1993 VALUATION ACTUARY
SYMPOSIUM PROCEEDINGS

SESSION 11

Mutual Company Issues

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MUTUAL COMPANY ISSUES

MR. ARMAND M. DE PALO: I am Chief Actuary of The Guardian Life Insurance Company of America. I am happy to have with me this afternoon Mr. Richard F. Lambert of The Prudential and Mr. Robert W. Maull of Mutual of America. This panel will be discussing some of the issues that are unique to mutual life insurance companies.

Introduction

This session will cover the following issues:

- The assumption that extensive cash-flow testing of reserves is a lot of work that does not produce much useful information for a properly managed mutual company, with true participating annual premium life contracts. However, this testing does result in margins that you can use to cover problems with other lines of business. The question is, how do you define which contracts are true participating contracts? Furthermore, must, or should, extensive cash-flow testing be performed? If so, how often?
- Allocation of assets and tax issues.
- How mutual companies that wish to expand rapidly deal with the limited availability of free surplus, including the consideration of demutualization.

I will begin by giving an overview of mutual life company issues and then let each of our speakers give their presentations.

The first question that we must address is: Why is there a "mutual life company issues" session? What makes mutual life companies different from other insurance companies? The answer is that mutual life companies are legally required to share with their true participating policyholders an equitable portion of any excess earnings from the block of business (i.e., they must deliver insurance at net cost). Therefore, the management of a mutual life company is legally required to look out for the best interests of all its participating policyholders. The mutual company should not have products with high guarantees that place one group of policyholders at risk of paying for the losses of other blocks of business. Mutual life company surplus is not the same as stockholder equity, which can be increased from outside sources.

Mutual life companies also finance new business from the retained earnings from existing and prior generations of policyholders, which is a low cost, but limited, source of capital. In effect, the current generation of policyholders was financed by prior generations of policyholders, and in return, they are expected to do the same for the next generation of policyholders.

"Weaks Axiom" makes it clear, however, that it is improper for a mutual life company to reduce dividends to existing policyholders in order to fund rapid growth.

In addition, mutual life companies only have a limited ability to directly raise outside capital to fund rapid growth or new lines of business. They are also subject to a federal equity tax that further curtails the ability to generate increased surplus.

The Company's Actual Dividend Philosophy

The actuary must establish a clear, written, annual crediting philosophy that agrees with the actions of senior management and the board of directors. If the company does not adjust dividends on a regular basis to track actual experience, the block of business may not be considered participating. However, if you cannot document how the dividends are expected to respond to changes in experience, you have a far larger problem and cannot model the business.

What is a True Participating Policy?

The question of which policies are truly participating is a very important issue since many mutual life companies are also selling products that are not expected to pay any dividends. However, in the past, these products had to be called "participating" because they were issued by a mutual life company, even though they were not expected to share in excess earnings. In the last few years, the law has been changed to allow mutual life companies to directly issue nonparticipating policies. Most mutuals still prefer to use a subsidiary for their nonparticipating products, such as universal life.

In the past, "nonparticipating" meant "guaranteed cost." However, today almost all nonparticipating cash value policies have some type of nonguaranteed element other than

dividends. Some actuaries think that this makes them identical to a true participating policy. This is simply not true. There are several very important differences:

- Insurance companies reserve for 100% of the following year's dividend since dividends are assumed to be paid from actual past statutory earnings. When modeling participating contracts, the actuary should start with the contract reserves plus the dividend reserve. This produces a substantial reserve margin of about 50% of the dividend liability, which does not exist on nonparticipating contracts.
- The dividend is a single amount comprised of gains and losses over the guarantees of the contract from several sources. A loss from one element can easily be offset by gains elsewhere. This is not true of an unbundled nonparticipating contract, where each element is disclosed separately and losses from one element are not directly offset against the gains on other elements. As an example, a participating contract can have a large negative loading component in its dividends.
- A dividend is based on actual past (retrospective) experience and not on outside indexes or on what is expected to occur in the future. While losses may occur, they can be recovered in future years to rebuild surplus. Nonparticipating elements, such as interest credited or mortality charges, are based on expected future (prospective) results; any variation is a gain or loss to the company that cannot legally be credited or charged off in future periods in states like New York.

This leads to the question of how to define a true participating policy. This question will be very important to the few mutual companies considering demutualization. This is because most of a company's existing surplus will need to be allocated to these policies. However, this issue is also important to all mutual companies with respect to determining how much cash-flow testing is required for reserves.

I believe that it is important to first define what a true participating policy is:

- Its guarantees must be nominal. In effect, the gross premium must be large enough to result in a large dividend scale. This scale must be large enough to absorb reasonable variations from current experience.

  - If the actuary is concerned that reasonable variations in current earnings will not cover contractual guarantees, then the contract is not truly participating and extensive testing is needed.
  - Annual dividends must be declared each year, except possibly in the first few policy years.
- The dividend must be paid from actual past statutory gains, not from expected future results.
- Under reasonable conditions, the block of business is expected to generate positive cash flows.
  - As an example, a block of single premium insurance, even if participating, may need extensive cash-flow testing if it is a large share of a company's business. This is because renewal cash flows are almost always negative.
  - The block of business should not have a high risk of lapse if dividends are reduced or become less competitive. The insured must have a real insurance need. A product sold as an investment, where a real insurance need does not exist, may not stay on the books if dividends are reduced to cover adverse experience.

One of the key reasons that true participating whole life does not need extensive cash-flow testing for reserves is that its primary purpose is long-term insurance coverage, and not the current investment return. In addition, large renewal profit margins exist to pay back the high initial acquisition cost, which is not included in reserve testing. In effect, the policy stays on the books long enough for any reasonable negative variation in experience to be recovered from existing policyholders in that block of business.

The Result of Cash-Flow Testing

For many years, I have stated that cash-flow testing of reserves is not very useful for a true annual premium participating policy. The fact that it may not be useful, however, does not mean that cash-flow testing does not have to be performed if required by law. Clearly, if all it took to avoid cash-flow testing of reserves was to call a policy "participating," then many

policies that are participating in name only would avoid cash-flow testing. While the law does not exclude participating business from cash-flow testing, it does give the actuary leeway as to the amount and type of testing, if the actuary can show that the participating product is not highly sensitive to cash-flow testing.

A mutual company may wish to do extensive cash-flow testing of its participating lines; not because it is needed for that block of business, but to use these margins to cover cash-flow problems with other lines of business. The NAIC model law allows company-wide aggregation of cash-flow results. However, for companies licensed in New York state, aggregation is only allowed within the life, annuity and health lines. Margins from one major line are not available to cover shortages in other lines.

Dividends Based on Past Earnings

Participating policies share in past experience, and a company can choose to pay out excess surplus to these policies. Remember that the board of directors first decides on the amount of distributable surplus. The actuary then makes sure that it is equitably distributed by the contributory principle to all policies within the same class of business in proportion to (not equal to) the major sources of earnings. If a company is paying out past gains from surplus, this part of the current dividend scale should not be modeled for reserve purposes. These payments are only being made because adequate excess statutory surplus currently exists.

Excess surplus can come from many sources, including prior capital gains or favorable experience not yet distributed. Since the starting balance cannot include surplus, the dividend may need to exclude any amounts that are currently being paid from excess surplus.

Since 1992, the Interest Maintenance Reserve (IMR) must be included in cash-flow testing. The dividend scale being tested should recognize the payout of these capital gains.

Terminal dividends cannot legally be reserved for. These dividends are considered to be surplus that has been retained to cover the future risks of the policy. It should be returned if the policy

terminates. If adequate surplus does not exist, terminal dividends can be set to zero. It therefore could be assumed that terminal dividends need not be included in cash flow testing of reserves. However, this conflicts with the requirement that you should test what is expected to be paid. Unlike excess surplus that is paid out after issue only if it exists, terminal dividends are also illustrated at issue. At best, this is therefore an open issue with respect to whether or not terminal dividends should be included in the cash-flow testing of reserves. However, they clearly need to be included in the testing of surplus.

Asset Allocation

Many products that require extensive cash flow testing have explicit assets assigned to that block of business. Participating policies, however, are backed by all of the assets of the company that are not explicitly allocated to other products. As a result, many of the assets used to develop dividends are part of surplus and are very complex to model. When the actuary decides how much cash-flow testing is needed, it is also important to make sure that the assets backing the reserves are not highly risky and supply a reasonable on-going cash flow.

Since participating policies share in the returns from all assets, including the assets backing surplus, the company has a wide range of choices as to how investment income should be allocated. Companies with adequate surplus can choose to invest in real estate, common stock, and other longer-term investments. A company with low surplus cannot do this without increasing the actual risk to the company. Since cash-flow testing for reserves, as defined by the NAIC, does not allow the inclusion of surplus in the testing, the actuary should first assign the longer term and more risky assets to surplus, and model only the balance of the assets as backing the policy reserves. The dividend scale model should then be based on the assets assigned to testing, using a method consistent with how actual dividends are developed, and not the actual scale being paid.

Equity Tax Issues

Regardless of whether you view the federal equity tax as unfair or theoretically incorrect, it currently exists. Since in cash-flow testing you start with no surplus, this tax does not have that

large an effect. The tax can be modeled as an expense of 2-3% of surplus generated from such contracts. The primary problem, however, is, how do you grow statutory surplus, if the federal government takes 2-3% of it a year? In effect, the after-tax return on surplus is very low. The actuary should know how the company prices its policies and how, or whether, the surplus tax affects dividends:

- If earnings on surplus are not being allocated to dividends, the equity tax can be charged against earnings on surplus. The company's surplus will therefore grow slower than how it did before this tax existed, thus reducing the ability of the company to expand. With the NAIC risk-based capital (RBC) formula becoming effective in 1994, companies using this method may choose to increase profit margins to help increase surplus.
- The company can treat this tax as an expense. It can charge this tax to its policyholders by reducing dividends. However, this tax is very unstable and must be averaged over many years. It does not make sense that dividends would go down because a company had more surplus. Therefore, if the tax is charged, it should be based on a target surplus formula.
- If target surplus is allocated to a product, the equity tax on that surplus may need to be considered. This is a problem for pricing, not cash-flow testing, since you cannot model surplus in cash-flow testing for reserves.

At present, there is no industry-wide agreement as to how or whether this tax should be charged to the policyholder. It is interesting that, if you model a new policy with the equity tax but without target surplus, profits can go up since the negative surplus strain is reduced by this tax. However, it is clear that, if the company as a whole is incurring an expense, dividends should not be increased. Most companies, therefore, either charge this tax against surplus earnings and do not model it, or allocate a part of this tax to policies based on target surplus formulas that are independent of the company's actual surplus.

If your dividend scale has a charge for the equity tax, other than for the surplus generated within the cash flow being tested, you will produce excess margins that may not be real. I therefore

believe that the dividend scale being tested should exclude a charge for the equity tax, unless target surplus is also being modeled.

Sources of Free Surplus

The primary source of surplus for most mutual companies has been from retained earnings generated from participating policyholders. Each policy is expected to leave behind only a small amount of surplus that is never returned to that block of business (this is sometimes called "entity surplus" or "retained earnings" or "profit"). This retained surplus, in effect, is a low cost source of capital to finance growth. However, it is also a very limited source of new capital since you must additionally return a fair share of any excess earnings to the current generation of participating policyholders. Each generation of policies benefits from the retained earnings of prior generations. In effect, all is well in a mutual company as long as you only write true participating business and do not try to grow too fast.

As we all know, long-term growth, unless outside capital is available, is limited to the statutory ROI of your products, including a provision for target surplus. A company may choose to use the NAIC RBC formula for this purpose. The result may be that, for most mutual life companies, long-term growth without outside capital may be limited to 5-10%.

Many mutual companies are not willing to grow slowly and only write true participating business. These companies are faced with the questions of how to fund their growth and what the effect of rapid growth and writing nonparticipating business will be on the participating policyholder.

Many mutual companies believe it is not proper to write high risk nonparticipating business, such as GICs or single premium deferred annuities (SPDAs), in a mutual company. It subjects the participating policyholders to the risk of covering possible losses with little expected gain. Other nonparticipating products, however, can be considered as an investment of the participating policies, which helps to increase overall company surplus.

Selling products with low statutory strain and high ROIs is one way to finance increased growth, without additional surplus. However, these products are difficult to find, except in niche markets.

Mutual life companies cannot directly sell common stock, but they can get outside funding from the following sources.

Surplus Notes -- Recently, the law was changed to allow payment of interest on surplus notes, without insurance department approval, if surplus is above a minimum level. We should expect to see banks lending money to insurance companies. Remember that, even though this appears as surplus, it must be paid back with interest out of future earnings. It is therefore not free surplus, but instead "window dressing." However, it needs to be included in any testing of future surplus adequacy.

Financial Reinsurance -- This can increase surplus by selling future gains. However, if a block of business is reinsured, you should include the cost of repayment in cash-flow testing since this money must be paid back. Since regulations limit any repayment to actual statutory earnings on the block, this should not have a major negative effect on reserve testing.

Downstream Holding Company -- You can use a downstream holding company that owns an insurance company to finance nonparticipating products. If this company is not wholly owned by the parent, you may be able to also save on the equity tax. This is not usually done by most mutuals, however, since they will not have 100% control of the company.

Demutualization -- Demutualization to become a stock company could be considered. However, it requires existing surplus to be allocated and walled off for the participating business. In general, few companies with adequate surplus would consider demutualization, unless the equity tax that only applied to mutual life companies became excessive.

Testing Surplus Adequacy

In the future, actuaries will also need to give an opinion on the adequacy of surplus to support expected company growth and to cover less reasonable variations in experience. It is unlikely that this can be done without some amount of modeling. The initial strain of new business can easily exceed the company's ability to generate surplus to fund this growth.

This model will have to consider existing surplus. Therefore, the dividend scale being tested may need to be different than the scale used for cash-flow testing of reserves so as to reflect how the company handles earnings on prior surplus capital gains and the equity tax. In effect, this should be the actual payable scale and not the scale consistent with the assets being tested.

This model will also be more complex. All assets will need to be tested, including the more risky and complex assets that were assigned to surplus in cash-flow testing for reserves.

Summary

It should be clear to most actuaries that cash-flow testing will give little useful information or identify the need for additional reserves if, for many years after the valuation date:

- The underwriting cash flow is positive;
- The investment cash flow is positive;
- Dividends track actual excess earnings; and
- The block is not expected to lapse en masse.

Furthermore, we can state:

- The actuary can choose which assets he or she wants to model. The actuary does not need to model complex assets if they can be assigned to surplus.
- Cash-flow testing of participating business should use a dividend scale consistent with the assets selected to be modeled.
- If prior gains are being distributed from excess surplus, then that part of the dividend scale can be excluded from cash-flow testing of reserves. However, it cannot be excluded from surplus adequacy testing.

- Margins from cash-flow testing on participating business can be used to cover cash-flow problems with other product lines.
- Mutual companies do have access to outside surplus. However, it is not the low cost surplus obtained from existing policyholders. If outside surplus is used, this higher cost must be priced for in your new products, and not charged to older blocks of business.

MUTUAL COMPANY ISSUES

MR. RICHARD F. LAMBERT: For my portion of the presentation, I will be talking about three main topics:

1. How do you reflect a company's dividend policy in doing cash-flow testing for traditional participating life insurance?
2. What did we learn from cash-flow testing about how sensitive cash flows for traditional participating life are?
3. What are some of the alternative asset adequacy approaches that might make sense instead of cash-flow testing?

When I was asked to talk on the subject of mutual company and participating life special issues, at first I wondered what I could talk about that was special or unique. When I thought about what we went through to complete our cash-flow testing last year, the issues we had to focus our attention on were issues that were not specific to participating life insurance: getting the asset data, interest scenarios, and so on. But there really are some important differences about participating life insurance. The most obvious difference is dividends. It is extremely important to be able to articulate the company's dividend policy in order to do meaningful cash-flow testing. How future dividends are modeled in your cash-flow testing is probably the most important assumption affecting your results. The obvious approach is what I would call the mechanical approach or universal life analogy. Under this approach, dividends are set by formula each year consistent with the interest scenario and a "crediting" strategy. This is similar to how cash-flow testing is done for nonparticipating products such as SPDAs and universal life.

The most important element to recognize, of course, is interest rates. The simplest approach is to use the current dividend scale and adjust it only for changes in interest rates in each scenario. Mechanically, this is relatively easy to do. In forming a reserve adequacy opinion, an important issue to think about is the timing within which the company adjusts dividends up or down with changes in interest rates. What is the lag time between when interest rates drop and when the company reduces its dividends to reflect those lower rates? How often are dividend scales revised? Is this different for increases and decreases? An examination of recent

company dividend actions would be useful in answering these questions and evaluating how realistic the dividend "crediting" assumption is.

Of course, interest is not the only element you need to consider in modeling dividends. How are you treating AIDS? At Prudential we include a charge for AIDS in our dividend scale and accumulate a reserve to offset future AIDS claims. Alternatively, would you expect to reduce dividends if secular improvements in mortality do not offset future AIDS claims?

The mechanical approach I described previously implicitly assumes all elements of the current dividend scale, in aggregate, are appropriate. That assumption needs to be validated. Are the pricing unit costs used in the dividend scale consistent with current actual expense levels?

Most of these issues are the same types of issues you would face if you were trying to model a nonparticipating universal life contract. That's because I have been talking about an assumed mechanical process for determining dividends. This mechanism is not necessarily consistent with actual practice and the legal guidance on how to determine dividends.

When the board of directors of a mutual company establishes the dividend scale each year, it looks at two main pieces of information: the earnings generated that year, and the resulting surplus position of the entire company. It then makes a judgment as to how much surplus the company needs to retain, the balance being divisible surplus. The contribution principle requires that this divisible surplus be shared fairly among policyowners in proportion to earnings, but the divisible surplus may be more or less than current earnings in any year. The mechanical approach really assumes that dividends are based on, and vary only with, earnings.

When dividends are viewed from this broader perspective, in addition to the mechanical considerations, you need to think about issues such as whether the dividend scale contains any interest on surplus or an allocation of earnings from nonparticipating lines of business.

To the extent your dividend scale includes such elements, you could question whether it is really appropriate to consider these items in a cash-flow test for the purpose of determining reserve adequacy, not company solvency. The treatment of this part of the dividend is much more like a stockholder dividend than a universal life interest rate.

If you pursue this line of thinking about true participating life insurance, you may start to question whether annual cash-flow testing really is the best way to evaluate reserve adequacy.

However, most companies did do cash-flow testing, even if they did not think it was really necessary, because that's what the regulations and standards of practice said we should do. Now that we have, it is instructive to review the results to see how sensitive the cash flows really are.

What did we learn?

If your cash-flow testing went anything like ours, you probably had a hard time finding a plausible scenario that resulted in anything close to negative results for traditional participating life. Although of course, if you push the assumptions far enough, you can make any product fail.

The two generic scenarios that cause a failure are a prolonged decline in interest rates to very low rates, and a run on the bank during an interest rate spike or at a time when assets are illiquid. Neither conclusion is very surprising. And, these are exactly the extreme scenarios described in the transmittal memorandum from the Actuarial Standards Board (ASB) with Actuarial Standard of Practice (ASP) 22 that are described as beyond "moderately adverse" and beyond the limits of what reserves must withstand without resort to surplus.

So what did we really learn? Not much that we did not know already. Probably the most important thing we learned was that cash-flow testing was more work and took longer to do than we thought it should. That's really not surprising for a new process with no clear history of common practice, only a draft ASB standard of practice, only draft practice notes until very late,

very little specific guidance on participating life, a very tight time frame, and lots of conflicting opinions on various issues. There also turned out to be quite a few people besides the appointed actuary who wanted an opportunity to comment on the methodology and results: auditors as well as regulators.

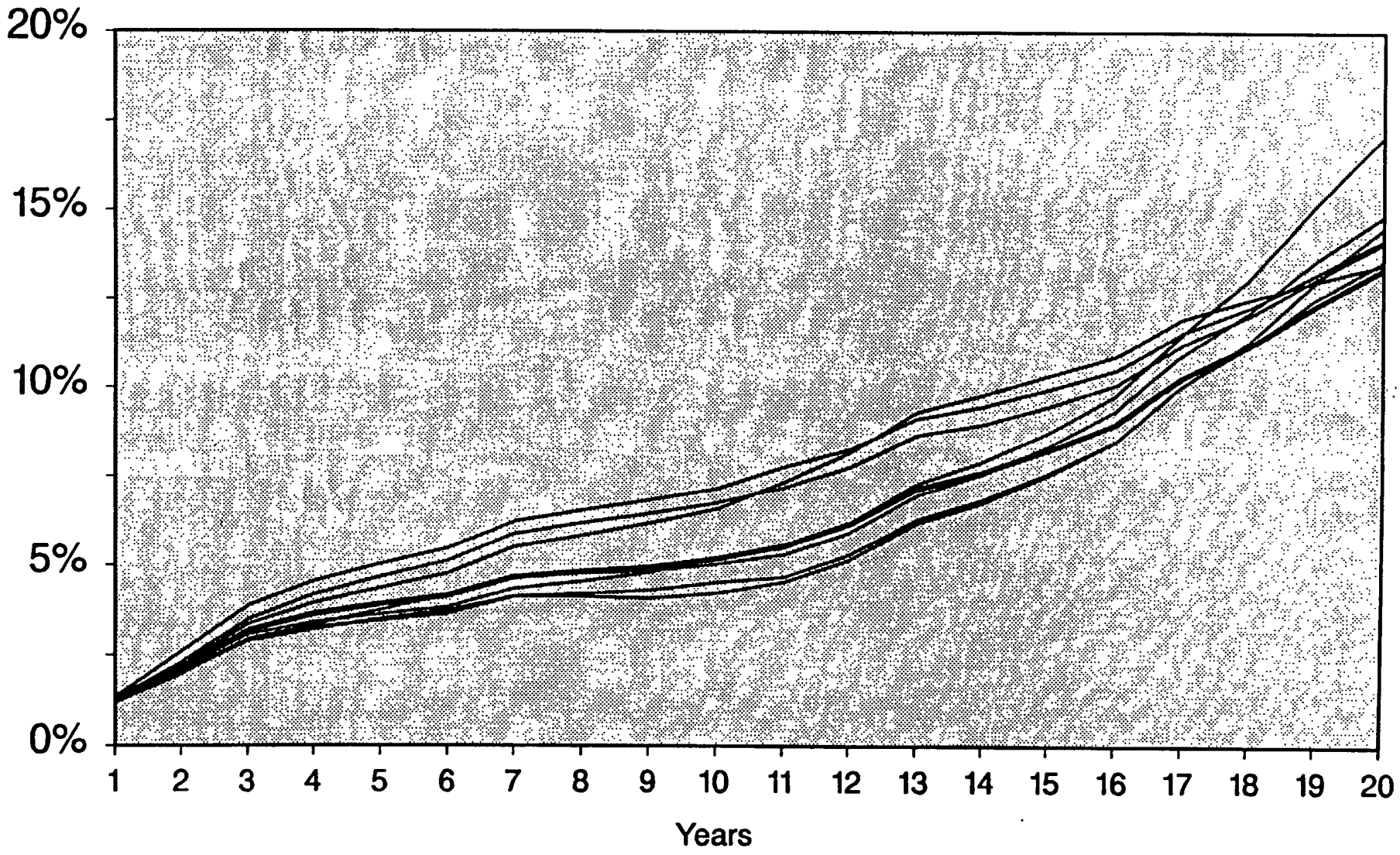
Six years ago in Dallas at the Valuation Actuary Symposium, Armand dePaolo and Jim Reiskytl gave a talk on the need (or really on the lack of need) for cash-flow testing for traditional participating individual life insurance. Perhaps it is not too late to reexamine the issue of the appropriateness of cash-flow testing for participating life insurance.

In our profession's effort to get ready for the appointed actuary requirements, we have (and I think appropriately) focused most of our efforts on those products where cash-flow testing is both appropriate and useful. However, there was remarkably little specific guidance in the model regulation, draft standard of practice, or even the practice notes on how to handle traditional participating life insurance, a product that accounts for almost half the reserves of The Prudential and an even higher percentage for some other large mutual companies. So just how sensitive were the cash-flow results to the various prescribed interest scenarios?

Chart 1 shows surplus as a percent of reserves over the first 20 years for the eight basic scenarios we tested, the prescribed seven plus an inverted yield curve scenario. The level interest scenario is shown by the middle lines, the rising interest scenarios are shown by the lower lines, and the declining interest scenarios are shown by the top lines. The most remarkable thing to me about the chart is how little difference there is among the various scenarios. ASP 14 on "When to do Cash-Flow Testing" says cash-flow testing may not always be necessary to support an opinion if the actuary can demonstrate that a block of business is relatively insensitive to changes in economic conditions. While I do not think this chart by itself constitutes such a demonstration, it certainly is a good start. To get a better understanding of why the results seem so insensitive, I thought it would be instructive to look at some historical data for Prudential, to see how sensitive the various components of insurance cash flow have been to changes in interest rates over the period 1976 to 1992.

CHART 1

Surplus/Reserves



As Chart 2 shows, both short-term and long-term interest rates varied up and down considerably over this period. Six-month Treasuries are used to represent short-term rates (lower line) and ten-year Treasuries represent long-term rates (upper line). This is an extended period of time with substantial interest rate volatility that allows us to see how various cash-flow items actually reacted to changes in short- and long-term rates.

Chart 3 shows for the same period of time the various components of The Prudential's insurance cash flow for traditional individual participating life: premiums on the positive side, and claims, expenses, dividends, surrenders, and policy loans on the negative side. The total of these cash flows is shown as the thick line and labeled CFIO for cash flow from insurance operations.

To try to untangle normal annual growth in each cash-flow item from the influence of interest rates, I did a simple regression on each cash-flow item using the calendar year, the short-term interest rate, and the long-term interest rate as the three independent variables. The calendar year variable is to pick up any normal growth trend in the data. Table 1 shows, based on a 95% confidence interval and a standard t-test for significance, which of the independent variables explained the variation in cash flow. While this is admittedly a simplistic approach, the results are instructive.

The largest single cash-flow item, premium, showed no significant relationship to either short-term or long-term interest rates. While claims, surprisingly, show some positive relationship to long-term interest rates, I think the relationship is coincidental, not causal. The decline in long-term interest rates since the mid-1980s has coincided with Prudential's shift more into the upper income market with its better mortality experience. Somewhat surprisingly, expenses also showed no significant relationship with interest rates. Apparently the variable expenses that grow with the size of the business dominate the fixed expenses that grow with inflation. While the lack of any significant relationship between dividends and interest rates seems surprising at first, it can be attributed to two things: (1) Dividend interest rates are related more to portfolio rates than new money rates, and (2) more important, the normal annual growth in aggregate

CHART 2

Treasury Rates

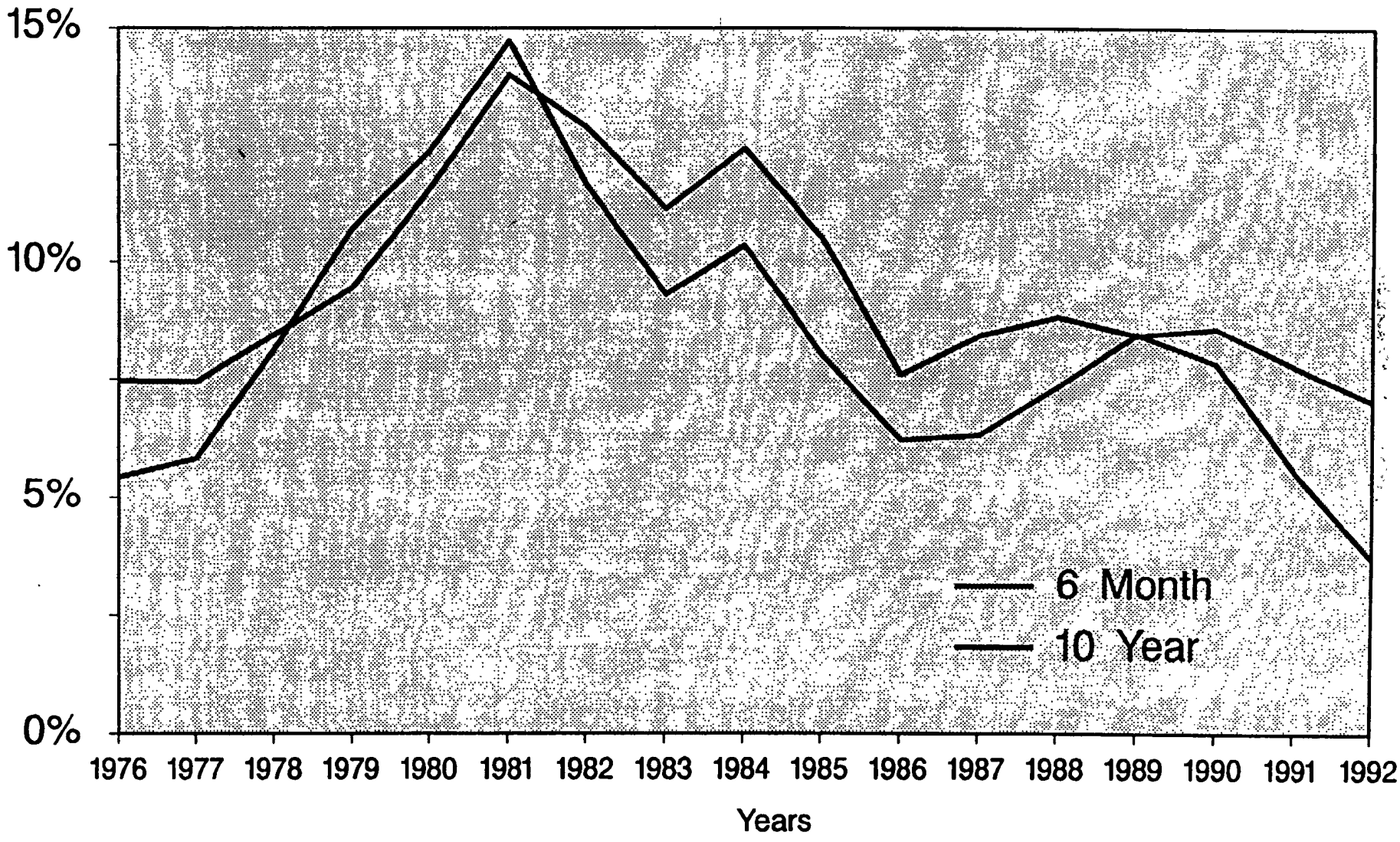


CHART 3

Insurance Cash Flows

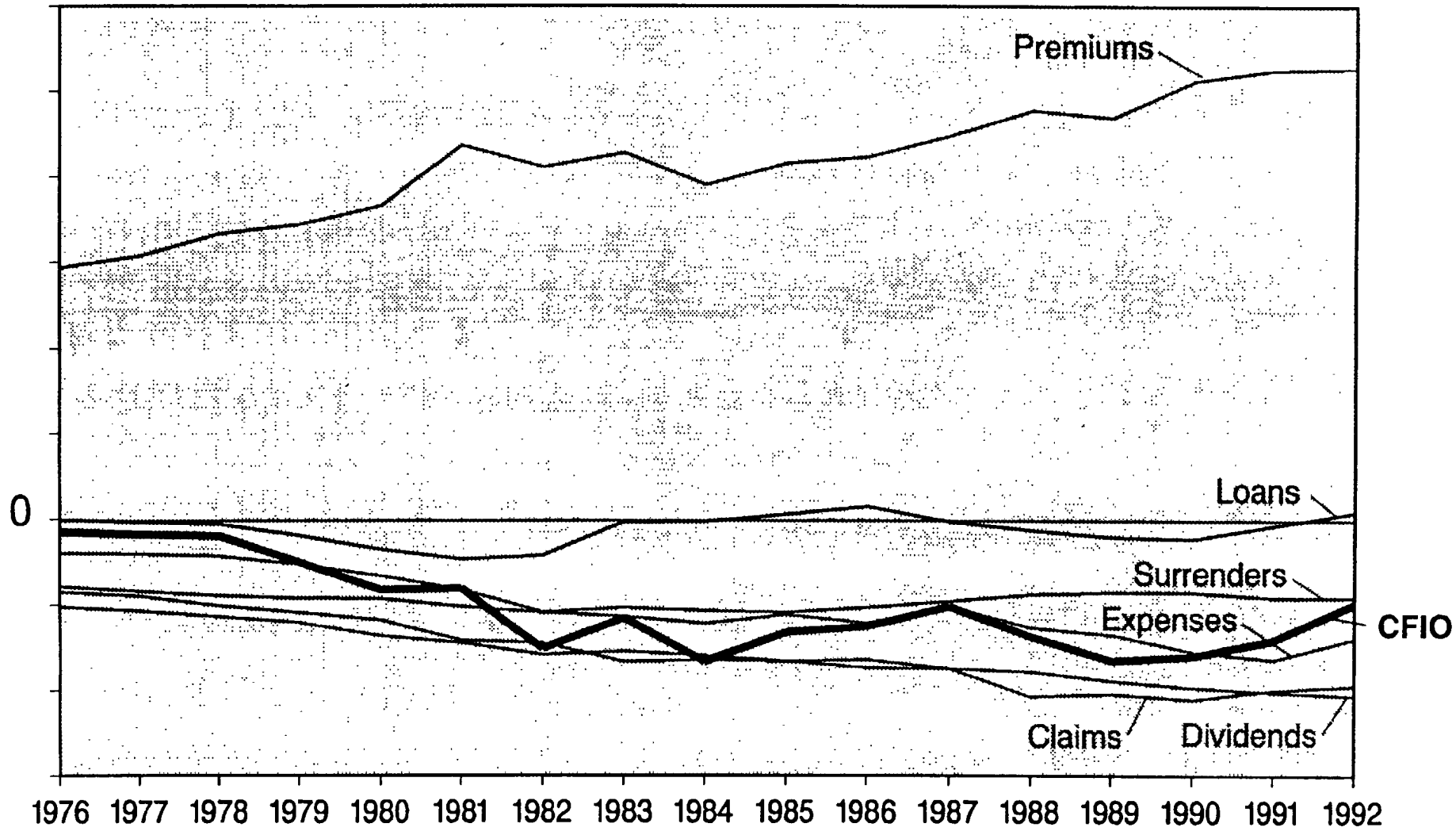


TABLE 1

COMPONENT	YEAR	SIGNIFICANT? SHORT-TERM INTEREST	SIGNIFICANT? LONG-TERM INTEREST
Premiums	Yes	No	No
Claims	Yes	No	Yes
Expenses	Yes	No	No
Dividends	Yes	No	No
Surrenders	Yes	Yes	Yes
Policy Loans	No	Yes	No
Cash Flow From Insurance Operations	Yes	No	No

dividends due to the slope of the dividend scale dominates the changes in the dividend interest rate.

As you would expect, surrenders and policy loan experience are interest sensitive. Surrenders rise and fall with the general level of interest rates. Policy loan activity, at least historically for The Prudential, tracks up and down with short-term interest rates, also not that surprising.

But the most interesting conclusion is the last one. While certain cash-flow components are interest sensitive, the overall insurance cash flows are not. This is because the total insurance cash flows are dominated by cash flows that are not particularly interest sensitive: premiums, claims, expenses, and dividends. Now we are a little closer to building a case that a block of participating life is not that sensitive to changes in economic conditions, at least on the liability side.

If you believe the preceding analysis, you might ask, what are the alternatives to doing cash-flow testing each year? To answer this, you must first look at the NAIC model regulation and the actuarial standards of practice to see what is required.

The model regulation requires an opinion that delineates the reserves and related actuarial items, which were analyzed for asset adequacy, the method of analysis, and those reserves not analyzed. Three methods are listed: cash-flow testing, sensitivity testing, and applications of risk theory. This is not an exclusive list, but any analysis must conform to ASB standards of practice and the standards in the regulation, and be a method deemed appropriate by the ASB.

ASP 22 provides more guidance. Not doing an asset adequacy analysis for participating life at all is not an option under the standard since, "Only reserves judged to be immaterial may be reported as 'not analyzed.'" But methods other than cash-flow testing may still be appropriate.

The standard describes three alternatives to cash-flow testing: (1) a demonstration that the product is highly risk-controlled and the reserves are very conservative; (2) a gross premium reserve test; and (3) loss-ratio methods. While the third is clearly inapplicable to participating life insurance, it may be possible to apply one of the first two methods.

The second alternative described in ASP 22 is a gross premium reserve test. This approach is acceptable if the business is not highly sensitive to economic or interest-rate risks, but is sensitive to obligation (i.e., C-2) risk. This method would seem more appropriate for term insurance but not traditional participating whole life insurance. A comparison of the statutory reserve to the gross premium reserve would be made.

If the statutory reserve is not materially greater, only then would sensitivity testing of expenses and mortality be necessary.

The first option in ASP 22 is a demonstration that the product is highly risk-controlled or that the degree of conservatism in the reserve basis is so great as to cover reasonable deviations from

current assumptions. Reserves for accidental death and dismemberment are mentioned as an example in the standard. This makes sense since there are no cash values available, which is one way to control C-3 risk, and the valuation interest and mortality are usually quite conservative.

Separate account products with cash values linked to the results of the separate account would seem to be another category of products where this type of analysis would be appropriate. The market value adjustment to cash values certainly controls the C-1 and C-3 risks. It should then only be necessary to demonstrate that mortality and expense guarantees have sufficient conservatism to provide for reasonably anticipated deviations from current assumptions.

The dividend mechanism of participating life provides a high degree of risk control over the long term, provided the premium margins are sufficient. This is a key principle for participating insurance: each class of business must be highly likely to be self-supporting. If this is the case, then secular trends in mortality, expenses, and interest can be reflected in future dividends. The only significant difference from variable products is the annual determination of dividends, compared to the daily market valuation of variable products, making it more difficult to control short-term risk such as a run on the bank. However, as I mentioned before, a run on the bank is not the type of scenario a reserve should be expected to provide for. That is the reason for surplus. It seems the two key elements of an asset adequacy analysis of participating life insurance using this method would be:

1. An evaluation of the margins in the dividend scale. A comparison of annual dividends to reserves (to show the margin for declining interest rates), to expected death claims, and to expenses would be one simple way to demonstrate that the premiums have sufficient margin in aggregate.

2. An evaluation of the liquidity of the assets backing the reserves to cover short-term cash-flow risk under a reasonably adverse scenario, but not a run on the bank. Liquidity would be defined as the ability to sell assets equal to reserves released on short notice

for an amount reasonably close to the book value and greater than the cash-surrender value paid out.

Another approach permitted by ASP 22 is to rely on prior year's cash-flow studies. In order to do this, the standard requires the appointed actuary to confirm the reasonableness of the prior period study; and to be satisfied no material events have occurred that would invalidate the prior analysis.

How might you go about this? Here are some suggestions. To confirm the reasonableness of the prior study, you should look at the reasonableness of both the methodology and the results. If the regulations, actuarial standards of practice, or practice notes have changed to require some additional analysis that was not performed in the prior study, for example, stochastic scenario testing, then you probably could not rely on the prior study unless you could demonstrate that the new requirement would not materially change your conclusion. To confirm the reasonableness of the results, a history of two or three years of cash-flow studies with consistent results would seem a reasonable basis for this judgment. The definition of a material change is something that can best be determined by sensitivity testing in the prior cash-flow testing. The following are some potential items to consider as to whether there has been a material change since the prior year's study. This is not unlike what might be done to justify using September 30 data for a year-end opinion. Some of the things you should look at for assets include changes in:

- Mix of assets by type
- Duration of asset cash flows
- Average return on assets
- Average credit quality of assets
- Investment/reinvestment strategy

And some of the things you should look at for liabilities include changes in:

- Mortality rates
- Lapse rates

- Expenses
- Tax rates
- Reinsurance
- Dividend policy
- Policy loans

I would like to conclude with my opinion on what makes sense. Cash-flow testing for participating life insurance can provide useful information. It certainly is possible to get into trouble with an overly aggressive, illiquid investment strategy. So I would not conclude that cash-flow testing should never be done for participating life insurance.

However, given a reasonable investment mix, adequate pricing margins, and a reasonable dividend policy, I find it hard to justify the expense of doing a full-blown cash-flow study each and every year on participating life insurance. For a company that did cash-flow testing in 1992 and again in 1993, and passed both times with very large margins, it would seem a waste of effort to repeat the process in 1994. Yet, even though the standards permit alternatives as I described before, since virtually everyone has done cash-flow testing, cash-flow testing is becoming the de facto current practice. The actuary who wanted to use a reasonable alternative approach might find him or herself defending his or her deviation from current practice.

Provided the pricing margins remain adequate, there are no major changes in the company's investment philosophy, and reasonable dividend actions are taken in the interim, doing cash-flow testing every three years would seem more than adequate for participating life insurance. At a minimum, we need some guidance from the ASB or a practice note on participating life insurance that recognizes alternative approaches so that a common-sense approach does not have to be defended merely because it deviates from current practice.

MUTUAL COMPANY ISSUES
A RATIONALE FOR DEMUTUALIZATION

MR. ROBERT M. MAULL: Why is it that so many people have said to me over the past year, "I hear Mutual of America is trying to demutualize. I didn't realize that you people were in financial trouble."

Where did we get this perception that only companies in financial difficulty should demutualize? In fact, this has not necessarily been the case in recent demutualizations, and I doubt that it will be in the future.

I want to discuss with you a number of the issues that mutual company managements will be thinking about in deciding whether or not to pursue demutualization. We'll review a few of the actual demutualizations that have occurred over the past ten years. Then we'll go over a short list of reading material for those of you who want even more information, particularly some of the more technical aspects of demutualization. Finally, I'll give you a few observations of things I have seen over the past fifteen months of our demutualization project.

Please recognize that my company is currently involved in some very intense negotiations on various issues with the New York Insurance Department. Because of this fact I will refrain from discussing these issues in this public forum.

Why Demutualize?

Why would a mutual life insurance company want to demutualize?

The ability to raise capital may not be the only reason for demutualizing, but in most instances, it dwarfs in importance any of the other reasons.

Before we get into this any further, let's clarify one point. I used the words "the ability to raise capital." I did not say simply, "raise capital." Why do I make this distinction? You may not need to raise capital today, but should the need arise, you want to have that ability. This leads

directly to a point about which I feel very strongly. It is that you want to make a move such as this from a position of strength rather than from one of weakness. In other words, don't wait until you are desperate before thinking about demutualizing. As we at Mutual of America are finding out, the process takes a very long time, and if you wait too long, the doors may be closed.

Why am I saying it's so important to have the ability to raise capital? Simply put, the environment in which we, as mutual companies, operate has changed rather dramatically over the years, and will continue to change.

What sort of a company do you want to be working for as we head into the 21st century? Do you want your company to be dormant, stagnant, barely holding on to the business it has? Or would you rather be a company that's vital, viable, and vibrant -- one that's poised to meet the new competitive challenges of the coming years, and that has a plan to continue to be a major force in the insurance business? Having that ability to raise capital may well spell the difference between those two companies -- the stagnant one and the vibrant one.

Let's look at some of the reasons why the ability to raise capital can make this difference for you:

1. A company's lack of capital implies reduced flexibility in times of crisis.
2. Your ability to react to changing circumstances is inhibited without an assured source of capital.
3. The impact of the rating agencies intensifies the distinction between capital-rich and capital-weak companies.
4. RBC requirements highlight those companies that are capital-weak.
5. Due to the presence of expert advisors for the client, the ratings agency impact may be even more severe for those insurers with significant business in the employee benefit plans market.
6. Mutuals need to maintain strong capital ratios in order to retain customer confidence.

7. From the perspective of a company's board of directors there may well be:
   a. Concern over the recent financial failure of several well-known insurers; and/or
   b. Concern over the perceived financial weakness of several other large companies.

In addition to having the ability to raise capital there are several other valid reasons for demutualizing:

1. The holding company corporate structure is much more flexible than that of a mutual insurer.
2. The use of company common stock as currency for making acquisitions may be advantageous (if for no other reason than to reduce cash outflow).
3. The use of company common stock in employee compensation plans may be a valuable tool to aid management in realizing its objectives.
4. There is the feeling among some people that the discipline of the stock market would cause improvement in an otherwise inadequate company management.
5. Is there an element of fiduciary responsibility upon the board of directors of a mutual company to its policyholders to unleash the intrinsic value of the company to the policyholders' benefit? Assuming that this is to be part of the plan of demutualization, long-term participating policyholders would receive an interest in the value of the company at the time of demutualization.
6. Finally, in some circumstances, demutualization is the most appropriate means of meeting the objectives of the strategic investor -- the investor who wants to take a large, or possibly controlling, ownership interest in the mutual insurer. We will see this element in a moment when we discuss a few actual cases.

Recent Demutualizations

Over the past 10 years there have been quite a few demutualizations. The most notable of these are the following:

1. In the mid-1980s Union Mutual Life Insurance Company formed a holding company, UNUM, which became a publicly traded company. It raised $550 million in its initial public offering, which occurred at the same time as its demutualization.

2. In a very different type of situation Maccabees Mutual Life Insurance Company demutualized in 1989. In this case there was an investor, Royal Financial Services, Inc., a subsidiary of Royal Insurance Holdings plc, that entered into a stock purchase agreement to buy Maccabees and bought from Maccabees an $80 million capital note convertible into additional shares upon demutualization. Upon demutualization, Maccabees became a wholly owned subsidiary of Royal.
3. Also in 1989 Northwestern National Life Insurance Company demutualized. This company had been a combination of a stock and a mutual insurer. Its demutualization served to eliminate the mutual segment. No specific public offering occurred at the time of this demutualization.
4. The most recent demutualization was that of the Equitable Life Assurance Society of the United States, which culminated in July 1992. It formed a holding company, The Equitable Companies Incorporated, which became a publicly traded company and which raised some $450 million in an initial public offering at the time of demutualization. In addition, AXA, which had previously purchased $1 billion in notes from Equitable, exchanged these notes for 49% of the common stock of the holding company upon demutualization. The entire transaction involving AXA was quite a bit more complicated than what I just described, but I'm not going to go into further detail here.

As you can see, there were a variety of motivations of the company managements involved. To be sure, this group of companies illustrates the fact that you don't have to be in financial trouble to want to demutualize.

And now, here in 1993, we can add State Mutual Life to the list, as it very recently made the public announcements that it was actively pursuing demutualization. According to an article in the *National Underwriter* recently, State Mutual is looking at demutualization in conjunction with its proposed purchase of Allmerica Property & Casualty Cos., an affiliate it has had a substantial ownership interest in. The article quotes an analyst with Duff & Phelps as saying that "access to capital would leave State Mutual less vulnerable to the vagaries of the property/casualty market."

Once again, we have the theme of the mutual company desiring access to the capital marketplace, as opposed to simply desiring capital. However, the article indicates that an initial public offering at the time of demutualization is an option being considered by State Mutual.

Reading Material

Some of you may now be sufficiently interested in the subject of demutualization that you want more information. If so, here's a short reading list where you can find lots more information on various aspects of this subject.

Bruce Darling has been writing a multipart series this year in *The Financial Reporter*. His three topics are: (1) a management perspective, (2) the plan of demutualization, and (3) establishment of a "closed block."

The Practicing Law Institute put on a program in New York City on February 10, 1993. This book, entitled *Demutualization of Life Insurers*, was prepared for distribution to program attendees. The articles are written by lawyers, actuaries, accountants, and investment bankers, most, if not all, of whom have been involved in demutualizations. A number of the authors in this book are involved in Mutual of America's demutualization investigation. To my knowledge, this book may only be obtained from the Practicing Law Institute in New York. Its cost is something like $70.

"The Report of the Task Force on Mutual Life Insurance Company Conversions," appearing in TSA XXXIX, is reprinted in the Practicing Law Institute book. Its introduction begins as follows:

> This Report presents the results of a three-year study by a Task Force of the Society of Actuaries. The charge to the Task Force was "To examine the actuarial issues involved in converting a mutual life insurance company to a stock form of ownership, and to produce a record of its examination."

If this material is not enough to satisfy you on the subject of demutualization, I know of any number of consultants who would be only too happy to provide you with even more information.

Some Concluding Thoughts

I want to conclude my remarks with a few thoughts for those of you who decide to take the demutualization plunge. While these comments will tend to be of a general nature, they are based on my experience to date working with Section #7312 of New York Insurance Law. You could see some variations depending on your own state of domicile.

One very significant effort you face is accomplishing a GAAP accounting conversion. We're talking about fully auditable GAAP here. If you already have in place some form of management GAAP reporting, you may have part of the job done. Nevertheless, you will have to produce GAAP financials that will have to stand full audit from several parties. The effort required will not be trivial.

Another extremely frustrating element of our demutualization effort has been the development of a valid database of historical contract financial information. At Mutual of America we have been developing these data, on a contract-by-contract basis, going back to January 1, 1979. We are a relatively young company most of whose growth occurred during the past 10 years. How far back you go will depend on the particulars of your own situation (as well as the desires of the Insurance Department). It is my understanding that for some business Equitable tried recreating data going back some 70 years. No matter the period of time, the job of getting the data, and then validating it for use in demutualization calculations, is a major undertaking.

In your demutualization you are going to want to retain consultants who are experts in various disciplines. At a minimum, you should retain actuaries, accountants, lawyers, and investment bankers. This is not the time to be "penny wise and pound foolish." Hourly billing rates should not be your major concern. Rather, go out and get the best you can. You want to have the most highly qualified consultants on your side. The Insurance Department, with whom you will be negotiating, will also be retaining its own consultants. If you don't retain whoever you believe is the best for your own side, there's a good chance that the Insurance Department will retain them for its side. You have the advantage because you can retain your advisors first. Remember, however, that you will be footing the bill for the Department's advisors as well as

for your own. Thus, it really makes no sense at all to go for second-best for the sake of trying to save some money.