk, Connecticut 06856-5116

Re: Statement 133 Implementation Issue No. H17, Foreign Currency Hedges: Hedging Functional-Currency-Equivalent Proceeds to Be Received from a Forecasted Foreign-Currency-Denominated Debt Issuance

Dear Mr. Smith:

Citigroup is pleased to have the opportunity to comment on the proposed Statement 133 Implementation Issue No. H17, *Foreign Currency Hedges: Hedging Functional-Currency-Equivalent Proceeds to Be Received from a Forecasted Foreign-Currency-Denominated Debt Issuance* (Proposed Issue H17).

Citigroup disagrees with the majority view in Proposed Issue H17. We agree with the rationale provided by the three dissenting Board members. In this letter, we explain why we agree with the dissenting Board members and demonstrate that the concept proposed is not only an amendment to Statement 133 but that it fails to distinguish between fact patterns that are clearly permitted to be designated as hedges under current guidance and those that Proposed Issue H17 states are not.

We believe that paragraphs 29(h)(3) and 36 of Statement 133 specifically permit hedges of forecasted transactions (including but not limited to debt issuances) and that implementing the Board's proposal would require an amendment of Statement 133. Paragraphs 29(h)(3) and 36 of Statement 133 (as amended) permit cash flow hedges of forecasted transactions and further state, in part;

> If the hedged transaction is the forecasted purchase or sale of a financial asset or liability...the designated risk being hedged is: (3) The risk of changes in the functional-currency-equivalent cash flows attributable to changes in the related foreign currency exchange rates.
>
> Thus, those criteria are not impediments to either a foreign currency fair value or cash flow hedge of such a foreign-currency denominated asset or liability or a foreign currency cash flow hedge of the forecasted acquisition or incurrence of a foreign-currency-denominated asset or liability whose carrying amount will be remeasured at spot exchange rates under paragraph 15 of Statement 52.

Further extracts from Statement 133 and the related literature are included as Appendix A to this letter. We believe that this is extremely clear in Statement 133, as we suspect do even the proponents of the majority view. Proposed Issue H17 therefore espouses a new notion—one that there must be a "direct" offset in earnings for cash flow hedge accounting to be permitted, which we can only conclude is an

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attempt to separate "qualifying" forecasted transactions from "non-qualifying" ones. We object to the introduction of this idea for three reasons.

The Proposal Represents an Amendment to Statement 133
This concept of "direct" earnings offset doesn't exist in the Statement as currently written and we simply fail to see any abuse or other significant practice issue that would warrant an amendment in this area. Appendix A provides a detailed analysis that includes relevant excerpts from Statement 133, as amended.

Foreign Currency Hedges of Forecasted Debt Issuances Can Impact Earnings
We disagree with the majority view response in Proposed Issue H17 that variation in functional-currency-equivalent proceeds to be received upon borrowing at a specified date in the future does **not** impact reported earnings. In the example provided in Appendix C we demonstrate that hedging functional currency equivalent proceeds to be received from a forecasted foreign-currency-denominated debt issuance clearly affects reported earnings both through the potential higher or lower interest expense (coupon on a larger or smaller principal amount of debt) and potentially higher or lower transaction gains or losses under FASB Statement No. 52, *Foreign Currency Translation*, both of which impact reported earnings.

Why is this always the case? In economic terms, a currency exchange rate always reflects the relative interest rates in the two economies. So-called *interest rate parity* drives the pricing of FX forward contracts so hedging proceeds of a forecasted debt issuance is, essentially, a hedge of the relative interest rates between the foreign and functional currencies.[1] We illustrate this in the example of Appendix D, showing that when exchange and interest rates are held constant, the cost of the hedge is precisely the cost of the interest rate differential over the hedge period.

The Concept Proposed to Distinguish Qualifying and Non-Qualifying Hedges Isn't Operational
The concept that paragraph 29(c) requires the effect on reported earnings be to directly related to the forecasted transaction itself is inherently flawed—it creates a distinction without a difference. We cannot differentiate between a hedge of the proceeds from a forecasted foreign-currency-denominated debt issuance and other foreign-currency hedging relationships that are currently acceptable under Statement 133, as amended and interpreted.

The proposal uses an example to show that the amount of FX exposure deferred is not equivalent to the change in interest expense on the hedged item. We agree that is true – but we also believe that this notion of "direct" offset is irrelevant. We note that this lack of direct offset is *also* true in both other hedges described below (and in Appendix B), except in the special case where the estimated salvage value of the machine is equal to zero. If the estimated salvage value is positive, a component of the hedged purchase price *will never go directly to earnings*—exactly like the "principal" on a bond. We summarize three common hedges below:

[1] This is true of all hedges of foreign currency exposure – it is in no way limited to the hedges discussed in Proposed Issue H17.

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Hedge of FX risk related to	Implicit components of item hedged
#1 Proceeds from forecasted debt issuance	Present value of principal repayment Present value of future coupons
#2 Cost of purchasing AFS bond	Present value of principal repayment Present value of future coupons
#3 Purchase of equipment	Estimated salvage value Depreciable component

We believe there is widespread consensus that hedges #2[2] and #3 are permitted under the provisions of Statement 133. However, since we cannot distinguish between hedges #2 and #3 and hedge #1, we believe that all three hedges must either be acceptable or all three hedges must be prohibited[3] under Statement 133. See Appendix B for more detailed illustrations of these three examples.

In our internal discussions and through minutes from the Board's discussions on this topic, we believe that supporters of the proposal are troubled by the potentially "odd" interest expense that can arise from cash flow hedge accounting. By "odd," we mean that allocating deferrals of foreign currency derivative contracts to interest expense over the life of the debt can result in very high or very low (even negative) "interest" rates. This impact is equally true in hedge #2. We don't disagree that such accruals feel odd but believe it leads to a different question than that discussed in the proposal. It suggests that the allocation (recycling out of OCI) methodology is perhaps inappropriate.

Concluding Remarks

Based on all of the above factors presented, we reiterate our belief that the Board should modify the response in Proposed Issue H17 to state that the forecasted issuance of a nonfunctional-foreign-currency debt instrument presents an exposure to variations in cash flows for a hedged risk that could affect reported earnings as required in paragraph 29(c) of Statement 133.

We also ask that the Board change its proposed view that paragraph 29(c) requires that the effect on reported earnings be directly related to the forecasted transaction itself, in part because we believe that such a view is in direct conflict with paragraph 29(h). We believe that the minority view is consistent with the requirements in paragraph 29(c) and current practice, while the majority view in Proposed Issue H17 requires an amendment of Statement 133 to implement and, even then, would not be operational in distinguishing various types of hedges that even supporting Board members believe are permitted.

* * * * *

[2] For example, hedge #2 is clearly permitted under Statement 133. Refer to paragraphs 29(h)(3) and 36. We observe *every* major source of interpretative guidance on Statement 133 that we have reviewed uses Hedge #2 as an example or describes it as a qualifying strategy.

[3] There are more possible examples. We used the three hedges listed above because they are both very common and sufficient to demonstrate the point.

We thank the Board for its consideration and would welcome the opportunity to further discuss this matter with Board members and their staff. Please do not hesitate to contact me at (212) 559-7721.

Sincerely,

Robert Traficanti
Vice President and Deputy Controller
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Appendix A

The Effect on Reported Earnings must be Directly Related to the Forecasted Transaction—Proposed Issue H17 Amended Citations

Paragraphs 28 and 29 of Statement 133 discuss the criteria that are to be met for a forecasted transaction to be eligible for designation as the hedged transaction in a cash flow hedging relationship with the criterion in paragraph 29(c) stating the following:

> The forecasted transaction is a transaction with a party external to the reporting entity (except as permitted by paragraph 40) and presents an exposure to variations in cash flows for the hedged risk **that could affect reported earnings**. [Emphasis added]

Paragraph 29(c) makes it clear that the hedged risk must be one that affects earnings. Proposed Issue H17 seems to go beyond that requirement to suggest that the hedge must be effective in both offsetting cash flows and offsetting the earnings impact.

As discussed in the alternative views section of Proposed Issue H17, there is no requirement in Statement 133 (specifically in paragraph 29(c)) for there to be a direct relationship between the gain or loss on the derivative hedging instrument and the earnings effect of the hedged forecasted transaction (hedged cash flows). To qualify for cash flow hedge accounting, there are numerous references in Statement 133 and the related Implementation Issues that require an expectation that the derivative instrument will be highly effective at offsetting the exposure to the hedged transaction's **variability in cash flows** attributable to the hedged risk, not the direct earnings impact.

The tentative conclusion in Proposed Issue H17 represents a significant change in the application and interpretation of paragraph 29(c) of Statement 133. If the Board intends to require the effect on reported earnings to be directly related to the forecasted transaction itself, this decision should be addressed by amending paragraph 29(c) along with all of the other references related to cash flow hedge accounting throughout Statement 133 and the related Implementation Issues, to reflect the fact the an entity must have the expectation that the derivative instrument will be highly effective at offsetting the exposure to the hedged transaction's cash flows and earnings impact to qualify for cash flow hedge accounting.

The following is a list of citations (with emphasis added) from Statement 133 and the related Implementation Issues, that we believe will need to be amended to incorporate this notion that the effect on reported earnings must be directly related to the forecasted transaction itself.[4]

1. Paragraph 28(b) –

   > Both at inception of the hedge 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 term of the hedge…

[4] We note that this list may not be complete, as it includes references from our initial review of the applicable guidance in Statement 133, as amended.

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2. Paragraph 29(c) –

   The forecasted transaction is a transaction with a party external to the reporting entity (except as permitted by paragraph 40) and presents an exposure to variations in cash flows for the hedged risk that could affect reported earnings.

3. Paragraph 29(h) –

   If the hedged transaction is the **forecasted purchase or sale of a financial asset or liability** (or the interest payments on that financial asset or liability) or the variable cash inflow or outflow of an existing financial asset or liability, the designated risk being hedged is:

   (3) The risk of changes in the functional-currency-equivalent cash flows attributable to changes in the related foreign currency exchange rates (refer to as foreign exchange risk) (refer to paragraphs 40, 40A, 40B, and 40C), or

4. Paragraph 30(b)(2) –

   The portion of the cumulative gain or loss on the derivative necessary to **offset the cumulative change in expected future cash flows on the hedged transaction** from inception of the hedge less the derivative's gains or losses previously reclassified from accumulated other comprehensive income into earnings pursuant to paragraph 31.

5. Paragraph 31 –

   If the hedged transaction results in the acquisition of an asset or the incurrence of a liability, the gains and losses in accumulated other comprehensive income shall be reclassified into earnings in the same period or periods during which the asset acquired or liability incurred affects earnings (such as in the periods that depreciation expense, interest expense, or cost of sales is recognized).

6. Paragraph 402 –

   This Statement requires that a hedged item or hedged forecasted transaction embody an exposure to changes in fair value or variations in cash flow, for the risk being hedged, that could affect reported earnings. That is, a change in the fair value of a hedged item or **variation in the cash flow of a hedged forecasted transaction attributable to the risk being hedged must have the potential to change the amount that could be recognized in earnings**. For example, the future sale of an asset or settlement of a liability that exposes an entity to the risk of a change in fair value may result in recognizing a gain or loss in earnings when the sale or settlement occurs. Changes in market price could change the amount for which the asset or liability could be sold or settled and, consequently, change the amount of gain or loss recognized. **Forecasted transactions that expose an entity to cash flow risk have the potential to affect reported earnings because the amount of related revenue or expense may differ depending on the price eventually paid or received**. Thus, an entity could designate the forecasted sale of a product at the market price at the date of sale as a hedged transaction because revenue will be recorded at that future sales price.

7. DIG Issue E7 –

   Upon designation of a hedging relationship (as well as on an ongoing basis), the entity must be able to justify an expectation that the relationship will be highly effective over future periods in achieving **offsetting changes in fair value or cash flows**...

   At least quarterly, the hedging entity must determine whether the hedging relationship has been highly effective in having achieved **offsetting changes in fair value or cash flows** through the date of the periodic assessment.

8. DIG Issue E8 –

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In periodically (that is, at least quarterly) assessing retrospectively the effectiveness of a fair value hedge (or a cash flow hedge) in having achieved **offsetting changes in fair values (or cash flows)** under a dollar-offset approach, Statement 133 permits an entity to use either a period-by-period approach or a cumulative approach on individual fair value hedges (or cash flow hedges). The period-by-period approach involves comparing the changes in the hedging instrument's **fair values (or cash flows)** that have occurred during the period being assessed to the changes in the hedged item's **fair value (or hedged transaction's cash flows)** attributable to the risk hedged that have occurred during the same period. The cumulative approach involves comparing the cumulative changes (to date from inception of the hedge) in the hedging instrument's **fair values (or cash flows)** to the cumulative changes in **the hedged item's fair value (or hedged transaction's cash flows)** attributable to the risk hedged. At inception of the hedge, an entity may choose either approach in designating how effectiveness will be assessed, depending on the nature of the hedge documented in accordance with paragraphs 20(a) and 28(a). For example, an entity may decide that the cumulative approach is generally preferred, yet may wish to use the period-by-period approach in certain circumstances.

9. DIG Issue G7 –

(Method 1) - The calculation of ineffectiveness involves a comparison of the present value of the cumulative change in the expected future cash flows on the variable leg of the swap and **the present value of the cumulative change in the expected future interest cash flows** on the floating-rate asset or liability.

(Method 2) - The change in the fair value of the "perfect" hypothetical swap can be regarded as a proxy for **the present value of the cumulative change in expected future cash flows on the hedged transaction** as described in paragraph 30(b)(2).

(Method 3) - For the types of cash flow hedges described in the question section, the measurement of hedge ineffectiveness may be based on a calculation that compares **the present value of the cumulative change in expected variable future interest cash flows that are designated as the hedged transactions** and the cumulative change in the fair value of the swap designated as the hedging instrument (herein referred to as the "change in fair value" method).

(Method 3) That is, in designating a cash flow hedging relationship, an entity must have the expectation, both at the inception of the hedge and ongoing, that **the relationship will be highly effective at achieving offsetting changes in cash flows**.

10. DIG Issue H16 –

To qualify for cash flow hedge accounting, Statement 133 requires an expectation that the derivative instrument will be highly effective at offsetting the exposure to the **hedged transaction's variability in cash flows** attributable to the hedged risk.

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Appendix B—Examples of Common Foreign-Currency Cash Flow Hedge Relationships

This appendix uses examples of three common foreign-currency cash flow hedge relationships to demonstrate that hedge of the proceeds from a forecasted foreign-currency debt issue is consistent with (a) a hedge of the purchase of a foreign-currency available-for-sale (AFS) security as well as (b) a hedge of the purchase of a machine in a foreign currency. For simplicity, tax effects are ignored.

Example #1—Cash Flow Hedge of the Functional-Currency-Equivalent Proceeds to Be Received from a Forecasted Foreign-Currency-Denominated Debt Issuance

When entities enter into a hedge of the functional-currency-equivalent proceeds to be received from a forecasted foreign-currency denominated debt issuance, the intent is to eliminate the variability of foreign currency cash flows related to a desired level of functional-currency equivalent proceeds. In a forecasted issuance of non-functional currency denominated borrowing, the designated risk being hedged may be characterized as the risk of changes in the functional-currency-equivalent interest payments and principal payments that would occur if the entity does not fix the principal amount to be borrowed in a foreign currency and functional-currency equivalent for changes in the foreign currency exchange rate from the inception of the hedge to the date the borrowing is originated. Thus, since the principal amount of foreign currency borrowing needed to achieve a desired functional-currency-equivalent borrowing fluctuates as a result of changes in the foreign exchange rate which are impacted by changes in the underlying interest rates (i.e., an event consistent with hedging functional-currency debt proceeds), the resulting interest paid after the borrowing occurs will vary as a result of changes in the underlying rates. We believe this is an appropriate risk to be designated under paragraph 29(h)(3) of Statement 133.

If an entity does not enter into a hedge of the functional-currency-equivalent proceeds to be received from a forecasted foreign-currency denominated debt issuance, the entity may need to raise more (or less) proceeds in a foreign-currency to receive the same amount of functional-currency equivalent proceeds. When an entity's functional currency strengthens versus the foreign currency of the borrowing, the entity would need to borrow more in the foreign currency to receive the same amount of functional-currency equivalent proceeds. The issuance of a larger amount of foreign-currency denominated debt could result in a higher interest expense (coupon on a larger principal amount of debt) and/or higher translation gains or losses under Statement 52, both of which impact reported earnings.

Background and Assumptions
On January 1, XYZ Company, a USD functional currency entity, forecasts the issuance of foreign-currency-denominated debt at par (100 FC) on June 30.

The spot forward exchange rate on January 1 is ($1:FC2). XYZ would like to lock in the USD (functional-currency-equivalent) proceeds to be received upon issuance of the FC debt. To do this, on January 1, XYZ enters into a forward exchange contract to receive $50 and sell FC100 on June 30 (forward rate of $1:FC2). By locking in the exchange rate of $1:FC2, XYZ has effectively ensured that

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the combined USD-equivalent proceeds to be received from the debt issuance and the forward exchange contract settlement on June 30 is $50 regardless of what the spot rate will be on June 30.

Upon issuance on June 30, the spot rate is $1:FC1.5. As such, the amount of USD-equivalent proceeds that XYZ will receive upon the borrowing is $66.67 (FC100 / $1:FC1.5). The value of the forward contract at expiration on June 30 is $16.67 (a liability), calculated as ((FC100 /($1:FC2) – (FC100 / $1:FC1.5)). The net combined USD proceeds received from the debt issuance and the forward contract settlement are $50, the locked-in amount.

The forward contract is designated as a cash flow hedge of the functional-currency-equivalent proceeds to be received from a forecasted foreign-currency-denominated debt issuance. The change in fair value of the forward contract will be recorded in OCI over the term of the forward contract, resulting in the following net entry on June 30:

Dr. OCI	$16.67	
Cr. Forward contract		$16.67

The debt issuance will be recorded at the current spot exchange rate on June 30 while the actual cash received (net of the settlement of the forward contract) is the locked-in amount of $50:

Dr. Cash	$50	
Dr. Forward contract	$16.67	
Cr. Debt		$66.67

If we assume that the debt has a term of 1-year and pays a 10% coupon, XYZ would recognize $6.67 of interest expense over the term of the security (assuming there are no further changes in USD/FC spot exchange rates):

Dr. Interest expense	$6.67	
Cr. Cash		$6.67

Over the term of the debt, the deferred loss on the forward contract will be recognized in earnings (most likely as an adjustment to interest expense):

Dr. Interest expense	$16.67	
Cr. OCI		$16.67

The hedging under discussion in Proposed Issue H17 (as displayed in Example #1) is consistent with the model used for other foreign currency hedges of forecasted transactions—like a cash flow hedge of the forecasted purchase of foreign-currency-denominated available-for-sale (AFS) securities as well as a cash flow hedge of a forecasted purchase of a machine in a foreign currency. These types of hedging relationships are clearly supported in Statement 133 and its related interpretations.

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Allowing hedging of forecasted purchases of foreign-currency-denominated assets while prohibiting hedging of forecasted issuances of foreign-currency-denominated debt is inconsistent given that **the same** issues discussed in Proposed Issue H17 seem to apply in both fact patterns.

Example #2—Cash Flow Hedge of a Forecasted Purchase of a Foreign-Currency-Denominated AFS Security

Background and Assumptions
On January 1, XYZ Company, a USD functional currency entity, forecasts the purchase of foreign-currency debt security at par (100 FC) on June 30.

The spot forward exchange rate on January 1 is ($1:FC2). XYZ would like to lock in the USD (functional-currency-equivalent) proceeds to be paid upon purchase of the FC debt. For simplicity purposes we ignore changes in FC price risk in this example. To do this, on January 1, XYZ enters into a forward exchange contract to receive FC100 and sell $50 on June 30 (forward rate of $1:FC2). By locking in the exchange rate of $1:FC2, XYZ has effectively ensured that the combined USD-equivalent proceeds to be paid upon purchase of the AFS security and the forward exchange contract settlement on June 30 is $50 regardless of what the spot rate will be on June 30 (again, ignoring price risk).

Upon purchase on June 30, the spot rate is $1:FC1.5. As such, the amount of USD-equivalent proceeds that XYZ will pay upon purchase is $66.67 (FC100 / $1:FC1.5). The value of the forward contract at expiration on June 30 is $16.67 (an asset), calculated as ((FC100 /($1:FC1.5) – (FC100 / $1:FC2)). The net combined USD proceeds paid for the AFS security purchase and the forward contract settlement are $50, the locked-in amount.

The forward contract is designated as a cash flow hedge of the forecasted purchase of a foreign-currency-denominated AFS security. The change in fair value of the forward contract will be recorded in OCI over the term of the forward contract, resulting in the following net entry on June 30:

Dr. Forward contract	$16.67	
Cr. OCI		$16.67

The purchase of the security in AFS will be recorded at its fair value on June 30 while the actual cash paid (net of the settlement of the forward contract) is the locked-in amount of $50:

Dr. AFS security	$66.67	
Cr. Forward contract		$16.67
Cr. Cash		$50

If we assume that the AFS security has a term of 1-year and pays a 10% coupon, XYZ would recognize $6.67 of interest income over the term of the security (assuming there are no further changes in USD/FC spot exchange rates):

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Dr. Cash	$6.67	
Cr. Interest Income		$6.67

Over the term of the AFS security, the deferred gain on the forward contract will be recognized in earnings (most likely as an adjustment to interest income):

Dr. OCI	$16.67	
Cr. Interest Income		$16.67

Example #3—Cash Flow Hedge of a Forecasted Purchase of a Machine in a Foreign-Currency

Background and Assumptions
On January 1, XYZ Company, a USD functional currency entity, forecasts the purchase of a machine in a foreign-currency for 100 FC on June 30.

The spot forward exchange rate on January 1 is ($1:FC2). XYZ would like to lock in the USD (functional-currency-equivalent) proceeds to be paid upon purchase of the machine. For simplicity purposes we ignore changes in FC price risk in this example. To do this, on January 1, XYZ enters into a forward exchange contract to receive FC100 and sell $50 on June 30 (forward rate of $1:FC2). By locking in the exchange rate of $1:FC2, XYZ has effectively ensured that the combined USD-equivalent proceeds to be paid upon purchase of the machine and the forward exchange contract settlement on June 30 is $50 regardless of what the spot rate will be on June 30 (again, ignoring price risk).

Upon purchase on June 30, the spot rate is $1:FC1.5. As such, the amount of USD-equivalent proceeds that XYZ will pay upon purchase of the machine is $66.67 (FC100 / $1:FC1.5). The value of the forward contract at expiration on June 30 is $16.67 (an asset), calculated as ((FC100 /($1:FC1.5) – (FC100 / $1:FC2)). The net combined USD proceeds paid from the machine and the forward contract settlement are $50, the locked-in amount.

The forward contract is designated as a cash flow hedge of the forecasted purchase of a foreign-currency-denominated machine. The change in fair value of the forward contract will be recorded in OCI over the term of the forward contract, resulting in the following net entry on June 30:

Dr. Forward contract	$16.67	
Cr. OCI		$16.67

The purchase of the machine will be recorded at its fair value on June 30 while the actual cash paid (net of the settlement of the forward contract) is the locked-in amount of $50:

Dr. Machine	$66.67

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Cr. Forward contract $16.67
Cr. Cash $50

If we assume that the machine has a 5-year useful-life and a salvage value of FC50, XYZ would recognize depreciation expense of FC10 per year over the 5-year useful life (FC50 total):

Dr. Depreciation expense FC50
Cr. Accumulated depreciation FC50

The equivalent entry in USD would be the following (presuming there are no further changes in the exchange rate since the purchase of the machine):

Dr. Depreciation expense $33.34
Cr. Accumulated depreciation $33.34

Also, over the useful life of the of the machine, the *portion of the* deferred gain on the forward contract will be recognized in earnings (most likely as an adjustment to depreciation expense):

Dr. OCI $8.34
Cr. Depreciation expense $8.34

The other $8.33 deferred would presumably be released upon the impairment or sale of the machine but otherwise be deferred indefinitely.

Comparing and Contrasting The Examples

	Example #1	**Example #2**	**Example #3**
Hedge of	Forecasted Issuance	Forecasted Purchase	Forecasted Purchase
Income event	Interest expense	Interest Income	Depreciation
Income event	Early Extinguishment	Sale of Security	Sale
Income event	Default or Restructuring	Impairment	Impairment
Income event	Maturity	Maturity	*Indefinite*

When looking at this table, we think is that there are no particular earnings events in each of the examples that helps us differentiate between the various hedges. We see *no* differences whatsoever between examples #1 and #2, and the sole difference between those examples and example #3 is that amounts deferred in OCI may *never* get recycled into earnings – a difference we don't really see as important, particularly because holding a debt instrument until maturity (or leaving one outstanding) is generally discretionary and an earnings event can be triggered at the choice of the party executing the hedge. That is, we do not see—in any of these hedges— a single event that is (a) not controlled by the hedging party, and (b) does not represent "an exposure to variations in cash flows for the hedged risk that could affect reported earnings."

Appendix C - Example Overview

Forecasted Foreign Currency Transaction Borrowing - to be Swapped to US Dollars Upon Receipt
Cash Flow Hedge Example

Assume a 1 year fixed rate Euro borrowing to occur on July 1, 2005. Hedge designated on January 1, 2005

Relevant FX rates:	7/1 forward rate @ 1/1	1.25	Spot rate @ 7/1	1.30	Spot rate @ 7/31	1.50

Description		No FX Forward Hedge	With FX Forward Hedge	Differences
On January 1, 2005:				
Required USD proceeds		50,000,000	50,000,000	
Forecasted EUR borrowing amount		40,000,000	40,000,000	
7/1/05 forward rate on January 1, 2005		1.25	1.25	
Forecasted USD proceeds		50,000,000	50,000,000	
FX transaction			**Forward Hedge**	
EUR amount of FX transaction			-40,000,000	
FX conversion rate - locked-in via forward contract			1.25	
Actual USD Proceeds (locked in)			50,000,000	
Settlement of FX contract			-2,000,000	
Euro Borrowing (converted to USD at 7/1 spot rate)			52,000,000	
		Spot Conversion		
EUR amount of FX transaction		-40,000,000		
7/1/05 Actual FX spot rate at time of borrowing		*1.30*		
Actual USD Proceeds with no hedge		52,000,000		
Required *incremental* EUR borrowing w/no hedge:		**-1,538,462**	-	
7/1 Actual FX conversion rate		1.30	1.30	
Adjusted incremental USD eqv. Proceeds		-2,000,000	N/A	
Adjusted actual Total USD equivalent proceeds		50,000,000	50,000,000	
Adjusted actual EUR Liability		38,461,538	40,000,000	1,538,462
EUR Interest Rate		3.00%	3.00%	
EUR Interest to be Paid (1 year Borrowing)		-1,153,846	-1,200,000	
Monthly EUR interest expense		-96,154	-100,000	
Actual USD Interest Paid with EOP Spot Rate @	1.50	-1,730,769	-1,800,000	-69,231
Euro debt outstanding at 7/31/05		38,461,538	40,000,000	
End of period 1 FX Rate @	1.50	1.50	1.50	
Translated to USD		57,692,308	60,000,000	2,307,692
FX reval of EUR borrowing USD equiv.		-7,692,308	-8,000,000	
Reval of FX Forward in OCI (Based on 7/1 Spot Rate) @	1.30	-	-2,000,000	
Net FX reval of EUR borrowing, USD equiv.		-7,692,308	-10,000,000	-2,307,692

No need to borrow more/less EUR. Amount is locked-in via forward rate in cell D5. This can be seen by adjusting the 7/1/05 spot rate in cell F5, above.

Both the USD eqv. And EUR liability amounts are locked-in via cell D5. This can be seen by adjusting the 7/1/05 spot rate in cell F5, above.

The EUR interest amount is locked-in. Pls see second table.

Reval on FX Forward at time of borrowing. This positive or negative amount effectively Locks-in the USD proceeds amount. See Journal Entries tab.

Appendix C - Example Overview

Forecasted Foreign Currency Transaction Borrowing - to be Swapped to US Dollars Upon Receipt
Cash Flow Hedge Example

Assume a 1 year fixed rate Euro borrowing to occur on July 1, 2005. Hedge designated on January 1, 2005

Relevant FX rates:	7/1 forward rate @ 1/1 1.25	Spot rate @ 7/1 1.30	Spot rate @ 7/31 1.50

This preceding example details the impact of fx revaluation risk associated with a forecasted foreign currency borrowing under a Hedge and No Hedge scenario. The Company's intends to borrow in Euro on July 1, 2005 and wants to ensure USD equivalent proceeds of $50MM (eliminate variability in forecasted cash flows related to FX risk).

The hedge utilizes standard FX forward contracts with same maturity date as forecasted start date of borrowing and in same currency (e.g., no ineffectiveness in hedge design).

The No Hedge scenario results in the need to borrow more Euro in order to receive USD proceeds of $50MM resulting in increased fx revaluation risk (FAS 52) which flows through earnings. Since the No Hedge scenario results in a different Euro notional borrowing amount (larger in this example), EUR interest expense is also impacted and, ultimately the USD interest expense is different in the hedge and no-hedge scenarios.

Put another way, in an FX environment where the company believes the dollar will strengthen relative to the Euro and desires to borrow in Euro in the future (wants to ensure USD proceeds of $50MM), the company can lock in its USD cash flows at inception of the hedge through an FX forward designated as a hedge of FX risk on a forecasted borrowing (cash flow variability eliminated). As this example shows, this variability in cash flows effects reported earnings through higher (or lower, if exchanges rates do not move in the direction forecasted) borrowing costs. Also, by locking in the USD proceeds (elimination of cash flow variability from the proceeds), the lower notional borrowing amount (in Euro) results in a lower FAS 52 transaction gain/loss which also impacts earnings.

Appendix C - Example Overview

Forecasted Foreign Currency Transaction Borrowing - to be Swapped to US Dollars Upon Receipt
Cash Flow Hedge Example

Assume a 1 year fixed rate Euro borrowing to occur on July 1, 2005. Hedge designated on January 1, 2005

Relevant FX rates:	7/1 forward rate @ 1/1	1.25	Spot rate @ 7/1	1.30	Spot rate @ 7/31	1.50

FAS 52 Reval With Hedge

Beginning Period EUR/USD →		1.00	1.10	1.20	1.30	1.40
End of Period EUR/USD →	1.00	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000
	1.10	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000
	1.20	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
	1.30	-2,000,000	-2,000,000	-2,000,000	-2,000,000	-2,000,000
	1.40	-6,000,000	-6,000,000	-6,000,000	-6,000,000	-6,000,000
	1.50	-10,000,000	-10,000,000	-10,000,000	-10,000,000	-10,000,000
	1.60	-14,000,000	-14,000,000	-14,000,000	-14,000,000	-14,000,000
	1.70	-18,000,000	-18,000,000	-18,000,000	-18,000,000	-18,000,000
	1.80	-22,000,000	-22,000,000	-22,000,000	-22,000,000	-22,000,000

Regardless of the beginning period FX rate at time of borrowing (7/1/05), for a given EOP of FX rate, the FAS52 impact is locked-in. Can be seen by looking across a particular row, e.g.: if EOP FX rate is 1.00, then the FAS52 reval is $10mm regardless of starting FX spot rate

FAS 52 Reval Without Hedge

Beginning Period EUR/USD →		1.00	1.10	1.20	1.30	1.40
End of Period EUR/USD →	1.00	0	4,545,455	8,333,333	11,538,462	14,285,714
	1.10	-5,000,000	0	4,166,667	7,692,308	10,714,286
	1.20	-10,000,000	-4,545,455	0	3,846,154	7,142,857
	1.30	-15,000,000	-9,090,909	-4,166,667	0	3,571,429
	1.40	-20,000,000	-13,636,364	-8,333,333	-3,846,154	0
	1.50	-25,000,000	-18,181,818	-12,500,000	-7,692,308	-3,571,429
	1.60	-30,000,000	-22,727,273	-16,666,667	-11,538,462	-7,142,857
	1.70	-35,000,000	-27,272,727	-20,833,333	-15,384,615	-10,714,286
	1.80	-40,000,000	-31,818,182	-25,000,000	-19,230,769	-14,285,714

FAS 52 reval not locked-in across various EOP FX rates

FAS 52 Reval - Difference

Beginning Period EUR/USD →		1.00	1.10	1.20	1.30	1.40
End of Period EUR/USD →	1.00	10,000,000	5,454,545	1,666,667	-1,538,462	-4,285,714
	1.10	11,000,000	6,000,000	1,833,333	-1,692,308	-4,714,286
	1.20	12,000,000	6,545,455	2,000,000	-1,846,154	-5,142,857
	1.30	13,000,000	7,090,909	2,166,667	-2,000,000	-5,571,429
	1.40	14,000,000	7,636,364	2,333,333	-2,153,846	-6,000,000
	1.50	15,000,000	8,181,818	2,500,000	-2,307,692	-6,428,571
	1.60	16,000,000	8,727,273	2,666,667	-2,461,538	-6,857,143
	1.70	17,000,000	9,272,727	2,833,333	-2,615,385	-7,285,714
	1.80	18,000,000	9,818,182	3,000,000	-2,769,231	-7,714,286

Details the impact on earnings via FAS52 reval between No hedge and Hedge scenarios.

Euro Interest Expense

Beginning Period EUR/USD →	1.00	1.10	1.20	1.30	1.40
Without FX hedge	1,500,000	1,363,636	1,250,000	1,153,846	1,071,429
With FX Hedge	*1,200,000*	*1,200,000*	*1,200,000*	*1,200,000*	*1,200,000*
Difference	300,000	163,636	50,000	-46,154	-128,571

EUR interest expense amount is locked-in via hedge. Note, that as shown above, the EUR principal as well as USD eqv. Proceeds amount is also locked-in.

Appendix C - Example Journal Entries

Forecasted Foreign Currency Transaction Borrowing - to be Swapped to US Dollars Upon Receipt
Cash Flow Hedge Example

Assume a 1 year fixed rate Euro borrowing to occur on July 1, 2005. Hedge designated on January 1, 2005

Relevant FX rates:		
	1/1 forward rate	1.25
	7/1 spot rate	1.30
	7/31 spot rate	1.50

			With Hedge				No Hedge			
			Euro		USD		Euro		USD	
			Dr	CR	DR	CR	Dr	CR	DR	CR
1/1/2005	Designate FX forward as hedge of forecasted Euro borrowing.									
1/1 to 7/1	DR	FX Forward Contract			- 2,000,000					
	CR	OCI - CF Hedge				- 2,000,000				
	Cumulative recognition in OCI of Cash Flow hedge impact									
7/1/2005	DR	Cash			- 2,000,000					
	CR	FX Forward Contract				- 2,000,000				
	Settle FX forward									
7/1/2005	DR	Cash (Euro)	40,000,000				38,461,538			
	CR	Euro Debt		40,000,000				38,461,538		
	Borrow in Euro									
7/31/05	DR	OCI			- 166,667					
	CR	Amortization of OCI Gain				- 166,667				
	DR	Interest Expense	100,000				96,154			
	CR	Accrued Interest		100,000				96,154		
7/31/05	DR (CR)	Euro Debt			(8,000,000)				(7,692,308)	
	CR (DR)	FAS 52 Transaction (Gain)/loss				(8,000,000)				(7,692,308)
Recap										
7/1/2005		Euro Debt		40,000,000		52,000,000		38,461,538		50,000,000
		OCI - to be amortized over tenor of debt				- 2,000,000				
7/31/015		Euro Debt		40,000,000		60,000,000		38,461,538		57,692,308
		OCI - to be amortized over tenor of debt				- 1,833,333				
		(Income) / Expense:								
		Amortization of OCI				166,667				
		Interest expense		100,000		150,000		96,154		144,231
		FAS 52 Transaction (Gain) Loss (Reval of Debt)				8,000,000				7,692,308
		Total P&L				8,316,667				7,836,538

Appendix D - Rate Differentials

FX Refresher:

FX Spot, FX forwards are quoted in units of Domestic Currency per Foreign Currency. For example: a USDBRL FX Spot Rate of BRL 2.00 corresponds that BRL 2.00 are necessary

FX Forward Rate is quoted based on the current FX spot rate (BRL 2.00 to US$ 1.00) and the interest rates in both currencies (also called the interest rate differential or forward

$$\text{FX Forward Rate} = \frac{\text{FX Spot Rate} * (1 + \text{Domestic Interest Rates})}{(1 + \text{Foreign Interest Rates})}$$

	Inception		Forecasted Borrowings (1 Year later)		
Market Data					
FX Spot rate	BRL	2.0000	BRL	2.00	
1-Y BRL Fixed Int. Rates (Domestic)		13.00%			
1-Y USD Fixed Int. Rates (Foreign)		5.00%			
as per FX Forward Rate identity, 1 Year					
FX Forward Rate =	BRL	2.1524			
			Cash Flows		
			in BRL Ccy	**in USD**	
Forecasted Borrowings:					
Vehicle Functional Ccy:	USD				
Borrowings Starting Date:	1 year from now				
Forecasted Borrowings in BRL:	BRL	2,000.00	BRL	2,000.00	£ 1,000.00
Forecasted Borrowings in USD	£	1,000.00			
Cash Flow Hedge					
Sell BRL forward (1-Year)					
Notional BRL	BRL	(2,000.00)	BRL	(2,000.00)	-£ 1,000.00
FX Forward Rate	BRL	2.1524			
Notional USD	£	929.20			$ 929.20
			Total Cash Flows	**BRL -**	**$ 929.20**

The difference between the original forecasted debt amount in USD terms and the final proceeds received is the **interest rate differential** between the two currencies (USD and BRL) locked at the inception of the derivative

Cash Flows at Forecasted Borrow Date		**USD**
Spot FX Gain or Loss on Derivative	£	-
Changes in the Forecasted borrowings amount due to FX Spot	£	-
Interest Rate Differential Gain or Loss (pay 13% in BRL, earn 5% in USD)	-£	70.80
Total Cash Flows	**$**	**(70.80)**