

**1998 VALUATION ACTUARY
SYMPOSIUM PROCEEDINGS**

SESSION 1GS

INTRODUCTION AND OVERVIEW

Charles D. Friedstat, Moderator

J. Peter Duran

Stephen J. Preston

INTRODUCTION AND OVERVIEW

MR. CHARLES D. FRIEDSTAT: I'm a Director with KPMG Peat Marwick, and the Chairman of this year's Valuation Actuary Symposium Planning Committee. This year we have the largest attendance we've ever had at a valuation actuary symposium. There are over 800 people in attendance.

We're very fortunate to have Anna Rappaport, the President of the Society of Actuaries, available to say a few words to us.

MS. ANNA M. RAPPAPORT: I'm delighted to be here. It's my first Valuation Actuary Symposium because this topic is somewhat out of my practice area. It's just wonderful to see the attendance and for me to share with you. This is a very important event to the Society of Actuaries because the appointed actuary role is so central to our profession in both North America and elsewhere. It's also an important time for valuation actuaries as they focus on not only keeping up to date with the things that are already enacted that need to be complied with, but also with new ideas and developments and emerging ideas. I've participated in several events this year. Last December there was a seminar on value-at-risk and risk measurement, and there were the spring meetings and this symposium. We're seeing more and more focus on different ideas relative to risk measurement. We can't help but wonder what they're going to mean for all of us. We certainly need to be at the forefront of it.

One of the ideas that has been discussed in my planning committee meetings at the board level, is how, as actuaries, we can seek new venues to apply some of these ideas. I hope some of what we learn will be helpful in the industries in which we traditionally work. I also hope it helps the employers we work for now, and perhaps some of us can apply the concepts elsewhere.

1998 VALUATION ACTUARY SYMPOSIUM

MR. FRIEDSTAT: We're now ready to begin the opening session. This is a general overview session, and the primary purpose of the session is to introduce you to some of the emerging and recent developments, primarily in the financial reporting, statutory, and GAAP accounting areas. On virtually every topic that is going to be discussed here there will be more in-depth discussion, and there might be entire sessions on a topic.

We'll start out the session with Steve Preston. Steve is executive vice president and chief actuary for Golden American Life Insurance Company. He's extremely active in a lot of the NAIC activities dealing with reserves. He will be talking about recent developments and some ongoing developments in the statutory area and some recent NAIC developments. I will follow with a very brief, limited discussion on certain tax implications pertaining to some of the things that Steve talks about. Following that, Peter Duran will be the speaker. Peter is a partner with Ernst & Young in New York City. Peter has been very active in GAAP for many years, participating in a lot of GAAP conversions. He has been very much involved with GAAP activities. He'll be talking primarily about developments from the GAAP point of view. That's the focus on the session.

MR. STEPHEN J. PRESTON: I'd like to talk about several different topics, and, as Bud mentioned, I'll summarize quite a few things, assuming that most of these topics will be addressed later on. First, I'd like to start by talking briefly about a newly created group at the NAIC called the Innovative Products Working Group. I'll then turn my attention to some of the recent developments on actuarial Guidelines XXXIII, XXXIV, ZZZ, and ZZZZ, the so-called sleeper guideline. I'll then turn my discussion to Regulation XXX, the actuarial opinion and memorandum on nonforfeiture and disclosure developments. I'll then summarize recent developments in the variable product and separate account areas. I'll then close with a brief discussion on the new valuation tables, practice note, updates, and the unified valuation system.

The NAIC Innovative Products Group was created this year by the NAIC Life and Health Actuarial Task Force to address new product issues. It's a forum for state regulators to identify and resolve innovative product issues. The group strives to provide a balance between several conflicting objectives. First, the group attempts to permit innovative products on a timely basis. At the same

INTRODUCTION AND OVERVIEW

time, it must find ways to determine a fit into existing laws, some of which are outdated and not written to cover innovative products. Primarily the group is focused on nonforfeiture disclosure, reserve adequacy, and other actuarial measures.

The group is currently addressing several initiatives, including equity-indexed products, variable product guarantees, Regulation XXX, and numerous other issues. In order to help the regulators balance some of those conflicting objectives, it's very important that companies take the initiative to review innovative products with regulators as part of the filing process, particularly in areas relating to valuation, nonforfeiture, and disclosure. This enables new products to be able to be introduced on a timely basis by helping regulators to get comfortable with major issues of concern. Session #26 will address the Innovative Products Group in more detail.

The revised Actuarial Guideline XXXIII requires that Commissioner's Annuity Reserve Valuation Method (CARVM) reserves be based on the greatest present value of all potential integrated benefit streams. In order to accomplish this, benefits need to be categorized into two groups: elective benefits and nonelective benefits. Elective benefits include benefits such as surrenders, withdrawals, annuitizations, and other benefits. For elective benefits, you have to consider all possible incidence rates, consistent with the greatest present value concept of CARVM. For nonelective benefits (such as death benefits, accelerated death benefits (ADB), nursing home, disability, periodic payments, and others), you're permitted to discount and calculate the benefits with prescribed tables. If those tables do not exist, you may use either industry or company experience, provided that margins are added for conservatism.

Guideline XXXIII is extremely complex to implement. Not only do benefits need to be split into those two categories, but the potential arises for multiple valuation rates being required within a single contract. The guideline does attempt to simplify the calculations by providing for "practical considerations," which allow for alternative simplified methodologies. Guideline XXXIII is retroactive and is effective on December 31, 1998, and does provide for a three-year phase-in. This guideline will be covered in more detail in Sessions 2 and 22.

1998 VALUATION ACTUARY SYMPOSIUM

Guideline XXXIV applies the integrated CARVM approach to variable annuities with minimum guarantee death benefits. Rather than calculate the extra reserves separately, it solves for a reserve equal to the difference between the integrated reserve and the separate account reserve. The integrated reserve is based on the projected net-at-risk assuming standardized immediate drops and assumed returns. Guideline XXXIV also provides for a mortality table for use in the reserve calculations and also provides for reserve requirements for reinsurance. It is also retroactive, effective December 31, 1998, with a three-year phase-in. Three sessions will address this: 2, 10, and 39.

Actuarial Guideline ZZZ applies the integrated CARVM approach to equity-indexed annuities. It excludes variable annuity guarantees, based on recent NAIC meeting discussions. The guideline was adopted in September 1998 at the Life and Health Actuarial Task Force meeting, and full NAIC adoption is likely by the end of the year. We hope that anybody who sells equity-indexed annuities has implemented one of the methodologies outlined in the guideline. The reserving methods are relatively consistent with the Academy's proposals. The guideline is also retroactive with an effective date of year-end 1998. Additionally, no phase-in is permitted. Guideline ZZZ provides for two alternative reserving methods: the CARVM with updated market values (UMV) or the market value reserve method, and the enhanced discounted intrinsic method. Further discussion on ZZZ will take place at Sessions 2, 18, and 43.

Guideline ZZZZ parallels Guideline ZZZ in that it applies the Commissioners Reserve Valuation Method (CRVM) to equity-indexed universal life (EIUL). At this point, there's only a small number of EIUL currently being sold. Guideline ZZZ allows two alternative methodologies: CRVM with UMV, and the implied guarantee rate method. The methods are relatively consistent with Academy proposals, but more work is needed before the guideline is ready for adoption. Guideline ZZZ will be discussed further in Sessions 2 and 18.

I want to talk briefly about New York Regulation 151 that has been under development for some time. At this point, the regulation has not yet been exposed, but it is expected that the concepts in Guidelines XXXIII and XXXIV will be reflected in the Regulation 151. Additionally, specific

INTRODUCTION AND OVERVIEW

variable annuity reserving requirements will be reflected in Regulation 151. In every other respect the rules will be similar to the old Regulation 126 reserving requirements. Exposure is possible by the end of 1998, with a possible effective date of December 31, 1999.

Since the 1995 Regulation XXX model was adopted by the NAIC, it has really achieved relatively limited adoption from the states. Only a few states have unconditionally adopted it, and there's a group of states that have followed the 51% rule. Recently, an ad hoc industry committee has put forth an alternative proposal for XXX. The major goal of the group is to achieve uniform state adoption by 1/1/2000, with a 1/1/2000 effective date. Uniform adoption would create a level playing field for all companies operating in all states. The proposal has very strong backing by the trade associations, including the ACLI and the National Association of Life Companies (NALC). The project is moving aggressively forward, and it is possible that NAIC adoption could be achieved by the end of the year.

Under the proposed revisions to Regulation XXX, the segmental reserving methodology included in the 1995 model would be retained. It would also appear that no changes would be needed to the Standard Valuation Law to accommodate the revisions. Mortality would be improved 15 years with 20-year select factors. More reliance would be placed on the appointed actuary in determining the valuation basis for deficiency reserves. The proposal also eliminates the five-year safe harbor for term insurance. Regulation XXX will be addressed in more detail at Sessions 2 and 15.

The Actuarial Opinion and Memorandum Regulation (AOMR) project at the NAIC has been underway for many years, and there have been numerous contentious issues under debate. The first issue is the Section 7 opinion issue, and there are several alternatives currently under NAIC review. The first alternative is to require gross premium valuation based on best-estimate assumptions for a Section 7 opinion. A second alternative recently put forth by Larry Gorski of Illinois would be to eliminate differences between Section 7 and Section 8 opinions. It would also move all the details in the existing regulation to the Actuarial Standard of Practice. This would essentially require only

1998 VALUATION ACTUARY SYMPOSIUM

that the current formula reserve requirements be met and also that an adequacy opinion under moderately adverse conditions be issued. Clearly, significant work remains to be completed before any conclusion can be reached.

The second major AOMR issue under debate relates to state variations. There has been quite a bit of work completed by both the NAIC and the Academy in this area. At this point there are several possible alternatives under consideration. The least popular alternative appears to be the current state of filing requirement. A popular alternative that has emerged is to require a state of domicile opinion, where you would have reserves also produced under a benchmark alternative such as the NAIC codified requirements. Additionally, a choice of those two alternatives is another possibility. A fourth alternative would be to require a state of domicile opinion and to provide in the opinion additional disclosures as to the requirements that were met in other states beside the states of domicile. A fifth alternative would be to require an opinion based on state of domicile only. This alternative does not seem to be a popular alternative with the regulatory community. Certainly all five alternatives require that the commissioner be able to reserve the right to request an opinion based on state of filing. AOMR issue will be discussed in more detail in both Sessions 2 and 5 and probably other sessions, including the regulatory meeting and the small company discussions.

Unfortunately, the nonforfeiture law project has really seen limited activity during the past year. The major reason for this lack of activity is the need for the new valuation law project to catch up. Since the new nonforfeiture law would be adopted, it would allow more products without accompanying valuation methods. Much discussion has focused on the need for better disclosure to the consumer to be put forth in conjunction with the nonforfeiture law. Overall, there appears to be a lack of industry and regulator consensus on a number of issues. Some of the major areas of concern include: the dual approach, where companies would be allowed to choose between the old and the new law; controversy over the plan for determination of policy charges and credits; and, issues relating to changes to the plan and consistency of experience assumptions in the plan. There's also a major issue as to whether cash values should be mandated, and issues relating to both plan confidentiality and certification requirements. Currently, the NAIC is reviewing the New York and New Jersey

INTRODUCTION AND OVERVIEW

requirements related to filing for nonguaranteed elements, and it is hoped that this work will move the project forward.

There has been quite a lot of activity at the NAIC in the areas of disclosure and illustration. The first is the annuity disclosure model. The annuity disclosure model is on the verge of being adopted, with a few small issues remaining. Essentially, the model requires a buyer's guide and a disclosure document as part of the sales process. In the interest of getting the model adopted, the supportability and illustration requirements were removed from the document. The Academy has been very active in putting forth supportability proposals, and this is an area where we will likely see a lot of attention in 1999.

Variable illustrations are starting to gain more attention at the NAIC, and certainly continued discussion takes place on the life model. I believe about half of the states have adopted that model, and another seven or eight are on the verge of adoption. However, the NAIC has considered opening that model up for possible revisions. In addition, New York has put forth, as part of its recently adopted Section 4228 requirements, a requirement that the actuary provide a statement of self support with the filing, whether or not illustrations are developed. The Academy is currently working with New York to try to come up with the details for these supportability requirements.

A new wave of products has recently hit the marketplace; they are the variable annuities with guaranteed living benefits. These products are essentially variable annuities with guarantees other than death benefits. The primary products that have been recently offered include guarantees on annuitization benefits and guarantees on accumulation benefits. At the NAIC's request, the Academy has formed a working group to study these products and make recommendations. Some of the topics for which the work group has issued reports are: product development issues, including market profiles and descriptions of the products; and valuation and financial reporting issues.

Some of the valuation issues that are being investigated include a detailed analysis of the risk profile and cost analysis for these benefits and proposed reserving methodologies. The group considered

1998 VALUATION ACTUARY SYMPOSIUM

six different reserving alternatives, and recommended that a Guideline XXXIV type structure be implemented, but with significant modifications. Significant work needs to be completed in this area. As I mentioned earlier, Guideline ZZZ was adopted, and until the end of the process, these variable annuity products were included in that guideline. They were removed from Guideline ZZZ under the premise that companies take an initiative to review their valuation methodologies with regulators as part of their filing process. These products will be discussed further in Sessions 2, 10, and 39.

The NAIC model covering group separate accounts with guaranteed minimum benefits is a draft model similar to New York Regulation 128 and California Bulletin 95-8. The model puts forth requirements for the plan of operations and reserves and provides for asset haircuts and actuarial opinion requirements. NAIC adoption is possible by early 1999. This will be discussed further in Session 2 by Jim Greaton. A model that's fairly similar to the NAIC guaranteed separate account model is the NAIC synthetic GIC model, with similar requirements including plan-of-operation, reserve, haircuts, and opinions. Adoption is possible by early 1999. The synthetic model will also be discussed in Session 2.

Donna Claire is going to talk about the new valuation table in more detail at Session 2. The Annuity 2000 and group annuity tables have been adopted by about 20 states, and several states have 1998 effective dates. There are some other new tables that have been requested by the NAIC. For example, the Society was asked to begin a process of looking into replacing 1980 CSO. There were no dates given on that in terms of deliverables. There are updates on disability and accidental death as well. Donna will also talk about practice notes, and if you want those notes, you have to go to Session 2. The three notes that have been modified are the equity-indexed products note, the variable products note, and life illustrations note. I believe all the others are unchanged. As you can see, the Academy has been very active on a number of initiatives. These groups are representing you, and the actuarial community. If you're interested in getting any work group reports, call the Academy and they'll be happy to provide those reports to you. The Academy work groups are happy to receive input on these issues, and certainly participation is encouraged on the work groups.

INTRODUCTION AND OVERVIEW

Bud asked me to make a few comments on the unified valuation system. The group in charge has done a significant amount of work at the Academy. It has been working for about a year-and-a-half and has made a great deal of progress in putting forth a unified valuation system proposal. The project started with a “blank piece of paper,” and, as a result, created a long-term project. The group is not being constrained by any existing requirements. The group is focusing on overall solvency as opposed to only reserve adequacy. It’s a holistic approach as opposed to a seriatim approach, and it places more reliance on the actuary and judgment as opposed to prescribed methodologies. Some of the reports that the group has completed to date include advantages and disadvantages of the existing valuation process. The group has begun to catalog existing valuation standards. The group is also developing valuation tools for use by actuaries and possible methodology proposals. The group has also completed an in-depth study on international reserving methods and has developed a prototype unified valuation system (UVS) report and actuarial opinion. There’s also a group working on numerical examples to try to develop details associated with the proposal. Finally, the group has also developed a draft model law, which it is fleshing out at this point.

MR. FRIEDSTAT: There are so many changes, like those that Steve talked about, that have been going on in terms of new reserve methods and new tables. When we were planning for this session, we thought it might be a good idea to have a brief discussion of taxes in the opening session. I’m going to briefly discuss some of the tax implications of these recently developed and currently proposed reserve methods and tables. I will discuss how and when they might become effective for tax purposes, and the steps necessary to plan for these changes.

First is Actuarial Guideline XXXIII. The tax law basically says that you’re supposed to use the definition of CARVM that’s in place at the date the contract was issued. In 1995, companies were faced with a new version of CARVM, and they had to ask this question: Basically, was this a clarification of what CARVM was already all about? If that was the case, then presumably they should change their method for tax purposes for existing policies and take a 10-year spread in accordance with Internal Revenue Code Section 807(f). They should also use the method prospectively for new policies. There were others who viewed this as a new method. They believed

1998 VALUATION ACTUARY SYMPOSIUM

that there were certain elements, the 93% floor and certain other things, that were not part of CARVM prior to that date. If that position was taken, it was a new definition of CARVM, and you'd use that method going forward prospectively for new policies. No changes in tax reserving methods would apply to existing policies. That's an issue that had to be dealt with. I think it's pretty clear in my mind that the 1998 version of Guideline XXXIII is, in large part, a clarification of the 1995 version. To the extent that your tax reserves would change, you would have a 10-year spread for the difference between what you're on in the 1995 version.

Actuarial Guideline XXXIV sheds some light on what tends to be a fairly common audit issue. There's a lot of diversity in terms of how companies are handling their tax reserves for variable annuity contracts. At least this clarifies it for those contracts with minimum death benefit guarantees, which generally comprise the vast majority of existing contracts. There are still certain tax issues that have to be dealt with. The minimum death benefit guarantee reserve had been an issue under the prior tax law. There was an unfavorable ruling in terms of the qualification of that benefit as a "life insurance reserve" for tax purposes. I personally think that the overall way that Guideline XXXIV was written enhances the ability of getting a deduction for that minimum death benefit guarantee reserve. There still are issues that you'll have to deal with in terms of aggregation. Do you have to aggregate the two reserves (the general account and separate account reserve), and do you have to revalue the minimum death benefit guarantee reserve that's in the general account?

Guideline XXX. In order to have a table be prescribed for tax purposes, you need 26 states to pass it. This also applies to an interest rate. For a reserve method, all you have to do is have it be adopted by the NAIC. You don't need passage by 26 states. When Guideline XXX was passed in 1995, it became the definition of the Commissioners Reserve Valuation Method (CRVM) from that point going forward for contracts that meet the definition of Guideline XXX. Again, even though it has not currently been adopted by 26 states, it became effective for tax purposes when adopted by the NAIC.

The new Guideline XXX, if it is adopted by the NAIC, will constitute a new definition of CRVM for the types of policies affected and, prospectively become the tax reserving method. Note that any

INTRODUCTION AND OVERVIEW

tables that are included in XXX are not the prevailing mortality tables for tax purposes. You need 26 states for passage.

I will compliment the group that has been working on the new Guideline XXX. There are significant tax issues that needed to be dealt with in the formulation of the guideline. Those have been effectively dealt with, and they're very significant. I'm referring to the fact that there is a rule in the tax law that says that if there's more than one federally prescribed table, you have to use the one that generally produces the lowest reserve. There was some concern that a new table of select factors, when 26 states would pass it, would then produce the lowest reserve. It might then be inappropriately applied for tax purposes to contracts like whole life for which it was not meant. I think that has been effectively dealt with. More significantly, the table that is used for Section 807 purposes is also the table that is used for Section 7702 and 7702A, the definition of life insurance and modified endowment contracts. So, I think that people have done a good job of considering the tax issues in those deliberations. Again, the new table of select factors would not become a table for tax purposes for these types of products until it's adopted by 26 states.

I think the same is true for Guideline ZZZ. Once it's adopted by the NAIC it officially becomes the method for tax-reserving purposes. I think there was excellent involvement with the tax considerations there also. I was on the valuation committee, and I chaired the tax subcommittee of the Academy Task Force dealing with equity-indexed annuities. The two significant issues, from a tax viewpoint, were also very important from the point of view of the valuation requirements. Those issues were that any approach that was adopted had to be consistent with CARVM principles. It was important for tax purposes because CARVM is the definition of the tax reserve method for annuity products. Second, there was some consideration that since we had a variety of methods that were possible approaches to ZZZ, we didn't want it to be viewed that one method could produce dramatically different results from another. This was also important from a valuation standpoint.

As a committee, we reached the conclusion that the results under the methods were materially the same. There was no inherent advantage or disadvantage between one method or another, especially when you look at it from the point of view of all possible future courses of interest rates.

1998 VALUATION ACTUARY SYMPOSIUM

The new annuity valuation tables. As Steve mentioned, during 1998, many states will have adopted the new tables. I'm not sure that 26 states will pass it effective in 1998, but the year the 26th state passes those new annuity tables, they become the federally prescribed tables for tax purposes. If you see that happening in 1999, you might want to plan ahead and take that into account.

A table becomes the federally prescribed table once 26 states pass it. There is a window of three years for companies to adopt new tables, but there may be an advantage to you in going to the new table for tax purposes at the earliest opportunity.

Again, the new accidental death benefits (ADB) table will require passage by 26 states in order to become the federally prescribed table for tax purposes. The 2000 or 2002 CSO table, whichever year it becomes effective, will also become the federally prescribed table when 26 states pass it. What might be of even more significance to you and the product development people is that those will also be the tables for the basis of meeting the definition of life insurance under IRC Section 7702. It does have significant product development implications.

In relation to the disability tables, the individual table will become the table for tax purposes once 26 states pass it. As for the group table, the requirement for group long-term disability insurance for tax purposes is that you're supposed to use a table that's representative of company experience. The vast majority of companies that use a table for statutory purposes use the same table for tax purposes under the argument that it is representative of their experience. The companies simply change the interest rate for tax valuation purposes. Although there is no specific 26-state requirement for this because it is considered cancelable A&H, when companies begin adopting it for statutory purposes, it's likely that they will also be adopting it for tax purposes. Now, I'll turn the discussion over to Peter, and he'll be talking about GAAP issues.

MR. PETER J. DURAN: I think it's pretty fair to say that there hasn't been as many different types of activity going on in a GAAP world this past year as there has been in the statutory world.

INTRODUCTION AND OVERVIEW

However, there has been one very significant pronouncement, and there are a couple of other things that are cooking, so to speak, that will be or have the potential to be very far-reaching and very significant in the years that come.

The development that is very significant, which just came out in June of this year is *FAS Statement 133* on derivatives and hedging. The FASB has been working on this statement for literally years. There were two different exposure drafts of it, and it has been finalized. That's the one I'm going to talk about first. One of the other items that I'd like to address is a concepts statement that the FASB issued. It has had various names. The final name was called using cash-flow information. At one point it was called present value-based measurement in accounting. It talks, on a conceptual basis, about how present values ought to be used in accounting without giving any real specific guidance. It's just a concept statement. There's a project at the AICPA level. The Insurance Companies Committee of the AICPA has a project on nontraditional products. Some of the products that the NAIC is wrestling with from a statutory point of view, the AICPA will be wrestling with from a GAAP point of view as well.

There are a couple of Standards of Practice (SOPs) that I'll just mention briefly that came out from the AICPA in 1997 and 1998 that are going to be effective in either 1998 or 1999. I want to say a little bit about international accounting standards, which, up until now, have not been a major factor in the U.S. but have a potential to become much more significant in the future. *FAS Statement 133* prescribes new accounting for derivatives and gives new definitions of derivatives and embedded derivatives. These are new rules for what is referred to as hedge accounting, and there are very specific, lengthy, complicated definitions of what a hedge is. It specifically addresses three kinds of hedges. The most significant are what they call fair-value hedges. It also talks about cash-flow hedges, and one is hedges of investment currency in a foreign subsidiary. The statement was just adopted in June. It could be applied as early as the third quarter of 1998. However, adoption isn't required until the year 2000. There are some significant adoption issues in terms of transition. There's going to be a number of sessions that are kind of related to this on the program. There are

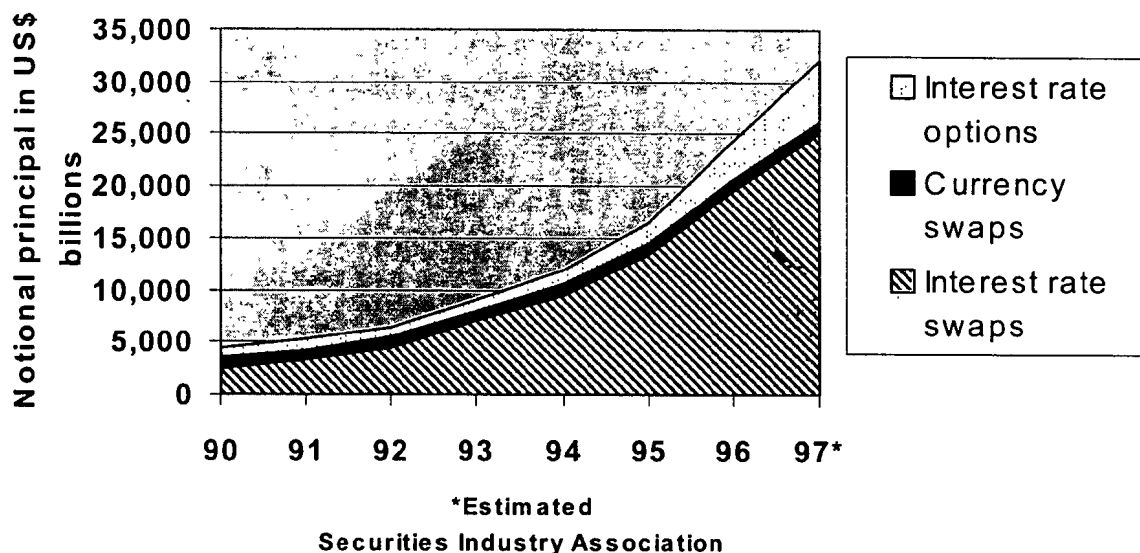
1998 VALUATION ACTUARY SYMPOSIUM

a number of GAAP sessions. There's a session on accounting for derivatives where I presume this will be sort of the topic. There's going to be a session on accounting for equity-indexed products under GAAP, which will be guided, at least in part, by this pronouncement. I put in a plug for those sessions later on.

The motivation on the FASB's part is obvious. The amount of derivatives has just skyrocketed over the last decade. Chart 1 shows how interest rate swaps have increased tenfold in terms of their notional principle over the last seven years. It has become an issue that the FASB just had to deal with. It had a big problem with the way interest rate swaps were accounted for under GAAP, and it wanted to fix that. It believed that the existing guidance was incomplete and inconsistent. Sometimes you had gains and losses that you deferred, and sometimes you didn't. It was complex and had a lack of transparency. These were the reasons given by the FASB. I guess we'll have to judge for ourselves whether the new standard is somehow more transparent than what we had before, or whether it's less complex, because this is certainly one of the most complex statements that has even been issued.

There were four cornerstone decisions that the FASB made early on in a project that set the tone for the rest of the project. The first was that derivatives create rights and obligations that meet the definitions in the GAAP concept statements for assets and liabilities. Therefore, they should be recognized on the balance sheet. Up until this statement, interest rate swaps, for example, were not recognized on the GAAP balance sheet. The second decision is that they also believed that fair value is the only relevant measure for determining the value of derivatives. The third concept is that only assets and liabilities should be recorded on the balance sheet. It seems obvious, but it was a backhanded way of saying that certain deferred gains and losses that had been allowed under the prior accounting would not be allowed anymore. They wanted to prescribe very tight rules for what they call special hedge accounting, which I'll talk about later.

CHART 1
Increased Use of Derivatives
Amount of OTC Instruments
Outstanding Rises 10-fold



The definition of a derivative, according to the FASB, had several elements. There needs to be an underlying, which is an index or a variable, for example, like the London Interbank Offered Rate (LIBOR), the interest rate or the price of a Treasury security, or the price of a bushel of corn. It is a notional amount that determines the aggregate amount on which the value will be calculated. It is the notional amount of the swap. There needs to be a relatively small initial investment. We're not really investing in an asset, but in the potential changes in value that the financial instrument may undergo over time. The fourth criterion was that there needs to be a net settlement either in cash or in something that can be converted easily to cash. Finally, they introduced the concept of embedded derivatives as well as free-standing derivatives. Embedded derivatives are derivatives that are inside a host contract, which is not itself a derivative. An example of that in the insurance industry is the equity-indexed annuity where you have a derivative embedded in what would otherwise be a bond type of contract or a single premium deferred annuity type of contract.

1998 VALUATION ACTUARY SYMPOSIUM

So, on the liability side, equity-indexed products will be affected. The GAAP accounting for equity-indexed products will be affected, as well accounting for some of the investments that insurers commonly invest in, such as equity-indexed notes and convertible securities. As I said, the main tenet or principle is that all derivatives will be recognized on the balance sheet, and they'll be recorded at fair value. We take off from there with a whole bunch of special rules in various circumstances.

We will have what the FASB calls special hedge accounting when we designate certain items as hedges and other items as hedged items. There are a number of criteria that need to be met in order for an item to be considered a hedge. There needs to be formal documentation of the hedge relationship. The company has to set out in writing what the risk management objective is. For example, the formal documentation might be that we want to protect ourselves against changes in the fair value of a bond portfolio that we hold. Or, we want to protect ourselves against changes in the fair value of a GIC contract, although we haven't seen anybody do examples of that one. Nevertheless, that would certainly be a potential hedge situation. You need to document the nature of the risk being hedged and the method for assessing the effectiveness of the hedge. The hedge has to be highly effective. What that means is that the changes in the fair value of the hedge need to correspond very closely. They don't give you an exact number, but they need to correspond very closely with changes in the fair value of the hedged item due to the risk being hedged. That's quite a mouthful, but what they're essentially saying is that you need to identify the nature of the risk being hedged. For example, if you have a bond, the market value could change because of changes in interest rates. The market value could also change because of changes in the credit rating of the bond. You might do an interest rate swap to protect against changes in the market value of the bond due to changes in interest rates. But, it would not protect against the risk of changes due to changes in credit quality. You have to identify the nature of the risk being hedged and see whether the hedge is highly effective or not, based on the nature of that risk.

There are a number of qualifying hedged items. What can you hedge? What can't you hedge? For example, you can't hedge an asset or a liability that is already accounted for at fair value, and where

INTRODUCTION AND OVERVIEW

the fair value already goes through income like a trading security under *FAS 115*. The fundamental criterion for being a qualifying hedged item is that the item has to present an exposure that could affect the financial statement. If we have a bond, the changes in the fair value of a bond, if it's an available-for-sale bond, can affect the financial statement. That can be a hedged item. The way the rules work are the ineffective portion of the hedge will drop through to earnings. For example, when we have fair value hedges, the change in the fair value of the derivative is recognized in current earnings. So, if the swap is going to be the hedge, as the swap changes in value, the changes in value will go through earnings. The changes in value of the item being hedged will also go through earnings. To the extent the hedge is actually effective, there will be no impact on earnings, which is what you'd like to happen. That's what you'd like. However, to the extent the hedge is not effective, there will be an impact on current earnings.

Cash-flow hedges are hedges of uncertain future cash-flows. For example, if we have a variable rate note, the cash-flows on that are uncertain, and we might be able to hedge that by swapping variable for fixed. There's a different accounting for cash-flow hedges than there is for derivative hedges that change. It goes through something called comprehensive income rather than income. Comprehensive income is a broader definition of income that includes basically all changes to equity except those that are due to capital infusions and dividends. That's a very brief overview. I would encourage anybody who's interested in this topic to attend the session that Dave Rogers is going to moderate later on.

I think the next statement is very interesting to actuaries because it deals with present value-based measurements in accounting. The FASB has issued an exposure draft of a new concept statement. A concept statement doesn't give specific guidance on anything in particular, but it does set out general principles that the FASB will use in setting future standards. For example, they've said that they want to move more in the direction of fair-value accounting. The board has said that publicly and on record. In fact, *FAS 133* that we were just talking about is a step in that direction. This concept statement will be setting out guiding principles that the board will use as it takes on other projects, like how do you measure all financial instruments at fair value? That's a project that

1998 VALUATION ACTUARY SYMPOSIUM

they're about to undertake. It would be used as a set of criteria for evaluating specific proposals in future situations that they will deal with. It would bring forth a common understanding of the objectives of present value measurement in accounting and in GAAP accounting.

They do endorse present value as the most relative measure when cash-flows are uncertain as to timing or amount. This is, I guess, your typical no-brainer to the actuarial community, but it has taken the accountants a long time to come to this realization, so we're announcing it today. Uncertainties of cash-flows should be reflected through the use of probability-weighted cash-flows discounted at risk-free rates. They really have a position in terms of what the discount rate should be. That continues to be controversial. They're also talking about using what we might call scenario analysis, looking at all possible cash-flows, rating them by probability, and then discounting. There are a lot of technical issues in this, and whether they have it just right or not is a question.

They've identified two measurement objectives for liabilities, because one of the things they talk about rather extensively in this paper is liabilities, and how do we use present values to measure liabilities? They have identified two variants on fair value. One is what they call fair value, which is the present value of cash-flows based on the market's assessment of cash-flows. Then "entity-specific" value is a present value of cash-flows based on the company's entity's assessment of cash-flows.

The AICPA project on nontraditional products is getting underway. I think it's moving slowly. You can see they have a target completion date of the year 2000, mid-2000. They're going to address what they call nontraditional annuity and life insurance contracts, although they specifically have decided not to address equity-indexed products because they believe those have already been addressed by *FAS 133*. They're going to look at the classification and valuation of liabilities. They're going to look at what disclosures should be in the financial statement. The project is a hodge podge of a lot of different things. Another aspect of the project is separate accounts. How should separate accounts be presented? In the old days, we had separate accounts where the policyholder bore 100% of the risk versus general account products. Today there's a whole range of

INTRODUCTION AND OVERVIEW

products that are in between. Which products should get the separate account treatment and which should not?

They're going to be looking at the question of guaranteed minimum death benefits on variable annuities, and what the GAAP accounting should be for that. What should the reinsurance accounting for guaranteed minimum death benefits be? That has been a subject for which there is no guidance. Different people are doing different things. How do you amortize deferred acquisition cost (DAC) for these products? As I mentioned, there are separate accounts, the classification of assets and whether they should be valued at book value or market value.

Let's quickly go over Standard of Practice (SOP 97-3), Guaranteed Fund Assessment. It is effective for 1999, and it gives some rules for how you account for the costs of the guarantee fund assessments under GAAP. Basically, you have to accrue for them at the time of insolvency, provided that you can estimate the liability. The SOP permits discounting of the expected future payments. Internal use computer software (SOP 98-1), requires the capitalization of the direct costs of internal use computer software. There have been variations in practice on this. Sometimes companies did it and sometimes they didn't. From now on the direct costs of internal use, computer software development, have to be capitalized under GAAP, although any systems enhancements to get systems in shape for the year 2000 need to be expensed. There's no change in that.

Finally, I just want to say one thing about international accounting standards. There has been something around for a long time called the International Accounting Standards Committee (IASC), which nobody paid a lot of attention to until 1995 when there was an agreement between the IASC and another organization called the International Organization of Security Commissions. They agreed on a program to develop international accounting standards that could be used for cross-border financing. In the U.S., the SEC is taking a wait-and-see attitude to this. The issue is that we need a set of accounting standards that could be used in any country to raise capital. The IASC was charged with doing that. We're supposed to have final standards around 2000 or 2001. There is an Insurance Steering Committee of the IASC that is charged with developing a standard on insurance. The insurance standard is going to have to be consistent with an overall standard on

1998 VALUATION ACTUARY SYMPOSIUM

financial assets and liabilities. The direction, at least at the exposure draft stage, is that all financial assets and liabilities would be measured at fair value. That's obviously a big change from where we are today. It is consistent with the FASB's direction in the U.S. to move toward fair value. There's a committee of the International Actuarial Association that's chaired by Sam Gutterman, the former SOA President. It is made up of actuaries from a number of countries. This committee is actively monitoring and commenting on this process. It is a very, very active group. That has the potential, as I say, in the years to come, to have a major affect on multinational companies.

FROM THE FLOOR: I have a question for Steve. You mentioned in your presentation that the products with guaranteed living benefits on variable annuities have now been pulled out of ZZZ. Is it my understanding that the regulators would like us to encourage companies with these products to work out reserves with the regulators prior to actually setting and filing the statements?

MR. PRESTON: Yes, that's correct. The regulator group has struggled with this because they want to allow these innovative products, but without specific requirements, there is really great difficulty in that area. So they have stated that they want to have companies come forth as part of the filing process and get into detail as to how they plan on valuing the products.

MR. FRIEDSTAT: We may have a further response to that question.

MR. LARRY M. GORSKI: I have some clarification or elaboration on what Steve said, but in a little different vein. I think twice you referred to the NAIC Innovative Products Working Group, and both times I think you implied that the group is moving towards making it easier for new innovative products to get regulatory acceptance. While that may generally be true, that statement should not be interpreted to mean that every product is simply going to be accepted by regulators. I just want to clarify that. It's not an open-door policy. In fact, there's one product that has been discussed at a couple of the Innovative Product Working Groups, and in my view it doesn't deserve to see the light of day. Other people feel the same way. There is not an open-door policy where every round peg is put into a square hold. There are products that get turned down.