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12 UNINTENDED CONSEQUENCES OF THE NEW ACCOUNTING STANDARD

BY BARCLAY T. LEIB

While many bemoan the added administrative burden FAS 133 has created for corporate treasurers, the standard has also led to several more specific, often unintended and sometimes surprising trends. Here are the top 12 changes cited by corporate treasurers, FAS 133 software vendors, Big-Five consultants and derivatives salespeople. Overall, they are not pretty.

1. Corporate options trading volume is dropping.

"I'd say corporate option volumes are down 50–60 percent so far this year," says one knowledgeable currency options salesperson at a New York bank. "Everyone is lost, and most are too embarrassed to admit they still don't understand the rules, so until they figure it out, they're definitely doing less business."

When this salesperson turned for guidance to a Big-Five accounting firm to help him better understand his clients' new FAS 133 problems, he, too, got little help. "Even at this late date, I couldn't get any good broad-brush answers to my questions," he states. "Instead they sent me this huge friggin' Bulletin to read. It's really pretty frustrating."

This salesman's perception is confirmed by three corporate treasurers, who point out that the accounting rules that once disadvantaged the use of forward hedges now disad-

vantage options strategies. "Our notional amount of options trading dropped in anticipation of this," says the treasurer of one West Coast technology company, "and it certainly will remain much lower than it used to be."

The key problem hurting the use of options revolves around FAS 133's treatment of time value. Even if a corporate treasurer identifies a specific exposure covered by an option purchase, the resulting package of exposure plus hedge only qualifies for hedge accrual accounting on the "effective" part of the hedge. Under FAS 133, the effective portion is deemed the intrinsic-value portion of the option. Changes in the time-value portion must now get reported to earnings. Extracting part of a derivative's value not only creates an administrative burden, but adds earnings volatility far beyond the original cost of the option.

Imagine a treasurer who buys an out-of-the-money option as disaster insurance, paying a premium cost of just 1 percent. As this option moves to be at-the-money,

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its time value might rise to 5 percent and be reportable as a positive earnings event, only to get written off in a later quarter when the time value of the option invariably retreats.

It's also ironic that just when Wall Street finally invented such nifty option products as one-touch options, participating forwards, and down-and-out knockout options—all of which help clients reduce option premium expense—few corporates will now dare to use them.

The FAS's Derivative Implementation Group has been singularly quiet on the treatment of exotic options, and no one has pushed the issue with the committee. "It is almost as if people are afraid to ask the question," says Michael Joseph, an Ernst & Young partner and DIG member. "The statement simply explains that if you can demonstrate equal risk and reward on a hedge and overall hedge effectiveness, any product is all right."

But can exotic options deliver this? Consider, for example, a corporate with yen receivables that buys a dollar call against the yen struck at 116 that also knocks out at 110. If spot yen goes to 110, and he gets knocked out of his option, he documents that his intention is to establish a full forward hedge. He's covered in all instances, right? His hedge strategy should be reasonably effective against his long yen exposure across a wide range of prices, right? Well, technically, maybe not.

In such a situation, the delta of the option would start to do funny things if the spot price approaches the knockout barrier. With a great deal of time to expiration, the probability of a knockout may be so high that the delta would fall near zero—making it unlikely to pass a hedge effectiveness test. Near maturity, the delta could move to 160 percent, given the large leverage and short distance to a knockout level, again blowing any hedge effectiveness test. And the intention to buy spot dollar-yen at 110 "isn't worth anything to FASB," according to one bank derivatives strategist.

So in the words of consultant Ira Kawaller, founder and president of Kawaller & Co., "For people who want hedge accounting, many of these instruments are off the table. Nobody's going to risk it. Even when using plain-vanilla option strategies, FASB imposes limiting restrictions on any deviation from the most basic combinations."

Specifically, FAS 133 still allows hedge accounting on collared trades and other multiple-option hedges, but imposes two overriding mandates: a firm must trade such a strategy at a zero cost or at a debit, and the firm must demonstrate the strategy's equal risk/reward and overall hedge effectiveness.

"The easy litmus test is that any trade done for a credit is unlikely to qualify for hedge accounting," says Kawaller. This creates the almost crazy possibility that a corporate treasurer might call a bank looking for a risk-reversal, get

shown a better price than expected and be forced to respond, "Gee that's a great price. You'll pay me \$10,000 for that risk-reversal? Sorry, I can't do it. I need to trade at flat."

So for the moment, if options are traded at all, simple strategies seem to be more saleable than complex ones. Some corporate clients have also instituted a policy of holding option hedges only intra-quarter, if they hold them at all. Others are engaging only in option hedges that start out with a high effectiveness ratio near 80 percent—long a 40-delta call and short a 40-delta put, for example, instead of spacing the strikes of these options farther apart.

"In equity derivatives there is still a strong desire to avoid a constructive-sale designation that would trigger a tax event," says Roger Ehrenberg, a managing director and head of corporate equity derivatives marketing at Deutsche Bank. "But people also want the highest effective delta from a risk perspective—in part because of FAS 133 issues. This requires a delicate balancing act between tax treatment and hedge effectiveness in order to optimize the hedged position."

2. Forward hedging is on the rise.

Given all the frustration with FAS 133 documentation, some people overlook its advantages. In the past, if corporate treasurers wanted to establish forward hedges against future anticipated cash flows or receivables, they had to mark these forward positions to market while leaving the underlying exposures completely unaccounted for until realized. To get around the resulting accounting fluctuations, companies often resorted to embedded forward contracts in bank loans or other structured products—paying millions of dollars to Wall Street for this added piece of financial engineering.

Now a corporate hedger can predesignate an exposure and a forward hedge, and carry them both as a hedge packet, with only an ineffective portion of the hedge—usually quite tiny—flowing to earnings. "I know a lot of corporates are complaining about the administrative burden of FAS 133," explains one foreign exchange director in a multinational entertainment company. "But if we can use forward contracts to hedge anticipated transactions in lieu of options, it will potentially save us millions of dollars in premium expense. In things like selling yen receivables forward, we'll be able to capture the benefits of the forward curve instead of always paying premium away."

This director thus offers the following advice to other treasury executives: "If you need to hire two or three extra people to do all the FAS 133 administrative work, hire them. That will still be far less than the option premium costs used to be. This should be good for corporate America, not all bad."

3. Corporates are hedging smaller notional amounts of their potential total exposures.

Under the new regulations, corporate clients that still desire hedge accounting must pre-designate a packet composed of a specific exposure and an associated derivative. But if the underlying exposure declines at a later date, the corporate client must "de-designate" a portion of that original packet. That can be a very messy and undesirable piece of work. As a result, a typical corporate looking at a foreign receivable of between 40 million and 90 million euros, for example, is now deciding to hedge only the lesser amount. Treasurers are also layering their hedges more, starting with, say, a 10 million euro hedge packet, and then adding additional coverage up to 40 million slowly over time.

"The risk is that corporates will significantly under-hedge their actual exposures," says one assistant treasurer. "Companies also end up with apples and oranges: half their exposures covered and the other half still lurking out there unhedged. No financial analyst is going to be able to understand what the company has or has not done."

Treasurers are thus caught between a rock and a hard place. At one extreme, if they under-hedge or decide that derivatives are simply too complicated and burdensome to use, their company may become less competitive in the global marketplace. "Conversely," warns Art Misyen, a director in charge of foreign exchange at Merck, "a corporate treasurer with constantly gyrating cash-flow forecasts, but a desire to establish 100 percent hedges, is going to have to endure some very messy documentation and accounting as hedge packets are designated and then later 'de-designated.' If you can avoid it, you probably don't want to go down that path."

4. Financial reporting is still likely to be confusing.

FASB's intention was to make financial balance sheets and earnings statements more transparent. But with corporations now doing hedge accounting for a portion of their exposures and mark-to-market accounting for other hedges, while leaving some exposures not hedged at all, don't bet on being able to understand financial statements any better.

"FASB's basic goal is to make the balance sheet more correct," explains Ernst & Young's Joseph. "It's really part of their bigger Fair Value Project, in which all assets and liabilities will get marked to market. But in the real world, we know that a lot of hedging is done on future revenue flows, oil in the ground, or anticipated merger transactions that aren't necessarily captured under a fair value model. By trying to get the balance sheet right, the in-

come statement may suffer."

Another West Coast treasurer says that the treasury department of his 1,000-person corporation is composed of only six people. Even so, his group typically has produced a disclosure statement on derivatives hedging activities for the firm's annual report that "easily comprises 10 percent of its entire length." Does anybody care about any of this? "When I ask our investor relations department if they ever get inquiries on these pages, they say they don't get any. Nobody cares about it, and if they do, they still can't understand it. FAS 133 isn't going to make this any better, and it might make it worse."

5. Fun and games with P&L reporting are getting funnier and gamier.

Under FAS 133, any hedge packet that falls out from being deemed "effective" by flunking a predefined hedge effectiveness test must be collapsed and the resulting income or loss on the hedge sent directly to current earnings.

"So imagine a company having a bad quarter with its operating income, but with a profitable derivatives hedge against a future exposure," says one consultant. "If that company can somehow purposefully blow the effectiveness test on that derivatives hedge, it would get to pad its current earnings statement." Has any corporation done that yet? "Let's put it this way," says the consultant. "I am already very used to playing with rules as opposed to playing with things that truly make sense."

This same consultant tells a story of a company in which one subsidiary bought a derivatives hedge from another trading subsidiary that chose not to offset it. The second trading subsidiary wanted to keep the exposure. But to get hedge accounting for the first company under FAS 133, the second subsidiary needed to book an offsetting transaction with an outside counterparty. So the second subsidiary entered into a back-to-back trade—basically executing a wash trade—with a friendly third-party counterparty. The original subsidiary that needed hedge accounting took the derivatives purchase from the outside firm, and the trading company that wanted to keep the original exposure took the sale. The outside counterparty pocketed a modest fee for the service, as did this consultant for coming up with an acceptable procedural path to follow.

Another popular game revolves around the accounting of inventory contracts. Under a FAS 133 exemption, if you document that you intend to take or make delivery on a forward purchase or sale of raw materials, that contract does not need to be marked to market. "But some think this rule is pretty superficial," says Joseph of Ernst & Young. "If you forget to file that one sheet of paper, then poof, your contracts to purchase raw material inventory get marked to market. Document the intent to take delivery, and then

after the fact don't do so, and a company risks the same thing happening." In effect, this gives the corporate entity a free option on the most favorable inventory accounting path to follow.

And then there are the new products Wall Street is trying to invent to get around FAS 133 altogether. Swaps on the time value of options have been developed by a few banks, as well as puttable options. In the latter instance, a long option contains an extra put on itself with a strike price that declines over time in a straight-line amortization of the time decay. If that sounds pretty complicated, it is. In addition, these products are also "very expensive," according to one treasurer who has seen several variations.

Merck's Misyan has had some of these structures presented to him. "But we're a little wary that if it walks and talks like a duck, it might sneak through the regulations for the moment, but turn into an *ex post* trade problem," he says. To date, he has sent the Wall Street structurers packing on any products that lack a Big-Five accounting opinion. "Merck continues to seek new ideas," he says, "but we are wary of overly creative solutions when there is uncertainty as to the FAS 133 accounting and reporting requirement."

But will every corporate treasurer react in this manner?

6. Accounting for embedded derivatives is turning out to be far more complicated than expected.

FAS 133 applies in some way to almost every corporation in America, even to those that have never touched a fancy Wall Street product. Give your corporate client an option on an extra few thousand megawatts of power, and bingo, a FAS 133 issue has been created, even without visiting the canyons of Wall Street to explicitly purchase a derivative.

Similarly, if a dollar-functional parent company allows a non-dollar functional foreign subsidiary to sell goods into another foreign country, but the transaction is denominated in U.S. dollars, an embedded currency forward transaction is created on the books of that foreign subsidiary. FAS 133 requires that this embedded forward trade be extracted and marked to market.

"Just finding all the derivatives products embedded in corporate contracts is a non-trivial issue," says Joseph. "Often they are simply part of a normal contractual way of doing business. But now they all have to get pulled out under FAS 133."

One can easily imagine great inconsistency in how companies will handle all these embedded derivatives problems. Some companies may simply try to ignore them, only to suffer nasty criticism when the outside au-

ditors arrive, while others may drive themselves crazy looking for them all.

7. Asset managers face huge problems with mortgage portfolios, convertibles and other products.

One of the most vociferous critics of FAS 133 has been Jonathan Boyles, vice president of financial accounting standards at Fannie Mae—and it is not hard to understand why. Fannie Mae buys tons of long-term mortgages. The agency finances itself using a variety of short-term and long-term borrowings and interest rate swaps, and trades options against the convexity of its mortgage portfolio. Like many large institutions, the firm often trades on a portfolio basis, and as the ultimate underwriter of mortgage debt, it intends to hold the majority of its positions until maturity.

But FAS 133's requirement that the time-value portion of option hedges be marked to market promises to wreak havoc on the firm's earnings statements. Historically, as Fannie Mae's total assets under management increased, the firm's earnings climbed smoothly and linearly under hedge accounting. But that phenomenon has become a thing of the past. Now the firm is planning to start releasing two sets of financial performance numbers: one using its old methodology, and another one using FAS 133's newly mandated approach. "I think the Wall Street community is aware of our stance on this issue," says Boyles. "And the analysts will appropriately discount the earnings volatility FAS 133 may create—particularly this requirement to mark the time value of options to market."

But FASB is not finished. To date, most of the underlying mortgage products Wall Street creates—specifically, "Interest Only" and "Principle Only" tranches of mortgage securities—have not been deemed derivatives under FAS 133. But according to Ernst & Young's Joseph, the DIG is "highly likely to soon conclude that the IO portion of a tranching mortgage product is a derivative."

Perhaps in anticipation of this, IO tranches started to cheapen markedly in late 2000, while swap spreads tightened, and fixed-income options ballooned in implied volatility. It appears that mortgage hedgers have already been forced to dramatically realign their hedging books in an effort to achieve better hedge effectiveness treatment. Given these market movements, who knows what profits or losses the huge portfolios of Fannie Mae and Freddie Mac may have already experienced—let alone what they'll encounter on an ongoing basis after FASB announces new rules on the IO tranches of mortgages.

But the saga continues beyond just Fannie Mae's purgatory. FAS 133's tentacles are also spreading into other parts

of the asset management world. Firms that previously hedged financial assets and liabilities on a portfolio basis can no longer achieve hedge accounting unless they drill down to each component part of the portfolio and create linked trades and exposures. This will be nothing short of a logistical nightmare for some. Insurance companies have also historically bought convertible bonds because of the equity kicker they offer the long-term investor. In the past, these convertibles were typically carried at par or at cost. Now, under FAS 133, the buyer of a convertible bond (but interestingly not the issuer) must strip out the equity option from the host bond and mark both separately to market.

Perhaps in normal markets, this would not be a major problem. But consider what the equity market has done over the past twelve months. How many underwater telecom or Internet convertible bonds currently reside in the portfolios of insurance companies? A few earnings surprises could easily be brewing in this area.

8. Energy hedges are particularly prone to being declared "ineffective."

For years, energy hedgers have been concerned about two components of risk: the absolute price risk of core benchmarks, and the so-called basis risk of different grades or locations of delivery. Companies that hedged the absolute price risk often did not focus on the basis-risk component or felt there was little they could do about it. Other companies frequently hedged away the basis risk using basis swap contracts, but for a variety of reasons they have been less concerned about the absolute price risk.

Under FAS 133, however, when testing for hedge effectiveness, only interest rate exposures can be broken down into their component parts. In other words, it is acceptable to split a funding exposure into benchmark risk (vs. Libor, for example) and the added credit risk of a specific corporation's borrowing cost over a base index, and then test a derivative hedge's effectiveness against one exposure or the other. But commodity exposures cannot be split when testing for hedge effectiveness.

Thus, if a company chooses to do a basis hedge against a basis exposure, the resulting packet would likely be deemed ineffective since the basis hedge would not be addressing the underlying price risk. Conversely, if a company hedges the underlying price risk, the basis risk could come back to cause problems in the effectiveness testing process.

"This is very problematic in the energy industry," says Suzie Kupiec, the Ernst & Young partner in charge of FAS 133 solutions for the commodity industry. "The FAS 133 Bulletin and DIG interpretations have focused largely on financial services and have left significant voids in addressing commodity derivative issues."

9. Multinationals can no longer reap windfall interest savings on cross-currency swaps.

For years, multinational corporations have partially hedged their net foreign investments with cross-currency interest rate swaps, taking advantage of the periodic interest exchanges as a reduction of interest expense.

Take a company that has a factory in Japan, for example. That company might have issued U.S. dollar-denominated debt, entered a swap contract to pay yen and receive dollars in the future, and then taken the favorable difference in interest expense as an immediate supplement to earnings. The embedded short yen exposure was temporarily left hanging and unaccounted for. Now under FAS 133, this exposure must be marked to market together with the yen investment the company has made. The resulting package is sent to the equity portion of the balance sheet.

"Some of the MacDonaldis and GE's of the world aren't very happy about this," says one FAS 133 consultant.

10. Plenty of FAS exceptions and loopholes remain.

FASB has ruled that any embedded derivative clearly and closely related to the host exposure should not be stripped out and accounted for separately. This means that when a company issues a callable or puttable bond, the embedded derivative is deemed related to the movement of interest rates and is thus impacted by the same forces impacting the movement of the bond itself. Callable and puttable fixed-income instruments do not therefore fall under FAS 133 mark-to-market accounting.

Some find this odd. In addition, some question the DIG's exemption of so-called remarketable bonds. An example of this latter product is when a company issues a piece of paper but at the same time sells an embedded two-year call option on a hypothetical U.S. Treasury to its investment banker. The result is an up-front interest savings for the company. But if interest rates plunge, the company will lose money on its short Treasury call. The investment banker then promises to "remarket" this debt in two years' time at whatever interest rate is necessary to clear the market and still recoup the ending value of the company's short Treasury call, plus give the company a new piece of debt effectively at par.

These financing methodologies started to become popular in 1998, and tons of such paper was issued. Unfortunately, most of these embedded short Treasury calls have now gone in-the-money. But the DIG judged that because of the technicalities of this product, it is really the investor of this paper who is short the option, not the issuing company, and in any case, the underlying added exposure is still an interest rate exposure. As a result, DIG has offered an opinion that

remarkable bonds should be exempt from the FAS 133 mark-to-market requirement—potentially saving companies like Nabisco a huge transition hit that some estimate would have cost that company more than \$100 million.

Elsewhere, some treasury people question the general accounting of interest rate swaps. Take, for example, a company that is funding itself on a floating basis. In order to mitigate some of the risk of an interest rate rise, the company decides to do a swap into a fixed rate for part of its funding needs. Under FAS 133 accounting, the floating side of the interest expense would be paired with the floating side of the swap. The result is likely to be a pretty good match.

But let's assume interest rates then come down. "Nowhere in earnings does the negative value of the fixed side of the swap show up," explains a Georgia-based treasury executive. "It only shows up on the balance sheet."

This same executive suffers heart palpitations every time she does hedge effectiveness tests on her company's own commercial paper debt vs. Libor-indexed swaps. "There is no commercial paper index to swap against," she says, "so we always run the risk that our Libor swaps are going to fall out of bounds in their effectiveness to our CP liabilities. This hasn't happened yet, but FAS 133 certainly presents me with one potential headache after another."

11. Many hedge effectiveness tests are conceptually flawed, and parameter risks abound.

When FASB laid out its mandate for hedge effectiveness testing, it provided two examples of an acceptable testing methodology. The first, referred to as the "dollar offset method," tests whether the change in the value of a derivative over a given period of time falls between 80 percent and 125 percent of the change in the value of the hedged item. The second tests whether a hedge has a correlation (R squared) to the hedged item that is sufficiently high—say, more than 80 percent.

Unfortunately, neither of these methodologies is particularly robust, according to consultants Andrew Kalotay and Leslie Abreo in an upcoming paper in the *Journal of Applied Corporate Finance*. (See "The Volatility Reduction Measure," Page 37.) As a result, many software companies have moved to using value-at-risk or other effectiveness testing methodologies. This leads consultant Kawaller to point out that, "While many of the systems out there today may present an acceptable manner of testing for hedge effectiveness, they usually do not provide the *only* or most optimal test for hedge effectiveness." In other words, there is no easy way to force FAS 133 into a cookie-cutter template.

In addition, many derivatives do not even have readily available markets to be marked against. Consider some examples: If a corporation has a whole portfolio of private eq-

uity warrants, how does its treasurer make a correct volatility assumption to price these warrants when the tenor of the warrants extend out five to 10 years? Or how should that extra option on kilowatt hours of electricity be valued? Or how different is an energy forward that allows delivery in one of several locations, instead of just one?

"There is definite parameter risk here that is not easy to quantify," says Joseph of Ernst & Young. "We encourage our clients to find some methodology—preferably a conservative one—to value such positions. But there is still no guarantee that they will get it right."

12. Salesmen and corporates will both smarten up fast.

These days, if a derivatives salesperson presents a trade idea to a corporate treasurer, that person better also present a preliminary hedge effectiveness test. "From a sales perspective, the accounting issues have come to be substantially more important under FAS 133," says derivatives strategist Wolf of J.P. Morgan. "Accounting has gone from the final tab in the pitchbook to one of the first." This means that while the accountants are busy learning something about derivatives, banks like J.P. Morgan are holding weekly seminars for their sales staff on hedge accounting. Banks are also starting to build or buy full-blown accounting modules.

But there is a flip side to that education process. With almost every treasury across America starting to test for efficiency in their hedges, how long will it take corporate treasurers to take a closer look at Wall Street's sometimes egregious derivatives pricing?

Jeff Wallace, a managing partner at Greenwich Treasury Advisors, thinks that added transparency is not only coming to corporate America's balance sheets but also to Wall Street's pricing. "Just from being forced to do effectiveness testing, corporates are going to end up being more sophisticated," he states. "They'll have pricing models using inter-bank rates and will be far more aware of the bad prices they may be getting from their Wall Street bankers. It is not going to be good for bank trading profitability."

So why are stocks such as Lehman Brothers and Fannie Mae still trading just below their all-time highs? As is the case with many middle-America corporate treasurers, it's likely that the implications of FAS 133 have yet to be fully appreciated by investors and analysts. Indeed, FAS 133 could easily be the catalyst for tough times on Wall Street—although all the diverse effects of it aren't likely to be known for several more quarters.

In the words of one corporate treasurer, "No one quite knows where this will end up." The only sure thing is that derivatives-savvy accountants are already in strong demand. **DS**