

**RECORD OF SOCIETY OF ACTUARIES
1986 VOL. 12 NO. 2**

ACCOUNTING FOR INTEREST-SENSITIVE PRODUCTS

Moderator: DANIEL J. KUNESH
Panelists: B. F. DUNN*
CHARLES D. FRIEDSTAT
Recorder: LINDA S. NEED

- o Types of products involved
 - Universal life (fixed and variable)
 - Annuities (fixed and variable)
 - Products with "market value adjustments"
- o Accounting alternatives
 - Statutory
 - Generally Accepted Accounting Principles (GAAP)
 - Internal reporting
- o Federal income tax considerations
- o Status of Financial Accounting Standards Board (FASB) proposal
- o Requirements of Securities Exchange Commission (SEC)
- o Asset/liability matching requirements of regulators

MR. DANIEL J. KUNESH: They say there are two things certain in life: death and taxes. A list of the more uncertain things in life would probably include exactly when we are going to die and how much we are going to have to pay in taxes (given the current trend towards tax law reform). It is quite likely, especially today, that this list of uncertain things would include accounting for interest-sensitive products. Does anyone know what the final guidelines from the FASB will look like?

* Mr. Dunn, not a member of the Society, is a partner of Peat, Marwick, Mitchell & Company in Chicago, Illinois.

PANEL DISCUSSION

There are some exciting developments on the horizon in the area of interest-sensitive product accounting. Some of these developments are going to surprise you and some may even upset you.

We are privileged and honored to have, as a guest speaker, Mr. Bob Dunn, a partner with the firm Peat, Marwick & Mitchell in Chicago. Mr. Dunn is no stranger to many in the room today. He is among the forefathers of the original Audit Guide and has remained very active with the American Institute of Certified Public Accountants (AICPA) and other groups responsible for formulating accounting policy in the industry. My second co-panelist is Mr. Charles (Bud) Friedstat from the firm Ernst & Whinney, also in Chicago. A principal at Ernst & Whinney, Mr. Friedstat is no stranger to the topic of accounting for interest-sensitive products. He is an expert on insurance taxation and has extensive experience with the topic at hand. I am a principal with Tillinghast, Nelson & Warren in Chicago.

MR. B. F. DUNN: The AICPA formed a task force through its Insurance Companies Committee about 3-1/2 years ago to deal with non-guaranteed premium product issues. I was appointed its chairman. When this Non-Guaranteed Premium Products Task Force started its work, universal life was just beginning to be sold. The Task Force did its work over 2-1/2 to 3 years. The Task Force's final report to the Insurance Companies Committee of the AICPA was approved and sent, as an issues paper, to the Accounting Standards Executive Committee of the AICPA, which has since passed it on to the FASB. The FASB is the only one of these groups that really counts.

AICPA Issues Paper. The issues paper (dated November 1985) is strictly the product of a group of six accountants. However, we had input from many other sources. Every meeting of the Task Force included representatives of the actuarial profession. We held our meetings in the "sunshine"; we did not turn away anyone who wanted to participate and share their ideas.

The Task Force started by dealing with the classic non-guaranteed premium product. It was new to the market. The only difference between this product and the traditional products was that the insurance company reserved the right to change premiums. The question we had to deal with was "What do accountants

ACCOUNTING FOR INTEREST-SENSITIVE PRODUCTS

do in the event that premiums changed?" It took us one meeting to decide that it was not a big problem. The traditional assumptions could simply be "unlocked" when the premiums were changed. Old reserves, old deferred acquisition costs (DAC) and the old grading schedules for DAC were locked in. New reserves, DAC and grading schedules could be calculated starting from the point in time when premiums were changed.

AICPA Issues Paper -- Single Premium Deferred Annuities (SPDAs). About the same time, a controversy started with respect to SPDAs. Many, particularly accountants, concluded that FASB's Statement 60 (FASB 60) contained the wrong answer with respect to how to account for SPDAs. I agreed that FASB 60 was wrong. The Task Force decided to deal with universal life type products after solving the SPDA accounting question.

I cannot imagine a more simple product than the SPDA. I thought we could answer the SPDA question in one meeting, too; however, two years later, we were still arguing about it. It eventually became clear to a majority of the Task Force that something had to be done, if for no other reason than to more closely conform to the SEC's determination that there were no profits at issue on SPDAs. It did not make sense to the SEC, nor to me, that profit should be recognized at issue on a contract like the SPDA.

One way our Task Force moved towards this conclusion was by asking ourselves and the head technical partners in some of the larger accounting firms a simple question: "What would you do, if you were not an insurance company, and you had a rather simple contract (such as a lottery annuity), where you received an amount of money; you immediately invested that money in something absolutely safe (such as Treasury Bills); there could be no surrenders; and there was a certain string of payments?" Since there is no exposure to death or surrender, one can project rather precisely how much money will be made on this hypothetical contract.

Given those facts, we asked, "Where there is almost nothing to keep the company from earning those projected profits, is it appropriate to record some profit when the contract is sold?" No accountant would agree that you could record any profit on the sale; profits have to flow with the life of the contract. We

PANEL DISCUSSION

assumed that this was the right answer. However, if the hypothetical contract was made riskier by adding the possibilities of surrender and death, the accounting literature indicated that you could recognize some profit at issue. This did not make sense. We finally concluded that, with respect to SPDAs, we had to develop a methodology that would recognize profits over the lifetime of the contract. The issues paper we drafted indicates that either a retrospective deposit methodology (i.e., the liability is the fund balance and acquisition costs are amortized) or a prospective reserving methodology (i.e., solve for the break even spread assumption) would be appropriate.

AICPA Issues Paper -- Universal Life. It got more difficult when we started dealing with products like universal life. We failed to reach consensus early and never did. There were a few (myself included) that could not logically bridge the gap between SPDAs (with no profit at issue and no profit as a percentage of premium) and a contract like universal life (with some profit at issue and some profit as a percentage of premium). However, the majority of the Task Force, as well as the Insurance Companies Committee and the Accounting Standard Executive Committee of the AICPA, felt that there was an adequate bridge. They concluded that use of the composite methodology, which in effect is traditional GAAP with a larger provision for adverse deviation, was appropriate for universal life type contracts.

The composite methodology is similar to what you have been doing all the time on traditional products, except that there is a much larger provision for adverse deviation, and consequently, smaller profits are recognized as a percentage of premium. The reason I never believed this methodology would work is that we never developed good guidelines for how large a provision for adverse deviation was appropriate. My suspicion was that everyone in this room would come up with a different answer on every contract. In any event, the issues paper concluded that the retrospective deposit methodology was appropriate for all annuities and that the composite methodology was appropriate for most other interest-sensitive products.

However, the issues paper is largely academic. The project is now in the hands of the FASB. It added the project to its agenda in February 1985 and has been working on it since then. The FASB was originally going to have a draft of its

ACCOUNTING FOR INTEREST-SENSITIVE PRODUCTS

position in 1985. Now it looks as if it will have a draft ready in the third quarter of 1986, with an official pronouncement possible in 1987. The FASB has appointed an advisory group (of which I am a member) and is communicating through the advisory group with many actuaries. Some of you have probably had an opportunity to make your views heard by the FASB or its staff.

FASB Status Report. The FASB issued a status report (#174) in April 1986 outlining its tentative conclusions. These conclusions included the following statement: "the Board is tentatively agreed that the accounting for long duration contracts contained in Statement 60 should not be reconsidered [i.e., we stay with traditional GAAP] if the contracts are both fixed and guaranteed and for which premium revenue is collected on a level basis over substantially the same periods that benefits are provided." The FASB also concluded that the composite methodology would not work. It would not approve that methodology. The FASB agreed that any accounting method that results in recognition of income based on a percentage of premium received is not appropriate for insurance contracts that allow the insurer to vary amounts charged or credited to policyholder accounts, or that allow the policyholder to vary the amount or timing of premium payments. In essence, the FASB would require retrospective deposit methodology on contracts so defined.

FASB Status Report -- Definition of Insurance Contracts. What does the FASB really mean to include in this definition of insurance contracts? I have visited with the staff at the FASB and have received reports about what is being said at some of its open meetings. If the FASB staff has its way, we all may be in for some interesting days. Currently, the staff would like to include many contracts in this definition. The new accounting rules it develops would apply to any contracts that allow discretion to either party -- the insurance company or the policyholder. If there is any discretion, you would not be able to use old FASB 60. Contracts that might fall under this definition, should it go forward, would include participating whole life contracts (because the insurer can vary the dividends) and possibly guaranteed renewable Accident and Health (A&H) contracts. There are probably many ways to apply a retrospective deposit methodology (i.e., no profits at issue and no profits as a percentage of premium) to participating whole life contracts. However, the FASB staff appears to be leaning towards some kind of prospective deposit

PANEL DISCUSSION

methodology, where the valuation premium would be over and above the premium needed to amortize acquisition costs. In essence, the valuation premium would be the gross premium, and the actuary would solve for a set of assumptions that would cause the product to break even. I do not know how this type of methodology would work on a guaranteed renewable A&H product; it might be a real stumbling block for the FASB in applying this theory.

FASB Status Report -- DAC Amortization. I want to mention a few other things that, as Mr. Kunesh said, may upset you. The Task Force made a mistake when creating illustrations for the issues paper. Because of the way some of the universal life composite methodology illustrations were derived, they showed early negative amortization of DAC. We should not have done that, because it started the FASB thinking about faster amortization of DAC. What causes the negative amortization? One of the causes is the amortization of DAC under various methodologies. Another cause is an interest factor in the amortization process. To an accountant, using an interest factor in the amortization process is identical to using sinking fund depreciation. That is something that has been around for many years. The FASB had to deal with the sinking fund depreciation question not very long ago. An AICPA committee dealing with accounting for real estate recommended that sinking fund depreciation be permitted and recognized as an acceptable method of depreciating an office building and other real estate. This method is rarely used in the United States, but is very common in Canada. In Canada, office buildings are typically amortized or depreciated using an interest assumption. It makes a lot of sense. The only way you can get a rational income statement, if you have a mortgage with interest being high early and low later, is to match the mortgage with a depreciation stream that includes interest. However, the FASB, in its wisdom, decided not to allow the addition of interest to United States depreciation methods. Since there appear to be no theoretical reasons why amortizing DAC on a long-term life insurance contract is different than depreciating a building, the staff of the FASB intends to recommend that the FASB not permit the use of interest in the amortization of DAC. Obviously, this exclusion of interest will speed up the amortization process.

The staff has also come up with another way to get faster amortization of DAC. In most of the methodologies for amortizing DAC, companies consider surrender

ACCOUNTING FOR INTEREST-SENSITIVE PRODUCTS

charges as part of the revenue stream. The FASB staff has concluded that, generally, surrender charges are there to help a company recover costs in the event of an early termination. Therefore, surrender charges, as they are received, could be considered a reduction in cost rather than revenue. This reduction in cost would be used to reduce DAC. Most companies are currently doing this for front-end loaded products. However, the FASB staff seems to be indicating that it is appropriate to reduce both front-end loaded and rear-end loaded DAC by surrender charges collected.

These would be two very dramatic changes. I do not know if they will occur. For many years, I felt, in spite of the Task Force, the Insurance Companies Committee and the Accounting Standard Executive Committee, that we had the wrong answer and that something similar to the retrospective deposit methodology was going to be the correct answer. I did not dream that it would go as far as no interest in DAC amortization and surrender charges being a reduction of cost, not revenue. Some of you who think that you have been as conservative as you could be, may find that you have not been conservative enough.

What are the odds on what the FASB will decide? Who knows? Undoubtedly, when the FASB circulates its exposure draft, everyone will have an opportunity to comment, and there will be public hearings. These kinds of approaches used to be, and can still be, very effective ways to get your views heard by the FASB. It consists of reasonable people. They are trying to get the right answer. They are not subject to the political pressures that the Accounting Principles Board was subject to at the time of the Audit Guide. There was tremendous political pressure on that rule-making body. That is how the Audit Guide became the Stock Audit Guide. This FASB is not subject to that kind of pressure. The only pressure it is subject to is intellectual reason. The issues will have to be debated on an intellectual, not political, basis.

FASB Status Report -- Retrospective Deposit Methodology. I would like to make a few comments on the retrospective deposit methodology. The FASB staff is convinced that the retrospective deposit methodology describes the minimum liability. There is the possibility of recognizing, through excessive early mortality charges, too much profit in the early years of a contract. If there were losses in the future, the retrospective deposit methodology liability

PANEL DISCUSSION

might not be large enough. The FASB staff is thinking very conservatively. The reaction of many accountants and actuaries is that the FASB has it backwards. Now that we have products where a substantial part of the risk has been passed over to the policyholder (because the company is able to vary the interest crediting rate and mortality charges), many of the company's risks are lessened. It would seem that a company should be able to count profit sooner when it is subject to less risk. The FASB realizes that there is a problem here. If there is too much human outcry about this inconsistency over where the FASB appears to be going with respect to traditional products, it may redo the whole thing, which would probably mean, with respect to traditional products, a full release from risk theory that we have not dealt with for a long time. Looking back on it, those of us who helped to write the original Audit Guide should have known better. Some of us felt we had the wrong answer with respect to annuities all the time. However, not that many annuities were being sold. We also knew that we had the wrong answer with respect to single premium products. There is no intellectual reason to front-end profits on these products; but again, there were not many being sold. If we had wrestled the problem through, with respect to annuities and single premium products, we would probably have reached an entirely different answer; however, we did not. That is why we are where we are today.

Change in Philosophy. There has been a very dramatic shift in thinking since the original Audit Guide and FASB 60. The two underpinnings of those documents were the matching of revenues and costs and the income statement being paramount. That is not the current thinking, which is to fix the balance sheet, get the right liability account, get the right asset account, handle the asset and liability accounts appropriately, and let earnings fall where they may. This is a very dramatic change in philosophy.

I could go on for some time about the philosophical underpinnings that I hear from the FASB. Victor Brown, one of its more thoughtful board members, recently wrote an excellent paper dealing with the dichotomy within the FASB. There is a faction that believes that the primary purpose of financial statements is to reflect economic reality. If you take that point of view, we would be using gross premium valuations, and the insurance companies would have real estate at

ACCOUNTING FOR INTEREST-SENSITIVE PRODUCTS

market value and oil and gas reserves at market value. That is not going to happen, even though economic reality cannot be ignored.

One of the other board factions believes that the primary purpose of financial statements is to be meaningful for decision making. Others believe that the primary purpose of financial statements is to accurately reflect contractual intent. To the extent that we get inconsistent answers out of the FASB, it is because of the pulling and shoving between these three points of view. These varying points of view often lead to the same answer and often lead to different answers. Things are apt to be confusing and uncertain until the FASB develops a consistent way of ruling on these accounting issues.

MR. KUNESH: I have two general observations. It appears that these proposals would apply to practically all products being sold today. Most universal life products have features that allow the insurer and the policyholder to vary premiums. Non-guaranteed premium products would also be swept into the fold. Second it would appear to me that there is uncertainty within the FASB itself. It does not really seem to know where it is or the direction in which it is heading.

MR. CHARLES D. FRIEDSTAT: Mr. Dunn has summarized the major developments in the history of GAAP accounting for interest-sensitive products along with the current status of efforts by the FASB to develop a uniform standard that can be applied to all companies. I will discuss how these developments have influenced accounting practices for these products in recent years with emphasis on current practices. Just what are companies doing in terms of accounting for these products in the uncertain environment? I will also cover in more detail the mechanics of applying these methods.

Some of the comments that Mr. Dunn made indicated that there is not agreement as to what costs may be amortized, what loads may be used to offset deferred costs, or what may be included in the definition of revenue. My comments will concentrate on the practices in place for three of the more common products being sold today -- SPDAs, universal life (both fixed and flexible premium) and single premium life (SPL). I will give theoretical and practical justification for the various methods commonly in use today and indicate where there seems to

PANEL DISCUSSION

be trends. I will also discuss the impact of the different accounting alternatives on the patterns of future earnings that emerge for each product.

GAAP Accounting for Single Premium Deferred Annuities

Although my comments relate specifically to SPDAs, many of them are equally applicable to flexible premium deferred annuities. My comments are not meant to encompass variable annuities.

Prior to 1982-83, companies selling a significant amount of annuities were generally more aggressive in using an accounting method which recognized a greater degree of income at the time the premium was received. Arguments for this position included consistency with the Audit Guide treatment; the degree of likelihood that required investment spreads were obtainable in the historically stable interest rate environment; investment management philosophies and the degree of asset segmentation and asset/liability matching; and certain features of policy design. In the real world, especially in a marketing-oriented company, there was a desire on the company's part to show an immediate positive impact on the bottom line when there were significant sales of these annuity products. Also, under GAAP accounting, companies had come to expect that increased sales automatically meant increased earnings.

Several developments resulted in a much greater shift towards methods which report no gain or loss at the time a contract is issued (except for non-deferrable acquisition costs). Under these approaches, profits are recognized over the term of the contracts. These events included the increasing instability in interest rates and exposure to C-3 risk in the early 1980s; the financial difficulties which occurred at the Baldwin-United and Charter Insurance subsidiaries and possibly at other large annuity writers; inquiries by the SEC to major annuity writers on their accounting practices and the degree of upfronting of profits; and the July 20, 1983 AICPA preliminary draft issues paper which concluded that the prospective or retrospective deposit approaches were the acceptable methods to be used in accounting for SPDAs. By year end 1983, and certainly by year end 1984, virtually all companies were using a deposit approach to account for new issues of SPDAs.

ACCOUNTING FOR INTEREST-SENSITIVE PRODUCTS

A brief discussion of the mechanics and earnings patterns of the more common accounting procedures for SPDAs follows.

Premium Approach. This approach attempts to follow the Audit Guide philosophy of matching revenues and costs, where premium is the definition of revenue. As a result there are no DACs carried against SPDAs since the DACs have been charged against single premium revenues when the contract was issued. Liabilities for future policy benefits and maintenance expenses are estimated, using a prospective approach, as the present value of future benefits and expenses to be incurred during the life of the contracts. Assumptions must be made as to full or partial withdrawal of available account values, death, interest and the exercise of settlement options. In each case, the costs associated with these occurrences are also estimated. Estimated costs depend on assumptions regarding expected investment yields, crediting rates to account values, surrender charges (if any), and any charges associated with settlement options. Future benefits are generally discounted to the present at the assumed investment yield rate (less margins for adverse deviation) resulting in a reserve substantially below the policyholder account value. Also, a significant portion of expected future interest margins are recognized as income at the time annuity premiums are collected. Future earnings relate only to the release of the margins for adverse deviation and differences between actual and expected experience. This approach is not unlike the calculations required for traditional non-par whole life.

Prospective Deposit Approach. This method may be thought of as a modification of the premium approach and normally develops greater reserves. Under this approach (and under the retrospective deposit approach), no portion of income is recognized as a percentage of premium. Rather, the premium is treated like a deposit, and income is recognized over the life of the contract. Under this approach, there is no separately determined DAC asset, and the same assumptions regarding future cash flows, experience assumptions, and interest crediting rates must be made as under the premium approach. However, instead of using the assumed investment yield rate, the discount rate used to determine present values is a "break-even rate" which results in the present value of future benefits and expenses (excluding nondeferrable acquisition costs) being equal to the premium received. This "break-even rate" is obtained by solving for the

PANEL DISCUSSION

interest rate that results in a net premium equal to the gross premium. This interest rate may not exceed the expected investment yield rate, and no income or loss results at time of issue. If all of the underlying assumptions are realized, income is recognized in future periods to the extent that the interest rate actually earned exceeds the calculated "break-even rate." For balance sheet purposes, the net reserve thus determined might be shown with the policyholder account value before surrender charges as a liability and the difference between the account value and the prospectively determined reserve as the DAC asset.

Retrospective Deposit Approach. As is true under the prospective deposit approach, no income is reported at the time a contract is issued, and the method is based on the accumulated effects of prior transactions. Under the retrospective deposit approach, the reserve is normally set equal to the full policyholder account value. Acquisition costs not recovered immediately from front-end loads are capitalized and amortized. The approach recommended by both the American Academy of Actuaries and the AICPA Insurance Companies Committee amortizes these unrecovered costs against reasonably anticipated future investment margins and surrender charges. In the illustrative example to the position papers, maintenance expenses are often deducted from this revenue stream against which DACs are amortized. This is logical. To accomplish this, assumptions must be made regarding death and full and partial withdrawals. The amortization schedule is often done on a worksheet basis, and the DAC assets at the various durations are usually determined using interest. The amortization schedule should be dynamic and be made sensitive to the actual termination experience of the business so that a proper matching of revenue and expense results.

In actual practice, straight-line amortization for fairly short periods (i.e., five to seven years, and almost never beyond the surrender charge period) is used by many companies. This may be appropriate if it results in a faster amortization pattern than under the recommended approach.

Summary. Currently there is a fair degree of consistency in the accounting approach taken by companies writing a material amount of SPDA business. While both the retrospective or prospective deposit approaches are permissible, and

ACCOUNTING FOR INTEREST-SENSITIVE PRODUCTS

while they generally develop reasonably similar patterns of earnings, the retrospective approach is far more common for practical and administrative reasons. Under both approaches, no income is recognized at issuance of the contract, and both approaches result in a similar pattern of income which is recognized over the term of the contract. Surrender charges are not used to reduce the reserve but are recognized as income when the surrender occurs.

GAAP Accounting for Universal Life

In my discussion of accounting for universal life, I will be referring to both fixed premium and flexible premium versions. My comments are not designed to encompass SPL products which are discussed separately.

Prior to 1984, when both the American Academy of Actuaries and the AICPA began to seriously address this issue, there was a significant degree of variation in the approaches taken by companies in accounting for the universal life products. Today there is still no general consensus as to the appropriate approach for using GAAP for universal life, although I believe companies have become somewhat more conservative in the amount of profit reflected at the time of premium receipt. This is due in part to the close scrutiny of methods by the professional organizations and also to the increased difficulty in realizing the anticipated investment spreads in the extremely competitive current environment.

The much greater number of approaches still currently in use is caused in part by a desire on the part of the management of major universal life writers (and companies where a significant percentage of all new business written is universal life) to realize some income on their GAAP statements at the time the policy is put on the books and at the time future premiums are received. This is especially true if management is more marketing oriented and has become accustomed to the traditional GAAP approach for ordinary life business where a significant proportion of profits is related to premium income.

There are significant persuasive arguments in favor of permitting at least a portion of income to emerge in relation to premiums. The difficulty appears to be determining how much income should be so recognized; this is subjective. In

PANEL DISCUSSION

many companies (especially if the product is a fixed premium variety) the receipt of premium is almost as predictable as with traditional whole life, and premium receipt is still a significant function.

There is significant variability in 1) the types of products and features being offered (front-end load, rear-end load, etc.); 2) the pricing and design of the product (relative importance of achieving investment spreads and mortality gains); 3) the company's markets; 4) the company's operating philosophy (e.g., not achieving the required investment spreads in early years to get business on the books); 5) the investment philosophy/practices (segmentation of assets and degree to which assets and liabilities are matched); and 6) the degree to which unrecovered costs match up with contractual surrender charges. For these reasons it is difficult to specify one accounting method as being appropriate for all universal life products.

As a general rule, I try to apply a standard whereby the approach taken produces a reasonable pattern of earnings taking into account all of the preceding items with emphasis on the services performed, the risks assumed, and the contract features. I am amazed by the number of companies that have adopted a methodology without examining the projected pattern of earnings. This is important and a part of the accounting methodology which should receive greater emphasis.

The final verdict has not been reached, and today there is still a fair degree of diversity in the accounting procedures used for these products. A brief discussion of the mechanics and earnings patterns of the more common accounting procedures for universal life follows.

Premium Approach. This is one of several prospective approaches which have been and are currently in use. Under this approach, GAAP procedures closely resemble the Audit Guide approach for traditional life business. Premiums are recognized as revenue when due or collected. Estimates of future premiums, benefits, and expenses are made based on assumptions regarding investment yields, interest crediting rates, contract charges, terminations and withdrawals, death benefits, expense levels, etc.

ACCOUNTING FOR INTEREST-SENSITIVE PRODUCTS

Assumptions should include provisions for adverse deviation. Policy benefits and expenses are matched against premium revenues through the calculation of the liability for future policy benefits. Likewise, the determination of DAC amounts are based on traditional concepts. The result is that income is recognized substantially in proportion to premium revenue, except for the effects of variations from assumptions and the release of provisions for adverse deviation.

Composite or Balanced Approach. This approach is similar to the premium approach except that there are significantly greater margins for adverse deviation. It is somewhat subjective and attempts to recognize the differences among universal life policies as to the risks and functions performed under the contract.

The determination of the revenue basis and the apportioning of the expected profit margins to particular risks and functions is accomplished by determining a net premium that is used to calculate the liability for future policy benefits. The calculation uses assumptions with greater than normal provisions for adverse deviation. The placement of these margins for adverse deviation can have a significant impact on the pattern of earnings. Depending on where these margins are placed, income will be recognized in appropriate relation to the significant risks and functions performed. Also the composite net premium will exceed the net premium determined under the premium approach. While a portion of income will still be recognized as a level percentage of premium, a portion would also be recognized from the release of the additional margins for adverse deviation. Income would also arise from the release of normal provisions for adverse deviation and differences between actual and expected experience.

While in theory the contract and its features should be analyzed to identify the relative levels of risks and functions performed, most of the additional margin for adverse deviation is assigned to the investment function. The most frequent question asked by companies considering the composite approach is how much of the total expected profit should emerge in relation to premium income. In actual practice, between 25% and 50% of total expected income is generally being recognized in relation to premium. This approach was recommended by both the American Academy of Actuaries and the AICPA.

PANEL DISCUSSION

Prospective Deposit Approach. This method may be thought of as a further modification of the premium approach and normally develops greater net reserves than even the composite approach. Under this approach (and under the retrospective deposit approach), no income is recognized at the issuance of the contract, and no portion of the income is recognized as a percentage of premium. Rather, income is recognized as it is realized through interest margins, mortality and expense margins, and surrender charges. This method is similar to the prospective approach for annuities in that sufficient provisions are included in each major assumption in the determination of the liability for future policy benefits so that the resulting net premium equals the gross premium. Income will then be recognized as actual experience varies from these loaded assumptions. The assumptions and the additional provisions in those assumptions will determine the expected pattern of reported income.

Retrospective Deposit Approach. This approach appears to be the general direction in which the accounting bodies are moving. Unlike the situation with annuities, where there is a close similarity between earnings patterns produced by the prospective and retrospective deposit approaches, there is not necessarily such a similarity for universal life earnings. As under the prospective approach for universal life, no income is recognized at issuance of the contract, and no portion of the income is recognized as a percentage of premium. Under this approach, the reserve is the full policyholder account value (without consideration of surrender charges, if any). DACs consist of the difference between first year acquisition costs and excess first year front-end loads or expense charges. The revenue stream against which deferred costs are amortized consists of the expected future income from differences between assumed experience and amounts credited or charged to the policy. In the examples, surrender charges were included as part of the revenue stream. All assumptions as to future experience should include provisions for adverse deviation.

In actual practice, there is much variability in the way different companies apply the retrospective deposit approach. If ten companies using the retrospective deposit approach to account for a similar universal life product were examined, ten slightly different approaches would be found. Some companies do not reduce DACs by excess first year loads and expense charges. Instead, these

ACCOUNTING FOR INTEREST-SENSITIVE PRODUCTS

items become part of the revenue stream against which DACs are amortized. This approach generally produces a faster pattern of earnings emergence and appears inappropriate.

Other companies deduct maintenance expenses from revenue, and as mentioned in relation to annuities, there is some degree of logic in this approach. Still other companies hold gross policyholder account values as the reserve and amortize DAC in relation to something other than future revenue margins. This is largely done for administrative ease and may be a stop-gap measure in the first year of the product to get something on the books. Examples of items used by some companies to amortize acquisition costs include premiums, cost of insurance rates for a level net amount at risk, and the premium necessary to keep the policy in force.

In most cases, these methods have proven inappropriate, with a fairly large first year GAAP income resulting. Some companies use surrender charges to reduce DAC rather than as a source of revenue against which DAC is to be amortized. This makes sense since it is logical that both front-end and rear-end loads should have similar treatment (i.e., both should reduce DAC). This view is currently in favor with the FASB. It also makes sense, because it is conservative, writes off DAC faster and is consistent with the reason for a surrender charge (i.e., the primary purpose of the surrender charge is to recover initial acquisition costs).

Relative Pattern of Earnings. It is fairly easy to see the relative degree of conservatism between the various prospective approaches, depending on where the additional margins are added. This is not always the case with the retrospective deposit approach. Generally, this latter method, which involves no profit at issue, is deemed conservative. However, depending on some elements of contract design, investment spreads, mortality charges, etc., this may not always be the case. For example, we have seen a number of universal life contracts where mortality charges are based on aggregate mortality, but expected mortality is select and ultimate. In these cases, a retrospective deposit approach may produce higher earnings in the early years than a balanced or composite approach.

PANEL DISCUSSION

Summary. There remains a great deal of inconsistency among companies in their GAAP methods for universal life. Guidance from the professional bodies has been somewhat inconsistent, and the final answer has not been received from the FASB. There is a difficult dilemma involved here. On the one hand, because of the great diversity of products, it may be appropriate to allow a greater degree of choice in the GAAP approach. On the other hand, some are concerned about abuse in this area unless a specific accounting procedure is adopted.

Product design differences should not result in a different pattern of earnings for equally profitable and risky products, but neither should the required accounting methodology significantly influence the way a company designs its product. It will be difficult to define one specific method which can be utilized for all possible universal life products. Until a final recommendation is adopted, it seems appropriate to maintain a reasonably conservative approach which produces a reasonable pattern of earnings taking into account product design and other features previously discussed.

GAAP Accounting for Single Premium Life

In recent years, SPL has become an increasingly popular product and accounts for a significant percentage of ordinary life premiums in some companies. This is in part due to the less favorable tax treatment related to SPDAs. One would thus expect that the appropriate accounting method should be similar to that adopted for SPDAs.

The American Academy of Actuaries and the AICPA have both dealt with the accounting treatment for SPL in their discussions of the treatment of lump-sum premiums for universal life policies. The Academy basically recommended the deposit approach under which no profit would emerge at the time of premium receipt. The AICPA Insurance Companies Committee adopted somewhat of a compromise position by limiting the amount of expected income that may be recognized as a percentage of premium to the amount that would be recognized if the contract required level premiums necessary to provide the death benefits under the contract for twenty years. The balance of the expected income would be recognized over the contract term through the inclusion of provisions for adverse deviations in the determination of the net premium. This latter

ACCOUNTING FOR INTEREST-SENSITIVE PRODUCTS

"20-year composite approach" has never been publicly illustrated, may be difficult to implement in practice, and would likely produce little earnings at the time the single premium is received. Generally, the deposit approach is used by the majority of companies writing this product.

Still there are some major writers of this product that do reflect a significant amount of income upon the receipt of premium. I recently read a company's 1985 shareholders' report and 10-K form that disclosed that 3% of premiums received on SPL products was entered as income at the time the premium was received. A significant amount of premium income was received on this product during 1985 with a much greater amount expected during 1986. While the disclosure of the accounting approach for this company was appropriate, it is my feeling that the company's approach will not be permitted for this product once the FASB addresses the issue. Whether or not I agree with the particular accounting approach adopted by this company, it should receive credit for its clear disclosure. It is very difficult to determine the methodology used for SPL accounting from most companies' financial statements.

While the issue has not yet been finally decided, there is a fair degree of consistency among companies writing a material amount of SPL business. The majority have adopted a deposit approach for new business under which no income is recognized at the time the premium is received.

MR. KUNESH: One thing is clear here. There is little consensus in the industry as to which method should be applied.

I would like to make a comment on GAAP and perhaps play the devil's advocate. The FASB has been compared to a number of things. Three come to mind at the moment: the federal government, a covered wagon and Jabba the Hut. Like the federal government, we really do not want the FASB involved, but we know it is going to be involved; when it does get involved, we know it is going to screw up somehow. Second, the FASB is like a covered wagon in the space age; it moves very slowly. Last, the FASB is like Jabba the Hut, because we know it is going to do whatever it wants to do, whenever it wants to do it.

The FASB proposals, to me, are particularly disturbing in three areas.

PANEL DISCUSSION

- o They seem to defy pure accounting logic, at least as I knew it in the past. I always believed that GAAP accounting required the matching of costs and revenues. Now I am not even certain what revenue is supposed to be for interest-sensitive products. Premium was the official income statement revenue. Yet, according to these proposals, you will not be able to recognize earnings as a percentage of premium. Under the old accounting logic, the process of matching costs and revenues meant that there was consistency between both sides of the balance sheet. Under the proposed rules, you would recognize interest on one side of the balance sheet, but not consider interest on the other side. Further, the new rules would also involve direct recognition of surrender charges against the DAC asset.
- o They seem to defy product economics, as Mr. Friedstat pointed out, and could easily lead to an erratic pattern of GAAP earnings. In most cases, earnings will be erratic under these proposals, and additionally, earnings will vary from company to company. This might lead to manipulation of product design features. We could have the cart pulling the horse. Companies that cannot use interest in amortizing DAC might overload their mortality margins to enhance profits in early policy years.
- o They may, to some degree, be self-serving to the accounting profession. It would be much easier to audit under the proposed rules than under the composite method or some of the other methods that have been suggested.

MR. R. THOMAS HERGET: Is the FASB literature, from which Mr. Dunn was quoting, authoritative accounting literature, or is it merely a communication of the FASB's current thinking?

MR. DUNN: It is a communication of the FASB's tentative thinking.

MR. HERGET: Therefore, a company would not have to change its accounting basis for current issues?

MR. DUNN: No, not based on anything that has been published to date.

ACCOUNTING FOR INTEREST-SENSITIVE PRODUCTS

MR. HERGET: You have been talking about focusing on the balance sheet: trying to get the account balances right and letting the earnings fall where they may. You talked about not using interest. I believe purchase accounting will soon be applied to a fair number of universal life policies. Under the guidelines for purchase accounting, you tend to have a market value philosophy. These certainly seem paradoxical. Do you have any idea what the hierarchy of these accounting principles might be?

MR. DUNN: Another of my jobs is sitting on a task force dealing with how to do purchase accounting for life insurance acquisitions. The life of the Purchase Accounting Task Force has been about seven years, and we have not met in a year and a half; we aren't making a lot of progress. I'll give you my personal interpretation of current accounting literature by using a hypothetical situation. Assume the FASB decides that retrospective deposit accounting is correct for historical GAAP, that no interest will be permitted in DAC amortization and that surrender charges should reduce the DAC asset. If you then have an insurance company purchase, and current accounting literature is to be applied to that transaction, I do not believe that historical accounting would affect the purchase accounting. Under purchase accounting, we'd still have to calculate the purchase price using fair market values for the various assets and liabilities. In a purchase situation, where retrospective deposit accounting was used for historical financial statements, the liability would probably be left alone. The DAC asset would be replaced with a judgmental asset for the present value of future profits on the business in force. The present value of future profits debit has to go either there or to goodwill. It makes more sense for the goodwill asset to remain unchanged.

MR. FRIEDSTAT: I agree with Mr. Dunn. While the Purchase Accounting Task Force has not met, it is my understanding that the approach to purchase accounting has been to emphasize return on investment principal and to define the initial reserve with the premium approach. The mechanics currently in place today would be consistent with that. I do not see anything, unless the FASB decides to address the issue separately, which would change that philosophy. Any other approach would deviate from a return on investment concept, which seems to be the direction the FASB is going with purchase accounting.

PANEL DISCUSSION

MR. DUNN: The one dichotomy may be the problem of interest or no interest. Right now, one of the reasons the Purchase Accounting Task Force is not meeting is that there is substantial disagreement among the members of this Task Force as to the interest rate that should be used in amortizing the value of insurance in force. Should you amortize it at the discount rate you used in valuing it? Or should you amortize it based on your expected investment yield rate (which would not include the risk rate of return)? The Task Force is very split. The FASB might decide not to permit any interest at all; however, I do not think it will do so.

MR. A. GRANT HEMPHILL, III: I do not recall any comments on a retrospective deposit benefit reserve. I wonder how many companies are using something less than a full accumulation value for back-loaded universal life?

MR. FRIEDSTAT: There are significant variations. Some companies may take the approach of reducing the reserve by the present value of future surrender charges. I have heard discussions of this approach, but I have not seen it in actual practice. However, I would not be surprised if in applying that approach, there are companies using something less than the full account value.

MR. DUNN: I see quite a few companies using less than the full account value.

MR. HEMPHILL: Where does the FASB currently stand on the benefit reserve?

MR. DUNN: Right now, if the product has a fund balance, the benefit reserve starts as the fund balance. Added to that would be any accrued but uncredited interest and any unearned mortality charges. Plus, to the extent that anyone can see future losses, there would be another addition.

MR. FRIEDSTAT: There is a current effort within the FASB which has not been brought out in this discussion. We have talked about the need for an additional reserve, and the FASB is looking at the issue. In the calculations that it is examining to determine the need for this reserve, the interest rate used in discounting the present values is the current rate being credited to policyholders, and the mortality discount is based on current mortality charges. This is significantly different than what most companies have

ACCOUNTING FOR INTEREST-SENSITIVE PRODUCTS

normally done. Typically, the discount rate is an assumed earnings rate and is somewhat divorced from the rate that is actually being credited to policyholders. This is another traditional GAAP concept that is being reexamined. It is not surprising to hear that it is also an issue in the Purchase Accounting Task Force.

MR. WAYNE E. STUENKEL: When the FASB comes down from its mountain top and decides on the appropriate method for universal life, what might happen to existing universal life policies? Should we expect to see some lock-in of current GAAP methods on existing reserves and DAC? Or should we expect to see some restatement of earnings?

MR. DUNN: That is anybody's guess. The FASB has been somewhat inconsistent when it issues a pronouncement that affects existing things. I am approximately 80% confident that the FASB ruling would apply only to contracts issued after some future date and that old contracts would be unaffected.

MR. STUENKEL: That would be very comforting to many of us.

MR. DUNN: Yes.

MR. JERRY F. ENOCH: Could someone please explain the mechanics of using the surrender charge to offset the DAC asset?

MR. DUNN: From an accountant's worksheet point of view, it would be a matter of accumulating surrender charges collected. The difference between cash paid and the fund balance would be accumulated and become a direct subtraction from DAC asset. The amortization process for the balance would be subject to a reasonable spreading, probably against the margins. That is how I visualize it. You might also be able to do it with some type of actuarial factor method.

MR. FRIEDSTAT: I would also visualize a worksheet. To use a factor approach, you would have to work in expected surrender assumptions and the actual surrender charges. It could be done, but you would have to alter the general methodology.

PANEL DISCUSSION

MR. ENOCH: From a conceptual standpoint, there has always been a surrender charge on traditional products. It was just not explicit. Therefore, we would be doing things one way for new products and another way for old products. The inconsistency has been mentioned before. Consider a fixed premium universal life product with premiums paid continuously, and compare it with the traditional whole life policy. We are probably going to end up with drastically different situations for the two products.

MR. DUNN: Yes.

MR. JERROLD R. SCHER: To what extent does the actuary have to consider the C-3 risk in terms of loss recognition? If the assets are too long, it does not sound like there is a direct need to go through the "reasonable" scenario. Are there demands placed on the actuary to recognize that kind of loss?

MR. KUNESH: Under the current proposals for the retrospective deposit methodology, there is no real tie in with the asset side of the balance sheet. But certainly, the current directions of the various committees that are studying the valuation actuary concept and the analysis of cash flow (and the C-1, C-2, and C-3 risks) indicate that the actuarial profession should consider cash flow very carefully in establishing a GAAP methodology. This means you cannot get away from prospective analysis.

MR. SCHER: Does this suggest that if the actuary thinks additional reserves are necessary for his product, they could become a GAAP reserve?

MR. KUNESH: I think so. Mr. Dunn's earlier discussion of the FASB shifting emphasis towards the balance sheet and the discussion about an additional reserve indicate that this would be possible.

MR. DUNN: From an accounting perspective, there are probably no direct accounting entries that would be made as a result of an actuary's concern over an extreme C-3 risk. For example, I own this hotel, and I do not have an insurance policy. I am fully at risk. I disclose that I am fully at risk, but I do not make an accounting entry. I suspect that concern expressed by a

ACCOUNTING FOR INTEREST-SENSITIVE PRODUCTS

professional actuary over an inordinate amount of C-3 risk in a company might affect disclosures, but I do not think it would affect accounting entries.

MR. ROBERT H. DREYER: If you have an agency contract that includes charge-back of commissions on early lapse, should these charge-backs be treated the same way as a surrender charge in your formulation of GAAP earnings?

MR. DUNN: I do not know.

MR. FRIEDSTAT: There is some logic in that treatment, to the extent that the charge-back commissions are recoverable.

MR. DREYER: For annuity products, you spoke of an amortization period in the range of five to seven years, with a maximum period being no longer than the surrender charge period. Our "Big Eight" firm has suggested to us that it would accept an arbitrary twenty year amortization schedule. This may have something to do with the product, which is an IRA/Keogh contract issued in a non-competitive market. Could you comment?

MR. DUNN: I am guessing that whatever the FASB finally decides on the amortization of acquisition costs, it would accept anything up to the expected life of the contract. If a company chooses to be conservative and use a shorter amortization period, it is likely to be acceptable. However, "life of the contract" will probably not change.

MR. FRIEDSTAT: I have also seen surrender charge periods longer than ten years. The determining factors are the contract and the investment crediting strategy. I can certainly conceive of situations where twenty years would not be unreasonable. However, if a company is crediting 12% in the current environment and is not earning its spreads and has not historically earned its spreads, it might want to adopt a more conservative approach.

MR. WILLIAM M. WHITE: Most of the words I have heard today have been regarding the theoretical approach for using GAAP for these products. I am concerned that the practical approach is being overlooked. I am concerned that we are going to get caught in a situation where what is theoretically right is

PANEL DISCUSSION

practically impossible. Would anyone care to address this concern about the reality of what we have to live with?

MR. DUNN: From a practical standpoint, fund balance is not a difficult concept for most contracts. It is a fairly practical thing to calculate. The potential problem is the DAC amortization. I expect the final authoritative literature on this question to be very broad. Accounting literature on how to depreciate a building, deplete an oil well and depreciate a machine is very broad; much is left to judgment. The requirement is that it be a rational, reasonable method. In the real world, I do not think one will find much constraint on a reasonable method.

MR. FRIEDSTAT: Most of the methods that appear in the direction we are heading are the easier ones to administer. No matter how you choose to develop your amortization schedule, once you do the calculation, you have percentages and you apply them to certain costs. There are some difficult things however. GAAP is dynamic. You are supposed to look at the appropriateness of the assumptions and change the amortization schedule appropriately. From a practical point of view the easiest approach might be to use the retrospective deposit approach with a worksheet or, if the systems are available, a factor. The practical problems are not going to be that difficult. We will now cover a few tax, statutory and valuation actuary issues.

Tax Accounting for Interest-Sensitive Products

Annuities: The Tax Reform Act of 1984 designated the Commissioners' Annuity Reserve Valuation Method (CARVM) to be the prescribed reserve method for annuity contracts that was in effect when the contract was issued. The Conference Committee's report stated that if the National Association of Insurance Commissioners (NAIC) in 1984 recommended that surrender charges were to be disregarded and no longer were to reduce reserves under CARVM, then this interpretation would have been considered to be retroactive to the date of issuance of the contract. This would have been the only exception and related mainly to contracts with contingent surrender charges or so-called "bail-out" provisions. Since this was not passed by the NAIC in 1984, the original definition of CARVM applies for tax purposes; there are no exceptions.

ACCOUNTING FOR INTEREST-SENSITIVE PRODUCTS

Different actuaries may have different interpretations of how to apply the original CARVM reserve principles to annuities with a bail-out provision. This is not dealt with specifically in the law.

During 1985, the NAIC passed a guideline concerning CARVM which specified that in the reserve calculations the value of future guaranteed benefits may not be reduced by contingent surrender charges which may not be available upon cash surrender. If the guaranteed rate violates the bail-out provision, the contingent surrender charge may not be considered when calculating the future account value. For tax purposes, this applies to annuities issued beginning in 1985.

For tax purposes, excess interest guaranteed beyond the calendar year end is to be excluded from the tax reserve calculation. Most people have interpreted this to mean that in the determination of the future cash surrender values, a company may not accumulate forward to determine future account values at a rate exceeding the federally prescribed rate. Thus, on contracts where high interest guarantees still exist at calendar year end, the statutory reserve may exceed the tax reserve.

In all cases, the final tax reserve included in the return is never less than the cash surrender value.

Universal Life. For life insurance contracts, the federally prescribed reserve method is the applicable Commissioners' Reserve Valuation Method (CRVM) in effect on the date the contract was issued. In December 1983, the NAIC promulgated a CRVM model regulation for universal life type products as a minimum reserve basis. Although prior to this time several companies may have utilized their own interpretation of CRVM for universal life policies, there was not an NAIC method which applied. In circumstances like this, the Senate indicated that reserves for tax purposes should be computed on a method consistent with CRVM. In actual practice, for administrative ease, most companies have used the CRVM model law approach for calculating federally prescribed tax reserves regardless of when the contract was issued. As is true for annuities, excess interest guarantees above the federally prescribed rate should not enter the CRVM tax reserve calculation. Therefore, it is possible that tax and statutory

PANEL DISCUSSION

reserves will differ for contracts with high interest guarantees (above the 6% federally prescribed rate) that extend beyond the calendar year.

The final tax reserve included in the tax return is the greater of the CRVM reserve and the cash surrender value.

Single Premium Life. There do not appear to be any tax reserve calculation issues which are peculiar to SPL. Again, amounts relating to excess interest guarantees beyond the calendar year end should not be included in the federally prescribed tax reserve.

MR. KUNESH: So far we have heard about the rather unsettled environment that companies find themselves in when reporting earning on interest-sensitive products on a GAAP basis. A similar state of disarray exists with statutory accounting for these products. Valuation actuaries are justified in feeling a bit frustrated about the lack of guidance, direction and consistency regarding the practices found in the industry today.

Statutory Accounting for Universal Life

NAIC Model Regulation. In December 1983, the NAIC passed a model regulation involving the valuation and nonforfeiture procedures for universal life products. However, to date, only ten states have adopted it. It appears that this regulation will be short lived. A wide variety of complaints have been registered by both companies and regulators concerning the model bill's ability to fairly and consistently regulate the products found in the market place today. Insurance companies, especially smaller insurance companies, complain about the model bill's complexity and the general lack of available valuation software systems. Regulators complain that the regulation drives the design of new products and opens the door to abuse through a perceived laxity in the nonforfeiture provisions. They complain that through the manipulation of policy loads and benefit charges (e.g., cost of insurance charges), companies can design a universal life product with almost any type of cash value structure they desire. Critics complain that the model regulation is next to impossible to program, extremely difficult to audit, and contributes little more than job security to consulting actuaries. Accordingly, several states which had

ACCOUNTING FOR INTEREST-SENSITIVE PRODUCTS

previously considered the regulation and other states which have already adopted it, are calling for a redefinition and restructuring of both the valuation and nonforfeiture provisions.

A brief summary of how the model regulation works might be helpful here. The model regulation applies to both fixed and flexible premium products. As in current valuation laws, the regulation defines a minimum reserve using CRVM. This CRVM reserve is defined as a net level premium reserve minus the unamortized balance of expense allowances defined by the 1980 amendments to the Standard Valuation Law. However, there are two very basic differences between this regulation and the Standard Valuation Law. These differences are intended to reflect the flexibility inherent in universal life products regarding premium payments, interest credits and cost of insurance charges.

The first difference relates to the relative level of the reserve at any time. The first step is to define a CRVM reserve based upon all of the guarantees (related to benefit structure, interest rates, mortality charges and expense loads) that exist in the contract at the time of issue. Next, this reserve is scaled down whenever the policy value is less than a value called the "guaranteed maturity fund." The guaranteed maturity fund is defined as that quantity which, at any point in time, is necessary to mature the policy based on the contractual guarantees that exist at the time of issue. Accumulation of this fund takes into account a premium called the "guaranteed maturity premium" which is a level gross premium again reflecting all of the contractual guarantees at issue. Accordingly, if the contract's actual policy value is less than this guaranteed maturity fund, the CRVM reserve is actually scaled down by the ratio of the policy value to the guaranteed maturity fund. In such a case, the actual unamortized expense allowance permissible under the Standard Valuation Law is also reduced.

The second major difference relates to structural changes made to the contract at the discretion of the policyholder after issue. Such changes would include revisions in the premium paying period, the maturity date or the contract's benefit structure. Where structural changes occur, however, the model regulation is rather vague, stating only that the reserve for such changes must be calculated in a manner consistent with that for benefits guaranteed at the time

PANEL DISCUSSION

the policy was issued. This means that both the present value of future benefits and the unamortized expense allowance must be adjusted to reflect policyholder directed structural changes to the contract.

Several problems exist with the model regulation's valuation provisions. First, the regulation is overly complex. It calls for the recalculation of all the key components of the reserve formula whenever actual experience credits vary from the contract guarantees (which is almost every valuation cycle). Accordingly, there is no easy way to define a single set of factors at the time the policy is issued. Further, the computation of reserves first requires substantial revision to a company's existing valuation systems. This has proven to be very costly and time consuming for many companies. There are still companies that are not prepared to calculate statutory reserves according to this model regulation. Finally, reserves defined by the model regulation are very difficult to audit.

The minimum nonforfeiture provisions of the regulation are also quite complicated. For flexible premium universal life products, the minimum cash surrender value is equal to the accumulation of actual premiums paid minus the accumulation of the actual charges made against the contract. These charges include:

1. the actual cost of insurance charges;
2. the actual initial and additional acquisition expense charges made against the contract subject to the maximums defined in the 1980 Standard Nonforfeiture Law;
3. the actual average administrative expense charges; and
4. any service charges made against the contract.

Thus, it can be seen that the regulator's concern about product manipulation is well founded. A company can actually control the level of cash surrender values payable by adjusting the pattern of benefit charges and administrative expense charges in their contract. This may be easier said than done, as

ACCOUNTING FOR INTEREST-SENSITIVE PRODUCTS

competitive pressures would quite likely cause most companies to conform with others in their practices. Accordingly, for most products on the market today, cash surrender values will at least equal or exceed those defined by the Standard Nonforfeiture Law for traditional products with similar benefit structures. However, the opportunity for manipulation does exist, and this concerns many regulators. Further, the complexity of the regulation makes it difficult to verify compliance with minimum cash value standards.

What has been done to address the concerns of the regulators and companies? What alternatives have been offered which would both answer these concerns and simplify the process of calculating cash values and reserves for universal life products? To date, alternative proposals have been presented by the NAIC and the state of New York.

NAIC proposals. In December 1985, the NAIC Actuarial Task Force presented certain simplifying proposals. Regarding reserves, the Task Force proposed that the reserve should equal the policy value times a ratio, minus an unamortized acquisition expense allowance. The ratio (actually a series of ratios), calculated at issue, is defined as the traditional net level premium reserve for the plan divided by the expected guaranteed maturity fund. As in the past, the unamortized expense allowance is subject to the maximum expense allowance defined by the 1980 amendments to the Standard Valuation Law. The beauty of this method is that a single set of reserve factors can be defined at issue and multiplied by the actual policy value as it accrues. Therefore, the proposal would be fairly easy to administer. The problem is that certain anomalies can occur, especially in the early durations.

Regarding nonforfeiture values, the Task Force agreed to pursue an approach similar to the one found in the model regulation except that cost of insurance charges are limited to the mortality charges used for valuation purposes, and the initial expense charges are limited by the amount of first year premium actually collected. Even with these changes, manipulation by companies is still possible, especially manipulation of contract load features. Since their introduction, these proposals have met a great deal of resistance from the American Council of Life Insurance (ACLI), the industry and insurance

PANEL DISCUSSION

department actuaries. As a result, the NAIC Actuarial Task Force offered new proposals in April 1986.

There are two new, rather complex valuation proposals. The first is based on the contract's actual cash value and the second on a minimum cash value. Both proposals treat flexible premium contracts separately from fixed premium contracts.

Under both proposals for fixed premium contracts, the minimum policy reserve is that defined for traditional plans of life insurance as defined by the Standard Valuation Law currently in effect. Reserves on back-end loaded products will likely equal this minimum reserve in the early policy years and the actual cash value in later policy years, depending on the level of current policy credits as to interest and mortality.

For flexible premium contracts, both proposals set the reserve equal to the greater of two quantities, "A" and "B." "A" under the first proposal is defined as the actual cash surrender value plus an increment. This increment represents the excess of a minimum reserve over a minimum cash value for the policy using the nonforfeiture mortality table, the maximum valuation interest rate provided under law, a fixed premium assumption, and fixed policy benefits as included in the policy form. The minimum reserve and the minimum cash value are calculated in accordance with the Standard Valuation and Standard Nonforfeiture laws currently in effect.

"B" under the actual cash value proposal is defined as the greatest of the respective present values of future guaranteed benefits, including guaranteed nonforfeiture benefits calculated using contract guarantees and assuming no further premium payments after the date of valuation. Therefore, under the first proposal, the reserve will generally be somewhat larger than the actual cash surrender value. It is even possible that reserves may exceed the full account value.

Under the second proposal, "A" is defined as the minimum cash value plus, again, the excess of a minimum reserve over a minimum cash value as defined for the first proposal. "B" is defined as the greater of the actual cash value at

ACCOUNTING FOR INTEREST-SENSITIVE PRODUCTS

the date of valuation or the greatest of the respective present values at the date of valuation of future guaranteed benefits, including guaranteed nonforfeiture benefits, again using contract guarantees and the assumption that no further premium payments will be received after the date of valuation. Under this second proposal, the reserve will generally be equal to the actual cash value of the policy, except for those back-end loaded contracts where maximum surrender values apply in the early years.

These proposals are more conservative than the current model regulation. Both proposals are quite complex and might be difficult to program. It remains to be seen whether or not one of these proposals can be amended satisfactorily. In my opinion, it is doubtful that either one will be adopted as they now stand.

The proposal for minimum nonforfeiture values appears to be a vast improvement over earlier proposals. Under this proposal, the minimum nonforfeiture values would be those for the guaranteed plan at issue, based upon a level premium assumption with premiums payable until the maturity date and benefits as specified by the policy. Expense allowances are limited to those defined for a whole life insurance product using the Standard Nonforfeiture Law for life insurance as amended in 1980. Many of the concerns raised by regulators about earlier proposals have been addressed. Companies would no longer be able to manipulate cash values by altering expense and benefit charges to the contract.

The Actuarial Task Force would like to finalize these proposals and adopt something at the December 1986 meeting. Its next meeting is scheduled for June 7, 1986. Substantial industry input is unlikely before then. Perhaps the ACLI will again solicit comments on the proposals after the June 1986 meeting.

New York proposal. The state of New York is proposing legislation to amend its life insurance nonforfeiture law for universal life. Two alternative tests are offered.

The first would impose limits on the amount of charges that may be deducted from gross premiums. It would also impose limits on all surrender charges. These limits would be based on percentages of premiums received, charges per

PANEL DISCUSSION

\$1,000 of face amount of insurance and per policy charges. As an example, for a level face amount policy, these deductions from the gross premium would be limited to the sum of:

- o 90% of premium received in the first year,
- o 10% of all premiums received in renewal years,
- o \$10 per \$1,000 of face amount in the first year,
- o \$1 per \$1,000 of face amount in renewal years,
- o \$200 per policy in the first year, and
- o \$5 per month per policy in renewal years.

Surrender charges under the policy would also be limited to these amounts.

The second alternative test is similar to the current universal life model regulation. Under this alternative, the policy would have to provide that at least once each year, the policyholder has the option to purchase a guaranteed paid-up whole life insurance benefit under the policy providing for an amount of whole life insurance at least as great as that computed on the basis of the mortality table and interest rate guaranteed in the policy for this purpose.

Regardless of which test is applied, the maximum surrender charge would have to be graded down to zero after 20 years or less. It will be interesting to see if the New York proposal has any impact on the ultimate NAIC proposal.

Statutory Accounting for Variable Life

The question of what is an appropriate reserve level for variable life insurance is still up in the air. The reserve for basic policy benefits will normally appear in the separate account Annual Statement, also known as the "green book." To date, most companies have set this reserve equal to a policy's full account value without reduction for surrender charges. However,

ACCOUNTING FOR INTEREST-SENSITIVE PRODUCTS

some variation in this practice does exist. On back-end load products where surrender charges exist, some companies, especially stock companies, will hold a reserve equal to the fund value less any applicable surrender charge. Regardless of whether or not a company takes credit for surrender charges in the reserve, it must maintain assets in the separate account equal to the full fund value. In such cases, there will be a surplus in the separate account. Generally, mutual companies will hold a reserve equal to the full account value. This is because mutual companies are subject to an extra tax on surplus and accordingly seek viable means to reduce surplus.

There are also certain additional general account reserves associated with variable life products. These additional reserves normally appear in the liability portion of the blue Annual Statement. The two major types of additional reserves are deficiency reserves and minimum death benefit guarantee reserves. Deficiency reserves can be significant on fixed premium products. On flexible premium products, they are generally not a problem. A minimum death benefit guarantee reserve is required whenever guaranteed death benefits in the contract exceed the separate account death benefit. The separate account death benefit is a variable sum restated to the size of the policy fund in the separate account. While this reserve is generally not very large in size, its calculation method can be quite involved.

Few experts agree on how CRVM applies to variable life insurance. The ACLI Actuarial Committee continues to struggle with this very thorny issue. A key question relates to how CRVM is to be defined for purposes of calculating tax reserves under Section 817 of the Internal Revenue Code. Hopefully, this issue will be resolved prior to the June 1986 NAIC meeting.

Valuation Actuary Concept

In today's environment, no discussion of statutory valuation concepts relating to interest-sensitive products would be complete without acknowledging the recent swell of activity involving the valuation actuary, his/her expanding role and the broader scoped Actuarial Opinion. Accordingly, it is appropriate to outline this activity and suggest how it might impact valuation actuaries.

PANEL DISCUSSION

The topic is extensive and has broad implications to the actuary assuming valuation responsibility. It will involve wide sweeping changes in the historical role the actuary has played regarding the assurances given to regulators, the determination of company solvency and internal management decisions. Some of the important concepts currently under study include:

1. a clear determination of the purpose of a valuation, fully recognizing that there are many different types of valuations,
2. cash flow analysis under varying, reasonable interest rate scenarios,
3. minimum surplus requirements and determination of distributable surplus to both policyholders and shareholders,
4. the interrelationship of valuation principles with pricing, financial management processes, line of business surplus allocations, surplus allocations between new and existing business, product design features, reinsurance, etc., and
5. the need for research and educational materials.

The advent of interest-sensitive products has drawn considerable attention to risks inherent in a changing interest environment. One only has to look to the unprecedented period of volatile interest rates in the late 1970s and early 1980s to appreciate this concern. To date, most attention has focused on C-3 risk. However, recent committee activity increasingly centers around C-1 risk (risk of asset deterioration and default) and C-2 risk (risk of pricing inadequacies), as well as their interrelationship with C-3 risk.

What has been happening to address these concepts and concerns? Who has been involved? Since the formation of a Joint Committee on the Role of the Valuation Actuary (Society of Actuaries and American Academy of Actuaries) in 1984, there has been a flurry of committee activity. This has come from both within and outside of the industry. The Joint Committee's primary role has been to coordinate the progress of other groups.

ACCOUNTING FOR INTEREST-SENSITIVE PRODUCTS

A key player has been the Academy's Committee on Life Insurance Financial Reporting Principles. Its most noteworthy contribution has been the July 1985 Discussion Draft of a revised Recommendation 7 and attendant interpretations. This document presented an expanded Actuarial Opinion addressing cash flow analysis for indexed interest-sensitive products and standards of practice for the valuation actuary. The Committee's latest activity relates to revising this draft with a special focus on C-1 and C-2 risks as they relate to C-3 risk and the valuation actuary's responsibilities. It is hoped that the Committee will release a revised Opinion, Recommendation 7 and Interpretations for submission to the NAIC in the Fall of 1986.

Another active committee has been the Society's Committee on Life Insurance Company Valuation Principles. On April 10, 1986 it issued an Exposure Draft on Life Insurance Company Valuation Principles. Together with the Society's Life and Health Corporate Affairs Committee (now called the Continuing Education Committee), an extensive monograph is being developed to organize and summarize available written materials on the subject.

In December 1985, the NAIC's Standing Technical Actuarial Committee released a guideline which will become part of the NAIC Examiners Handbook. The guideline would have regulators accept the expanded Actuarial Opinion as a replacement of the one used to date. A very key ingredient is the provision that regulators may ask the valuation actuary to issue a rather extensive and revealing actuarial report outlining methods and assumptions employed, revealing whether or not various cash flows tests were performed under varying interest rate scenarios, discussing the interrelationship of assumptions to such things as guaranteed benefit payments, future expenses and policyholder dividends, and commenting on the extent to which the Opinion is influenced by a continuing business (going concern) assumption. Its scope is limited to interest-sensitive products. However, those close to the issue agree that the concept of an expanded Actuarial Opinion only makes sense if it applies to all business. The guideline will not appear in the 1986 instructions to the Annual Statement as originally planned.

In February 1986, the ACLI Task Force on the Valuation Actuary issued a draft report outlining its position from the industry's standpoint. The draft report

PANEL DISCUSSION

states that the ACLI is not opposed to the concept of a valuation actuary or an expanded opinion, but would oppose regulators dictating minimum surplus or the standards of practice which would apply. This task force also calls for an exemption for small companies or companies with a simple product base.

What does this all mean? How does it affect you as a valuation actuary and your concerns about reporting on interest-sensitive products? Undoubtedly, there is a general belief that traditional valuation approaches may be inadequate and inappropriate. Indeed, it is likely that for unbundled products, reserves may be calculated simply as the accumulation of policy values with an offset for unamortized DAC. It is also likely that there will be a merging of statutory and GAAP principles. This should lead to greater comparability of GAAP and statutory earnings.

Tomorrow's valuation actuary must recognize that to control C-1, C-2 and C-3 risks in a variable interest environment, his/her company must coordinate product, underwriting and pricing operations with investment operations. The actuary must place greater emphasis on the solvency of the company as an entity. No doubt his/her responsibilities and role will be increased; his/her legal liability will also be increased.

Future Design on the Valuation and Nonforfeiture Laws

Statutory accounting for interest-sensitive products still remains in a state of flux. Part of the problem might result from the fact that both the Standard Valuation and Standard Nonforfeiture laws in the United States have probably outlived their usefulness and have become counterproductive. Some experts believe that the Standard Valuation Law is wrongly based on predetermined interest rates and to make it workable, an equally artificial method is used to value assets. They claim that any change in the valuation law would also require a corresponding adjustment in the asset valuation laws.

Conservatism built into the Standard Valuation Law was deliberately intended to introduce an implicit solvency margin related to the volume of business transacted. Such a solvency margin would probably translate to a specific minimum capital requirement. As an example, banks have specific minimum capital

ACCOUNTING FOR INTEREST-SENSITIVE PRODUCTS

requirements relating to deposits in various classifications. Critics of the current valuation law claim that as a practical matter the law does not achieve this purpose. They point at difficulties experienced by certain writers of substantial volumes of SPDAs in recent years. These critics offer the following alternatives:

1. They would repeal the Standard Nonforfeiture Law in its entirety. Instead, they would leave to the market place whether or not a specific policy form could or should include nonforfeiture values.
2. The Standard Valuation Law would become a dynamic valuation standard and would match reserve liabilities with asset values at market. Major transitional rules would be required to deal with outstanding contracts with guaranteed cash values.
3. A specific solvency margin would be required.

While these proposals appear to be rather far reaching in scope, some change in the valuation and nonforfeiture laws is required if the insurance industry is to retain its competitive posture. Indeed, this may be a particularly good time to effect such changes because, for the first time in at least twenty years, asset portfolios are in reasonably good shape with near equality between book and market values.

