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## NEW PRODUCTS ACCOUNTING ALTERNATIVES

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Statutory and generally accepted accounting principles (GAAP) accounting alternatives for:

- o Universal Life (UL)
- o Variable Products--variable life (VL) and variable universal life (VUL)
- o Flexible Premium Annuity (FPA)
- o Single Premium Deferred Annuity (SPDA)

MR. REX D. HEMME: Since I first faced the challenge of trying to apply traditional GAAP and statutory accounting principles to "new products" about six years ago when a client suddenly started issuing a significant amount of SPDAs, I've had several other opportunities to ponder the applicability of the existing accounting standards to new products and to review the results of the deliberations of other actuaries. Two facts have become clear to me: (1) The existing standards do not serve us well when it comes to such products as SPDAs and UL. (2) We are not going to reach a uniformity of actuarial practice by letting each actuary wrestle with the implications on his own.

In late 1983, the NAIC gave us what we had been expecting for some time--a model regulation on statutory valuation and nonforfeiture practices for UL. At the same time, that body issued a model regulation on variable products as well.

During 1984, under pressure from the Securities and Exchange Commission (SEC), the Non-Guaranteed Premium Products Task Force of the American Institute of Certified Public Accountants (AICPA) Insurance Companies Committee produced an issues paper with the succinct title of "Accounting by Stock Life Insurance Companies for Annuities, Universal Life Insurance and Related Products and Accounting For Non-Guaranteed Premium Contracts." The American Academy of Actuaries provided

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substantial input concerning the principles embodied in this issues paper. Some of the terminology has changed, but in general the Academy approach has been adopted by the AICPA Task Force. While that issues paper hasn't been officially promulgated yet as a Financial Accounting Standards Board (FASB) statement, many of us attempted to apply it at year-end in 1984.

MR. SHANE A. CHALKE: My presentation deals with the statutory side of things, and in some ways, it's a bit incongruous with the title of our session because statutory, by its very definition, allows no accounting alternatives. But I will stick to statutory, with the exception that I'll expand this topic somewhat to cover the current situation with federal income tax (FIT) accounting for UL and VUL. We are in a unique situation now where FIT is intimately tied to statutory valuation. I think that in future years, FIT will continue to drive the statutory process and the requirements of statutory. During the end of last year, we saw how this could happen in the realm of annuities. There were several changes on the boards in statutory accounting for annuities which were fought by some companies, mainly for tax purposes. I think this trend will carry over to UL and VUL.

Things are chaotic with UL. It's hard to believe that UL has been around for seven years now. It's an old product as far as product ideas go. But there's still quite a bit of confusion as to what a minimum statutory reserve is for UL.

The first UL products invariably used demonstrations of compliance with the Standard Valuation Law, which took a narrow view of UL as a product form. With almost no exception, the demonstration centered around the fact that (1) the reserve was really the account value and vice versa; (2) the product was really an unbundling of the valuation structure; and (3) this account value, guaranteed interest rate, cost of insurance (COI) deductions, and so forth, that we showed the policyholder, were reserve mechanics and nothing more. That's where the idea for the product came from back in 1977 and 1978.

For this view of UL to hold true, the following constraints are necessary. First, your gross premium minus your loads (the amounts that you take out of the gross premium before it's accumulated) has to be equal to the valuation net premium.

Since the valuation net premium has to be a constant percentage of the gross premium (the basic statutory valuation principle), most people thought that it was impossible to have things such as policy fees, and so forth--such is a fairly narrow interpretation of the UL product compared to today. Another restriction implied by this viewpoint of UL was that first year loads had to be equal to or less than a commissioner's reserve valuation method (CRVM) expense allowance.

In addition, the policy guarantees, that is, the guaranteed interest rate and the guaranteed COI charges, had to be the same as the valuation basis. So if your valuation basis is 4 percent 1958 CSO, those had better be the policy guarantees in order for this view of UL to hold true. Another more subtle point was that the method of accounting--

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the formula used to go from one account value to another account value, from one month to the next--had to be actuarial. It had to look like a valuation formula. This viewpoint was responsible for the fairly odd account value formulas that you see in UL even today, where most of the formulas divide the death benefit by an interest rate factor before they apply the COI rate. There's no reason from a policyholder or policy design standpoint to have that interest rate factor; it's just something that happens to fall out from treating the account value mechanism like a Fackler reserve accumulation formula.

All of these constraints serve to define the classical UL model. Even though almost all companies took that approach, which includes at least the first 60 companies that went on the street with UL, I am not aware of even one policy that completely complied with all of these constraints. So we were on pretty shaky ground statutory-accounting-wise, even back in the simpler days of UL.

As UL progressed over the years, companies found it more difficult to stay within the confines of this classical model. Initially almost all policies had short-term guaranteed interest rates and guaranteed COI rates that were better than the long-term guarantees, at least for a year. Of course, initially that was for tax purposes. It was felt that a dividend paid a year early wasn't a dividend. People found it difficult to charge COI rates for smokers that were equal to 1958 CSO. In a struggle to maintain this classical viewpoint, companies treated smokers as substandards, something that is very unpopular today with many of the state jurisdictions, but it was an attempt to maintain this classical viewpoint, that we actually unbundle the reserve, rather than the premium.

Over the past two or three years, almost all of the new UL policies have been back-end loaded. With the marketing emphasis on later duration cash values, it's almost impossible for a front-end load product to compete with a back-end load UL policy. With back-end load, additional questions are raised. Where is the reserve now? Is it the account value? Is it the cash surrender value? Or is it somewhere in between? This question persisted a long time before it was satisfactorily answered. There were still more deviations to come after that. First-year load structures migrated from valuation expense allowances to standard nonforfeiture law expense allowances. Policy guarantees became more complex, even to the point where now we have an entire class of UL policies called secondary guarantee products, having very complicated guarantee structures which don't match the classical model at all. Many plans now have policy fees which have replaced the implicit policy fee of an interest rate corridor.

Basically this classical model is not only unrealistic for today's UL policies, but it's also completely unnecessary. The idea that the rate structure is equal to the valuation basis, or is a representation of the valuation basis, is entirely artificial. Actually it's quite a throwback to the days, when you priced the whole life policy, took the valuation net premium, loaded it for expenses, and that was what you charged. I don't think there are any companies that still price that way.

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A lot of these classical ideas were changed, or at least a new method was put forth, when the National Association of Insurance Commissioners (NAIC) adopted their model UL regulation in December of 1983. Part of the model regulation includes a new type of valuation method for UL. The purpose of this regulation was to relieve UL of the artificial constraint tying the cost basis to the valuation basis. This was the impetus for the development of the regulation, and it had far less to do with trying to take an 818 (C) election or to define a CRVM method for tax purposes.

The basic premise in the regulation's valuation method is that the account value mechanism--the account value progression from one month to the other, the charges that are taken out, the expense load, and so on--is representative of the cost basis of the policy only and not at all representative of the valuation basis. Any tie between these two would be coincidental rather than required. With this viewpoint, the premium rate is replaced by the policy factors rather than the valuation basis. In other words, in the old days you had a rate book. Now you have interest rate and COI guarantees, a formula to go from one month to another, and expense charges. So it's the premium that's been unbundled and not the valuation structure. This seems like a fairly subtle point, but it is the driving force behind the model regulation. This different way of viewing UL is what the model regulation method grew out of.

When adopting this viewpoint, you can observe that any restrictions on the various components of UL are completely unnecessary. There is little justification for limiting COI rate charges, interest rates, and expense charges; they just fall to the wayside. Any restrictions of this kind in the various components of UL would be analogous to stipulating premium rates on traditional plans. Companies are already deviating from these types of restrictions and having difficulty in some of the state jurisdictions, especially when companies make the transition to 1980 CSO. They find that it becomes difficult to keep their COI rates under 1980 CSO, leaving them several choices. They can go to the 1980 CSO smoker/nonsmoker basis, which has been approved in about seven states but most of the states tend to accept it. They can try the old standby trick of calling smokers substandard, which doesn't work in about eight or nine states now. So, companies are in a bit of a bind if they want to maintain this older view of the cost basis being the valuation basis.

Now the obvious question is: if the account value is not the reserve and if we differentiate between these two items, where is the reserve? In order to describe where the reserve is or how this method actually works, I'm going to start with the simplest case, which is fixed-premium UL.

Under the Standard Nonforfeiture Law's definition of the minimum reserve, only two planned characteristics are required in order to completely determine this reserve. One of them is future guaranteed benefits, and the second is the gross premium pattern. For fixed-premium UL or interest-sensitive life or excess interest whole life, or whatever it's called this week, both of these items are completely

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defined. Now in order to get future guaranteed benefits, you might have to go through an extra step or two. But all the things are there in order to get it. You can always take that account value and project it forward and find out what the guaranteed benefits are. And, of course, by the very nature of a fixed-premium product, you know the gross premium pattern. Therefore, the statutory reserve according to the Standard Valuation Law is completely defined for this class of policies. There are no questions for this class of policies; the model regulation does nothing more than provide a bit of information as to how to apply the Standard Valuation Law to this type of plan. It's redundant information because all the information is there directly from the Standard Valuation Law.

Flexible premium plans are a bit more complex. The gross premium pattern is missing. You might think that future benefits are missing as well, but once you determine the premium pattern or at least make an assumption as to the premium pattern, you know guaranteed future benefits because they're both explicitly tied to each other. In the case of flexible premium plans, the model regulation does nothing more than provide a premium assumption, specifying a pattern of premiums to be used in doing the valuation. Then once this pattern of premiums is adopted, all the other information is determinable. With the pattern of premiums, you can determine future benefits. The premium that is specified in the model regulation is analogous to a whole life premium. As a matter of fact, it's very close to the guideline level premium under Section 7702 of the Deficit Reduction Act of 1974 (DEFRA). It's the premium that, under policy guarantees at issue, will exactly mature the policy.

One more concept to follow the model regulation method is something called a guaranteed maturity fund (GMF). A bit of a foreign concept, it follows naturally from the premium assumptions. Basically, if you look at the contract from issue, assume that a guaranteed maturity premium (GMP) is paid each year, and follow that account value through to maturity on policy guarantees, you'll see that it exactly matures the policy. The resulting account value in each year is equal to the GMF in that year.

The formula for the reserve is nothing more than the present value of future guaranteed benefits less the present value of future valuation premiums. It's like every statutory reserve in the world. To get these future benefits at any point in time, you project the account value forward assuming that the GMP is paid in each year and just see what happens to the death benefits--maybe it's the specified amount, maybe it went up due to the corridor. You keep doing that year after year until you get to the date of maturity, and you've developed a pattern of death benefits and an endowment value; these are guaranteed future benefits. This sounds rather complicated, but it gets a lot worse.

In addition to everything else, there is a little item in the model regulation method affectionately known as the R factor. It is the most unusual part of the method. When you project forward to get your guaranteed future benefits, rather than just use the current account

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value, the method specifies that you use the greater of the account value or the GMF. The reason why you are required to use the greater of the two values is fairly simple. If you had an account value less than the GMF and you did a projection forward, the policy wouldn't mature because, by definition, the GMF is that level at which, when you project forward, it exactly matures. So if you did project forward with the account value and the account value was less than the GMF, you would end up in a situation where you didn't account for the whole policy structure all the way to maturity. The fund might run out at some point, and the policy might become 20-year term or something like that, providing less accuracy in valuation.

The R factor comes into play one other time, once your projection is completed. In any policy year when your account value is less than the GMF, you multiply that account value by the R factor, where the R factor is nothing more than the ratio of the account value to the GMF. When the account value is greater than the GMF, you ignore the R factor. The R factor insures against a negative reserve as well as makes sure that you project all the way to maturity. If the account values run very low and you subtracted a full expense allowance, you'd come out with a negative CRVM reserve. This is, at least according to statutory valuation principles, undesirable. The R factor effectively limits the expense allowance. What's interesting about this is that the expense allowance can vary from year to year; it's not necessarily fixed at issue as for most traditional plans.

It's hard to believe that anyone but software firms and insecure consultants would want to promulgate such an extremely complicated method. Actually, for any policy that complies with the constraints of the classical model, which still is for the most part 95 percent of the UL out there, the model is easy to apply. In other words, if your valuation basis is 4 percent and you guarantee 4 percent interest, the valuation basis is 1958 CSO and you guarantee 1958 CSO COI rates, and so forth, then the method is extremely simple. The formulas all fall out of each other and the method reduces to a simple adjustment to the account value. There is no requirement to calculate a GMP or a GMF or an R factor. There is no requirement to do a projection or discounting. All of the complicated method disappears if you comply with this classical model, and it's fairly easy to do a proof to show this, which can save you a tremendous amount of work.

It's important to keep in mind that this method was developed in 1980. It takes a long time for it to go through the hundreds of thousands of regulatory committees, and so on, before it actually becomes a model regulation and then years after that before it actually becomes a regulation. But the original intention was that, for most UL plans for companies that were going to adopt this classical approach anyway, the method would be very simple. There would be hardly anything to do for classical policies yet they retain the flexibility needed in order to have a policy that had a cost basis different from the valuation basis. If you just didn't feel like guaranteeing 4 percent interest, and you just didn't feel like charging 1958 CSO COI rates, you would still have the freedom to deviate from the valuation basis.

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Unfortunately, the changes in the tax law, that is, Section 807 of DEFRA, now specify a certain valuation basis for tax purposes and basically the law requires that you use a CRVM. It also requires that you use the "NAIC approved method." Since the UL model regulation was approved by the NAIC at the end of 1983, it is the "NAIC approved method," regardless of the fact that it's only been adopted as a regulation in a handful of states.

The third requirement and most important feature of the tax law, is that the reserves must be calculated on the minimum standards of interest and mortality. For UL you'll be required to compute tax reserves using a 6 percent valuation interest rate. For the vast majority of plans which may guarantee 4, 3, or 4.5 percent interest, this facet disallows using the classical model, and you are now required to do the complete projection, discounting, GMP, GMF calculation, R factor, and so on. For some UL plans, you can prove that the tax reserve is less than the cash surrender value. The tax law does say that if that case is true, the reserve is equal to the cash surrender value. For some front-end load plans, it is possible to make such a proof. For most back-end load plans, no proof is usually available so you are stuck with going ahead and following the method. I think, on average, in the computer time it takes to value one UL policy, you could have valued almost five hundred traditional policies. On a large mainframe I've seen this method take as long as one second per policy, which, as far as mainframe time is concerned, is an extreme cost, an extreme burden on your computer resources as well as your programmers, not least of all your actuaries. Remember that the method was developed in 1980. It was impossible to foresee what was going to happen with tax laws. As a matter of fact, Mike Davlin and I developed this method long before TEFRA, back when TEFRA was still called stopgap.

Will things improve? I think that over the next few years, as this method and UL reserves come up on both internal and on tax audits, guidelines for more acceptable approximations and techniques will be accepted. Right now, I find that companies are taking very conservative approaches; valuing each UL policy on a seriatim basis, doing an actual projection and discounting it, and doing the whole thing in a full-blown manner. As companies get a little more aggressive, we'll find out exactly where the boundaries are, and how much approximation will be allowed. Since we're dealing with the Internal Revenue Service (IRS), it's a little more difficult than dealing with strictly statutory reserves. We'll just have to wait and see where the practice will lie on this issue of calculating tax reserves for UL. I'm not entirely optimistic. I'm not a great fan of statutory accounting as it is, and this is just a lot of extra work to arrive at a not particularly useful answer.

The statutory reserves for VUL are still up in the air. We have an amendment to the variable life model regulation, adopted by the NAIC at the end of 1982, which provides little guidance as far as statutory reserves for VUL. Most of the reserve section of the regulation deals with reserves for guaranteed death benefits. The part for the basic statutory reserve has the typical actuarial phrases used when we don't know what else to do: that reserves must be calculated by a method

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consistent with general accounting principles or something like this. It also has a statement, which says that reserves must be calculated taking into account the fact that future obligations are tied to the benefit base; the regulation defines the benefit base basically as the account value.

Basing my opinion on this fairly meager information and the work that I have done to date, I feel is that the states will generally require that the reserve on VUL be equal to the account value. I don't think that they will be particularly comfortable with a statutory reserve that's much less than the amount of the account value, basically because with VUL, you are required to have a cash value equal to the account value. This means that whatever the policyholder thinks his account value is, those assets actually have to be there in the separate account. The future benefits spin off of the performance of this full base of assets. I think those two items will mean that most of the state regulators will be of the opinion that you'll have to hold the full account value for the statutory reserve.

A problem arises regarding what will happen with tax reserves in VUL, and this is something that is even more of a gray area. One of the dangers, I think, is that the CRVM of the UL model regulation will be cross-applied to VUL for tax purposes. The companies will be required to go through the exercise of calculating some sort of a CRVM reserve on VUL. This could be disastrous to the profitability of the product because you'd end up in a situation where you have required capital sitting there in that separate account, yet only a small portion of this would be deductible for tax purposes in the early years. Even worse, for mutual companies, part of the account value, and part of the separate account would be subject to the mutual surplus tax. Both of these are quite undesirable. The American Council of Life Insurance (ACLI) has recently formed a committee to study this problem. I would expect to see some sort of proposed regulation on tax reserves for VUL within three months, but things always tend to move much slower than anyone ever guesses.

MR. EDWARD F. BADER:

### GAAP ACCOUNTING FOR NEW LIFE INSURANCE PRODUCTS

Since 1973, the FASB has been the designated organization in the private sector for establishing standards of financial accounting and reporting, which are known as GAAP. These are officially recognized as authoritative by the SEC and AICPA.

FASB promulgations are set forth in the form of statements of financial accounting standards. All insurance companies registered with the SEC are required to file financial statements prepared in accordance with GAAP. Statutory accounting principles are prescribed by the individual state regulators and the NAIC.

#### GAAP History

The history of present life insurance GAAP can be traced as follows:



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- o The AICPA issued an industry audit guide in 1972 entitled "Audits of Stock Life Insurance Companies."
- o The AICPA issued a statement of position in 1978 entitled "Confirmation of Insurance Policies In Force."
- o The FASB issued the Statement of Financial Accounting Standards (SFAS) No. 60 in June 1982 entitled "Accounting and Reporting by Insurance Enterprises." The standards set forth in FASB Statement No. 60, which were derived primarily from the AICPA Industry Audit Guide, focused on the traditional forms of insurance that were dominant in the market at that time--mainly guaranteed-premium, fixed-benefit, and ordinary life insurance.

### GAAP Versus Statutory Accounting

The major differences between statutory accounting and GAAP include the accounting treatment of items such as:

1. recognition of premium revenues,
2. recognition of expenses (deferred acquisition costs),
3. recognition of losses,
4. deferred income taxes,
5. valuation of investments and recognition of realized and unrealized gains (losses) thereon,
6. investments in subsidiaries,
7. stockholder's equity,
8. mandatory securities valuation reserve (MSVR), and
9. nonadmitted assets.

I will be concentrating on GAAP accounting relating the accounting recognition of premium revenues, costs, and losses.

### FASB Statement No. 60

The underlying principles set forth in FASB Statement No. 60 pertaining to traditional life insurance accounting are:

1. Premiums should be recognized as revenue when due from the policyholder.
2. When the premium revenue is recognized, a liability should be accrued for future policy benefits. This liability is determined as "the present value of future benefits to be paid less present value of future net premiums equals liability for future policy benefits." The interest rate used in calculating the present values is based

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on the insurance company's expected investment yields at the time the contract is entered. The determination of the liability also requires assumptions regarding such factors as mortality, terminations of contracts by policyholders, and expenses to be incurred by the company. These assumptions include a provision for the "risk of adverse deviation."

3. Policy acquisition costs, those costs that vary with and are primarily related to the acquisition of insurance contracts, should be capitalized and amortized in proportion to the premium revenue recognized. The capitalized costs should be amortized using the same assumptions applied in determining the liability for future policy benefits.

Once the assumptions have been estimated at the inception of the contract, they are "locked-in; that is, the liability and cost are not recalculated as actual experience differs from assumed.

Since the FASB presumed that premiums would remain level throughout the term of the policy, it concluded that it was appropriate to also lock in the original assumptions for that term. In spite of promulgating GAAP in SFAS No. 60, the FASB included its own qualification (from paragraph 69 of Appendix B to statement No. 60):

This statement does not address issues that are currently being studied by the insurance industry and the accounting and actuarial professions. Some of those issues include: ... how should universal life insurance contracts and similar products that have been developed since the AICPA insurance industry related guides originally were issued be accounted for?

### Nontraditional Products

As the FASB recognized in 1982, the life insurance industry was undergoing rapid and dramatic change. A variety of new nontraditional products have been introduced and have flourished. The more significant of these nontraditional products include: UL, VUL, FPAs, and SPDA<sub>s</sub>.

#### I. Universal Life Insurance

UL is fast becoming the predominant form for new long-duration life insurance contracts.

Under a UL insurance policy, premiums paid by the policyholder are credited to a fund from which periodic charges are deducted for life insurance coverage and expenses and to which interest is credited. The balance of the fund represents the contract value of the policy. The interest credited to the contract value is generally based on a guaranteed minimum rate plus additional "excess" interest at rates determined by the insurance company.

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UL may be a flexible-premium or fixed-premium contract. Under flexible-premium UL, the policyholder usually can change the amount of coverage and the amount and timing of premium payments. The policy will remain in force so long as the contract value is sufficient to permit deductions for the COI and expense charges. A flexible-premium UL policyholder can usually choose either a specific amount of (a) death benefit, and insurance is purchased for the difference between the death benefit and the accumulated contract value, or (b) insurance coverage, and the death benefit equals the amount of that coverage plus the accumulated contract value. Under fixed-premium UL, neither the premium nor the face amount of the insurance coverage can be changed by the policyholder.

A flexible-premium UL policy generally permits the policyholder to pay lump-sum premiums, which, broadly speaking, are premiums that are in excess of the premium payments that the insurance company has a reasonably conservative expectation of receiving on a continuing and long-term basis. Lump-sum premiums are immediately credited to the contract value on receipt.

UL policies also generally permit partial withdrawals and loans of contract values subject to possible charges by the company.

### II. Variable Universal Life Insurance

VUL is just being introduced into the market, and the specific forms of these contracts have not been finalized.

As its name suggests, VUL combines some characteristics of fixed-premium variable life insurance and universal life insurance. Like UL, it is an "open" or unbundled policy with separate, identifiable charges for expenses and mortality. As with fixed-premium variable life, the cash value of VUL is funded through a separate account--a segregated set of assets set apart from the general funds of the insurer and devoted exclusively to this purpose.

Although it shares similarities with each of the two products from which it takes its name, VUL is markedly different from those products in several respects. Unlike fixed-premium variable life, VUL has no fixed premium or benefit structure. There is no fixed formula which translates investment performance into additional death benefits. The investment return for VUL is translated into additional cash value, with no required increase in the amount at risk. In a sense, this makes VUL more of an investment-oriented product, although limited by the new definition of life insurance contained in the 1984 tax legislation.

There are no contract value guarantees with VUL. The value of the contract fund is tied to the market value of the assets in the related separate account. Theoretically, the VUL policyholder could have a substantial cash value one day and zero the next if disaster befell the underlying assets.

### III. Flexible Premium Annuities

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FASB Statement No. 60 defines an annuity contract as "a contract that provides fixed or variable periodic payments made from a stated or contingent date and continuing for a specified period, such as for a number of years or for life."

Under an FPA contract, premium payments are made at the discretion of the policyholder. The FPA contracts issued in recent years typically provide for the accumulation of premiums and related interest credited to the contract value during the period that funds are held by the insurance company. The interest rates typically are subject to certain guaranteed minimums that are supplemented by excess interest declared by the insurance company.

The rate at which interest will be credited to the contract value, or the method for determining interest credits, is specified in the contract. Although interest rates may be indexed to current market rates, the interest credits are not directly determined by the experience of specific investments held by the insurance company.

### IV. Single Premium Deferred Annuities

An SPDA contract is entered into with the payment of one premium at the inception of the contract. Identical to an FPA, the SPDA provides for the accumulation of interest credited to the contract value during the period that funds are held by the insurance company. The interest rates typically are subject to certain guaranteed minimums that are supplemented by excess interest declared by the insurance company.

The rate at which interest will be credited to the contract value, or the method for determining interest credits, is specified in the contract. Although interest rates may be indexed to current market rates, the interest credits are not directly determined by the experience of specific investments by the insurance company.

### AICPA Issues Paper

In November 1984, the AICPA released an issues paper discussing GAAP application to various types of long-duration, nontraditional life insurance products.

This issues paper was prepared by the nonguaranteed-premium products task force of the AICPA Insurance Companies Committee. The task force received substantial assistance in identifying and analyzing the issues from the American Academy of Actuaries' Life Insurance Financial Reporting Principles Committee and the Committee on Financial Reporting Principles of the ACLI. The Academy issued a discussion memorandum on this.

The purpose of the issues paper is to propose GAAP treatment for certain insurance products specifically excluded from FASB Statement No. 60. The conclusions presented in the paper are those of the AICPA. The issues paper has been submitted to the FASB, which has the ultimate responsibility for determining GAAP.

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### Accounting for Nontraditional Life Insurance

Present industry accounting practices for nontraditional life insurance vary substantially. This is a result of the wide variety of contract design and differing investment, marketing, and underlying philosophies. Three predominant accounting practices are presently being used to account for nontraditional life insurance: the premium approach, the deposit approach, and the composite approach. The primary differences between these three accounting approaches revolve around the issue of income recognition.

The premium approach follows traditional life insurance accounting practices. Revenues are recognized when premiums are due. Expenses and benefits are recognized in proportion to revenues.

Under the deposit approach, premiums are treated like a deposit. No income is recognized at the issuance of the contract, and no portion of income is recognized as a percentage of premium. Income is recognized over the life of the contract as it is realized through interest margins, mortality and expense margins, and surrender charges.

Under the composite approach, income is recognized over the term of the contract in proportion to the insurance enterprise's risks and functions, which ordinarily relate to investment, mortality, expenses, terminations, and premium collection.

### UL--Composite Approach

For UL insurance, the AICPA advisory conclusion is to follow the composite approach. To apply the composite approach, the contract and its features should be analyzed to identify the relative levels of risks and functions performed. The primary performance and risk elements in a UL contract ordinarily relate to premium receipt, investment, mortality, interest, withdrawals, expenses, and other factors.

Income should be recognized over the term of the contract in proportion to the insurance enterprise's risks and functions under the contract. In applying the composite approach, the net premium should be determined by first including normal, conservative provisions for adverse deviation in the assumptions regarding investment yields, mortality, terminations, and expenses and then including additional provisions in the assumptions in order that income will be recognized in an appropriate relation to the relative significance of the risks and functions. In the absence of evidence to the contrary, it should be presumed that the dominant risk and function relates to investment, and income should be associated with investment in proportion to its dominance.

Any portion of total income remaining after the association with the various identified risks and functions (represented by the excess of the gross premium over the net premium) should be recognized in direct relation to premium revenues. In the absence of evidence to the contrary, it should be presumed that premium collection is not a significant function under the contract, and thus, income recognized in direct

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relation to premium revenues should not be a significant portion of the total expected income under the contract.

In addition to the assumptions regarding investment yields, mortality, terminations, and expenses, reasonably conservative assumptions are required regarding expected future premium levels, mortality charges, interest credit rates, and other features of the contract. Actual experience regarding those contract features should be considered in evaluating the continuing reasonableness of the assumptions, and adjustments to prospective assumptions should be made as necessary to maintain a consistent and reasonable pattern of income recognition.

### UL--Deposit Approach

Although the FASB and SEC have not adopted a formal position on the AICPA advisory conclusions, unofficial indications have been to recommend the retrospective deposit approach to account for UL.

Under this 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. The gross contract value is maintained as the liability for future policy benefits, and capitalized acquisition costs are amortized in proportion to future expected revenues. Periodic mortality charges are usually assessed against contract values at the beginning of a period, and interest is credited at the end of a period. Applying this approach requires considering provisions for unearned mortality charges and accrual of uncredited interest as of the financial statement date.

### VUL Accounting

Regarding accounting for VUL, the issues paper states: "The application of this issues paper to variable universal life insurance contracts has not been determined."

However, it would seem safe to recommend application of either the composite or deposit approaches in accounting for VUL. I would not encourage use of the premium approach due to the following arguments:

1. The nonguaranteed nature of eventual costs and benefits under the contract suggests that accounting practices for guaranteed-cost contracts may be inappropriate.
2. The flexible or irregular pattern in which premiums may be received suggests that complete reliance on premium revenues to determine income recognition may be inappropriate.
3. The continual nature of the underwriting and investment management services suggests that complete reliance on premium revenues to measure the level of service and income may be inappropriate.

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4. The unbundling of investment and insurance aspects suggests that accounting policies for each element can and should be considered separately.

### Accounting for Annuities

In regard to accounting for annuities, the AICPA concluded that the deposit approach should be followed. No income should be recognized when the contract is issued, and no portion of the total expected income should be recognized as a percentage of premiums. Rather, all income from a contract should be recognized over the term of the contract. The liability for future policy benefits should be equal to gross accumulated contract values before adjustment for contractual surrender charges, if any. Surrender charges should be recognized as income in the period in which the related surrender occurs.

Acquisition costs not immediately recovered from front-end loads should be capitalized and amortized in relation to reasonably anticipated investment margins, expense charges, and surrender charges. This will require the use of assumptions regarding mortality and full and partial surrenders of contract values. The resulting amortization should be sensitive to the actual termination experience of the business.

Income may be recognized under the deposit approach either prospectively or retrospectively. Either method is acceptable according to the AICPA advisory conclusion.

Conceptually, the prospective method is the same as the premium approach and does not include a separately determined deferred acquisition cost asset. It is based on assumptions regarding future cash flows, and the liabilities are traditional present value calculations. This requires the selection of assumptions regarding future contract-holder actions and their costs and assumptions regarding maintenance and claim settlement expenses. This method also requires the determination of the interest rate expected to be credited to gross accumulated contract values.

The interest rate used in the prospective method is established at the level which, at issuance of the contract, results in the present value of future benefits and expenses being equal to the premium received. This rate is used only if it does not exceed the expected investment yield rate and if it results in no income or loss at the time of issue. If all other assumptions are realized (contract-holder activity, credited interest rates, and expenses), income then is recognized in future periods to the extent the interest rate actually earned on investments exceeds this calculated "break-even rate."

The retrospective method does not depend on specific assumptions with regard to future transactions, but is based on the accumulated effects of prior transactions. This method is based on maintaining the liability equal to gross accumulated contract values.

Deferred acquisition costs not recovered immediately from front-end loads would be capitalized and amortized. The amortization periods

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used are often fairly short and may be arbitrary, or they may be based on the projected realization of earned interest in excess of that expected to be credited to contract values. Some companies include projected surrender charges in the stream of revenue used to determine the amortization schedules.

SPDAs should also be accounted for using the deposit approach.

However, the amount of income that may be recognized in the payment period should be limited to the amount that would be recognized had level premiums been payable for twenty years to provide the guaranteed death benefits under the contract. The balance of the expected income should be recognized over the contract term by including additional provisions in determining the net premium.

While the FASB has not yet issued authoritative pronouncements on accounting and disclosure for the new nontraditional life insurance products, the AICPA advisory conclusions contained in the issues paper can and should be applied.

MR. THOMAS P. EDWALDS: Concerning riders in the valuation process, for example, if a policy has a separate premium charge for waiver of premium but does not have a guaranteed charge for that taken out of the fund, does that mean you have to regenerate your GMFs and things like that?

MR. CHALKE: It was anticipated while developing the model regulation that riders basically would be ignored in the projection, and separate reserve items would be carried for rider amounts. The major reason for that is that many of the riders on UL are such that it is difficult, if you do a projection, to determine certain rider benefits. A rider such as waiver of premium is difficult to value under this actuarial approach. There is a phrase in the model regulation that states that the policy should be valued together with any riders. Personally, I have no idea what that statement means. I'm not sure what the intention is; my interpretation of the model regulation is that you would carry reserves for the base policy and riders separately.

MR. EDWALDS: Would you care to comment on any policy designs you've seen that are particularly intractable for the model regulation type of valuation?

MR. CHALKE: Absolutely. The biggest problems in going through this method are for those plans which have a method of accounting, i.e., going from one account value to another particularly nonactuarial one. There is a great variety in formulas currently. Some companies will multiply the previous account value by an interest factor to determine the death benefit and other strange nuances. For these types of policies (often it is necessary to go through an actual iteration method) the computer time to generate reserves is significant. Other types of policies are difficult, such as substandard policies, which, even on a guaranteed basis, are going to hit the tax corridor. Therefore it is likely that an iteration will need to be used.



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MR. HEMME: In the issues paper on UL, under the composite approach, there are two important sentences. One says, "In the absence of evidence to the contrary it should be presumed that the dominant risk and function relates to investment, and income should be associated with investment in proportion to its dominance." Later another sentence says, "In the absence of evidence to the contrary it should be presumed that premium collection is not a significant function under the contract and thus the income recognized in direct relation to premium revenues should not be a significant proportion of the total expected income under the contract." In dealing with some of my clients at year-end, they were inclined to want to attribute 60 or 75 percent of the income over the course of the contract's existence to premium collection. Have you observed that among your clients, and what has been your reaction?

MR. BADER: It's a continuation of the traditional approach. Most companies have been used to recognizing revenue or income in relationship to collection of premium, and it's very difficult to get them to abandon that entirely. This is one of the areas that we debated at great length, and one of the problems we had is that we were faced with all of the abuses that existed in the SPDA area where there was a significant amount of income recognition at issue because we had collected the premium front-side. Companies argued that the income recognition process was complete, there were no future risks, and therefore we were entitled to recognize 60, 70, or more percent of income. That argument is a little specious considering some of the insolvencies and some of the problems that we have seen with the SPDA. There are significant additional risks that are involved. The whole concept of asset liability matching has not been dealt with, or if it has been dealt with, some companies dealt with it speciously. So the AICPA rejected that approach, and I believe that the Academy committee and the ACLI generally agreed with that. The problem that we would have, of course, is that it's always starting out with the words "in the absence of evidence to the contrary." Will you accept 60 percent of income recognized because of premium? So it's a give and take. This language is troublesome to the SEC and the staff of the FASB primarily because there are some people who believe that there should be a rigorous test and that it should be a mechanical approach to income recognition. They believe that there should be little or no judgment in the way in which companies recognize income because they are afraid that these kinds of words will give rise to a significant amount of front-ending of income which the accounting profession, some actuaries, the insurance regulators, and the SEC are opposed to.

MR. BADER: Obviously the multitude of regulations on UL are extremely complicated. How do the regulatory agencies deal with enforcing these? Is that why they've coined this "valuation actuary," to put all the burden on him for complying with these regulations that nobody can understand?

MR. CHALKE: That is a very leading question. I have yet to meet a regulator who understands the method. It is still in such an early stage that there are few people who have studied it and who understand it fully. I believe that it was never intended that the method

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should be required to be understood in its entirety because of the way in which it was intended to be used. We were "back-doored" by the tax law. Things became much more complicated than we ever anticipated.

MR. VINCENT P. GALLAGHER: Could you comment on exactly what process the actuary who is trying to do GAAP accounting would go through in order to establish all the various assumptions to use the composite method?

MR. BADER: Not being an actuary, I should defer that because I'm not sure what process they go through. I think that method has been utilized as Mr. Hemme has indicated. For the most part there are few companies we know that aren't using some form of the composite approach. There's a great deal of variation in the methods being used. Wouldn't you say?

MR. HEMME: There's a great deal of variation in the methods being used. In our particular firm, we were having to calculate reserves first on a normal set of GAAP assumptions, say, on the traditional basis or the premium approach, and then having to put in margins for additional deltas as we deemed appropriate in mortality, lapse, or interest assumptions until we got to the point where we had used up the portion of the GAAP margin that we wanted to attribute to factors other than premium. It's trial and error, an iterative approach; it's not much fun and it's time consuming.

MR. BADER: There are some illustrations of some of the methods, for those of you who are interested in some of the formulas, which are in the exhibit to the AICPA's issue paper. They were prepared for us by the Academy's committee. There are a number of forms, so it gives you at least a headstart in terms of what some people think. While there are variations, I think many of the consulting actuarial firms and some of the accounting firms that have actuarial groups are using these approaches to develop income recognition patterns using the composite approach. They have both the retrospective and the prospective method so that the basic work is there for you if you'd like to review it.

MR. GALLAGHER: What Mr. Hemme was talking about strikes me as the kind of calculation that you'd go through at product development time. Do you calculate factors? What do you do down the line when you have a block of in-force business to calculate the GAAP benefit and expense reserve based on a composite method?

MR. HEMME: This past year end was the first time we've attempted to apply the methodology, and we haven't faced the renewal year problem.

MR. GALLAGHER: Are you aware of any companies that are doing anything more now than holding some kind of fund value in a side expense asset?

MR. HEMME: Yes, we have two clients in the Texas area who have actually developed factors based on the approach I have just described.

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MR. GALLAGHER: And what do they apply the factors to, accumulation value?

MR. HEMME: Accumulation value typically.

MR. GALLAGHER: So there are UL systems that support that?

MR. HEMME: Yes. It's really a jury-rigging of the existing traditional products.

MR. GALLAGHER: So they apply factors to account value and not to some kind of insurance in force.

MR. HEMME: That's where the jury-rigging comes in. You generate factors that would apply to insurance but then you convert those factors to ratios of accumulation values.

MR. GALLAGHER: Would this be just benefit reserve or benefit and expense reserve?

MR. HEMME: It's really the net reserve.

MR. GALLAGHER: Would you effectively be amortizing on accumulation value?

MR. BADER: Yes. There is an Appendix B which describes the way in which a UL policy would be amortized by year and describes establishing reserves under three methods: percent of premium, prospective, and retrospective methods.

MR. GALLAGHER: I have seen that, but I just haven't seen how to put it in practice in a large number of cases. The theory I understand; the practice I have a lot of trouble with.

MR. WILFORD A. LEONARD: Apparently the FASB staff is having a great deal of trouble with the principles involved, and there is a new Advisory Committee. Is it possible that a new approach might be developed?

MR. BADER: It's highly unlikely. Mr. Richard Robertson is a member of the Advisory Task Force. I don't think that they would come up with a different method. Any of the methods that they are going to select are in the issues paper or in the actuaries' discussion memorandum. There may be some slight variations of that. But the biggest problem that we will have with the FASB is getting them to adopt the composite or the balanced approach that is described by the actuarial paper. I think they will attempt to simplify the method and try to move towards a deposit approach. We are hopeful that we will be able to convince them that the composite method is the right answer.

MR. LEONARD: Is the Advisory Task Force working toward a target as far as time for this approval?

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MR. RICHARD S. ROBERTSON: I think they are going to try to get some kind of an exposure draft out by third quarter and look toward getting something finalized by the end of the year.

MR. BADER: I think that's probably a little ambitious for them. Both the actuarial committee and the accounting committee met with the FASB a couple of weeks ago, and most of their efforts are in getting the pension standards resolved. They are committed to getting that finalized by the end of this year even though it's effective in 1987. So, I'm not as optimistic as the FASB staff is that they will have an exposure draft by the fourth quarter.

MR. ROBERTSON: Neither am I. These things always take about twice as long as they are expected to.

MR. BADER: We really have to educate the whole. Because of the way the FASB establishes accounting principles, we have to educate the staff, and they, in turn, attempt to educate the board per se; much gets lost in the translation. There are also the external pressures from the SEC and others who, in effect, not being privy directly to all of this education, take simplistic views of how these issues should be resolved.