

# **RECORD, Volume 25, No. 3\***

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San Francisco Annual Meeting

October 17-20, 1999

## **Session 76PD**

### **Generally Accepted Accounting Principles for Nontraditional Products**

Track: Financial Reporting  
Key Words: Financial Accounting Standards, Generally Accepted Accounting Principles, Product Development, Standards of Practice

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*Summary: This panel discussion deals with the host of new exotic product types and the accounting profession's efforts to provide guidance. The five product types below do not fit neatly into the rules set forth in Statement of Financial Accounting Standards 50 and 97:*

- *Variable annuities with guaranteed living benefits*
- *Equity-indexed products*
- *Market-value-adjusted annuities*
- *Annuities with a front-end bonus feature*
- *Investment contracts with no significant source of profit other than interest spread*

Mr. Bruce D. Bengtson: Our primary focus is going to be on some of the developments that are in process at the American Institute of Certified Public Accountants (AICPA), which has set up a task force to address long-duration nontraditional product accounting. Also, the FASB issued *Financial Accounting Standard (FAS) 133* a while ago, and there are several implementation issues that are being reviewed.

I believe it's only fair to mention that our two original guest speakers had last-minute emergencies. Tom Campbell, who is one of our other presenters, has volunteered to deliver John Pintozzi's presentation. Tom is the liaison from the Academy to the task force, so he has attended most of the meetings and has that information firsthand. Tom Campbell is vice president and corporate actuary for Hartford Life. He's been with the Hartford since 1983 and he's responsible for

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many aspects of financial reporting, including how to implement *FAS 133* and whatever statement of position (SOP) eventually comes out of the AICPA.

Mr. Thomas A. Campbell: As Bruce mentioned, I'm going to talk about the Nontraditional Long-Duration Contracts Task Force. This is a task force that was created by the AICPA Insurance Companies Committee last year, with the charge to develop an SOP that gives guidance for GAAP accounting for many of the new products that provide new twists on traditional insurance products.

One example is an equity-indexed annuity (EIA). It has a fixed floor guarantee, which is a traditional fixed annuity contract; but it also has participation in the Standard & Poor's (S&P) 500. Today the current practice is for companies to account for these products by applying existing GAAP standards such as *FAS 60* and *FAS 97*.

Unfortunately, many of these new products were not around when *FAS 60* and *FAS 97* were developed. In many cases they don't fit the standards cleanly, and as a result you get inconsistent GAAP treatment between companies. It's important to note that the task force is looking to interpret existing GAAP standards instead of creating new ones. Finally, if you think the FASB is going to move forward with their fair-value accounting, you may treat the upcoming SOP as an interim approach. If it takes several years to get fair-value accounting in place, we're still back to *FAS 60* and *FAS 97*.

Even though the task force is interpreting current standards, it will probably approach the FASB with issues that would require modifications to current GAAP statements. If the AICPA/FASB says, "This is how you really have to do it," then obviously things are going to change. For some companies they're going to change a little bit; for other companies it's going to change a lot, so it's important that everyone gets up to speed with what's going on and actually participates and gives feedback.

The nontraditional products and product features that will be covered by the SOP include variable annuities (VAs) with guaranteed minimum death benefits (GMDBs) and guaranteed living benefits, which I'll get into later. It includes EIA and life contracts, as well as modified guaranteed life and annuity products, which Mike will cover. It includes synthetic GICs and may also include secondary guarantees with both universal life (UL) and variable life (VL) contracts. Now, while some of these products are under the scope of *FAS 133*, as Jim will get into, there may still be issues that need to be addressed by the task force.

What further complicates the issue of applying current GAAP accounting to these new products is that for many of these products, one company can write a contract out of the separate account and another one can write pretty much the same contract out of the general account. As a result, some of the newer products blur the lines between traditional separate account products, where the contract holder takes the investment risk, and traditional, where the company takes the investment risk.

One example is guaranteed benefits with VAs that offer floors on the performance of the underlying assets. When you put that together with accounting guidance for separate accounts that is limited and subject to interpretation, we see inconsistent treatment of very similar products by different companies. The task force is therefore considering several issues within the proposed SOP, which include whether separate account assets and liabilities should be included on the balance sheet of the life insurance company.

If they are, should they be consolidated with general account assets and liabilities? The criteria under which policyholder liabilities should be classified and reported in the separate account as well as valuation and disclosure issues will have to be decided upon. In addition, the SOP is expected to address classification and reporting of seed money.

The SOP also gets into sales inducements. The task force is continuing discussions and drafting our SOP. We're looking to get feedback from the Executive Committee of AICPA, otherwise known as AcSEC, and to present issues to them. We're expecting to have an exposure draft by the middle of next year. At that point the task force will review comments and finish any revisions by the middle of 2001. Upon approval from AcSEC and the FASB, we could have something as early as the end of 2001.

Currently, there are situations where both accountants and actuaries are looking to the task force and some of the tentative conclusions that support the positions they're taking on interpreting *FAS 60* and *FAS 97*. Let me go through where the task force is headed on several of the issues, including separate account reporting and the valuation framework that I alluded to: the treatment of seed money, sales inducements, and separate account disclosures. Please remember that all of this is subject to change as the drafts get finalized and we go through all the approval processes for the SOP.

Regarding reporting and valuation of the separate account, the SOP is going to deal with what qualifies for separate account treatment, where assets and liabilities are marked-to-market and presented as summary totals on the financial statements, as it says in *FAS 60*, and appropriate disclosures. In order to address the issue of inconsistent treatment of traditional general account and separate account products, the task force has tentatively concluded that only pure pass-through VA and VL contracts should be valued and reported as separate account assets and liabilities. Assets and liabilities on contracts with guarantees, which are otherwise known as spread products, should be consolidated with general account assets and liabilities and valued and reported as if they were general account contracts.

The task force is examining the feasibility of applying criteria that reflect the characteristics of the traditional separate account products in order to help determine whether the contract qualifies for separate account treatment. That's going to include whether it's in a legal separate account, whether there is a pass-through of performance, and whether the contract holder actually controls the allocation of assets in the contract. These findings are all tentative.

Contracts will be carried at fair value for separate account products that meet the criteria. However, the task force is also examining ways of splitting contracts that have both traditional and variable product features and some form of fixed guarantee. A VA with a GMDB is one example. This would provide general account reporting and valuation for assets and liabilities that support just the guarantee features of the separate account products, while allowing separate account treatment for the pure pass-through portion of the contract.

The task force believes that moving all of the contract's assets and liabilities from the separate account to the general account because of the existence of something such as a death benefit or a guaranteed living benefit could result in confusion to the user of the financial statements. We are also drawing an analogy to the treatment of embedded derivatives (EDs) in *FAS 133*. The task force is still working on these criteria and is looking for feedback from AcSEC and comments from the public.

Regarding seed money, the tentative conclusion is that seed money assets should be valued and reported as general account assets. This is based in part on the opinion that seed money does not meet the criteria needed to get separate account treatment. You would then classify a seed money asset using whatever GAAP standard applied, whether that's *FAS 60* or *FAS 115*. To the extent that you invest seed money in a VA- or VL-unitized separate account, you would most likely follow *FAS 115*, which requires that those types of assets be treated as equities and held at market. There is a minority view that seed money should be treated as an equity security since it represents an investment in a specific entity—in this case a separate account.

Sales inducements (or bonuses) are a very controversial topic since current practice varies widely. Some companies go as far as immediately expensing all types of sales inducements. Others defer everything and amortize it over the full life of the contract. Inducements include higher credited rates during the early years of the contract (so-called teaser rates), a onetime bonus that is there to reimburse the contract holder for surrender charges that are paid on the surrender of a competitor policy, and persistency bonuses that credit additional interest after a specified period of time.

The tentative conclusion is that the incentive should be expensed over the relevant vesting period. The up-front bonus would be expensed immediately, and persistency bonuses would be expensed over the specified period. We had a lot of arguments both ways on this one. Arguments have been made that sales inducements are similar to acquisition costs, which should be deferred as a deferred acquisition cost (DAC). The task force tentatively concluded that since they don't meet the definition of DAC in *FAS 60* and *FAS 97* they shouldn't be deferred. AcSEC has gotten into the act and has asked the task force to look at alternative treatments based on analogies from similar structures in other industries. The task force is currently evaluating the treatment of original issue discount on debt to see if there's an analogy there for deferral.

Finally, the SOP will adjust the disclosure requirements for separate accounts. I think this is one of the more important things because it's clear that the accounting by itself isn't always going to capture the true picture of what's going on in the company, especially in the separate accounts. We currently expect to include disclosures on the nature of the separate accounts, the types of guarantees that are provided, and the types of assets, including whether the separate account is insulated. The task force thinks that disclosures will particularly help where guaranteed benefits that are separated from the variable product are reported in the separate account.

There's a lot there, and as the task force develops an SOP, it's very important to keep up with what's going on because the assessment of the impact of this SOP will definitely fall in the laps of actuaries as well as accountants.

Mr. Bengtson: Jim Pearson is a senior manager in the National Accounting Services Group of PricewaterhouseCoopers, specializing in insurance and financial industry matters. His principal responsibilities include providing consulting services to the firm's practice offices on complex and emerging issues. He is also the editor of the firm's external insurance newsletter, *Insurance Insight*. Jim really knows this technical accounting material. He will tell us about *FAS 133*.

Mr. James T. Pearson: I have the pleasure of trying to condense *FAS 133* into about 20 or 30 minutes. It doesn't appear that daunting since the standard itself is only about 30 pages, but there are more than 200 pages of information on how to actually implement this standard. I'll try to condense it and just give you some key highlights and an overview of what the standard is all about.

We'll focus on three or four key items of the statement, starting with the definition of "derivative": how that's new, and how that's changed from prior guidance. Then we will move on to what an ED is, which is probably a new term to us all, and what's included or excluded from the scope of the document. I'll also touch on what the Derivative Implementation Group (DIG) is and what specific topics they may be working on that are of interest to insurance enterprises.

*FAS 133* is part of the FASB's overall project on financial instruments. It was first added to the board's agenda back in 1986; we didn't see a final standard issued until June 1998. It's really one of the first steps in the board's ultimate goal to have all financial instruments measured and reported on the balance sheet at "fair value." It's very controversial. As I mentioned, it requires financial instruments to be carried on the balance sheet at fair value with changes in those fair values reported through earnings in certain circumstances. The reasons for this change are that the current guidance is incomplete, difficult to apply, inconsistent, and did not provide for clarity in the financial statements.

Many derivative instruments were reported off the balance sheet. At the same time a few years ago, large companies were reporting significant losses resulting from activities with derivative instruments, causing the SEC and other regulatory

bodies to take action and promote this comprehensive set of guidelines for derivative instruments.

The key aspect of *FAS 133* is that all derivative instruments are reported on the balance sheet at fair value. Changes in the fair values of those financial instruments are reported in either earnings or other comprehensive income, which is like a temporary equity account. The FASB allowed for three types of special hedge accounting provisions. These are fair-value hedges, cash-flow hedges, or foreign-currency hedges.

In the "Basis of Conclusions" in *FAS 133*, the board describes the four cornerstone decisions that led them to their conclusions. The first is that only items that are assets or liabilities should be reported as such on the balance sheet. Then it concluded that derivative instruments meet the definition of assets or liabilities. Third, it also determined that fair value is the only relevant measure for derivatives. Finally, it did allow for special hedge accounting treatment, provided certain criteria are met, and limited this treatment for transactions involving offsetting changes in fair values, cash flows, or foreign-currency exchange rates. This special accounting also requires a high degree of hedge effectiveness, and it concluded that these changes in fair value from hedging activities should flow through operating income in most cases, except for cash-flow hedges, which flow through other comprehensive income.

In developing the definition of a derivative under *FAS 133*, the board attempted to avoid providing a definition based on classes of instruments or examples. It made the definition very wide and encompassing as an added step to prevent it from quickly becoming obsolete.

The definition of derivative under paragraph 6 or 16 of *FAS 133* is based on four distinguishing characteristics. Those criteria are that it must have an underlying—that is, an interest rate, a price of a commodity, a foreign exchange rate, or a rating of creditworthiness. It must also either have a notional amount, a payment provision, or both. Then it must have none or a relatively small amount of initial net investment. It also must be able to be settled on a net basis for cash.

The board provided for certain scope exceptions under the standard, particularly with respect to traditional insurance contracts. I think the rationale there was that it was able to acknowledge that many of the issues surrounding the valuation of insurance liabilities were still unresolved, and it was not able to come to a conclusion on how to establish the fair-value insurance liabilities. The other scope exceptions listed include regular-way securities trades, normal purchases and sales, most financial guarantee contracts, over-the-counter (OTC) contracts with certain underlyings, and derivatives that are an impediment to sales accounting.

In paragraph 10, it discusses certain contracts currently included in the scope of *FAS 60*, *FAS 97*, and *FAS 113* as not being within the scope of *FAS 133*. Those contracts are excluded if the payment under the contract is the result of an identifiable, insurable event and is a debt of the company. An example in the case

of a traditional insurance contract would be a fire or a theft in the case of a traditional property and casualty (P&C) contract. However, there are certain contracts that contain a derivative instrument combined with an insurance product and/or another nonderivative instrument that may qualify for accounting under the provisions of *FAS 133*.

These contracts are known as hybrid instruments. They contain an ED that meets the definition of a derivative if it were split from its "host" contract, yet may have terms that affect the cash flows or value of other exchanges required by a contract similar to what your derivative might have. For instance, a call option, an equity index return, or an equity conversion feature embedded in a debt contract may be required to be accounted for under the provisions of *FAS 133* as an ED.

If certain criteria are met, the accounting for an ED requires its separation from the host contract. For a debt instrument with an equity-indexed return, you would be required to bifurcate that equity-indexed feature from the debt contract. The ED would now meet the definition of a freestanding derivative instrument under *FAS 133*, unless the ED is clearly and closely related to the host contract. In our example we have a debt host with an ED that is an equity-indexed feature, which clearly would not be clearly and closely related to its debt host. *FAS 133* then requires this ED to be bifurcated and accounted for like a freestanding derivative.

When should you apply *FAS 133* to a hybrid instrument? If the contract in question is carried at fair value with changes going through earnings, it is not subject to *FAS 133*. If this is not the case, you must determine if the ED would meet the definition of a freestanding derivative instrument under *FAS 133*. If it did meet the definition of a derivative, and it was determined to not be clearly and closely related to the host contract, you would need to apply the provisions of *FAS 133*. Since the example I provided was an equity-indexed ED and a debit host contract, you would then need to apply the statement.

What does that mean? It basically means that you would need to pull out that ED, recognize it at fair-market value, and have the changes in its value recognized in earnings. The host instrument would be accounted for in the same manner as similar contracts.

In addition to accounting for EDs and freestanding derivatives, *FAS 133* changes the rules for hedge accounting. There are certain criteria that need to be met in order to qualify under the special hedging provisions of *FAS 133* as either a fair-value, cash-flow, or foreign-currency hedge; some of which I've listed here. There has to be formal documentation created at inception of the hedge that would identify specifically what the hedged item is, what the hedging instrument is, the nature of the risk that's being hedged, and the method of assessing hedge effectiveness.

What does "highly effective" mean? Current guidance would indicate that something in the range of 80-125% would be deemed to be highly effective. The FASB chose not to define what they mean by highly effective in the standard, so it's safe to assume that the current guidance or practice is expected to continue. The

hedge has to be highly effective at inception and on an ongoing basis, and is the subject of significant interpretation and implementation issues.

There are many questions related to how you perform the hedge effectiveness analysis—whether it needs to be done on a quarterly basis or whether it needs to be done cumulatively—and how to satisfy the documentation requirements under *FAS 133*. In fact, we have seen SEC comments and discussions with the SEC staff where they are vigorously monitoring the implementation of *FAS 133* as it relates to these documentation requirements. They are requesting in comment letters the specific documentation that's prepared at the outset of the hedge that determines that it is highly effective. The SEC is requesting the information that should have been prepared by an early adopter of *FAS 133*, where the early adopter determined that the adoption of *FAS 133* is not material. It appears that the SEC will be monitoring the implementation of *FAS 133* very vigorously.

As I mentioned, there are 3 types of hedges that are permitted under *FAS 133*:

- a fair-value hedge, which is the hedge of exposure of the volatility of fair-value changes of an existing asset or liability or firm commitment
- a cash-flow hedge, which hedges the variability of cash flows
- a foreign-currency hedge, which hedges the variability of earnings because of foreign-currency exchange rates (and has to be either a fair-value or cash-flow hedge)

The accounting for each one is going to depend on the hedging relationship, but if there is no hedging relationship, the answer is quite simple. It's marked-to-market for that derivative instrument, recognizing gains or losses or changes in fair value of that derivative instrument through earnings.

In any situation, it is likely that the hedge is not going to be 100% effective in achieving offsetting changes in fair value or cash flows.

The standard was established that way. If there's not 100% offset, that ineffectiveness is going to be recognized in earnings, and some volatility will remain even in a cash-flow, fair-value, or foreign-currency hedge relationship. Some of the reasons for that ineffectiveness are small differences in notional amounts, principal amounts, credit ratings, repricing dates, maturity dates, underlying interest rates, or currency rates. If they don't exactly match, there will be some ineffectiveness that will be recognized through earnings.

Under fair-value hedge accounting, all derivative instruments were reported on the balance sheet at fair value. Changes in the fair value of those derivative instruments are recognized in earnings. The hedged item is also adjusted for changes in fair value. Its changes in fair value are also recognized in earnings with any ineffectiveness reported in earnings. Unless there's 100% effectiveness, those ineffective items will be running through earnings. In addition, the basis of adjustments to the hedged item continues to be amortized (for at least an interest-bearing asset or liability) in accordance with its applicable GAAP methodology.



Under cash-flow hedge accounting the effective portion of the derivative's gain or loss will be recognized in other comprehensive income. Those amounts will then be reversed out of other comprehensive income when the hedged item affects earnings. In the case of a hedge of a forecasted sale, you would remove or reverse the items out of other comprehensive income into earnings when that forecasted sale actually takes place.

A cash-flow hedge is a little bit different in that any ineffectiveness is either going to be recognized in earnings or not recognized at all. It will be recognized in earnings in the case of an overhedge where the derivative instrument's change in fair value is greater than the change of fair value of the hedged item.

For a foreign-currency hedge, the functional currency accounts in *FAS 52* were retained under *FAS 133*. This will result in either a fair-value or a cash-flow hedge. You can designate foreign-currency hedges on either a firm commitment, an available-for-sale security, a forecasted transaction, or even a net investment in a foreign hedge. There is no hedge accounting permitted for an asset or liability that is denominated in a foreign currency.

The next basic lead is a very quick overview of *FAS 133*. Some good news is that *FAS 137* was issued this June. It provided for a 1-year deferral of the effective date of *FAS 133*, which is now effective for fiscal quarters of all fiscal years beginning after June 15, 2000. That's January 1, 2001 for those companies on a calendar-year basis.

Some of the reasons why the board ultimately agreed to a deferral (and it was pretty much against it) reflect the complexities and implementation issues as well as competition with Y2K efforts. Many insurance and banking companies were under system change moratoriums imposed by regulatory authorities that wouldn't allow them to make system modifications other than for efforts associated with the Y2K issue. Many companies believe that numerous system changes, or even new systems, will be required to comply with *FAS 133*; however, they would not be able to make those changes until after the Y2K efforts were completed.

The most significant issue for the delay was that the board probably came to recognize that there could be some inconsistency in the application of *FAS 133* because of the numerous implementation issues dealing with EDs, net investment hedges, and hedge-effectiveness analysis.

The DIG is an advisory group established by the FASB in 1998 to identify and resolve implementation issues prior to the implementation of *FAS 133*. Conclusions reached by the DIG are not considered final until they're formally cleared by the board. This usually takes place after an exposure period for items that have received a tentative conclusion.

There are 12 members in total: the chair, who is also an FASB board member, six from the accounting firms, and five from industry. There are also two observers—one from the SEC and one from the FDIC.

The steps in the process begin when someone identifies an issue and brings it to the DIG. The DIG formulates the issue into a write-up and discusses it at a DIG meeting. The DIG or the FASB staff may come to a tentative conclusion, which is then posted on the Web site ([www.fasb.org](http://www.fasb.org)) for a comment period and ultimately brought back before the FASB where they will take a formal vote and clear (or not clear) the item. If it's cleared, it gets posted back out onto their Web site and is ready for inclusion in a soon-to-be-released, staff-authored question and answer implementation guide.

All these write-ups are available on the FASB's Web site under their technical projects button, which is further layered down into their DIG button. There are six issues specific to the life insurance industry: five dealing with EDs, and one with a cash-flow hedging issue. There are also issues dealing with the scope of the standard and other broad issues that are probably relevant to insurance enterprises.

I've just listed some of the specific issues that deal with identifying EDs that require separate accounting under *FAS 133*. Also, P&C reinsurance contracts with retention levels that vary with an equity index pose another ED question that's being addressed by the DIG. Finally, the SEC issued an announcement that provides another window of opportunity, where a company is allowed to reclassify certain held-to-maturity securities (in conjunction with the implementation of *FAS 133*) into the trading or available-for-sale categories.

Mr. Bengtson: Just one more thing on *FAS 133*. The issue identified as B6 that deals with hybrid instruments and how to establish the value of the ED as opposed to the host contract is a key issue that you may want to look up if you're surfing the Rutgers FASB Web site.

Now, I will reintroduce Tom Campbell. Tom is the liaison from the AAA to the AICPA task force. He's also the appointed actuary at Hartford Life and is responsible for actuarial review, financial reporting, reserve valuation, and actuarial compliance. He co-chairs the Academy's VA Guaranteed Living Benefits Work Group. Therefore, I believe he is one of the industry's experts on GAAP for nontraditional variable products.

Mr. Campbell: I will continue the discussion on both the work of the AICPA task force and on the application of *FAS 133* to insurance products by covering the impact that these are likely to have on variable products. My comments will be primarily geared towards VAs, since most of the task force and the *FAS 133* issues focus on them. I will cover variable products in general and some of the guaranteed benefit features that are offered with variable contracts, concentrating on those offered with VAs.

Some of the guaranteed benefits offered with VAs include guaranteed purchase rates, which have been around for quite a long time. This is a guarantee on the annuity purchase rate and not on the account value level. GMDBs have also been around for years, but have recently become a lot more popular and significantly

more generous. This guaranteed benefit is defined as the guarantee of a minimum amount payable on the death of the contract holder, regardless of how the underlying separate account assets have performed. I'll also describe VAs with guaranteed living benefits.

These guaranteed benefits are similar to death benefits, but the guaranteed benefits are not based on mortality; therefore, the term "living benefits" was coined. They also generally require that the contract holder satisfy a waiting period, during which the company collects fees.

I will then describe a VL issue that occurs when a secondary guarantee is offered with VL contracts. Secondary guarantees are currently more popular with fixed UL contracts, but they are applicable to VL. A secondary guarantee provides that the policy will stay in force even if the account value goes negative. It's usually subject to the payment of a minimum premium over the life of the contract.

Let's move on from definitions and address the application of *FAS 133* to variable products in general. While there is no specific reference to VL in *FAS 133*, I think you can conclude that VL should receive treatment similar to that which is applied to VAs, based on an analogy.

*FAS 133* addresses VAs in paragraph 200 of the example section. It says that VAs do not contain EDs, but it bases that conclusion in part on the observation that the contract holder owns the underlying assets, which we know is incorrect. This error was brought up by the task force to DIG, which reviewed the discrepancy and concluded in Issue Paper B7 that there's still not an ED even if the contract holder doesn't own the assets. That conclusion was based on what they called "nine indicators which demonstrate that the characteristics of VAs are substantially similar to contract holder ownership." These nine indicators included such things as the insulation of the separate account from the insurance company and the pass-through nature of the separate account performance. The issue paper goes on to define what it calls a traditional VA, which is a contract that has some of these nine indicators. This comes into play in other issue papers that I'll mention in a minute.

The DIG noted that its conclusion was further supported by the current practice that sets a company's total separate account policy liability equal to the policy account value, which in turn is equal to the market value of the assets which support that policy. They said that this is comparable to fair-value accounting, which eliminates one of the three requirements for treatment as an ED. They were very quick to point out that this fact wouldn't support the issue paper conclusion on a stand-alone basis. It's just one of the considerations that went into the whole issue. The paper also concludes that GMDBs are also not EDs. This was based on the "Insurance Event Exclusion" in paragraph 10 of *FAS 133*.

Finally, the issue paper notes that the conclusions are based on the unique structure of variable products, VA contracts, and separate accounts, and it would be inappropriate to analogize this treatment to other "seemingly similar structures," which is a direct quote.

Another issue addressed by the DIG relates to the so-called "nontraditional features," which are discussed in Issue Paper B8. This focuses on VAs that have nontraditional features. These are defined as benefits that share some of the investment risk between the company and the contract holder, such as guaranteed minimum accumulation benefits (GMABs), which is one of the guaranteed living benefits that have hit the marketplace over the past year or so.

A GMAB guarantees that if the contract holder keeps the contract in force over a specified period of time, otherwise called a waiting period, the account value will at least equal a minimum amount. That minimum amount is typically a return of premium, but some contracts accumulate the premium at a very low interest rate. A maximum anniversary value or a look-back type of design would also fall into this GMAB category, although there aren't any of those out there now. Currently the waiting periods go from 5 to 20 years.

Issue Paper B8 concludes that a VA with a GMAB is a hybrid contract (that's obviously the *FAS 133* term) where the host is the traditional VA, which fits the B7 definition. The GMAB is the ED. Since the host is equity-like and the ED is debt-like, they are not clearly and closely related. Therefore, *FAS 133* requires that the GMAB be separated from the host and valued as a derivative.

The DIG is also addressing the application of *FAS 133* to guaranteed minimum income benefits (GMIBs). They lumped the GMIBs with guaranteed purchase rates and a feature called the guaranteed payout annuity floor into one issue paper on guaranteed living benefits called the nontraditional payment alternatives. They haven't finalized the issue paper yet, but we may be able to see a tentative conclusion in December.

The GMIB is similar to a GMAB. Both have a waiting period and additional fees, but the GMIB is contingent on the contract holder annuitizing the contract at a minimum guaranteed annuitization rate.

The guaranteed payout annuity floor is a guaranteed floor on a variable payout annuity. Typically it is a percentage of the initial benefit payment. It is not that popular yet, but we expect to see more of these going forward.

The DIG is discussing how these payment alternatives satisfy the "net settlement criteria," which is one of the fundamental requirements for all stand-alone and EDs. The net settlement criteria are satisfied if you can settle the derivative for cash or an asset convertible to cash. One position is that the period-certain annuities do satisfy the net settlement criteria, while another position is that an annuity with a life contingency doesn't satisfy the net settlement criteria. Furthermore, a life-contingent payout may not be an ED because it's an insurable event covered by the exclusion under paragraph 10. Again, please remember that this is all tentative, so stay tuned.

One issue that is not addressed by the DIG, which I wanted to touch on, is secondary guarantees that are offered with VL contracts. The features that are

currently in the marketplace are mostly with UL, but even if it were with a VL contract it would probably not be an ED. This is my opinion because the guarantee is really just a payment of a death benefit, which meets the insurable event exclusion of paragraph 10.

However, the NAIC may change the structure of these benefits via proposed Actuarial Guideline XYZ. This guideline would require that nonforfeiture benefits be provided for secondary guarantees, and if these nonforfeiture benefits are comparable to traditional life insurance cash-surrender values, you may have a hybrid instrument. I think you would have a host equal to the VL policy, which is an equity-like financial instrument, and have an ED of the nonforfeiture benefit, which is debt-like. Since they're not clearly and closely related, you have to bifurcate the contract and value each piece at market.

Two issues that remain from *FAS 133*, which the task force is planning to address, relate to variable products. The first one brings us back to the GMAB, which we now know falls under the scope of *FAS 133*. Since *FAS 133* tells us that the accumulation benefit is an ED, do we still apply *FAS 97* to the whole contract for DAC balances and amortization? And if so, *FAS 97* requires that the GAAP liability should be equal to account value, but then you have an ED in addition to the account value, so how do those 2 requirements interact?

The task force is looking at this issue, but no conclusions have been reached. One approach we're looking at is to recognize the fees that are collected to support the guaranteed benefit as an offset to the benefit costs in determining the derivative cost. Under this approach the benefit cost would be determined at issue and would be an annual cost that would be locked in. The derivative value held at any given point in time would equal the present value of future benefits that are estimated at that point, less the present value of future estimated revenues based on the cost that was determined at issue.

We believe that cost should have a floor of zero—it shouldn't be less than zero. In this way the estimated present value of future benefits at issue equals the estimated present value of future fees at issue, so the initial derivative value would be zero. Thereafter, it would be based on the relationship of the estimated fees to the estimated cost. It is similar to a net premium approach, but there are still a lot of details that need to be worked through. It may not be theoretically correct.

The second variable product issue (post-*FAS 133*) that the task force is getting into is GMDBs. As I mentioned earlier, they are not subject to *FAS 133*. However, there are plenty of issues with the "simple" application of *FAS 97* to this product. For example, is this an investment contract or is it a UL-type contract? *FAS 97* defines UL-type contracts as those that expose the insurer to mortality risk, which might point to a UL type of contract. The task force is looking at mortality risk significance tests, and is leaning towards a ratio of the present value of expected GMDB costs to the present value of future revenues of the entire contract.

The task force is also looking at possible premium deficiency testing and unearned revenue reserves for VA contracts that are classified as UL-type contracts. The unearned revenue issue is based on the observation that the revenues that cover the death benefits are typically a constant number of basis points of the account value, while the death benefit costs tend to bounce around and produce some mismatching of revenues and benefits.

The premium deficiency issue questions whether you should use all of the contract's revenues or just the revenues that are identified with the death benefit in your testing. The task force is leaning towards looking at the whole contract because we feel that's consistent with how premium deficiency tests are done with other contracts.

One approach to an unearned revenue type of calculation compares the present value of future estimated death benefit costs at any given time to the present value of future revenue based on a net premium type of estimate. It's similar to what I described for the GMAB, but under this approach both the revenue over the life of the contract as well as the present value of future death benefit costs would be recalculated on each valuation date.

The task force is also looking at how any of these extra GAAP benefit reserves held should be reflected in the amortization of DAC for the entire VA contract. The SOP should also identify if there is a requirement that companies consider a range of reasonable scenarios to determine the GMDB cost as opposed to just using a single set of assumptions. This would be applied to the GAAP reserve as well as the calculation of estimated gross profits in the amortization of DAC.

In conclusion, I want to give you a *FAS 133* score card. Stand-alone VAs—they're out. GMDBs are out of *FAS 133*. GMABs are in. GMIBs, guaranteed payout annuity floors, and guaranteed purchase rates are still a question mark; VL with secondary guarantees is a maybe.

Mr. Bengtson: As all of you can surmise, there is a lot of tentative guidance on a number of these issues from the FASB on *FAS 133* or from the nontraditional long-duration contracts task force of the AICPA.

Our next presenter is Mike Hughes. He is a partner with the Chicago office of Ernst & Young, who just happens to be Life USA's auditor. He is very familiar with a number of the issues surrounding bonus annuities and EIAs. Mike has 12 years experience in financial reporting, product development, product pricing, and asset/liability management for insurance enterprises.

Mr. Michael A. Hughes: I will be covering EIAs in some detail. We will look at current guidance, look at *FAS 133* implications, actually run the numbers in a case study, and talk about some fuzzy issues.

Let's begin with a quick overview of the existing guidance. GAAP accounting for products really begins with product classification. *FAS 97* establishes investment

contracts as a separate product classification for GAAP reporting purposes. These are long-duration contracts, which means typically more than a year. They do not expose the company to significant mortality or morbidity risk (and the right to annuitize a deferred annuity contract at guaranteed purchase rates does not typically constitute a significant mortality risk), so most accumulation-stage annuities are characterized as investment contracts. *FAS 97* goes on to say that investment contracts should be accounted for in a manner consistent with the accounting for interest-bearing or other similar financial instruments.

For DAC purposes, you may or may not choose to use the *FAS 97*-type approach. Practice Bulletin 8, sometimes referred to as PB8, goes on to say that an *FAS 97* approach should be used when the surrender charges are significant or when the revenue from sources other than the investment of policyholder funds is significant. Otherwise, acquisition and interest costs should be recognized at a constant rate applied to the net policy liabilities consistent with the interest method.

Most companies have interpreted this as just quick background information. The GAAP reserve is usually the account value. DAC is typically amortized using a retrospective deposit, UL-type *FAS 97* approach. A few companies use an interest method as described in *FAS 91*. In many cases, the results are quite similar. I would say that this similarity is not true when it comes to unlocking for variances in interest spreads or for the treatment of realized or unrealized capital gains.

Let's turn our attention to EIAs under the current guidance. If you dig deep enough into the archives of the authoritative GAAP literature, you will find an obscure piece of guidance called Emergency Issues Task Force (EITF) 86-28. It deals with the accounting for indexed debt instruments, and addresses the accounting for debt instruments with both guaranteed and contingent payments.

For example, if you have a bond that pays a 5% interest coupon with a final payment equal to the greater of the initial principal or the return on an S&P index (which sounds a lot like what we have with our EIAs), the EITF indicates that the liability for the contingent payment features should reflect the current index value without anticipation of any future changes. This would be the undiscounted intrinsic value of the embedded option.

Accounting for the investments under current guidance simply follows *FAS 115*, so I won't go into that. Accounting for hedges has been dealt with at the current point, before *FAS 133*, through a variety of promulgations and generally accepted practices that lack a consistent approach. I could summarize the existing guidance to say that, "If you qualify for hedge accounting treatment, then the accounting for the hedge parallels the accounting treatment for the hedged item." This would be a typical application of the existing guidance.

Let's bring it all together. The equity-indexed liability would be carried at the book value of the guaranteed benefits plus the intrinsic value of the embedded option. The supporting option would be held at amortized cost, consistent with the book-value treatment of the liability, plus the intrinsic value of the option. Supporting

bonds would be held consistent with *FAS 115*, and DAC could be amortized using an *FAS 97* approach. There may be some variations from this in current practice, but generally you would see that the accounting treatment for the hedge would parallel the accounting treatment for the embedded option.

Enter *FAS 133* and the rest of the story. *FAS 133* provides comprehensive, new guidance on derivative accounting, which I think we have covered fairly well, so we don't need to go into it in detail. All derivatives, including EDs, will be recorded on the balance sheet at fair value. There is a comprehensive definition of what a derivative is that's fairly specific as indicated in Jim's presentation. However, insurance contracts are generally exempted from *FAS 133* because nobody can figure out what the fair value of an insurance liability is.

*FAS 133*'s reach extends beyond traditional derivative activities and includes some of the derivatives that are embedded in our life insurance and annuity products. EDs are required to be separated from their host contract and accounted for as a derivative if, and only if, all of the criteria in Chart 1 are met.

One thing that we haven't really touched on yet is that when you bifurcate out an ED from its host and account for them separately, the ED is not eligible for hedge accounting. *FAS 133* does not permit hedge accounting of one derivative with another, which greatly simplifies its application to EIAs.

If you're trying to figure out whether or not you have an ED, follow Chart 1 step by step. Would it qualify as a derivative if it were freestanding? Is it clearly and closely related to its host? Does the current accounting for the contract already carry changes in fair value through earnings?

The \$64,000 question for actuaries is, which life insurance and annuity products contain EDs? I think Tom covered this fairly well. EIAs, clearly, yes. Equity-indexed ULs, yes. VAs with guaranteed accumulation benefits, yes. VAs with GMIBs, unclear, but no is my guess. VAs with GMDBs, no. UL/VUL with no lapse guarantees, probably no. Market-value-adjusted annuities, probably no.

EIAs clearly are one of the products that are affected by *FAS 133*.

Here are some additional items of interest to actuaries. If the ED cannot reliably be identified and measured, you need to carry the entire contract at fair value, with changes through earnings. The contract may not be eligible for hedge accounting. Also, there are grandfather provisions for accounting for EDs on products issued through 1998. I believe that was extended by *FAS 137*, which extended the required application date for *FAS 133*. It also requires that the host contract, once you've bifurcated the ED out of the hybrid contract, would follow the existing guidance that would be applicable on a stand-alone basis.

Accounting for EIAs under *FAS 133* is fairly straightforward. The embedded option is split out and carried at fair value. Changes in fair value go through earnings, and



there's no opportunity for hedge accounting. You then need to establish a liability for the host contract.

To do this you need to allocate the premium between the host and the ED. The initial fair value of the ED has already been split, so the remainder of the premium is the premium that's applicable to the host contract. You then use that remainder premium to establish a liability for the guaranteed benefit stream. The host contract liability would grade from the allocated premium at the beginning of the period to the guaranteed benefits at the end of the term using some sort of imputed interest rate. The accounting for the fixed-income investments and DAC that support these policy liabilities doesn't really change.

I think the quick review of a case study will bring it all together and reinforce some of the key concepts. Let's start with an SPDA that's equity-indexed. It's a 5-year point-to-point European design with a guaranteed minimum value equal to 90% of the gross premium accumulated at 3%. Bonds are yielding 7% and are classified as held-to-maturity. OTC call options are used to support the indexed benefit (embedded option). The call option that you're purchasing exactly replicates the economic features of the embedded option. Commissions are 6%. This example ignores other expenses, taxes, terminations, etc.

Let's review some key points on the balance sheet. What you see below in Table 1 is the ED that is bifurcated out and carried at market value on the liability side. The host contract starts at the allocated, that is, remainder premium and grades to the guaranteed minimum benefit at the end of the term. The bond's book value is amortized cost and reflects the premium less the cost of the option, and less the commission, at time zero. The value of the bond portfolio grows at 7%; it's reduced by the assumed shareholder dividend that's paid out of profits each year.

TABLE 1  
EIA CASE STUDY

Revenue			56	59	62	66	69
	Investment Income		56	59	62	66	69
	Increase MV of Call Option		104	(200)	400	(375)	225
Expenses	Interest Credited		35	36	38	39	41
	Increase MV of Embedded Option		104	(200)	400	(375)	225
	Amortization of DAC		10	11	12	13	14
Income (=GAAP Book Profit=Cap Transfer)			11	11	12	13	14
ROA			0.99%	1.08%	1.03%	1.06%	1.17%
<b>Balance Sheets</b>							
Assets	Bonds	794	839	886	936	988	1,043
	Call Option (@MV)	146	250	50	450	75	300
	DAC	60	50	39	27	14	-
	Total Assets	1,000	1,139	975	1,413	1,077	1,343
Liabilities	Host Contract	854	889	925	963	1,002	1,043
	Embedded Option (@MV)	146	250	50	450	75	300
	Equity						
	Total Liabilities & Equity	1,000	1,000	1,139	975	1,077	1,343

The options are held at market value. You can see that the market value of the option supporting the liability exactly matches the fair-value liability of the indexed benefit; that is, the embedded option. DAC amortization is calculated as usual, using estimated gross profit (EGP) per *FAS 97*, and assuming exact option replication.

From an income statement standpoint, the case study shows net investment income on bonds, plus the changes in market values of the options exactly offsetting the changes in fair value of the indexed benefit reserve flowing through income. You also have interest credited on the host contract at an imputed rate of 5.6%, and DAC amortization that's coming through as a constant percentage of EGP.

This case study produces a *K* factor of about 50%, with a relatively level pattern of earnings and return on assets. This is despite the fact that the equity value scenario used reflects a fair degree of volatility. I didn't actually pick an S&P pattern or anything. I just made up some values for the market values.

Some key points. Hedge accounting cannot be applied under *FAS 133*, but if you are well-matched from an economic standpoint, you will get a smooth pattern of earnings. If you're not economically well-matched, watch out.

Selective issues. Unfortunately, life is not as simple as our case study. Few companies are perfectly hedged on an economic basis, so even minor variances can lead to significant year-by-year earnings volatility. I think the question about using the cash surrender value as a floor for the total policy liabilities (the host contract plus the embedded option) presents some uncertainty.

How do you identify and value the ED on some of the complex products like ratchet designs with nonguaranteed renewal participation rates? What sorts of policyholder behavior assumptions should be used? Are those same behavior assumptions reflected in the hedging strategy and the hedges that we purchased? What tools do we need to calculate these fair values? How are we going to amortize DAC? Should the changes in the market value of the options be going through EGP? If we have volatility in earnings caused by hedge ineffectiveness or minimum guarantees that create negative EGP, what DAC interest rates should be used?

There are a lot of issues once you really get into a specific situation that could make the implementation of *FAS 133* a little more complicated. However, from a high-level standpoint, I think *FAS 133* can be somewhat friendly to equity-indexed product accounting; it really frees up your companies to look at dynamic hedging and some other creative alternatives. On balance, it's not really a bad result for EIAs, but *FAS 133* generates a number of issues to keep aware of.

Mr. Bengtson: While we didn't get into a whole lot of detail on bonus interest and sales inducements, we can still handle some questions from the audience.

Mr. Graham D. Ireland: Just one question about the definition of fair value. If you are doing financial reporting periodically, there may come times when the price of a particular option has, on an OTC basis, spiked to unusually high levels. Should fair value reflect the cost of buying an option from a dealer at any point in time, or can you substitute long-term reasonable rates of the cost of an option?

Mr. Bengtson: I think that perhaps I see your dilemma. However, fair values for exchange-traded options are pretty much set at whatever they are selling for at a point in time, but I will let Jim address this question.

Mr. Pearson: Actually, I think on the definition of fair value, as defined in *FAS 133*, it would indicate, as Bruce mentioned, a specific point in time. Whatever that value is in the market would be the fair value of that instrument as of that reporting date.

Mr. Hughes: *FAS 133* doesn't actually define fair value. I think it discusses it and refers back to *FAS 107*, if I'm not mistaken.

Mr. Pearson: That is correct.

Mr. Hughes: I think *FAS 107* suggests that you should look first to existing markets; that is, the value that you'd get in an arm's-length transaction. If there was a public market for a particular type of option, I think you'd look to that established market value.

Mr. Ireland: Sorry, just one supplementary question. Certain guarantees associated with VAs are established at the contract level and apply to a basket of funds. In other words, they become quite complex derivatives. How would your answer change in that instance, if at all? In other words, is it a matter of breaking down the liability derivative you've offered into a number of component parts and trying to mark each of those according to a price that would be established by a dealer?

Mr. Campbell: I'm not sure I know the answer. The whole concept ties into all the fair-value discussions that have been going on. It ties into the FASB concept paper. This is truly going to be one area where actuaries are going to be struggling; they're going to have to be involved in this. We'll probably be dealing with the possibility of doing a lot of stochastic analysis and actually doing a lot of pricing, which gets really painful if you have 100,000 contracts all with an ED. I think this is an issue that needs to be moved forward and needs a lot of input from everyone, including actuaries. Unfortunately, I don't have an answer to your question.

Mr. Hughes: I think you would use the established option-pricing routines for these types of options, and to the extent that you had different baskets of funds underlying the option, you would want to try to reflect the appropriate correlations and so forth between the different funds involved. I think there are fairly well-defined option-pricing routines, not easy or simple, that exist which could be used.

CHART 1

