RECORD OF SOCIETY OF ACTUARIES
1984 VOL. 10 NO. 4B

GENERALLY ACCEPTED ACCOUNTING PRINCIPLES RESERVE ALTERNATIVES FOR "NEW PRODUCTS"

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MR. CHARLES CARROLL: This session is an open forum which in your program is titled "Generally Accepted Accounting Principles Reserve Alternatives for New Products." In discussing the subject matter of today's session, we have decided that a more appropriate title for the session might be "GAAP Accounting Alternatives for New Products," since the discussion of reserves alone on any product does not make sense. Both sides of the balance sheet have to be considered for developing either the theory behind accounting for new products or for the practical implementation of those theories. So we are not just talking about GAAP reserves in this particular session. Also because of the limited time available in the session, we have had to narrow our perspective to the more important products. The ones we will emphasize are fixed deferred annuities, fixed universal life, and variable products. Specifically, in the variable area we will discuss the currently available type of traditional variable life and universal life II or universal variable products.

We have assembled a very qualified panel for this topic. Our first panelist is Paul Kolkman. Paul is with IDS Life and he serves on a couple of important industry and professional committees. He is a member of both the American Academy of Actuaries Committee on Financial Reporting Principles and the American Council of Life Insurance committee of the same name. During the past two years, Paul has been closely involved in the process leading to the setting of accounting standards for universal life. Paul is going to talk about both deferred annuities and universal life and he will discuss some of the history of that standard-setting process, including some war stories, and the latest results in that arena.

Our second panelist is Doug Eckley, a consultant with Tillinghast in St. Louis. Doug is one of those rare individuals with a combination FSA and CPA; he used to be with my firm, Ernst & Whinney. As much as anyone, Doug has been involved extensively during his career in accounting for variable life, given that the GAAP reserving for variable life insurance products is in its infancy. The accounting standard setting bodies have not really addressed the issues raised by variable products.

This is an open forum and we expect a lot of discussion from the floor. We are particularly interested in people's experiences with both the theoretical and the practical problems of accounting for new products. We ask that you hold your questions until both our speakers have given their prepared remarks but we are allocating a fair amount of time for questions.

MR. PAUL KOLKMAN: My portion of this morning's session deals with GAAP accounting for new generation products. I will concentrate on universal life, although I do plan to discuss deferred annuities, somewhat. At the end, I will make a couple of comments about practical implementation GAAP for such products.

Let me first give you some background. The basic principles of GAAP accounting for insurance originally were set forth in the Audit Guide, the AICPA's industry audit guide for stock life insurance companies, published in 1972. The Audit Guide contains two basic principles: first, revenues are defined to be premiums for both insurance and annuity products; and second, the assumptions used in the accounting are supposed to be the actuary's best estimates with suitable margins for adverse deviation. The combination of these two basic Audit Guide principles produces a stream of income for a block of business that tends to be a level percentage of premium plus the release of the margins for adverse deviation. Since the premiums received on a block of business tend to decrease with time, the earnings that are recognized on the block will also tend to decrease with time unless the decrease in the premium margins is more than offset by the widening of margins for adverse deviation. This combination gives us the traditional pattern of expected earnings on a block of business.

The basic principles set forth in the Audit Guide have served the industry well and in 1982 they were incorporated in the Financial Accounting Standards Board's Statement No. 60 (FASB 60), which is the current authoritative guide for life insurance accounting. However FASB 60 specifically stated that it offered no guidance on accounting for universal life and similar products. It did not assert that FASB 60 and the principles in the Audit Guide were inappropriate. FASB 60 stated that since the accounting for such products was currently under review by both the accounting and actuarial professions, it would remain silent on the question.

With this background, I will turn to single premium deferred annuities (SPDAs). The SPDA was the first new product to be given separate accounting consideration after adoption of FASB 60. Much of the discussion over SPDA accounting set the tone for the discussions on other products that followed.

If you apply the Audit Guide strictly to accounting for SPDAs, you will tend to release a large portion of your income from the product at the time the premium is received. Some major annuity writers took this approach in their accounting. To follow this approach, you make projections of future benefits coming out of the single premium annuity contract. You predict surrenders less any applicable surrender charges to determine a future benefit stream, which you then discount at a GAAP valuation interest rate slightly higher than the benefit accrual rate to the customer. The result is a GAAP reserve for the contract which is significantly less than the premium received. You will record a large amount of income on the date of receipt of premium, followed by some release of margins for adverse deviation in future accounting periods.

Not all SPDA writers took this approach. Some companies took a more conservative approach, feeling that it was inappropriate to recognize sizable earnings on receipt of the single premium. They tended to tie up future earnings in extra margins for adverse deviations in the interest assumption. Essentially, they solved for an interest rate that gave little or no profit at issue and then released earnings as future investment margin for business staying on the books.

After the Baldwin United situation, the diversity in SPDA accounting became obvious and the SEC put pressure on the accounting profession to narrow the range of accounting alternatives for SPDAs. Also, at about that time the non-guaranteed premium products task force of the American Academy of Actuaries Financial Reporting Principles Committee was drafting a paper on accounting for SPDAs. The Academy paper took the position that given the risks inherent in SPDA business it was inappropriate to recognize much of your earnings at issue. However, the paper did not specifically prohibit the recognition of profit on the receipt of a single premium, on the grounds that it was not an actuarial issue. The actuarial issue was appropriate valuation assumptions, and to determine them based on a predetermined result was not actuarial.

The Academy committee produced a draft paper which was passed to a similar task force and committee within the AICPA, the non-guaranteed premium products task force of the Insurance Companies Committee. The AICPA group took the Academy paper, redrafted it to change the conclusion to the view that no profit or loss should be recognized on the receipt of a single premium, and passed it to their parent committee with the recommendation that it be adopted. Before the paper was exposed for public comment or formally approved the SEC tried to use it to force several life insurance companies to change their SPDA accounting as of year-end 1983.

In early 1984, while the SPDA situation was still unresolved, the SEC told the accounting profession that it expected guidance for universal life accounting before the end of the year. The same Academy task force that had drafted the SPDA paper produced a similar one for universal life accounting. It discusses four alternatives to universal life accounting, falling into two major categories: prospective and retrospective approaches.

In the prospective approach group three methods are discussed in the Academy paper: the Audit Guide approach, the full margin approach, and the composite approach. As this paper and versions of it have traveled from the actuarial to the accounting profession and to other bodies the names given to these methods have been changed. The composite method has been called the composite, balanced, or generalized approach. The handle "full margin" has been applied to two or three different methods. The fourth method described in the paper is a retrospective method which is called the deposit approach. The choice among these methods is the heart of the accounting issue for universal life so I will take a little time to describe them and compare their implications for the earnings recognition pattern of a block of universal life insurance.

Starting in the prospective category, the first method is the Audit Guide approach which follows traditional GAAP principles in accounting for universal life. Essentially you read the Audit Guide and apply it as much as possible to your accounting for universal life. Reserve accumulationsare funded out of premium income and deferred acquisition costs are capitalized and amortized against premium income, just as for traditional whole life insurance. Under this approach policy reserves rarely equal customer account values. In a heavily front loaded contract you would have policy reserves in excess of the customer account values for many years, and in a no-load or rear-loaded product you would have policy reserves less than the customer account values.

If you use the Audit Guide approach profits for universal life will tend to emerge as a level percentage of premium plus the release of any margins for adverse deviation. The only thing new about universal life accounting is that you have to predict future premium payment patterns and the behavior of your customers with respect to some of the benefit options they have. This is obviously more difficult than it has been for traditional business but if you have the experience available and are brave enough to make such assumptions, you should be able to account for universal life insurance in exactly the same way as for traditional business.

The second approach described in the Academy paper is the full margin approach, which is at the other end of the spectrum from the Audit Guide method. In applying the full margin approach, you use the Audit Guide approach with one exception: when you determine margins for adverse deviation you load those margins arbitrarily until the GAAP net premium equals the gross premium. This will allow no profits to emerge as a percentage of premium income and will force all profits to emerge as release of the these now excessive margins for adverse deviation. Typically you would load interest and mortality assumptions although you could also load expense assumptions. The principal question in applying the full margin approach is how to weight the profit recognition elements: should half of the future profits emerge as interest margin and half as mortality margin or would a 70/30 split be more appropriate? The theoretical answer is to determine the relative weights of investment and mortality risk inherent in the contract. I think this approach is feasible for mortality risk, but I am not certain about interest risk. You wind up with a situation in which you almost have to be arbitrary. In comparison to the earnings recognition pattern from the Audit Guide approach, the full margin pattern is very tail-ended. No earnings are recognized in proportion to premiums, the bulk of which are received early in the life of the contract. The investment and mortality margins over which your earnings will emerge occur predominantly in the later years of the contract.

The third approach discussed in the Academy paper is the composite approach, which is a middle ground between the previous two methods. In the composite approach you again load your valuation assumptions arbitrarily, assuming a lower interest rate and higher mortality than you expect. But you don't load them up so far as to consume all of the gross premium: the sum of the GAAP net premiums will still be less than the gross premiums. Obviously the resulting earnings recognition pattern will be somewhere between the patterns on the Audit Guide and the full margin approaches.

The fourth method described in the Academy paper is the deposit approach. This is the only retrospective approach that is discussed and it is the method that is probably used by most companies today. Reserves are assumed to be customer account values. Acquisition expense for the contract is reduced by any first year loads in excess of renewal loads and then amortized over future net expense loads, mortality margins and interest spreads. This method is relatively simple to apply in practice. One trouble with the retrospective deposit approach is that the earnings recognition pattern is totally driven by contract design. The mortality margins and the expense loads, for example, are handled in different

ways. When you capitalize your expense the first year you reduce it by excess first year expense loads. But you then allow your full mortality margin to fall through to earnings in the first year. In a product with large mortality loadings it should be obvious that they have been included to recover expenses, but this method will tend to release all mortality loadings in the year in which the mortality charge is made. If you have mortality charges based on 80% or more of the 58 CSO table and you sell a policy to a preferred risk, you have select and ultimate mortality and will get large earnings released in the early years. These earnings really should be levelized, I think, and used to amortize your expense, but under this method applied the way most people have been applying it that does not happen. You get an earnings recognition pattern that is driven totally by contract design and you cannot make generalizations about it.

The Academy paper that discusses these four methods finally recommends the composite approach as the preferred method in accounting for universal life. The paper is nearly final and should be available for distribution shortly. Earlier versions of it have been distributed, and an early draft was given to members of the accounting profession, including the AICPA task force on SPDA accounting.

The accounting profession had a lot of trouble with the composite method. Although the actuarial group did not view it as a compromise method, it has that external appearance in that it is a middle ground between the Audit Guide approach and the full margin approach. The accountants preferred the concepts of right and wrong and they did not like compromise. They felt that there was too much flexibility retained in a method in which you arbitrarily load up your assumption but not so much as to consume all of your premium. They felt that it was not auditable and that there was too much discretion left to the company and the actuary. The fact that this discretion was available for traditional business did not seem to bother them; they just did not want to have it for universal life business. The accounting group therefore took the paper, broadened its scope to include both flexible premium annuities and single premium annuities, and changed the conclusion to recommend the deposit approach. They felt that the deposit method, despite some problems with it, was at least auditable and that it could be applied to annuities and to universal life without much problem.

About this time, with the actuarial profession preferring the composite method and the accounting profession preferring the deposit method, we had a third player enter the arena, the ACLI. The Financial Reporting Principles Committee of the ACLI preferred the composite method but realized that things were not going well for it, in that the accounting profession really was not coming around to it. The ACLI therefore recommended a new alternative which probably should be called the limited method, although I don't know whether it has an official name.

The rationale for the ACLI proposal is that the principal problem in accounting for universal life is the treatment of large irregular payments. With earnings as a percentage of premiums it is possible to release a sizeable amount of earnings when you get a large payment under a contract, and the accounting profession and ultimately the SEC would probably view this as an abuse. If you could find a way to eliminate this

potential for abuse you should be able to stick to traditional GAAP methods. The ACLI recommended a test called the 20 pay life test, which said that when you receive a premium payment under a universal life contract you can account for it by traditional GAAP methods to the extent that the payment does not exceed the level of a 20 pay life premium. If the cash payment is in excess of that amount the excess is to be accounted for by deposit methods. This gets you back to the composite approach, where you have a blending of both the Audit Guide approach and the full margin approach, but it is handled in a different way and it was more salable. The accounting profession seemed to accept the concept. It was understandable and had some appeal because it was grounded in the Audit Guide.

Eventually the accounting group, the Insurance Companies Committee, changed their mind from deposit back to composite and the Accounting Standards Executive Committee (AcSEC), voted unanimously in late August to endorse a version of the composite method. They called it the limited composite method because it combined the composite method recommended by the Academy and the limitation recommended by the ACLI. I am not certain about the effect of the combination of those two concepts. I think you are still left with composite, but there could be some situations in which the result is a little different.

This recommendation now goes forward to FASB and we are quite hopeful that either the composite method or the limited composite method will ultimately be adopted for universal life. The method preferred for deferred annuities right now is deposit, according to both the Insurance Companies Committee and AcSEC. The vote in AcSEC was 9 to 4, with four members voting in favor of the composite method for flexible premium deferred annuities.

I promised a little discussion about some practical considerations. I think much of it is best left to the question and answer session, but I can make a few comments. First of all, applying the composite method to accounting for universal life insurance is going to be extremely difficult, to say the least. The first thing you need is good experience on which to base your valuation, but most companies do not yet have a large body of experience with universal life business. Second, the flexibility under a universal life contract implies that you cannot set your accounting and forget it. You must reconsider your accounting in the future, probably at regularly scheduled dates, and you have to be prepared to either unlock your assumptions or do periodic revaluations to see if the assumptions and the methodology you are using are still adequate.

To lead in to Doug's portion of the program, now that the issues for fixed universal life are, we hope, resolved and we either have the composite or the limited composite method, the next area of concern will be variable universal life accounting issues. There are people who do not think that there is any good reason to have different accounting principles for variable and fixed universal life contracts if they are basically the same except for funding methods. These issues are probably going to be resolved next year, although people are giving thought to them today.

MR. CARROLL: Thank you, Paul. Before we get to Doug's remarks, I will use my moderator's perogative and ask Paul a question. It concerns the standard-setting process in which the various accounting groups flip-flopped a couple of times on the issues. I would like to know what was causing them to change their minds, because for those of us who followed the developments the final outcome was surprising. It looked like the deposit method was all but locked up and now we are headed down a different route. Could you comment on that, Paul?

MR. KOLKMAN: I knew you were looking for war stories. The process has been very interesting. The issues surrounding accounting for universal life insurance are complex and you have to look at a lot of numbers, but I do not believe that any of the groups did that soon enough. The Academy group began meeting early this year, but it picked only one contract design as a standard to study and we prepared illustrations for that design. Other people looking at similar questions have also picked just one contract design and done their illustrations on that basis.

The accounting profession did not, and I think still does not, have a good understanding of the concepts and principles of universal life accounting and the implications of some of the methods that are being used. The bodies which are going to recommend rules, the Insurance Companies Committee of the AICPA and AcSEC, were relying on committees which were doing the work and reporting up through them, and these people were casting about in the dark for a long time. It became humorous and maybe ultimately embarrassing, especially on the accounting side, because these groups would change their votes from meeting to meeting. You could almost predict what the ultimate accounting guidance was going to be by knowing what one vote was and how many meetings they were going to have until it was final: as a general rule, they switched every time.

The ACLI's involvement broke the impasse. The actuarial group tended to stand on principle: they knew what was right and other people ought to agree with them. The accounting profession also had a strong sense of what was right and to them that meant auditable. The groups were not agreeing so the ACLI got involved, looked at the issues on both sides, tried to appeal to both groups, and did an excellent marketing job. We have a solution which should satisfy both the actuarial profession and the accounting profession. It is based on the Audit Guide and it seems to be a natural extension of what we have been doing for the last 10 to 15 years. But there are war stories from the process and when the results we expected were not the results we got and we took our news upstream, the groups involved changed their minds and then changed back. In early August we thought the battle was over. A public vote of the Insurance Companies Committee indicated that the deposit method was the only acceptable method, and they are the reigning experts as far as the accounting profession is concerned. But I like to think reason prevailed, and we now have the composite method. We <u>hope</u> we have the composite method.

MR. CARROLL: I guess there are a couple of lessons here. One is never give up the ship, and the other, as expressed in the motto of the Society, is the need to substitute demonstrations for impressions. It is better to look at actual numbers produced in a professional manner than talk based on impressions of what these methods might accomplish.

We have received a historical perspective, since all the things that Paul has been talking about are coming to maturity. The next part of the presentation is forward-looking, because we are going to deal with accounting for contracts which have not really been considered by standard-setting bodies. I think we will get a taste of how that battleground might shape up. Doug has done some of the number work to illustrate the effects of these concepts on accounting results.

MR. DOUGLAS ECKLEY: There are three parts to my talk. First I will review the Audit Guide, since it is still generally accepted. Then I will discuss its application to variable life and finally I will talk about variable universal life.

I think a quick definition of variable life is in order. Under a variable life contract, the premiums are fixed and the bulk of them is deposited into a separate account and valued at market value. Each year the excess growth over the statutory assumptions is used to buy additional insurance, most commonly paid-up additions. Variable universal life, as I call it, is universal life with market value fund balances.

The Audit Guide has a section on recognition of premium revenues. It assumes that premiums are revenue. That is an assumption that has come under question with products such as variable and universal life. However, the Audit Guide makes this assumption and decides that those revenues should be recognized in proportion to performance under the contract.

Consider whole life. The Audit Guide discusses whole life and decides that there is no predominant function or service. Therefore the appropriate recognition of premiums relative to performance is level premium recognition over the contract. Another example is short duration term insurance which the Audit Guide says has a predominant function of providing protection. Therefore premiums should be recognized in proportion to the amount of insurance. For variable life, the predominant function may be investing the funds. This point is subject to argument and we will probably have some thoughts on it a little later.

Realistically every insurance company recognizes all premiums as revenue when collected. On short duration term contracts, if you read the Audit Guide literally, you should recognize premium revenue in proportion to face amount. When a single premium for a credit life policy comes in the door, it is credited to revenue. What the Audit Guide is really saying is that earnings, not premiums, should be recognized in proportion to performance under the contract.

For whole life insurance we would recognize earnings in proportion to premiums, since there is no predominate function or service. Accountants like to be conservative, and so the Audit Guide calls for provision for adverse deviation in the reserve calculations because the expected amount of premiums is not certain to be collected. This provision will reduce the amount of earnings that come out in proportion to premium revenues. The rest of the earnings are realized as the margins for adverse deviations are released.

What earnings are left as premium margin are analogous to income from an installment sale. The Audit Guide goes on to say that the premium margin rewards the selling effort while the release of margins for adverse deviation rewards the servicing of the policy, notably the assumption of risk. The release of the margins for adverse deviations is in proportion to the passing of the risk from mortality fluctuation and other sources.

Thus we do not have all earnings released in proportion to premium: we also have these releases of margin. Now there is a contradiction in this, because if we have some earnings coming out as margins for adverse deviation are released, we are really saying that assuming risk is a dominant function or service. But earlier we said there was no dominant function or service. I think the Audit Guide almost contradicts itself there.

With variable universal life premiums are not fixed. Not only are they not certain of being collected because of fluctuations in deaths and lapses and so on, they are not even fixed in amount. Variable universal life, being analogous to universal life, is completely flexible. I would conclude that little or no earnings should emerge as a proportion of premium, certainly not as much as with traditional insurance. However the assumption of risk is not as significant with variable universal life. Almost all of the investment risk is passed to the policyholder, and the company becomes more of an investment conduit. The view of the traditional whole life policyholders might be that they do not have to worry about how the company invests their money because they have their guarantees. With variable universal life they have to worry: all the investment results are passed directly to them. I think that implies that the investment function is now more important, which then might mean that earnings, at least partially, should be recognized in proportion to investment income.

With variable life premiums are fixed as with traditional whole life. We should therefore get some earnings as a percent of premiums. There is less assumption of risk but it is still there due to the underlying guarantee of death benefits based on statutory reserve assumptions.

Now let us consider the practicalities of all this for variable life. Let us suppose we want to recognize earnings in proportion to premiums. With traditional static reserve factors that is impossible. If you set your reserves so that they are solely a function of the original face amount there is a very large chance that your reserves will be unrealistic down the road as the separate account might grow ten-fold and the face amount of insurance go from 1,000 to 10,000. Therefore I think the traditional approaches can be rejected out of hand.

We need some way to obtain a dynamic aspect for the reserve. The way I suggest, which has been used in practice a little bit, is to hold the separate account value as a liability. The assets that are allocated to the policyholder in the separate account would become a GAAP liability. This is analogous to the universal life fund based reserving which is the predominant practice. It makes sense because that fund in the separate account belongs to the policyholder in the sense that he gets the investment performance. It is logical to hold it as a liability. Finally, the fund is the unpredictable animal which can make static reserves completely unrealistic as we go down the road.

An alternative might be to meld the general and separate account transactions into one and only look at cash flows that flow into and out of the company. You would still need to project the separate account values in order to get the death benefits and cash values that would be in effect and to get the asset charges. And you would also need a way to make the benefit reserves dynamic. Because this method is cumbersome, I suggest holding the separate account value as a liability.

We have three pieces of reserve under this approach for variable life: a separate account liability, an expense asset completely analogous to the asset in traditional deferred acquisition costs accounting, and another item which I have not touched on yet, the general account reserve.

I have two approaches to present which differ in their treatment of the general account reserve, and we will go through some actual numbers to illustrate them. The first approach tries to recognize earnings in proportion to premiums, and it is as close as possible to traditional accounting. The mechanics begin with setting all the assumptions, including one that you need in addition to the traditional assumptions, the separate account growth. Given these assumptions you can project the general account cash flows. Gross premiums come into the general account and net premiums leave for the separate account. Death and surrender benefits, dividends, and maintenance expenses leave the general account, while asset and mortality charges and reserves released on death and surrender come in from the separate account. Using these cash flow projections you can roll forward a general account asset share. Then solve for the premium which in place of the gross premium gives a final general account asset share of zero. That is the GAAP net premium by definition. Using that net premium reproject the general account asset shares, which will start at zero and end at zero but in between may be positive or negative. Divide those asset shares by the units issued and they will become the general account reserve factors to be applied to the amount of insurance issued.

Approach two, on the other hand, tries to recognize some earnings in proportion to investment income. Go through the procedures of approach one but for the separate account growth rate use the statutory guarantee, since the paid-up insurance amounts that are purchased by excess interest will be separately reserved. Thus you have one set of general account reserve factors analogous to those in approach one but using only the statutory guarantee as an assumption. In addition, calculate attained age paid-up general account reserve factors per thousand of additional amount purchased by the excess earnings in the separate account. These factors will be negative because they equal the present value of the mortality margins and asset charges to be received in the general account from the purchased paid-up insurance. The separate account reserve includes the liability for the paid-up insurance benefits. This second approach is less practical because of the large number of reserve factors it requires. Take duration two. You have a reserve factor based on the initial amount issued and another factor to apply to the paid up amount that was just purchased at the end of duration one. At duration n, you have n-1 paid-up amount factors to apply plus the reserve per thousand of initial amount, a total of n factors.

With either approach the acquisition expense reserves are exactly the same as for traditional products, since variable life is a fixed premium product.

Now let us look at some numbers. Slide 1 illustrates the general account reserve methods of approach one and approach two for a variable life policy with a face amount of $100,000. Approach one assumes 8% growth in the separate account, whereas approach two assumes the statutory reserve rate which in this case is 4 1/2%.

In approach two the GAAP benefit premium is a little greater because we use the statutory reserve rate as the separate account growth assumption. GAAP expense premiums are the same as for traditional insurance. Subtract the two GAAP premiums from the gross premium and the resulting profit margin is a percentage of the gross premium. Again, approach two has a lower margin because of the more conservative assumption. The benefit premium covers all separate account transactions with the general account and all benefit payments. Outgo from the general account would be the net premiums deposited to the separate account plus surrender and death benefits, dividends and maintenance expenses. Income is gross premiums plus what comes back from the separate account, including asset charges, reserves released and tabular mortality charges.

Slide 2 is a projection of earnings if all assumptions are met under approach one. Earnings are realized in proportion to premiums. This approach follows the Audit Guide if we ignore the required provision for adverse deviation in the reserve assumptions. That 13.2% margin is the same as what we saw in Slide 1.

Now if unit growth is 6%, the situation is not as rosy. (See Slide 3) We do pretty well to start out but since our separate account is not growing as fast as normal we are not getting our anticipated asset charges and we are getting smaller gains from the excess of tabular over actual mortality. This shows the need for conservatism in setting the separate account growth assumption: as you go into the future, you might need to revise assumptions or recognize a loss.

Slide 4 shows 10% unit growth. If we were conservative in setting the 8% assumption, this is what might happen. Earnings start out similar to what they were if all the assumptions were realized, and then grow as the separate account values increase because the amounts of insurance grow correspondingly, mortality charges are higher, asset charges are higher, and so on. The parallel situation for traditional insurance is when the interest assumption is set conservatively and as reserves build up there is more excess interest income. In the case of variable life the reserves are not bounded by the initial face amount; therefore we see earnings as high percentages of premiums as we go into the future.

Now let us look at approach two. Start with Slide 5 by looking at duration 15. At this point we are getting the premium margin which we calculated back on Slide 1 as earnings. The reason is that actual unit growth in durations 11 and later equals our assumed unit growth under approach two. In the early years when we had excess growth we front-ended the projected asset charges and mortality gains upon purchase of the paid-up insurance. To see how this process works, start at the end of

SLIDE 1

FIXED PREMIUM VARIABLE LIFE

FACE AMOUNT $100,000

	APPROACH 1	APPROACH 2
GROSS PREMIUM	$2,689.49	$2,689.49
BENEFIT PREMIUM	1,844.71	1,950.15
EXPENSE PREMIUM	489.20	489.20
MARGIN	355.58	250.14
AS PERCENTAGE OF GROSS PREMIUM	13.2%	9.3%

SLIDE 2

FIXED PREMIUM VARIABLE LIFE

ACTUAL UNIT GROWTH 8% LEVEL

	APPROACH 1	
YEAR	EARNINGS	% OF PREMIUMS
1	$355.58	13.2%
2	355.58	13.2%
3	355.58	13.2%
4	355.58	13.2%
5	355.58	13.2%
10	355.58	13.2%
15	355.58	13.2%
20	355.58	13.2%
25	355.58	13.2%
30	355.58	13.2%

SLIDE 3

FIXED PREMIUM VARIABLE LIFE

ACTUAL UNIT GROWTH 6% LEVEL

APPROACH 1

YEAR	EARNINGS	% OF PREMIUMS
1	$352.73	13.1%
2	350.86	13.0%
3	348.23	12.9%
4	343.89	12.8%
5	339.35	12.6%
10	320.44	11.9%
15	256.69	9.5%
20	143.67	5.3%
25	(48.86)	(1.8%)
30	(366.04)	(13.6%)

SLIDE 4

FIXED PREMIUM VARIABLE LIFE

ACTUAL UNIT GROWTH 10% LEVEL

APPROACH 1

YEAR	EARNINGS	% OF PREMIUMS
1	$358.43	13.2%
2	360.35	13.4%
3	363.10	13.5%
4	367.67	13.7%
5	372.59	13.9%
10	394.80	14.7%
15	474.17	17.6%
20	629.96	23.4%
25	923.86	34.4%
30	1,460.33	54.3%

SLIDE 5

FIXED PREMIUM VARIABLE LIFE

ACTUAL UNIT GROWTH YEARS 1-10, 10%
11 +, 4.5%

	APPROACH 2	
YEAR	EARNINGS	% OF PREMIUMS
1	$271.50	10.1%
2	290.92	10.8%
3	309.11	11.5%
4	326.79	12.2%
5	343.59	12.8%
10	463.96	17.3%
15	250.14	9.3%
20	250.14	9.3%
25	250.14	9.3%
30	250.14	9.3%

duration 1. If there is excess income in the separate account that amount will buy a paid-up addition, similar to a dividend buying a paid-up addition. With approach two we have a special general account reserve factor for that paid-up addition, which might be an attained age factor. That factor is negative because it reflects the present value of the net income to the general account of asset charges and mortality margins from the purchased paid-up insurance. In the separate account we hold a reserve which covers the future death benefits based upon statutory assumptions. The negative general account reserve factor is anticipating our future asset charges and mortality margins. We get earnings which are higher than the premium margin as we anticipate those charges and margins; in fact they increase as our separate account increases. Once our growth drops to the assumed level, there is no longer income to front-end because we are not buying any more paid-up additions.

Separate account growth can be unpredictable. In Slide 6 we assume a cyclical growth rate for the separate account and accounting based on approach one. We are still getting earnings closely related to the premium margin which bounce around 13.2%. The reason is that our separate account reserve is absorbing the shocks. When the unit growth is poor that reserve drops, and when it is excellent that reserve goes up. So with approach one the shocks are absorbed and we come out close to the premium margin. Note, however, that we are not breaking through the floor of the guaranteed minimum death benefit. If the separate account ever got too small to support the guarantee, we could see some huge losses.

Approach one is appropriate if there is no predominant function or service per the Audit Guide. We then recognize earnings in proportion to premiums over the life of the contract.

Approach two is not as neat when we use this same cyclical assumption. (See Slide 7) Since approach two front-ends profits, when we have a drop in the separate account value and therefore purchase a negative paid-up addition, we have negative asset charges and mortality margins to front-end and we lose money. As a result, our earnings are cyclical just as is our assumption. From the point of view of traditional GAAP this result has to be wrong. We have fixed premiums and we should to a large extent be recognizing earnings in proportion to premium, but earnings here are bouncing all over the place.

What if the predominant service is to earn excess investment return for the policyholder? You can argue that that is the predominant service by default. With traditional life insurance, policyholders are not concerned about the results of the company's investments: as long as the company does not go broke they have their guarantees. But with this kind of product, the policyholder has to be concerned about investment return. Even if there were no predominant service for traditional insurance, investment return has to be the predominant function for this kind of insurance. On the face of it, then, approach two is not GAAP but when you think about it, it might be GAAP. I do not think top management would like this kind of projection, but the lesson is that when defining earnings recognition as proportional to service rather than premiums, you have to be careful.

SLIDE 6

FIXED PREMIUM VARIABLE LIFE

ACTUAL UNIT GROWTH YEARS 1-3, 8%
4, 7, 10, ETC., 25%
5, 8, 11, ETC., (12%)
6, 9, 12, ETC., 14.5%

	APPROACH 1	
YEAR	EARNINGS	% OF PREMIUMS
1	$355.58	13.2%
2	355.58	13.2%
3	355.58	13.2%
4	390.18	14.5%
5	346.18	12.9%
6	346.23	12.9%
7	378.47	14.1%
8	361.16	13.4%
9	340.79	12.7%
10	378.86	14.1%
11	361.20	13.4%
12	333.69	12.4%
13	391.06	14.5%
14	355.97	13.2%
15	326.66	12.1%

SLIDE 7

FIXED PREMIUM VARIABLE LIFE

ACTUAL UNIT GROWTH YEARS 1-3, 8%
4, 7, 10, ETC., 25%
5, 8, 11, ETC., (12%)
6, 9, 12, ETC., 14.5%

APPROACH 2

YEAR	EARNINGS	% OF PREMIUMS
1	$263.73	9.8%
2	275.88	10.3%
3	287.01	10.7%
4	527.84	19.6%
5	(55.11)	(2.0%)
6	428.40	15.9%
7	703.64	26.2%
8	(237.75)	(8.8%)
9	533.56	19.8%
10	964.75	35.9%
11	(508.35)	(18.9%)
12	669.17	24.9%
13	1,264.12	47.0%
14	(796.08)	(29.6%)
15	818.01	30.4%

Now I want to talk about variable universal life. Variable universal life is universal life with a few differences. Instead of a crediting rate to the fund the policyholder gets a growth rate which can be negative. The growth rate reflects market values. The company, instead of getting an interest spread as with universal life gets the asset charges from the separate account. With variable universal life, there is no investment guarantee. This might mean that assumptions can be set more aggressively. But I think the same accounting alternatives exist for variable universal life as for universal life. I would point out that the accounting has to be dynamic, though. The traditional Audit Guide approach can be rejected out of hand.

Another view of variable universal life is that it is a souped-up bank account. If you look at it as a bank account, you could argue that premiums are not revenue. As far as I know, every life insurance policy to date has recorded premiums as revenue when they came in the door, but banks do not work that way. When you make a deposit at the bank it debits cash and credits deposit liabilities. There is no premium revenue. There is some argument that premiums are not revenue for these types of policies, and I would consider that a separate accounting approach, although the earnings might come out the same as if you looked at variable universal life as universal life.

Another approach would be to treat variable universal life as closely to variable life as you can, assuming that you like approach one. With variable universal life there is no analogy to approach two because there are no paid-up amounts being purchased each year. You would hold a separate account value as a liability. In addition you would hold a general account reserve per unit of issue, and an expense asset. You need additional assumptions for the amount of death benefit since the policyholder can change the benefit within limitations, and you need an assumption for the premium stream for the same reason. But you can then calculate a general account asset share under those assumptions; it might be close enough to reality because you are holding the separate account value as a liability. You have the dynamic aspect. But I think this approach is cumbersome and I prefer a method analogous to universal life.

The last method I want to describe, and none of these have been scientifically thought out at this point, is to account for variable universal life as closely to traditional products as possible but with some dynamic aspect. One way to do this would be to perform profit tests and decide from them that the premium margin is 10% of whatever premium stream you think you will get. When the gross premiums come in the door deduct 10% on paper allocate the 90% to the separate account apply the actual growth rate and asset charges and so on, and hold the result as the liability. That is dynamic and basically it is solving for reserves to get earnings equal to your profit test results, possibly with some margin for adverse deviation thrown in. If you prefer, acquisition costs could be separately amortized according to premium margins. I do not like this approach because I think the liability could stray far from the actual separate account value, since you are using a percentage of the premium for bookkeeping purposes instead of the real gross premiums less loads that actually goes into the separate account.

MR. CARROLL: I will use my moderator's perogative again and ask Doug a question. I have come to believe that for universal life, variable life or variable universal life the traditional valuation approaches of using predetermined factors multiplied by units are cumbersome and subject to pitfalls because the products are so open. With variable universal life you have the ultimate in an open product where all the things that you might normally have thought of as being units are now variables. Some periodic review of the policy as it stands and a projection of cash flows under the policy anew at almost each valuation date would seem to be required in theory, or at least would permit a better reflection of earnings under the contract. I would like to know first your thoughts on that point and second whether you have seen companies use something similar to this in practice.

MR. ECKLEY: I will start with the second part of your question. I have not seen companies use a periodic review and projection method for variable universal life because as far as I know there are not yet any such products out in the market. For variable life, I have seen my approach one implemented in the U.S. and in the U.K. where analogous products exist. With regard to the first part of the question, Charles and I are in agreement. Charles used the phrase periodic review, while I speak of a dynamic reflection of the fund values.

MR. CARROLL: We will now turn to discussion from the floor. If anybody has input on practical experience with these accounting methods I would appreciate hearing about it.

MR. WILLIAM CROSSON: While this session is concerned for GAAP for so-called new, or non-traditional, products, I would like to report on a non-traditional approach my company is developing with respect to old or traditional products. Working with the accounting firm of Peat Marwick Mitchell & Co. we are developing GAAP accounting and reporting for our mutual life insurance company, primarily to provide our management and our board of directors with more appropriate information than we have been providing in the past.

The big differences, of course, between mutuals and stock companies are in the nature of the ownership interests and in the role of policy dividends. For traditional products, because of the almost immediate pass back to the policyholders of redundancies in the gross premium, the gross premium itself is virtually irrelevant to the emergence of earnings and is not appropriate for defining revenue. By revenue I mean the basis over which we charge the policy benefits, dividends and the deferrable expenses. Casting about for an appropriate definition of revenue we decided that for us, revenue consists essentially of gains from mortality, interest and lapse. We call this the source of earnings definition of revenue or SOE. Under GAAP, we will be faced with calculating three valuation items each year instead of the usual one. We'll have to calculate the GAAP reserve, deferred acquisition charge asset (assuming dynamic valuation) and the statutory reserve. It turns out, and I have mathematically proved, that if revenue is suitably and precisely defined in terms of dividends, expected statutory loading and expected statutory gains from mortality interest and lapse, then the GAAP reserve (aside from the DAC asset) is exactly equal to the statutory reserve (without recognition of deficiency reserves and excess cash value

reserves).Thereby, we reduced the number of valuation calculations to be made from three to in essence two. Thus, the only significant actuarial difference between statutory and GAAP accounting under this approach for a mutual company is the establishment and amortization of the deferred acquisition charge asset. It should be noted that this equality of statutory reserve and GAAP reserve holds regardless of the particular dividend formula used.

MR. CARROLL: I would like to comment on that. I think we should soon have an extensive session on GAAP reporting principles for par business issued by mutual companies, which is a developing and, as Bill pointed out, very interesting topic. Approaches are now being worked out in practice but there ought to be some uniformity. One of the dangers we face, both for universal life with the deposit method and for par business issued by mutuals, is that because the definition of earnings as a level percent of premium is generally considered to be inappropriate for many products people are redefining what revenue ought to be. However they are redefining revenue company by company and product by product. If the Audit Guide in its original state allowed flexibility, we are currently in a state of anarchy with the rapidly approaching disintegration of the Audit Guide principles. We need a complete review of the foundations.

MR. ECKLEY: I have two comments. First, don't assumptions in the dividend scale and the dividend calculations have to correspond pretty closely to reality? That is one caveat for this approach. Second we are defining revenues over which earnings emerge, we are not really defining revenues. The premiums are always going to be revenues.

MR. CROSSON: I can respond to those questions. First of all, there are two uses of the word revenue. One is for purposes of your income statement and the other is the foundation or the basis over which you allocate the policy costs. I believe those are two distinct concepts that are, unfortunately called by the same name. I was referring to revenue in the second context, rather than the first. As for your point about the dividend formula, if you define revenue in such a way that it recognizes the dividends that you actually expect to pay as part of the definition of revenue, then the assumptions underlying the dividends you actually expect to pay, are irrelevant to the equality of GAAP reserve with statutory reserves.

MR. MICHAEL REILLY: I have two questions, the first for Mr. Kolkman. Is the deposit approach now generally accepted for both single and flexible premium deferred annuities? Or was that approach adopted exclusively for single premium deferred annuities?

MR. KOLKMAN: Nothing has been adopted. But the recommendation that went from AcSEC to FASB is that the deposit method be used for both single and flexible premium annuities. The open issue is should you extend the deposit method to flex pay annuities or is the receipt of premiums a significant item which merits recognition of some earnings in proportion to them. But right now the recommendation is going forward with the deposit method applying to both types of deferred annuities.

MR. REILLY: My second question is for Mr. Eckley. Can you comment on what accounting guidance may be developing for variable deferred annuities and the new combination fixed and variable deferred annuities?

MR. ECKLEY: With variable annuities we have again the question of whether premiums are revenues. Analogous to bank accounting an alternative which might be considered is to debit cash and credit the liability on receipt of premiums. Generally I think one of the items in the balance sheet should be the amount in the separate account with respect to both of the types of contracts you mentioned.

MR. REILLY: Can you envision the deposit approach being extended to variable annuities?

MR. ECKLEY: Yes, if by deposit approach you mean holding the amount in a separate account as one of the GAAP liability items.

MR. KOLKMAN: I would like to comment briefly on that. I think that my company is very likely the only company in the country that has accounted for their installment annuity business, both fixed and variable, on a composite basis. Back in 1981 when we first switched from a loaded installment contract to a no-load installment contract we had to reconsider our accounting for that business. We found that if we held customer account values on a no-load contract with surrender charges as our reserve liability and set up some DACs and ran them off, we wound up with a pattern of earnings that was wildly tail-ended. We did not think that was appropriate. We now account for that business by recognizing between a point and a point and a half of premium as earnings, which brings in 20 to 25% of the expected earnings under the contract. We apply this method to both fixed and variable deferred annuities. We hold reserves which are less than customer account values and we amortize our deferred acquisition costs against premium. It is more imaginative than approaches a lot of people have taken but it does work well and it gives us an expected earnings pattern that, while increasing, does not increase nearly as dramatically as it would if we did not recognize any earnings in proportion to premium.

MR. ROLAND DIETER: I have two questions, both for Paul. First, who were your accountants and second, how is the ACLI 20 pay test applied? Do you look at all the premiums received under a contract within a certain calendar year or duration or all premiums paid from the inception of the policy? Or do you just look at the stipulated modal premium in deciding whether it is above or below a 20 pay?

MR. KOLKMAN: Our auditor was Peat Marwick Mitchell & Co. As far as the second question is concerned, I do not know if all the mechanics have been worked out. The principle concern is to avoid the situation in which you can recognize a large amount of earnings because of a huge one time dump-in of money. I think the test in practice would be on an annual basis. In other words, you determine the annual premium for a 20 pay life, and to the extent that under a contract, you receive that amount or less the span of a year, you would account for that contract by fully traditional means. If you ever crossed the line, be it at issue or halfway through the year or near the end of the year, you would switch to the deposit method for the excess.

MR. MARK EVANS: We sell a large amount of universal life, and I am the unfortunate soul who gets to figure out how to report on GAAP for it. The approach we use may be applicable to variable universal life and result in some simplification. Our benefit reserve is simply the cash value for the universal life contract. At the point of issue we do a projection and then set the deferred acquisition cost so that earnings will emerge as a level percentage of premium plus a release for a provisions for adverse deviations. Since the benefit reserve is equal to the cash value the method is automatically dynamic. We also put the deferred acquisition cost on a dynamic basis by adjusting it using the relation of the actual cash value to the cash value we expected at the time of original issue. This method avoids the problem Mr. Kolkman brought up about unexpected premium dump-ins. It seems to me that this approach would work for variable universal life with some modifications. I would like Mr. Eckley's reaction to this method.

MR. ECKLEY: Is your product front-end loaded?

MR. EVANS: This is strictly a front-end loaded product. I do not immediately see any reason why the method would not work on a back-end loaded product.

MR. ECKLEY: For a back-end loaded product you would have to make sure the earnings recognition took into account the running off of the surrender charge. In other words, if you hold the net cash value on a back-end loaded product your reserve is going to be building up faster in early years than in later years because the surrender charge is grading off. With that caveat. I think the method would work for variable universal life, since it has the dynamic aspect which is essential. On amortizing the deferred acquisition cost I do not have much to suggest: I think anything you can justify to yourself and is reasonable is all right.

MR. EVANS: If you include the back-end load in your projection then I think that it would automatically be taken care of since the DAC in this approach is a balancing item to get you to your desired net liability.

MR. ECKLEY: I agree.

MR. LARRY WARREN: I would like to know if we can touch upon the actual mechanics involved in calculating the reserves on the traditional universal life product. In particular, under the composite method what percent of premium would be allowed to be recognized? Are we talking about 50% of the profit recognition that otherwise would be recognized under the traditional method?

MR. KOLKMAN: If you go through the logic in the Academy paper you are supposed to look at your contract and try to determine the principal services. If the contract is being sold as an investment contract with minimal amounts of insurance and you are expecting large lump sum premiums in the early years, the paper suggests that you should tie up a lot of your profits in interest margins, and you would have a very small percentage of premium being recognized. If you are selling your universal life product to a different segment of the population and you are expecting a large amount of preauthorized check business then you are issuing good old whole life in a universal life wrapper. The logic of the

paper would suggest that you could report a sizeable proportion of your profits in proportion to premium, probably half. The illustration in the Academy paper--for no reason other than that there were three things involved, the premiums, mortality and interest margins--shows an illustration of a third of the profits coming out as a percent of premiums, a third coming out as interest margin and a third as mortality margin. But you are supposed to look at your contract, determine what is driving the contract, and try to report earnings in proportion to that.

MR. WARREN: What type of adjustments would be made in subsequent years for emerging experience? Would a static GAAP factor be adjusted? How would that adjustment take place?

MR. KOLKMAN: I do not know. You should try to set up a valuation based on the experience that you expect to develop. Then annually, or every two years, you would have to take a good look at that business, see how experience was developing and decide whether it was appropriate to unlock your assumptions and readjust things from that period forward.

MR. CARROLL: I am not sure I have any viable alternatives, but in practice I find some companies using a static factor basis and then facing up to the problem when they change any of the elements of the policy, crediting rate, mortality charge, or expense load. They reopen the contract and prospectively redefine the reserve, which would be a procedure somewhat similar to what companies might do for non-guaranteed premium products. In other words, at the point at which the price is changed, they start with the ending net GAAP liability and project forward from there based on the new assumptions. Another more dynamic possibility would be to develop amortized costs on a worksheet using some dynamic method, and develop a set of fixed percentages which would be applied to actual account values to determine benefit reserves. The account value therefore gives you the dynamic adjustment. Frankly, I am not ecstatic about any of those approaches. Although there are others that are available I have not seen anything that was an especially good method from a practical standpoint.

MR. ECKLEY: I will try to suggest an approach using what Charles calls the percentages of fund values. Take a profit run, the best estimate run, and look at the present value of profits as a percentage of present value of premiums. Let us say it is 10%. If you want to reflect profits on the one third, one third, one third approach you would load up the assumptions with margins for adverse deviations, redo the profit run until your premium profit margin is 3 1/3%, and then calculate as percentages of the fund the reserves which give you profit of 3 1/3% of premium each year under your projection. The other two thirds of that 10% profit you expect to receive would come out as the margins are released.