RECORD OF SOCIETY OF ACTUARIES
1990 VOL. 16 NO. 4B

SURPLUS MANAGEMENT

Moderator: NORMAN E. HILL
Panelists: ROBERT J. CALLAHAN
MICHAEL E. SPROULE
WILLIAM R. WELLNITZ
Recorder: GEORGE J. HEBEL, JR.

- o Estimating the need for surplus
- o Capital budgeting
- o Influence of rating agencies and regulators
- o Providing for surplus needs
- o Reinsurance
- o Alternate financing
  - -- Securitization
  - -- Surplus notes
  - -- Factoring commissions

MR. NORMAN E. HILL: Our first panelist is Mike Sproule. Mike is a consulting actuary with Tillinghast in New York City. His specialty is in the area of restructuring and strategic management consulting. So without further ado, I'll turn this over to Mike Sproule.

MR. MICHAEL E. SPROULE: It's particularly nice to be here with you in such a beautiful place as Disney World. I'm finding as I go around to different cities that actuaries are getting a whole lot more recognition than we are probably used to getting. The press, for example, tells us we have the number one ranked job in America, and that's supposedly good. But I find this recognition isn't always positive. Last week I was at a cocktail party and someone came up and asked me what I did for a living and I told her. She responded that she knew all about actuaries. She asked if I knew the difference between an actuary and a terrorist. I said, "no." She said, "the difference is that you can negotiate with a terrorist."

The theme of my remarks is the essential role of surplus management in the development of a viable competitive strategy for the 1980s and beyond. I would like to begin by asking a simple question: Why do insurance companies need capital? The answer is that companies need capital to support future planned growth and to provide a security margin to adequately ensure their ability to meet their financial obligations. These two objectives, growth and financial strength, compete for capital which in most companies, is a scarce resource.

To the extent that more capital is set aside to enhance the financial strength of the life insurance company, less is available to support the growth of the firm. What makes this a difficult balancing problem for many life insurance companies is that both growth and financial strength are perceived as being essential. For many smaller companies, the need for growth can be explained in two words -- critical mass. Critical mass can be

defined in lots of ways. What I will offer is that critical mass is the minimum size that must be reached in order for an insurance company to be competitively viable in the product or market niches in which it chooses to compete. Many life insurance companies are far below any reasonable definition of critical mass and must grow substantially if they are to have any chance at all of surviving.

For many larger companies the need for growth can also be explained in terms of two words -- administrative capacity. The administrative capacity of most large insurance companies today substantially exceeds their current transaction volumes. Such companies either need to grow to fill this capacity or they should downsize their operations to reflect reality. Downsizing is not much fun. But much like a crash dieter, many companies promptly proceed to put the fat right back on resulting in short-term pain but no long-term gain.

At the same time, the quality of the life insurance company's financial guarantee has become much more important in the marketplace. In some markets, like pension GICs, a high quality rating from Moody's, Standard & Poor's, or Duff and Phelps is essential if you want to compete at all. Such considerations, in my view, will become increasingly important in other markets. For example, banks today are very concerned with the financial strength of the life insurance companies whose annuity products they distribute. This so-called "flight to quality" is probably a healthy trend and should encourage more life insurance companies to view maintaining a strong balance sheet as an important competitive factor. It is unfortunate, however, that the debacle of the S&L crisis and the potential for life insurance industry solvency problems resulting from perceived junk bond, real estate, and asset liability mismanagement problems may be more responsible for this "flight to quality" than anything positive the industry has done.

What strategies are available to life insurance companies? As part of the strategic planning process, an insurance company needs to determine what competitive positioning strategy it will pursue. Will the insurer seek to follow a low-cost producer strategy or a differentiation-based strategy?

A low-cost producer strategy can be translated in the marketplace to lower prices to policyholders and/or higher commissions to distributors, or both. A company employing such a strategy is generally seeking to leverage superior cost fundamentals which could take various forms: lower operating or distribution expenses; higher risk-adjusted investment returns; or superior underwriting capabilities and results.

Companies employing a differentiation-based strategy seek to create positive perceptions of their companies that enable them to compete successfully even though they charge higher prices to policyholders or credit lower commissions to their distributors. Successful efforts to differentiate can take various forms: providing superior service to policyholders and/or distributors; product innovation; focusing on less competitive product or market niches; or superior financial strength that increases policyholder confidence that the company will be able to meet its financial obligations. I would submit that every life insurance company employs one of these two fundamental competitive positioning strategies.

SURPLUS MANAGEMENT

There are probably about 780 fleets of companies that are large enough to be reported in *A.M. Best*, and they operate throughout the United States. It appears to me that many of these fleets of companies have not consciously thought about their long-term competitive positioning strategy and its implications for their growth and financial strength. For example, how many companies could you name that have inferior cost fundamentals but still attempt to compete in the marketplace by offering lower rates to policyholders, higher commissions to distributors, or both?

How much capital does an insurance company need? The simple answer is: enough to finance its planned growth and to adequately insure its ability to meet financial obligations. This implies an integration of surplus planning with the insurance company's strategic or business planning process. Such a planning process should address a number of basic questions if the company is to be in a position to assess its future capital needs:

- What lines of business will the company participate in?
- What rates of growth are planned?
- What margins are anticipated for new business?
- How much could actual results vary from expected, particularly for interest sensitive products?
- What internal solvency margins does the company require?
- What rating objective must the company meet to satisfy the needs of its customers?
- How much surplus is required by the rating agencies to secure such a targeted rating objective?
- How much of a cushion does the company want to hold relative to such targets in order to cover future adverse fluctuations?

Planning without developing meaningful and realistic quantitative assessments of the capital required to support such plans is an exercise that belongs more in the Magic Kingdom.

The next question that needs be addressed is: How much capital is expected to be generated internally? To project current and future surplus from internal sources, several questions must be answered:

- How much surplus do you have?
- How will the surplus position change as your inforce business matures?
- What effect will new business have on future surplus?
- How much might actual results vary from expected?

At one extreme such a projection of the company's future statutory surplus positions on a year-by-year basis would be comparable in scope to completing an appraisal of the company.

The next question to address is whether or not there's a surplus gap. Armed with an estimate of the amount of surplus that would be internally generated, we can evaluate the gap between required surplus and internally generated surplus. If our required surplus has not being fully employed, we need to evaluate additional business

opportunities that would put more of the capital to work. If attractive alternatives are not available, consideration should be given to paying back the excess capital to stockholders or policyholders. The more typical situation, however, is one in which capital is a scarce resource.

What makes surplus management such a critical issue is that it is concerned with reconciling differences between available and required capital by making choices among competing alternatives. The results of such choices will determine the future competitive viability and, perhaps, even the survivability of the insurance company.

Next we need to determine how capital shortfalls will be eliminated. When the surplus required by the proposed strategic plan exceeds the amount expected to be available from internal sources, something has to be changed. The projected capital shortfall could be eliminated in a number of different ways.

Planned rates of growth of existing business or investments in new ventures could be cut back to a level more supportable by internally generated surplus. Alternatively, outside sources of additional capital could be identified to enable the company to finance the proposed business plan. Establishing priorities as a means of reducing the demand for capital can be very difficult. Management may have a tough time deciding what kind of growth it really wants. This might be particularly true where historically important lines of business are no longer generating acceptable rates of return on capital, resulting in a need for the company to really consider restructuring its activities.

Many insurance companies see themselves as confronted with a long list of alternatives. For example, they might expand their existing life insurance businesses, enter new segments of the life insurance business through product, market or distribution diversification, expand internationally, or diversify into other financial services.

Even the very largest life insurance companies are faced with the need to assess their priorities and do not have sufficient capital to do everything. The alternative to seeking additional sources of capital to eliminate a gap may be an attractive option. Both Bob and Bill are going to address a number of approaches that could be used to fill such capital shortfalls.

In considering such alternatives, it is important to separate those that involve more permanent sources of long-term debt and equity capital from those that are stop-gap in nature. Stop-gap approaches might be viewed as including securitization and surplus relief approaches. I put these two together because both involve efforts to leverage the company's existing capital through what might be termed creative accounting. Where risk transfer has been limited, such transactions have little real positive effect on the ability of the insurance company to meet its future obligations, and then, only if margins on the additional business financed by such transactions produce rates of return in excess of the cost of this capital. The additional leveraging risk might still make this a bad trade off.

Over time we should expect the rating agencies to heavily discount such temporary statutory capital. The issue here might be a battle between our creativity as actuaries in

developing complex structures that take advantage of statutory accounting anomalies and further leverage the balance sheet, resistance to these efforts by regulatory authorities concerned with the perceived deterioration and the quality of the balance sheets of life insurance companies, and the efforts of rating agencies to assess the real ability of insurance companies to fulfill their long-term financial obligations. What role will the rating agencies play in the future? Life insurance companies should assume that sophisticated consumers in the future will increasingly differentiate companies based on their financial strength and will require better deals from weaker companies if, indeed, they will be willing to purchase policies from such companies at all. I would note that such requirements would put additional margin pressures on the companies that are in the weakest position to respond. Further, these are likely to be the companies emphasizing growth as part of a "last ditch" effort to reach critical mass and survive.

Whether we like it or not, the question of how much capital and surplus a company needs will depend on how much the rating agencies will require in order to provide the insurance company with the rating it needs to meet the needs and demands of its customers and distributors. Meeting internally calculated requirements should be viewed by life insurance companies as an additional, but not sufficient, condition.

The role of the rating agencies has grown with the increasing dominance of interest-sensitive products in our markets. In the 1930s, someone asked Willie Sutton why he robbed banks. His answer was, "That's where the money is." In the United States life insurance market today, the money is in GICs and individual annuity products. If you want to accumulate assets, that's where you're going to have to play. These spread products require sophisticated asset/liability management skills which many companies simply do not possess. This shift from products on which it was difficult to lose money to products with a much higher potential for mismanagement has added to the importance of financial strength when consumers purchase policies.

Does any of this matter at all to mutual life insurance companies? Over the long term, the growth rate of a mutual company will be limited by the rate of growth of its surplus. When business grows at a faster rate than surplus, the ratio of surplus to assets declines. If the company starts with excess surplus, such faster growth can be sustained for a short period of time. However, at some point the rating agencies will react by reducing the mutual company's rating, making it more difficult to grow and be profitable. If business continues to grow more rapidly than surplus, further rating declines will result. Ultimately, the company's ability to write business will be severely impaired due to its weakened financial condition.

However, if the mutual can produce rates of return on its capital that are attractive to investors, it could access outside capital to finance more rapid growth. If the company produces returns at least equal to those required by investors, it could restructure to gain access to such additional capital through the use of various techniques such as downstream holding companies or joint ventures. If the mutual cannot produce market rates of return, investors will not be willing to make their capital available. As a result, once existing free surplus is used up, the long-term sustainable growth rate of a mutual will be limited to its internal rate of growth of surplus unless it can demonstrate an ability to meet investor requirements. In that case, additional growth may be financed by securing

additional capital through restructuring. In short, mutual companies that wish to grow more rapidly than their internal rate of growth of surplus are subject to the very same return on equity requirements as stock companies, and must manage their affairs as if they are stock companies. Otherwise, outside capital will not be available to them.

How important is it to properly measure financial results? Statutory earnings are misleading indicators of profitability with losses generally caused by new sales, whether this business is ultimately going to prove to be profitable or unprofitable. GAAP earnings can also be misleading as they are dominated by inforce business. Further, losses can be incurred in the year of sale, as certain acquisition costs may not be deferred. Earnings are likely, as a result, to increase in renewal years due to still conservative assumptions. However, 75% of a life company's effort and expense is new business related.

Value-added measurement systems can offer significant advantages by eliminating inconsistencies between pricing and financial reporting, and by properly reflecting the company's hurdle rate. Such approaches produce a better measure of the value added to the company by new business. This should be a key statistic for managing your business. Further, value-added measurement systems would provide the kind of surplus projection capability needed to properly manage surplus and integrate it into the planning process.

I would note that a good part of the industry's problems are due to pricing business with inadequate margins. In a January 1990 article in *Best's Review*, Terry Lennon, Chief of the New York Life Bureau, criticized the industry for not realizing even a risk-free rate of return. He noted that this condition is not consistent with an industry that is starved for capital.

The challenge to the industry is to generate appropriate returns on the capital of both stock and mutual companies. Improving margins will require a focus on cost fundamentals. If margins are improved, capital will be available. Those companies that do not deal with their margin problems will find themselves facing a solvency crisis at some point rather than dealing with the challenge of managing their surplus. Compared with other financial sectors, we as an industry are somewhat more fortunate. The longer term nature of our liabilities gives us some time to react. But as we have seen with the S&L crisis, those that do not react will not take much comfort in the fact that they might have lots of company.

MR. HILL: Our next panelist is Bill Wellnitz, Vice-President and Chief Life Actuary of the Reinsurance Division of Transamerica. So I'll turn this over to Bill.

MR. WILLIAM R. WELLNITZ: My segment of the panel deals with some ideas and approaches for providing for the surplus needs of life insurance companies including the use of reinsurance. My remarks are generally from the viewpoint of Transamerica Life Companies, a stock company, but I hope that you'll find some of these ideas useful from your own company's perspective, including you folks that work for mutual companies.

As Mike noted in his presentation, the issue of what you do to adjust your surplus, your capital position, starts after you understand your current as well as projected future

capital needs, and after you're comfortable with the levels of the margins in the products that you're currently writing and desire to write in the future. It's all too easy to deal with surplus needs as a knee-jerk reaction to an end-of-year problem, and that really fails to address the fundamental issues of the business.

For many companies, including Transamerica, surplus management is a continuous, evolving process. As part of that process, we work to establish target levels of surplus, to stay abreast of available sources of surplus and to continually negotiate for the capital resources that we decide we need. We continually monitor, reassess, and rebalance the surplus need/resource equation.

In establishing our target levels of surplus, we consider solvency requirements first. As a fairly mature company, we have found that this is fairly well handled via the conservatism built into our statutory accounting; but that isn't a sacrosanct item. We must always consider which of our businesses have faster or slower growth rates, and what that mix of business means in terms of our adequacy of statutory reserves. Next we consider our rating agency requirements. Historically, A. M. Best has been the most significant rating agency for our consideration, but we have found, like many of you have, that our friends at Moody's, S&P, and Duff & Phelps have become very important to us. Finally, we consider the effect that maintaining a particular level of surplus has on Transamerica's earnings per share and return on equity, and on our ability to pay dividends.

Some of these considerations conflict with each other, and it's obvious that considerable balancing is required to arrive at a specific surplus target. For example, the cost of holding surplus at levels that satisfy A. M. Best will have the effect of depressing your company's ROE and may force you and your management to set priorities. We then consider available sources of surplus and develop our program for meeting our targeted needs. Over the recent past, we continually reviewed going to the capital markets either directly or through our parent, reinsurance, and several miscellaneous alternatives that I'll touch on later.

Turning first to our capital markets, both domestic and international markets should be considered. New capital raised may take several different forms including preferred stock, common stock, or debt. Preferred stock or debt can be either nonconvertible or convertible.

Debt would generally be issued at the holding company level with the funds dropped down to the life insurance company group as a surplus contribution. That may be preferable from a pricing standpoint since the interest paid on debt is fully tax deductible while dividend payments are not. In addition, it allows for leveraging up the returns to common shareholders. It may also be preferable if the need for capital is viewed as short term. However, don't lose sight of the fact that debt service capability must be analyzed, particularly in light of the fact that it's the life insurance enterprise that has to be able to dividend up the cash to service the debt.

Common stock could be issued at either the holding company level, if there is one, or directly at the life insurance company level, or even at the level of a subsidiary to the life

insurance company. For example, common stock might be issued at the subsidiary level in conjunction with some sort of a joint venture arrangement. The advantage of using a subsidiary for a joint venture where another party is providing a significant portion of the capital is that it allows the company to wall off the joint venture from other operations. This usually is desirable from both parties' perspectives.

To raise capital of any form from the capital markets, we have found that you have to be able to convince a potential investor that you could provide them with a level of return that is commensurate with the risk they will be assuming. It has been frequently difficult for life insurers to sell their stories to the capital markets. There is currently a general perception among investors that returns on universal life are not adequate, and you may have a very difficult time getting the funds you're looking for if the story that you were trying to sell focuses on a universal life portfolio.

Other factors that investors may have concerns about include the impact of the underwriting cycle on health business, the impact of the interest rate environment in general, and the continuing accounting changes that in recent years have made it difficult for investors to analyze life insurance company performance with any sense of comfort.

To go to the market successfully, we have found that you need a good track record, a good story about what you're going to do with the funds, and you need to propose a price that investors view as reasonable. In addition, your timing needs to be right as to market conditions for all of this to work out.

Judging from the depressed nature of insurance stocks in general right now, this is going to be a very tough time for life insurance companies to sell their stories, even if they're good. Investors are generally concerned about life insurance companies right now, in part due to their exposure to both junk assets and the real estate problems. There continues to be some market sentiment that the insurance industry is following on the heels of the S&Ls with respect to their financial situations. This doesn't mean that you cannot do a deal.

Most recently Lincoln National/Dai-ichi concluded a transaction which provides a fairly good example of an approach that a stock company might use for going to the capital markets. In this well-publicized transaction, Lincoln National went to the capital markets and raised new capital via the issue of some $312 million of convertible preferred stock issued to Dai-ichi Mutual, Japan's second largest life insurance company. The $312 million will represent about a 9.6% share of Lincoln National on a fully diluted basis.

The preferred issue carried a coupon of 5.5%, and appears to have been priced at a 25-30% premium over Lincoln's market value at the time of the issue. This transaction reportedly was intended both to raise relatively low-cost capital to support Lincoln National's growth, and to create a strategic alliance anticipated to yield other benefits to both parties in anticipation of a global insurance market.

Because of the perceived strategic value to the Japanese party of getting a toehold in the U.S., it is believed that Lincoln may have gotten a better price than would have been

available from U.S. or European sources. It is particularly noteworthy that this is the largest investment to date in a U.S. insurer by a Japanese insurer, and may pave the way for further Japanese investments. Also, it is probably reasonable to point out that this transaction was negotiated and closed prior to the Iraq crisis and the resulting disruption in the financial marketplaces. I would guess that it would be very unlikely that the transaction would have been completed in the same fashion it was, had it been pursued in the latter half of the year as opposed to the first half.

Moving on to reinsurance. As Mike noted, reinsurance is a frequently used approach for financing life insurance company capital needs. This can take the form of conventional coinsurance in which the writing company basically transfers a piece of the business to a reinsurer at issue in order to finance the strain associated with writing the business. Alternatively, financial reinsurance, which has been frequently dubbed surplus relief reinsurance, can be used. Now financial reinsurance has been a well-covered topic at prior Society meetings so I'm not going to go into it in great depth, but a brief overview is probably helpful.

Financial reinsurance can perhaps best be distinguished by first considering some key attributes of conventional coinsurance. In conventional coinsurance, the reinsurer in effect accepts full exposure on a portion of a block of business from a direct writing company. Mechanically, the reinsurer pays an allowance to the direct writing company to return to that company a portion of the investment that it had already made in the book of business. To the extent this exceeds the ceding company's cash investment in that book of business, these allowances enhance the ceding company's surplus position. The ceding company then pays the reinsurer premiums on the block of business, net of allowances. The reinsurer assumes liability for the benefit payments and makes a profit to the extent that the premiums exceed the allowances, benefits, and the reinsurer's expenses. Typically the market for conventional coinsurance is quite competitive, and the reinsurer must assume substantial business risk in conjunction with assuming the business. While the reinsurer enjoys the full profit potential, it is fully exposed to the same risk of loss as the direct writer.

Financial reinsurance transactions are structured quite similarly except that the reinsurer agrees to give back most of any excess of the net reinsurance premiums over the benefits and expenses. Because of this payback feature, allowances are less than on the conventional coinsurance. In this way the reduced upside potential is balanced against the remaining risk of loss. The advantage of this design to the ceding company is that it both meets its initial needs for capital and minimizes the cost of reinsuring since it gets back any excess profits.

Financial reinsurance has been a popular, although somewhat cyclical, approach for financing life insurance companies. It appears that this year it is readily available. Judging by the size of the allowances that have been advanced, we would estimate that the total inforce amount of financial reinsurance approaches $3 billion.

Surplus relief has some advantages over other capital sources. It can be tailored to cover a specific portion of the strain associated with particular new business writings so it can be closely associated with a specific management strategy. It goes to the income

statement while other sources of relief generally do not. This can be very advantageous in some circumstances.

Unlike other forms of capital, it does not increase an insurer's GAAP equity. It does, however, reduce the insurer's GAAP income to the extent of the cost of the reinsurance. Depending on the pricing of the relief, the drag to stock company ROE associated with the cost of surplus relief may be less than the drag associated with other new capital issues which may impact both the numerator and the denominator of the ROE calculation. Surplus relief is also a useful tool for the company to manage temporary surplus needs that may arise. It can be used as a stop-gap measure between more permanent sources of financing as well.

For example, it may ultimately be the best approach for a company to go to the capital markets for a long-term capital need, but as we're experiencing right now, the capital markets may not be of a mind to want to buy into your story. So surplus relief may be the appropriate vehicle to provide for the bridge financing necessary until the capital markets become more favorable again.

Over the last five years, regulators have taken a pretty intense look at financial reinsurance in general. Their concern has been with the levels of reserve credit taken for particular financial reinsurance treaties. As a result of this review, treaty designs have been tightened up and certain clearly abusive practices have been eliminated. Risk transfer requirements have been established. Requirements as to the level of security needed to take credit for the reinsurance have been clarified. Although there continues to be some difference by state as to what is acceptable, at this point there is generally pretty clear guidance available.

I'd like to close with a couple of additional avenues that have been examined in the recent past that I would like to comment on. First, we have the so-called securitization deals. I know Bob will be touching on these in his discussion. Employee stock ownership plans (ESOPs) are interesting. I'm not sure if there have been any regulatory changes, but it has been possible in the past to set up an employee stock ownership program, have that separate entity get a bank loan, and use the proceeds from the bank loan to buy company stock. The loan then becomes secured by the stock purchased, and the cash is then available to the company to drop down or utilize otherwise as part of its capital structure. In essence this allows the company to borrow money without the debt showing up on the balance sheet.

Another way to create capital that might not otherwise be available is by moving either some of your sales compensation or, in fact, some of your salary compensation from cash to newly issued stock. I emphasize it has to be newly issued stock in order for this to have an effect of increasing the cash position of the company. I've seen this work quite favorably in the case of agents' compensation because the perceived value of the stock is oftentimes leveraged in the minds of the agent over and above just simply the dollar value.

I want to emphasize this: It is absolutely critical, as Mike said, to understand your business and to know what it is you're trying to achieve before you consider what you're

going to do with your surplus management. Fundamentally, if you're not going to use the resources in a fashion that's going to move your company ahead, then you've got to deal with those other company issues first. The trick is to balance things so that you're getting the right capital at the right time at the right cost for the right reasons.

MR. HILL: Our next panelist is Bob Callahan. Bob is Chief Life Actuary of the New York Insurance Department. He serves as a member of the NAIC's Life and Health Actuarial Task Force and serves on several other NAIC working groups and task forces. He has served on a New York departmental task force relating to reserves and nonforfeiture topics, and has worked with industry advisory groups in related areas.

MR. ROBERT J. CALLAHAN: I'm glad that Norm mentioned who my employer is. The remarks I am presenting are my own personal views and not those of my employer.

Now when Norm asked us to be on this panel, he in turn sent out a letter listing the topics this panel was to cover. While we were all free to select topics, he did assign some topics to each of us. The topic assigned to me was the influence of rating agencies, regulators, and alternate financing. I must say I am very glad that the other two speakers touched upon all topics because, frankly, they can say some things which I can't. I was told a few years ago not to criticize any entity not under the direct regulation of the New York State Insurance Department. So it is with some reservation that I venture into the area of the rating agencies.

I will refrain from explicitly mentioning any particular rating agency. In 1987, the Institute for International Research held four sessions in three different cities for a one and one-half day conference entitled, "The First Annual Symposium on GICs." I was a panelist at each of the sessions on the panel entitled, "How Sound Are Your GICs? A Panel Discussion of the Creditworthiness of GICs Issuers." Representatives of some insurers and some rating agencies were also on the panel.

To rate the GIC issuer means assigning a rating to the insurance company. One rating agency specializing in insurance for years had annually published ratings along with a summary of financial data. Does anybody know who that is? It had a monopoly on rating insurance companies. Is that a better clue? Then perhaps in the mid-1980s, some nationally recognized rating agencies rating government and corporate bonds started rating insurance companies. Why would a nationally recognized rating agency normally rating bonds start rating life insurance companies? Stock insurance companies issue stock. Insurance companies, both mutual and stock, can and do borrow, but rating debt was not the principal reason for these agencies rating life insurance companies. I don't know why they started rating property and liability companies, but then in the 1970s and into the 1980s, life insurance companies became very active in the issuance of guaranteed interest contracts.

Frankly, GICs look and smell and act like bonds. Pension plan administrators purchase GICs as funding vehicles. Pension plan administrators have fiduciary responsibility and sought advice as to the soundness of the issuers. In turn, both life and property and casualty insurers sought the prestige of getting a high rating from a nationally recognized rating agency. These rating agencies conducted a financial analysis and assigned the

rating at the request of the company in charge. Some rating agencies charged the insurance company for the service and, in at least one case, if the insurance company did not like the rating it was given, it was allowed to withdraw its request.

Thus even today there are relatively few ratings assigned to insurance companies by rating agencies other than the one specializing in insurance that has historically assigned ratings. For example, the May 1990 edition of the *Insurance Forum* shows that as of April 1, 1990 (give or take a few days), four agencies rated 811, 100, 54 and 32 of the approximately 2,000 life insurance companies. The complete rating is shown for three of the agencies. For the agency rating the most, the September 1990 edition of the *Insurance Forum* shows life/health companies assigned ratings in 1989 that had reduced ratings or no ratings in 1990. It also shows the complete list of the 270 life/health companies with top ratings in 1990. The September 1990 edition also notes that as of August 1, 1990 (give or take a couple of days), for life/health and property/liability companies combined, the other three agencies rated 402, 201, and 43 companies, and lists the companies receiving the top rating from each.

In 1987, one observation that some panelists noted was that the rating agencies did differ in assigning ratings to a given insurer. Further, there was a high concentration of top ratings by at least one agency. Perhaps at that time only the strongest insurers sought a rating. Ratings are periodically reviewed and at times are reduced. In some cases there has been a change in the insurer's financial condition since 1987 due to circumstances within or outside the insurer's control. It could also be that the rating agencies are gaining more insight into the complexities of life insurance companies.

Those public and private entities seeking to borrow are fully cognizant of the effect of a rating since the rating affects the interest rate that an entity has to pay on borrowed funds. Life insurance companies issuing GICs and group annuity contracts in the qualified pension area are aware that fiduciaries are seeking highly rated insurers. At times, in any negotiations, as for example in the case of the terminated pension plan, and in particular in the case of a plan covering union workers, a top rating is set forth as a necessary condition in awarding any contract to a given insurer. In spite of the relatively few life insurers being rated, those insurers with a high rating will use such rating in advertising and marketing all their products. Other things being equal, obviously a top rating helps. There are a good many life insurance agents who look at their fiduciary responsibility and are feeling more responsibility to their clients for placing their business with a top rated insurance company.

Some insurers have adjusted their financial reporting to show a better picture. One example, is switching from the net level to a modified reserve system on new issues in order to show better statutory gains from operations. Another example is reducing the reserves on a given block of inforce business to show more surplus. Other examples involve use of reinsurance or some alternate financing to create the appearance of surplus.

Now some have suggested that the regulators assign the ratings to insurers. Perhaps the regulators may be in a good position to do so. However, assigning a top rating to an insurer may be subject to review by such insurer and possible court action by the insurer.

The regulator could be forced to justify the basis and to make public all data which the regulator used to form his judgment. Now, whether a rating is assigned by a private rating agency or by a regulator, there is the danger of bribe and impropriety where an insurer is seeking a high rating by whatever means possible.

A state insurance department is required to do a financial field examination of each life insurer incorporated or domiciled in its state. In New York, each domestic life insurer must be examined at least once every five years. Most smaller life insurers are examined every three years, some every four years, and the largest every five years. However, a review of the annual statement is done every year, for both domestic and foreign insurers. The examination details are kept confidential, and upon completion of the examination, the draft report is discussed with the company and may be examined or adjusted before it is finalized. Thus, there may be several years between the "as of" date of examination and the filing of the report on examination. Once filed, the report is public. Any adverse comments in the report can adversely affect the company, particularly when the news media obtains the report and publishes excerpts. An examiner must use discretion in any comments during the course of the examination. In some cases there may be a legitimate explanation; in others, corrective action may be taken. If the examiner makes careless and/or incorrect statements and such have an adverse affect on the business of the insurer, the examiner is in danger of being sued. However, where there are problems and corrective action by the insurer has not been taken, the examiner is obligated to take such action as necessary to protect the insured public.

Now, the National Association of Insurance Commissioners has an insurance regulatory information system (IRIS) which uses annual statement data filed on diskettes, and calculates a number of ratios for each insurer, with a separate set of tests for property and liability companies, life and health companies, and fraternals. The nature of the ratios is public information, available from the NAIC at a charge. Surplus is part of the calculation in 5 of the 12 ratios for life insurers. At one time the results of the tests were confidential. Then in the past, the tests were run by a private individual using public data, and the results published by such individual. The results are now public and available from the NAIC at a charge, but with caveats as to the meaning of the results.

Failure on a given number of tests does not necessarily mean that the company is targeted for special attention. There are other criteria used as well. An examiner team consisting of examiners from 13 different states will review selected annual statements for explanations. When the examiner is not satisfied, further explanation is requested from the company. When the company's explanation is not satisfactory, a first, second, third, or no priority is assigned and both the company and the state of domicile are so informed. This listing is confidential. Obviously, publication of such listing could adversely impact an insurer's ability to write new business or impact lapses of its inforce business. Some insurers will try to adjust their reporting to avoid failing tests. They all know what the tests are.

Some rating agencies use target surplus based on risk and get a ratio to actual surplus. Rating agencies tend to include as part of adjusted surplus the mandatory securities valuation reserve (MSVR) which is a statutory liability. Some regulators do the same thing. In fact the material sent out to the NAIC working group and to the NAIC

advisory group for the October 31, 1990, meeting in Kansas City shows the MSVR being added to surplus and half of the dividend liability being subtracted to obtain the so-called adjusted surplus; but a number of questions are being raised as to the use of that MSVR. That meeting is set for October 31. Many of those who are on the committee have not yet received their notice of the meeting, but if they haven't, they should find their notice when they get back to their office.

I personally feel that taking a ratio of the sum of statutory surplus and MSVR to total admitted assets is misleading, as those insurers with a high concentration of bonds should have a higher MSVR and, thus, a higher ratio.

Lew Roth, a Supervising Actuary with the New York Insurance Department, has reviewed the factors used by the rating agencies and developed risk-based target surplus. His work has been reviewed by department examiners and actuaries, revised, and run against New York licensed insurers. As I mentioned, that work is being turned over to the NAIC working group.

Now since conservative reserves have the effect of hiding surplus, one might expect that those insurers seeking more surplus will adopt more liberal reserve bases. To strip out the conservatism may be somewhat unfortunate. It does put more responsibility on the valuation actuary to make sure that reserves are adequate. From the solvency standpoint, I would prefer to see the market value of assets and market value of liabilities.

In New York, we expect to promulgate a regulation permitting such as an option to an insurer. It is hoped that such use will influence an insurer to appropriately match assets and liabilities. Even with well-matched assets and liabilities there can be tremendous swings in the amount and ratio of surplus to admitted assets. Book value of assets and of liabilities is intended to smooth out some variations in surplus, but it can mask real problems.

I feel that statutory reserve bases have been liberalized considerably and, even though the statement was made earlier that statutory reserves are conservative, they may in some cases be inadequate if there's not a proper matching of the assets and the liabilities.

With the baby boom generation having reached middle age, many feel there is an opportunity for growth for the life insurance industry, but more capital is needed to provide for growth. Stock insurers can raise capital by issuing stock. In some cases, the stock is issued by a holding company and then contributed to the insurance subsidiary. Some say the capital of mutual companies is contributed by its policyholders in the form of redundant premiums with the excess premium later returned in the form of policyholder dividends.

In recent years, the loadings on certain blocks of participating business have decreased and, in fact, some policies contain a statement that very little, if any, dividends are expected. Perhaps the need to raise capital, as well as federal income tax considerations, has given rise to talks about demutualization. However, there are severe limitations to demutualization.

Various alternate financing schemes have been proposed such as surplus notes, securitization, and factoring or levelization of commissions.

I first heard of surplus notes about four years ago, although New York Insurance Law, currently Section 1307, embodied them for years. Originally they were intended only for mutual insurers and primarily for startup capital but allowed for other purposes as well. Later the law was amended to permit stock insurers to issue surplus notes. Prior approval of the Superintendent is required before issuing a surplus note, and prior approval is required for repayment of principal and interest, and then only out of free and divisible surplus.

With such restrictions on repayment, the insurer is not required to set up a liability for repayment, but does have to report in the annual statement the amount of the principal and the accumulated interest. With such restrictions, third-party lenders demand a very high interest rate such that as a practical matter, such notes are primarily used by affiliated insurers where the interest rate is of little consequence when affiliated companies are consolidated. However, the same effect can be accomplished by the parent contributing surplus to the subsidiary.

An advisory group, at the request of the NAIC Working Group on the Sale of Future Revenue, reported at the September 1990 meeting as to the status of the various laws on surplus notes. Some states have no laws whatsoever authorizing surplus notes -- most do. Some states have maximum interest rates -- most do not. Some states permit such notes only for mutuals, others for both mutuals and stocks. Some states permit such notes for startup capital whereas others prohibit such use. Some permit such notes only for emergency use. In my opinion, a troubled insurer borrowing from a third party would have to pay a very high rate of interest in light of the restrictions on repaying it and the financial condition of the insurer. In fact, a truly troubled insurer may not find a third party willing to lend money under such conditions.

At the very least, the survey pointed out the need for uniformity of state law. However, a member of the advisory group concluded that as a practical matter, use of surplus notes is restricted to affiliated companies. The advisory group did consider the tax aspects, and whether it would be more advantageous to use a noninsurance company parent to lend the money, and whether the company receiving the money should treat it as equity or as debt. If anyone is interested in a summary of the state laws, copies can be obtained either from the chairman of the advisory group or from the NAIC working group or from the NAIC central office.

About two years ago, several different individuals came up with a scheme for securitization of assets by an insurer borrowing money with repayment conditioned on a designated block of business being inforce, and then only on the excess of the gross premiums over the net valuation premiums. And when some of these individuals came to us, at least one of them said this was very, very confidential and we told them we'd heard of this from other sources. The insurer's assets increased upon receipt of the cash. The proponents claimed that no liability need be set up as repayment was conditioned upon future premium payments which did not have to be made, and that as long as

repayments were based on the excess of the gross premiums over the net valuation premiums, no premium deficiency reserve need be set up.

Since repayment was not conditioned upon earnings and prior approval by regulators was not required, the interest rate charged was much lower than what a third party would require in case of a surplus note. After considering the pros and cons, New York issued Circular Letter 1989-7 dated March 13, 1989, stating that a liability should be set up. While prior approval was not explicitly required, prudence dictated that prior approval or at least prior nonapproval should be obtained.

Regulators of two different states gave approval to surplus enhancement. Then the NAIC working group met and considered whether the transaction should be treated as a sale or as debt. An advisory group split on this question and simply presented the pros and cons leaving it to the NAIC working group to decide. The majority of the working group decided that surplus relief should not be granted and that an appropriate liability should be set up, while grandfathering any previously approved arrangements.

From the standpoint of the insurer, it is my opinion that it is better to receive the monies up front. However, if the monies are needed to pay claims or expenses, the obligation still remains to repay the loan.

Perhaps if the conditions for repayment of surplus notes could be liberalized, the interest rate could be lowered. Perhaps some of the aspects to securitization of assets could be incorporated into the requirements for surplus notes. It is possible the NAIC will reconsider its position, but I would not hold my breath waiting for them to do so. If bank loans do become feasible for surplus enhancement, then banks will need actuaries to analyze the financial condition of insurers and make such loans only in the case of the better, more stable insurers, and where there's a high expectation of repayment. Yesterday I heard of one bank that did have a full-time staff actuary for such purposes who has now left the bank and gone to work for a reinsurance company.

Another scheme to show more surplus and higher gains or lower losses upon issue of life insurance is that of levelizing commissions. Many regulators are in favor of level commissions as a means to conserve business and as an antidote to replacements. However, as a fact of life, newer agents need to receive high first-year commissions to get by until renewal commissions become significant. Thus, what we have seen is the proposal for a third party to act somewhat like a general agent to receive level commissions from the life insurer, but to borrow monies from a bank against such renewals so that the third party can pay a high first year commission to the soliciting agent. The third party is intended to be independent of the insurer, although in actual practice, I don't think that's the case. The bank would want to have the business on which the level commissions are paid be of such amount that even with higher than normal lapses, there would be sufficient renewals to repay the loan. If there are not sufficient renewals, then the loan will not be repaid in full. However, if the renewals are sufficient, once the loan is repaid, no more renewals are payable by the insurance company to the third party. By majority vote, the NAIC working group decided that the renewal payments by the insurance company to the third party were more related to the loan than to commissions,

and that an appropriate liability should be set up. The accounting language to require this will be finalized and most likely will be adopted by the NAIC this December.

It might be noted that one state not on the NAIC working group had hired a consulting actuary to review the plan for levelizing commissions for one of its domestic life insurance companies. The consultant recommended approval and the state approved surplus enhancement with the arrangement. While the consultant wanted to be in on the executive session during which the NAIC working group deliberated the question, the regulators felt it better to exclude the consultant. However, any business involved in any prior approval is likely to be grandfathered, but no new business will be permitted to provide surplus relief through such arrangement.

As an aside, one has to wonder whether the treatment of deferred acquisition expense by the IRS is apt to result in either a change in commission payments or a change in accounting for commission payments. If the NAIC working group had approved of surplus relief through the arrangement described, then the group would have had to decide whether the reserves should be calculated by the net level premium method rather than by a modified reserve method. We didn't have to answer that question.

Actuaries have been involved in devising some of these alternate financing schemes. If any work were to be accepted, most likely any approval would be contingent upon a demonstration of the adequacy of the assets to support the obligations of the insurance companies. The valuation actuary must be aware of such arrangements.

MR. LEW H. NATHAN: My understanding from what I've read is that the NAIC is reviewing reinsurance transactions, in particular maybe those transactions where the surplus of the ceding company is enhanced while at the same time little or no risk is passed to the reinsurer. I was wondering if any of the panel would care to comment on whether or not this may affect the current market for financial reinsurance?

MR. CALLAHAN: I think it was in 1985 that New York issued Regulation 102 on such surplus relief, and required that risk be passed as a condition for the ceding insurer to receive reserve credit. Subsequently, the NAIC adopted a model regulation which was very, very similar to that. Now in the discussion of securitization of assets, one of the regulators that approved such an arrangement felt it was better to get the money up front than in arrears like you would in case of reinsurance; and he approved the arrangement. At that time it was decided by this group to also review financial reinsurance arrangements and surplus notes.

At the most recent meeting in September in Kansas City, one of the members of the group made it very clear that he did not want to go into financial reinsurance because he felt that was a topic that had been "squared away," that there was a model regulation on it and the thing now is for the states to adopt a model regulation along the lines of the NAIC. There are others of us who felt that there were still questions despite the model regulation on financial reinsurance. Sheldon Summers is a member of that working group and since the September meeting, he has sent a letter to the chairman, Leon Hank, on the subject of financial reinsurance. Now it can be reopened, but there are some who don't want to reopen the question of financial reinsurance.

PANEL DISCUSSION

MR. PAUL A. CAMPBELL: To what extent is the total subject of regulation of reinsurance as a separate topic from regulation of insurance being dealt with at the present time in the development of directives?

MR. CALLAHAN: I have personal views on the subject that differ from many other regulators, but there are other regulators on the actuarial task force who do feel that the regulators should get more involved in the direct regulation of reinsurance. Many states have laws similar to New York's that restrict the credit that a ceding insurer can take in case of reinsurance. Credit is allowed for reinsurance ceded to any licensed insurer or to any reinsurer that's an accredited reinsurer in New York. In case of any other insurer not so licensed or accredited, then the credit is restricted to the amount of funds withheld.

Now, a lot of this financial reinsurance involved a combination of funds withheld plus a letter of credit for the balance and the only way that a letter of credit was recognized as a fund withheld was in case of an unauthorized reinsurer. An authorized reinsurer or licensed company could not put up a letter of credit for the ceding company to get the reinsurance credit. I felt this gave an unfair advantage to unlicensed reinsurers as opposed to authorized reinsurers. In that regard, the NAIC did adopt a model on which banks should be recognized in issuing these letters of credit and under what sets of circumstances. While I frankly have felt that the letter of credit should not be recognized as a fund withheld, I'm outvoted in the matter by those who do have the jurisdiction over the subject.

FROM THE FLOOR: Bob, you referred to an upcoming regulation which would give an insurer an option of market valuing the assets and liabilities. Were you referring to Regulation 128?

MR. CALLAHAN: Yes, I was.