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RATING AGENCIES AND ASSET/LIABILITY MATCHING

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o The panel will discuss coordination of A/L matching with outside rating agencies.
  -- What do they want to know about A/L matching?
  -- What is the impact on ratings?
  -- Can A/L matching improve ratings?

MR. PETER J. BONDY: We have three excellent panelists who have much to share with you. In 1987, I moderated a panel discussion on rating agencies at the New York meeting of the Society of Actuaries. At that time we focused on the three sides of the rating process. That is, the rating agency, the insurance company, and then, of course, the user of that information. At that time, we did not have the focus that we have today, asset/liability matching. Your panelists indicate that they believe that today the risk for the life insurance company may not necessarily be as significant on the mortality side as it is on the asset side.

Let me be elementary to begin. Asset/liability matching in its purest form likely means that we purchase assets such that whenever cash is needed to meet obligations, those assets will provide that cash. However, in the real world, we are going to be mismatched either because we are not able to match 100% or because we make a corporate decision to be unmatched. Reasons for making a corporate decision to be unmatched might be to maximize profit or, alternately, to be able to be more competitive in the market. The process by which different companies make that decision can either be a very specialized or sophisticated process or it can be a "back of an envelope" process or somewhere between these two extremes. I suspect that the majority of companies are probably somewhere in the middle and that we are still saying "gee we need to do more" and "we need to learn more." And I think we have to.

Let's consider New York's Regulation 126 which applies to companies that are licensed or authorized in New York. This regulation requires an actuarial opinion memorandum from the actuary attesting that in his opinion his company has an appropriate asset/liability match. When the regulation first came out, it required an opinion memorandum only for annuities. Its scope has now been expanded to include single premium universal

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life and will be expanded to include annual premium universal life. In his actuarial opinion memorandum the actuary is certifying that under different economic scenarios, he expects that cash will be available to meet obligations and, if that will not be the case, that the necessary additional reserves have been set up. The valuation actuary concept is coming up very quickly and all of you who certify reserves are going to have to include the asset side in your opinion.

Let's take a look at the securities which companies are buying. Going back a few years ago, it was fairly simple. You have many new names: collateralized mortgage obligations (CMOs), scripts, synthetics, and more. I'll speak about my own experience. Our company started buying CMOs sometime back. When we first heard about these in the actuarial department, we were informed that these CMOs were being purchased to go with a specific line of insurance or product line. We quickly tried to gather any information we could on these CMOs and found that it was a tough project. It was tougher yet to find out how these CMOs were being priced and how they were being projected with respect to cash flows. And, yet more recently, we have concluded that these CMOs, the specific CMOs that were purchased, should really belong to capital and surplus and not to the line of business they were purchased for, or for that matter, to any line at all.

We have the buying public out there; they are aware of what is going on in the savings and loan (S&L) industry, what is going on in other industries, and, now what is seemingly starting to take off with respect to the life insurance industry and the news media's recent focus on the insurance industry. Examples are two recent headlines in *USA Today*. These references speak about insurance stocks being out of favor, the "at risk" status of five prominent property/casualty insurers, and, finally, the risk of a needed bailout for the insurance industry, along the lines of the S&L bailout. While I do not necessarily agree with all of these and do not believe that our industry is as weak as portrayed, the general public is reading about it.

So how does the public decide that the insurance industry is not in the big mess that the news would have them believe? How does the public decide about what company to go with? Especially the public that is investing large dollars in GICs and settlement annuities. The rating agency opinion is one of those alternatives. I suspect that asset/liability matching is one of the big ticket items that rating agencies are looking at in their process and in deciding what rating to assign to a specific company.

We have three speakers. Two are from rating agencies, and one is from an insurance company. We have attempted to coordinate so that there's minimal duplication. The two speakers from the rating agencies are Bill Cavanagh with Standard & Poor's (S&P) and Larry Brossman with Duff & Phelps. Our speaker from an insurance company is Bruce Vane. Bruce is with PAMCO, Prudential Asset Management Company.

MR. WILLIAM J. CAVANAGH: A couple of months ago, my boss came to me and said, "How would you feel about going to Orlando in October and addressing the Society of Actuaries on asset liability management?" My immediate response was "presumptuous." Nevertheless, asset/liability management is the key issue for life insurance companies and it is one that has a significant impact on ratings. There are ratings today and we expect there to be more in the future that would be different if the asset/liability

management position of that company were different. Now most frequently it affects the rating in a negative sense. Where we believe there is more risk than normal, the rating may be lower, but there are cases where the rating is high because we are quite comfortable with the asset/liability management at that specific company.

First, I want to put our ratings into perspective. Asset/liability management is only one of the issues that we look at. It is an important one, but it is part of a full process that evaluates the whole company. A rating process includes collecting information, both public and nonpublic. It always entails a meeting with the company's management to ask questions, understand their business, and understand the risk that they take. There is a primary analyst assigned to each company. That analyst is responsible for running the meeting, making sure that all goes well from our perspective, and that we get the information that we need. Then the analyst prepares and writes a report and distributes it to individuals within the insurance ratings group and perhaps other members of S&P where we believe it is appropriate to have their review. The analyst makes a recommendation about the appropriate rating for this company. A committee of analysts, predominantly those familiar with insurance companies, but which may also include some others where there is a need for specific expertise, then meets and discusses the client company's situation and determines the rating. The rating decision is provided to the company, first, and then distributed to the public through a number of media.

We look at a number of factors; we have a process that looks at seven basic attributes when we are rating a company. The first attribute is industry risk, which is the basic risk of a business. Essentially, annually we analyze each line of business and determine its risk relative to other industries. We define a score for it and this affects the individual company's rating. A company's industry risk score is merely the weighted average based on revenues from each line of business.

Second, we look at a company's management in terms of its strategy. Does the strategy make sense for that company? Can it play competitively in the lines of business that it operates? We look at it from a perspective of its management in terms of the performance that they have delivered and how conservatively they manage their financial affairs. We look at business review, which is essentially sustainable competitive advantage in the line of business. That can come from a number of factors such as strong distribution, special expertise in a product line, or a special niche market where they have a particular strength.

Third, we then get to one of the most important factors: operating performance. It is here that we really look at asset/liability management as part of a company's investment risk. We also look at capitalization, liquidity, and financial flexibility, and these factors also have a place to play in terms of evaluating a company's asset/liability management. In operating performance we focus on return on assets. We look very heavily at the stability of earnings. Are these earnings stable or are they likely to fluctuate with cycles or economic events? Lower earnings on a total basis are more acceptable where they are stable as opposed to cyclical businesses. We predominantly look at earnings on a GAAP basis or a near GAAP basis but we also look at them on a statutory basis. Will statutory earnings support the capital growth necessary to properly sustain and support the lines of business?

Fourth, we look at catastrophe risk and number one on this list is asset/liability mismatch. Interest rates change; there's very little companies can do about it except manage their exposure to these changes. Other attributes that we look at are loss reserve deficiencies which is relatively important for some lines of business but not so important for life lines.

Fifth, we look at investment risk, investment portfolio asset concentration. Statistical expectations about likely default scenarios fall apart where you have large concentrations of certain assets and excessive use of reinsurance. You're putting your company's security to some extent in the hands of another company. Within investment risk, if you look at the relative risk, the relative importance is different on investment characteristics for life insurance companies versus banks, for instance. We place the most importance on asset allocation strategy, then comes interest rate risk management, third is asset quality, then diversification, liquidity, and returns. The top two are essentially key components of asset/liability management as is liquidity. We have a basic perception and we consider a company's asset/liability management and duration match and mismatches just a portion of that. The most important thing is that you have a set of liabilities, the businesses you are in. These will drive your asset structure, your investment structure, and your capital structure. They're highly interrelated. Certain types of investments are just not appropriate to certain types of liabilities. Certain levels of risks that you choose to take in your investment portfolio can be compensated for by additional capital. And these three components are all interrelated in how we look at a company and the rating we assign for the company.

Sixth, we look at liabilities for life insurance companies since they are in an array of different businesses. There are some short-tail obligations such as accident and health insurance and traditional medical insurance where there aren't large liabilities. There isn't a significant time frame between the time you receive premium and when you must pay the losses. It is inappropriate to have anything but a very liquid investment structure for that type of business. It is slightly different when you talk about long-term disability insurance where you develop significant reserves.

In life insurance contracts, particularly permanent life products, whether it be traditional or interest-sensitive products, there are longer-term obligations with a significant investment component. For these it becomes much more important, in terms of determining your rating, to assess how you manage the interest rate risk inherent in the products. Frankly, the most difficult product we see for which to assess this properly is probably universal life insurance. The array of options that you have provided customers in those products makes it very difficult to determine what the duration of the liabilities is and to identify an appropriate investment structure to support those liabilities.

Annuity business is more straightforward; these are essentially investment products. In individual annuities, whether they be immediate or deferred, there are significant differences in the investments that are required. For deferred annuities, primarily single premium deferred annuities (SPDAs), we look heavily at what you provide in the contract. This includes the options you provide, surrender charges, how long they last, relatively how high they are. When do your interest rate guarantees reset? Are you guaranteeing rates for five years or are you guaranteeing rates for one year with resets

every six months? These make a significant difference in how we evaluate your investment structure and the risks of your company. Probably the most talked about contract for asset/liability management is the guaranteed investment contract. The margins in this product are extremely thin and, unless you are carefully managing asset/liability risk, they can evaporate very quickly and turn into negative margins. So much attention is devoted to this specific line of business in our analysis with regard to asset/liability management because of both the thin margin and the large proportion of growth that this product has provided for individual companies and for the industry.

When we look at asset/liability management, the key word is "management." How well does your company understand the risks it is taking with regard to asset/liability relationships? As I have stated, a key item is product characteristics. What options have you provided your customers that make it more difficult to determine when you must pay on those contracts? Then how do you invest the proceeds to appropriately match that? Guaranteed investment contracts have little flexibility for real estate investment, stock investments, or anything other than fixed income investments with very identifiable cash-flow characteristics. We look at the duration matching that you do. There are many different versions of this, whether it be pure Macauly Duration, whether you do stochastic modeling, whether you test under a variety of interest rate scenarios. We routinely request the results of the New York Regulation 126 scenarios and evaluate them. We think they have been a benefit to the industry because they make every company licensed in New York, at least look at this issue and address it. We do not necessarily take a lot of comfort from passing these tests, although we get nervous if a company does not pass these tests. We think that it is important that a company be doing testing if their lines of business, whether it be single premium deferred annuities, immediate annuities, or guaranteed investment contracts, require this kind of analysis and we think it is very useful that this will be extended to other lines of business, particularly universal life insurance. We look heavily at these interest rate scenarios and pay a lot of attention to them. We also ask companies what other analyses have been done.

There are a number of questions that we ask, particularly with regard to investment-related products. How do the investment department and the marketing department for these products coordinate? Particularly for guaranteed investment contracts, it is very important that, at the time of sale, there be a strong relationship such that the investment department know what's being sold; that they in fact have a part in setting the rates at which these contracts are sold, and that they have information as to the volume sold so that hedging or purchase plans can be put into place to manage the risk. We are frankly less comfortable where the investment department is outside the company and where there isn't a good relationship between those two departments.

Another risk that is becoming more important is asset credit quality. We look at bond portfolio ratings. We look at the impact of mortgage foreclosures and nonperforming assets. Travelers Insurance had the most profitable guaranteed investment contracts in the industry supported by a pool of mortgages. It seems they're less profitable these days. We look closely at what nonperforming assets are and how they are trending. The question is not what nonperforming assets do you have? It is, what can you do about them and how are you managing the process? Of particular importance in this issue is what is the liquidity of those investments?

In looking at asset liquidity, which is highly related to the whole issue of asset/liability management, what are your positions with regards to cash and cash equivalents to meet both near-term predictable needs for cash and upcoming mismatched ratios of contracts? Do you use duration matching and horizon and match cash flows for a year or two to make sure they are close? Do you do it as an evolving process to ensure that you will have the cash to meet predictable maturations? Given the issue of 1035 rollovers, for single premium deferred annuities, do you have a position capable of meeting surge demands if there is a concern from the public with regard to the company's financial situation?

We look at corporate debt. We look at the investment return rate of the portfolio. We look at normal issues of diversification with particular regard to the speculative portfolio. Those investments are not as liquid as normal high-grade investments. The current market situation in the high-yield market shows that you cannot be sure that those cash flows will be as timely and you cannot manage your portfolio to change the situation on an evolving basis if you haven't locked that in earlier.

Private placements is another area of concern. There are significant benefits that private placements can offer. They tend in general to be of somewhat lower credit quality than investment grades. Traditional private placements are considered to be borderline investment grades to just over the border into noninvestment grades, on average, and we will look at a company's performance. There are also significant private placement investments in leveraged buyout (LBO) situations for some companies. They are not liquid. The benefits they offer tend to be in covenant protection in terms of either protection against events or, more importantly, call risk protection which significantly eases the problem of managing the investment portfolio from the cash flow position.

Commercial mortgages also have a role. We do see problems out there and we expect problems to increase for the industry in commercial mortgages. However, predominantly there are few companies who have been aggressive and are going to be hurt. Therefore, the industry on average, unless things get a lot worse than they appear to be, is not going to be hurt, although we do expect some losses.

Real estate is a useful investment for very long-term contracts whether they be traditional participating whole life policies or other very long-duration contracts where there is a clear need to hedge the inflation risk. There can be benefits for certain types of obligation, but guaranteed investment contracts and deferred annuities are not the contracts I am talking about.

We then look at a company's implementation. What is their investment performance? Are they in fact delivering the duration of contract that their strategy or policy says they should? What has their performance been in terms of yield? What has their performance been in terms of losses and foreclosures? And, what are the policies and procedures in place, particularly with regard to concentrations? Concentrations do change the nature of the investment risk that you take.

Now we come to capitalization. A company that has excess capital, and we look at it by line of business, has the ability to take greater investment risk, whether it be in credit quality or in asset/liability matching, than a company that is less well capitalized.

We consider that company's management of asset/liability risk, whether the risks they are taking, and whether the range of mismatches that they are willing to take are absorbable by the capital within its current rating category. In looking at capitalization, we also look at operating leverage, we look at the liabilities excluding separate account business, and we look at the Mandatory Securities Valuation Reserve (MSVR) as a percentage of total surplus and MSVR. We also take into perspective existing financial leverage, either downstream or upstream, as it affects the company. A type of investment leverage is other businesses that you own. How much of your capital is tied up in subsidiary operations that also have risks that must be supported? Finally, we look at liquidity and financial flexibility. The base liquidity of your cash flows does impact the liquidity that you are required to have in your investment department. We also look at the cash flows from your operations. In addition, it is important that you maintain a cushion of liquidity, whether it be in cash or equivalents or at least in very high-grade marketable securities to meet surge demand. Other sources of external liquidity may accompany these, whether it be a rich parent or the ability to borrow if necessary.

We look at financial flexibility, which is the ability to access additional capital or funds, either through the equity markets, through reinsurance, or through the sale of assets. Typically in the last case we would be talking about subsidiary businesses or other sources of capital gain.

In general, we consider asset/liability management to be one of the very important investment risks facing life insurance companies today. It is a catastrophe risk. Interest rates can change. In the investment markets today, it is quite possible that interest rates can move 1-2% in a few days given the current situation in the Middle East. If war were to break out, who knows what interest rates would go to if people believed that the oil reserves of the world would be impinged. These types of risk must be taken into account. It is not a risk that can easily be diversified.

Asset/liability management is a critical rating category for companies. As I said in the beginning, there are companies whose ratings would be different today if their asset/liability management position was different. It is an issue we look at closely and which we consider very important to the rating process.

MR. BRUCE F. VANE: Several years ago, I took my then six-year-old son to the office and he seemed to be having a pretty good time. He was playing with the copying machine, the computers, and meeting with people. He really did enjoy the cafeteria; he's probably the only one that day who enjoyed the cafeteria. On the way home I noticed that he was a little despondent and I said, "What's the matter?" He said, "I'm disappointed." A father zeroes in on a word like "disappointed" coming from a six-year-old boy. So I said, "What are you disappointed about?" and he said, "I'm disappointed that I didn't meet any of those clowns you said you work with." I did not bring any of those clowns with me here, so I hope you are not disappointed in what I have to say.

PANEL DISCUSSION

The concept of asset/liability management and its impact on the insurance company rating can only be discussed by me, I think, from Prudential's perspective within the context of the total process, the total rating process. I am going to describe to you how that process works at Prudential.

The process involves four different parts. One is preparation for the review sessions. Second, documentation, the information that is sent out in advance of the meetings. The meetings themselves and then the follow-up are the third and fourth parts of the process.

Under preparation and documentation, Prudential approaches the meetings in two different ways. First from the aggregate enterprise. The treasurer's operation, the corporate actuarial staff, and the executive office are involved in these sessions. Here the entire enterprise is looked at very broadly. What are the overall strategies at the entire enterprise level? For the detail, each business unit contributes to the process at Prudential; PAMCO is the Prudential's asset management company. In other companies it would be called the pension department. Each area like PAMCO is run as a separate business, with separate strategies and separate accountability for financial results measured in several different ways. Each of these business units is expected to participate in the rating meetings and to contribute to the documentation that is provided in advance to the agencies.

In the documentation we would include our business strategy, our mission if you will, our vision statement, our organization, specific objectives and plans for the near term, and for the longer term, our investment strategies. We would include our New York Regulation 126 test results; we would include financial statements, statutory results, current and projected; a pseudo internal GAAP measurement system that we use, current and projected; projected leverage results. The ratios that the different agencies use for calculating financial leverage include projections of those results in our submissions. We also include information on market share, whether or not market share is an objective, there is information in each of the businesses on market share. This goes out in a series of books.

The meetings with the rating agency last at least one full day and occasionally have run longer than that. From PAMCO's perspective, the people we send to the meeting are the CEO of PAMCO, the President, the Comptroller, the Senior Actuary, I fill that role, and the Portfolio Manager of our most critical portfolio which is the guaranteed products portfolio. In the guaranteed products portfolio, we have GIC contracts and plan termination annuities. That portfolio has $33 billion.

At the meeting, the CEO will describe any changes that have occurred in our plan, our objectives, or our strategies since the documents that we provided to the agencies were distributed. So we'll update results so far during the year. Are we on plan? Have there been any changes in the plan since the information was sent out? Specifically we will describe any changes in strategies: are we considering taking more risk? Are we backing away from something? Generally we provide an update to what we had sent out in advance. At the meetings we also comment on the state of the markets.

The agencies ask us specifically about the GIC market: what do we see happening in that market? What are we doing? What is our basic strategy? How does that change? How's the profitability? What is the impact of the banks in the GIC market? All of these are discussed at the meeting. We provide a list of our strengths and weaknesses in the markets that PAMCO serves. This includes the insurance company's separate accounts, investment services that we provide, defined contribution plan marketing, participation in record-keeping services and periodic payments, check writing in addition to the guaranteed portfolio. We also discuss other items like hidden surplus.

I think that the rating agencies will agree with me when I say that just looking at a company's statutory financial statement doesn't tell the whole story of financial soundness. There are key sources of hidden surplus in the statutory blank in addition to some of the reporting masking what's actually going on or the negative side like credit quality and other items where statutory reporting is just now catching up to the concerns that the rating agencies have had over prior years. The pockets of hidden surplus that I'm referring to may include items like the company's own pension plan or real estate that is carried at depreciated book instead of market. Real estate is pretty tricky right now but there may still be some excess of market over book in that portfolio. We would also discuss with rating agencies reserves that are in excess of statutory requirements or reserves where the statutory requirement is deemed to be conservative. All of these are discussed in general terms with the agencies.

We believe that our job is really to comment in general terms on what has changed, what we see happening in the future, and respond to their questions.

Many of the questions in the last several years have covered investment strategy. I believe that asset/liability management is one of the more critical aspects of what the rating agencies look for in an insurance company. It is not just interest rate mismatch or duration match or mismatch. It gets into credit quality of the assets, cash-flow matching, duration matching, strategy, diversification. Bill has mentioned these.

Bill also commented on the relation of risk to capital. A company that has more capital can afford to take more risk. The critical thing from the rating agency's perspective, I think, is to convince them that your company understands the risks that it is taking, that it knows how to manage those risks, that it anticipates the downside as well as the upside, that it is not making unrealistic expectations of what's going to happen in the future, and that it really understands and manages the risk. The second step is to convince the rating agencies that you have sufficient capital to be taking those risks. I believe all of these go into what the agencies view as the strength or weakness of a particular insurance company.

The critical thing from our perspective, once we have convinced them that we understand the risks and that we have the capital to manage the risk, is to make sure that there are no surprises. If we have a change in strategy, a basic change in business strategy like pulling out of a particular market, we would feel that we should go to the agencies and tell them what we are doing and why we are doing it. Because the worst thing that can happen is to have them come in and say, "You surprised us with this; what's going on?" Obviously there would be some good business purpose to that kind of

an activity and we would make sure that the rating agencies understood what we thought the business purpose of the strategy was.

In summary, the whole subject of asset/liability management is one of the more critical elements of insurance company ratings. A lot of work still remains to be done in terms of how to best present this to the agencies and I am confident that this will happen in the near future.

MR. LARRY A. BROSSMAN: I spent much of my life in pricing products. I ran a universal life pricing committee for a couple of years for a company. That was kind of a first exercise in joint efforts among some companies. But probably my best experience is that I spent a number of years playing tournament bridge; my bridge partner was Bill White who spent many years as Life Actuary for the New Jersey Insurance Department. Bill had some interesting psych bids, along the way, and I think that to some extent asset/liability matching has some aspects of the same thing.

Another side light. Many years ago I was sitting in my class at Harvard Law School, next to Ralph Nader who was a member of my class. Who knows how your paths will cross again. Thirty years later, I am not sure I understand the insurance business even after having spent 30 years in it. Nader, having spent no years in it, understands it fully. Some parts of our knowledge base, I think, we should exchange. I do this not to tell you I am busy, but I think asset/liability matching is a hot topic in the financial strength and solvency of the life insurance business.

Many of you also know that in management, in politics, and in other things, perception is reality, so do pay attention to it. I was just in Dallas for a session aimed at essentially CEOs and Presidents of insurance companies talking about solvency and managing in a crisis situation. Now I am here in Disney World talking to actuaries. I am speaking to the Manhattan Life underwriters tomorrow on the subject of "Will the life insurance industry follow the savings and loan industry into an economic wasteland?" Next I speak to a Congressional task force on the valuation of annuities and the week after that I speak in Los Angeles to an investor group about the impact of junk bonds in the life insurance market. The only reason I mention all these is because they all involve different disciplines: management, people who sell the products, actuaries and consultants, the federal government, and people who invest in insurance. So it is a new day out there. I think it is truly a blessing except that it's really troublesome as we go ahead.

Bill covered the subject extremely well and Bruce covered the subject from the home office standpoint. I am going to focus on some things that at least give me concern.

Obviously at my company we focus on the same thing, the average duration of assets. Very frankly, one of the things I find is that asset/liability modeling is a black box. It belongs to the actuaries. We are not auditors, we are not going to find the missing refrigerators or the missing policies. We are going to believe your numbers and your data. But one of the reasons we want to look at the data qualitatively is that we want to look at you; we want to talk to you. We also are interested in history; we want to know your history and we want to know the history of your business. And, we'll talk about assumptions. I've learned from my old days in my pricing experience with actuaries and

everybody else that I cannot understand your black box but I sure can understand your assumptions, so give them to me.

We like to talk to you about your assumptions and we like you to be able to put them out to us. Don't treat us as if we are not entitled to them and don't make us look through books and have a difficult time to find them. Are they your assumptions or are they from the PALLM system or did someone else give them to you? Where did you get them? Whose system are you using?

You can give me what has happened from the days when the whole business was technically insolvent in the spike during the 1977-82 period when everybody valued bonds at book. The well-kept secret, of course, was that the industry was insolvent, not bankrupt on a cash-flow basis. Durations have considerably shortened since then. In virtually all companies now you see the duration of assets and the duration of liabilities. I am much more uncomfortable about the accuracy of the duration of liabilities then I am on the asset side. There are many good asset models out there. Frankly we're concerned about the accuracy on the liability side; we want to know whose model they are. Are they yours or are they somebody else's?

We want to know your techniques and the systems you use to model the liabilities. We find that virtually everyone now has a system and some of these will run the models for you. A couple of things we should talk about on the techniques and systems here: is it an inside or an outside system? Believe me, we are not actuaries and we do not pretend to be actuaries.

We have seen some beautiful modeling systems by the brightest young actuaries I have met in a long time, but we don't know the system. However, if you use a system available from a vendor, and there are a whole lot of very good systems out there, that is helpful to us in the rating process. I say that only because we know that system and we have access to the people who monitor and put that system together. For these we do not need your answers, we know where we can go to get them.

Bill mentioned running the New York Regulation 126 scenarios. That is a good discipline. So it is not so much the numbers that come out of the process but it is the process itself. It is the discipline of the process that is important to us. Increasingly, we like to see stochastic models; we like to see a lot of models; and, frankly, we keep pushing at them until you find any model that gives you trouble. If we come in and talk to you, this is like doing a personnel review. You had better be able to tell us about a model or two where you have a problem. You had better be able to give us a problem. If there is no problem it suggests to us one of two things: either you don't understand what you are doing or you are playing games with us.

How many scenarios? Obviously we ask that question. We look at the models, but we are really more interested in who comes in to explain them to us, how they explain them, where your problems are, and how they work. We are not going to black box you. We can't open the gear box and we're not going to look in your gear box; it's not functional and we can't do it in the rating process. We need a different methodology evolving here. What we're doing with insurance companies is still evolving; we really want to work with

you; we have to make some better information available to us in a way that is cost feasible for us. We can't do this process on an intensive qualitative basis for 15,000 life companies and 2,000 casualty companies.

How is investment quality factored in? The issue with asset/liability management is that money had a flat curve for a long time and the asset/liability models were in there. You could hedge anything that you wanted and you could squeeze the bubble down anyway you wanted. The real issue that is being played to us now has shifted. Bill's priority on banks and insurance companies is really all on the money; I would reverse that. Asset quality is the game that we're playing because it is the easiest way you could do a runout. If you have a $150 billion GIC business with an average spread last year of 120 basis points, you can retreat to junk and now get anywhere from 400 basis points to 1,100 or 1,200 basis points. Tremendous temptation to run to junk and that is why quality is really the issue.

How do you factor quality into your model? This really gives us concern. No model is perfect. You still really have to go in and do a hands-on review of the particular assets involved. So no model is going to substitute for this review.

How do you model across product lines? You can get some very interesting reactions. Frankly, the whole industry is spread business now. That is one of the things that has changed in the industry. I have seen them model that business against home service business, known as debit business in the old days. You can get a very interesting model with that combination. A number of companies have purposely gone into structured settlements and terminal funding annuities, for example, because they have a long tail with no cash value call. This does nice things for your model.

Obviously everybody does the New York filing, even companies that are not in New York. We look at it although we do not consider it controlling. There are some things you can do with the New York filing. For example, how you allocate assets among lines of business. So we do not consider it a controlling document. Frankly we would rather see more models, particularly stochastic. There have to be some scenarios that give you more difficulty than others and we are not sure that they are fully considered in the New York system.

Now we get to the methodology followed in the coordination among the investment, actuarial, and marketing functions. How is coordination achieved? This is where we like for somebody to tell us how those people actually work together. For those of us who have spent many years in the insurance industry, we have gone through a period when insurance companies were all run by actuaries or lawyers. Then the marketing people came along. Now what we see increasingly is that the power in an insurance company is moving to the financial side and increasingly now also, probably, moving even beyond that to the investment side. It is very comforting to us to see a high-level, knowledgeable actuary working directly in the investment department who talks to us. That is a direction that some of us have found encouraging.

And what drives the process? Also, how does that process work? How do you interact? How do you meet? This is where the qualitative analysis comes in. Is the process

working or does it exist nominally only? And, as Bruce was saying, is market share part of your factor? Do you price the product and then find the investments to fit it? Are you in markets that you will get in and get out of if in fact you can't make your spreads? What is controlling? The companies that are pricing to an internal rate of return, which have an accurate handle on it, which are then repricing back to assumptions, which know what they are doing, and which have shown income over a period are companies that are frankly very attractive to us. We find these as the best management tools, even in mutual companies now, where we see that they are pricing back to profit in lines of business and are getting very sophisticated at it. I mentioned the use of outside consultants before. That can be helpful to us because they are known quantities.

The last area I want to spend a little time on is the accuracy of the liability side of the model. One of the things we find is that there is not a true integrated model. The investment people seem to have good investment models. I believe the actuaries get the blame and/or credit for the liability side. Increasingly we really need to know how accurate the liability side is.

In the first place, the products aren't really the same products. One of the things that is happening, in my perception, is that just like you went to the administrative services only (ASO) business on the health side of the house you are now also going to the ASO business on the annuity side and some people say, universal variable life is the same also. So essentially you are dealing with management. Many of the products being sold now are really passing management risk. We are really not concerned with separate account products that liquidate at market. So we have to strip out the portfolio and deal with only those products that actually carry risk.

When we look at a company that gives us concerns and which you cannot model, we do two things. On the investment side we bring our investments people in. We have a junk bond area. We have 20 people who work in the less-than-investment-grade area and who maintain a service. There is junk and there is junk; you have to look at it. We do the same thing on the liability side.

We are really very interested in your products and look at your whole portfolio to see how much is in separate accounts. How much is really at risk? How much is immediate annuities and payout terminal funding? And as you strip out the portfolio obviously what we're backing toward is how much "5%" cash value is sitting out there in a "17%" short market. All of it could run and, frankly, if we were all honest with ourselves, should have run but did not run. So as we work through the portfolio, that is the most critical kind of money. We then also look at termination charges and other product design features. What we really like to do is to see the design features. For example, how much do you have at 10% termination charges? How much do you have in cliff termination charges? How much do you have in termination charges that never expire? Obviously, what I am talking about here is that we really do an analysis of all product design features and want to test all of the assumptions. Just doing an asset/liability model is not enough.

The other thing is to determine whether you are talking about historic results when you look at scenarios. Everybody knows that there is hot money and soft money. We

recently rated a company that was in the annuity business, from 1977-82, they knew what their profit margins were; they knew how their block of business acted. Now obviously this was an annuity company that sold to brand name and sold to service. Service, incidentally, is a code for surviving in the future. We rated another company that was in the annuity market. Their annuities had a longer guarantee period and had a 300 basis point spread. The market went 300 basis points away from them and 50% of their assets left them. They covered it by increasing new sales. I am not sure that in the current market that is helpful.

These are the kinds of things that are helpful to us. Asking you where you get your liability models and how your business is going to act is very helpful to us. Incidentally, one of the things that is troublesome for me is to see some of the best companies selling the lousiest products. While they are very profitable, they have little mobility. As an old mutual company person, that gives me some trouble. Obviously this is one of the directions we are going in and companies are becoming pure annuity companies. That will give you no company. Almost nobody guarantees more than one year these days. We have some companies who are becoming pure annuity spread companies who essentially price their products not on what you can get in the interest market but on how much they have to pay because they know from history exactly how much they have to pay and how much business will run. So essentially their products are not necessarily priced properly for the customer. When we look at their models, if we know how they price their products, it is very helpful to us.

We like to see everything marked to market and we like to know where you get those values because that is where reality is going.

We recently did a company for which the Regulation 126 filing showed no problem in any of the tests. When we valued their less-than-investment-grade portfolio to market it essentially wiped out their surplus. They also had a lot of so-called unharvested gains in the real estate area. We took the real estate portfolio; brought it in and looked at it; we could not see it being harvested; the value was not there. It is very comforting to us if there is a market value; not your market value. This is a problem we have with direct placements; a problem we have with real estate; problems that we have in other areas. Outside value is the name of the game. Outside judgment is free from some prejudice. When one of the insurance companies did a securitization deal with a major New York bank, one of the by-products was the fact that they got their whole real estate portfolio reset to market with outside market values in it. When we came in and looked at them, not only in relation to that deal, that was very helpful information to us.

MS. FAYE ALBERT: I don't know who to address this question to; I think any one of the speakers might be able to respond. There has been a lot of discussion that the increase in the number of issues of below-investment-grade bonds has resulted in a reduction in the amount of private placements that insurance companies have held. Do you know anything about that? Do you have any quantitative information on that?

MR. VANE: I think it is fair to say that we have seen a decline in the number of new private placement issues in the last year or so, but I do not have any numbers behind that. Is that part of what your question was getting at?

MR. BONDY: I have a different answer. From our side, our investment officer has been probably taking in more private placements. Our company has not been known as a player in the private placement market and has been trying to become one. And, although I have not looked at them in the last four to six months, I understand that the margins are much larger than they would have been some years back and that they are priced very competitively in favor of our company.

MR. BROSSMAN: Well, the real question is what is the ultimate impact of 144. I think there will be a bigger market in private placements. I think 144 will probably be two markets. There will probably be the bigger trading market and some smaller private placements, but obviously the spread on private placements will change. I think there is also another thing acting here. That is, insurance company managements are close to terrified about the perception of less-than-investment-grade bonds in the marketplace. It is not at all clear how private placements sort through on a security evaluation. When we go into companies, we normally get the management's evaluation but we have to ask what they do, whether they relate to senior debt or other kinds of things. I also think the same thing is happening in the junk bond area. A lot of people would like to bottom fish in junk bonds; go in and buy something that is 100 cents on the dollar for 15 cents. But, they are afraid to carry it on their portfolio; they are afraid to deal with their Boards and the public and I think some of that backwashes. The market will come back. That's my sense of it.

MR. CAVANAGH: I think at present, meaning the past six months or so, there is more of a private placement market perhaps. My understanding is that there isn't a lot of desire for new issue public triple B ratings, which is a significant portion of the traditional private placements for double B, triple B, borderline type companies where covenants can make them more attractive. I think, short term, that there is a market for it because the public market has pulled away so heavily from the high-yield market which had been displacing private placements over the last five or six years. Going forward I agree with Larry that there is going to be probably a two-tier market for private placements. There is going to be the traditional private placement which, my guess is, will predominantly be handled by the traditional players. Insurance companies will be a big part. And, then there will be the private public high-grade market where, for reasons of distribution, efficiency, and cost of placement, high-grade issuers will be doing part of their issues in the private market.

MR. LEW H. NATHAN: We're talking about asset/liability management and from time to time we have heard the reference to GICs. The banks sell bank investment contracts (BICs). I was wondering if any of the panel could comment on which industry, they think, does a better job of managing that type of liability?

MR. CAVANAGH: I do not know that I want to comment on which industry does the better job of managing that type of market. I think because of the nature of their liabilities, banks have certain advantages in the short-term GIC market of one-, two-, perhaps three-year terms, relative to insurance companies, because they better match the types of deposits and loan business they have. I think that the interesting question concerns the extent to which banks would be trading off FDIC insurance in the future. The FDIC wants the premium on those contracts to help cover other losses that they

may be facing. But it's not clear that everyone else wants them to take the potential exposure from these contracts and they do not want it divided down into the participant's fee. So it is not clear how that would work out in the future. If it works that FDIC insurance clearly does not cover, then I think there will be a select few banks in the business. If it works that FDIC insurance does cover, I still think that the relative capital strength of the insurance industry, at least of those players active in the GIC market, will remain an advantage relative to banks.

MR. BROSSMAN: You can actually answer your question when you look at the long-term CD rating of banks because now you are getting a normative kind of thing. If we did an overview of the industry, if you do not think a level playing field is here now, it is in a sense here, and, it is in a sense in the GIC business which is a $150 billion business that didn't even exist in 1970. It rolls $50 billion a year now. You have insurance companies in there, you have banks, and, essentially on the short side, you have Shearson putting a synthetic product out there which will cash out at book value. You even have Finnish banks coming in or trying to come into the market without an FDIC guarantee. We urge everybody who buys BICs, for example, not to use the FDIC guarantee. We think that it is going to be a problem, probably is even currently a problem, and we expect it will eventually be changed. We advise them to look to the basic underlying credit of the bank. I think, from an overview basis, that the insurance industry is a stronger industry than the banking industry and stronger than savings and loans. It is a comment I normally make when people ask what is happening to the insurance industry. It is a financially strong industry compared with savings and loans, banks, and, frankly even, investment banks. However, there are enormous differences between insurance companies and those differences are going to get wider.

MR. NATHAN: You also talked about when you come in to visit insurance companies how you ask questions about the asset/liability models that they are using. An ancillary question to that would be: do banks get asked the same types of questions, if they have things like four- or five-year BICs that they are selling?

MR. CAVANAGH: I am sure they do, but I do not personally ask them.

MR. BROSSMAN: It is a different question. It is a source of funds for banks. So it is a different kind of issue. That is one of the reasons why people complained about banks competing with insurance companies because for banks it is really a source of funds. That is why they have been basically in the short side. In addition, people said that banks would be in and out of the business. Some have shown some staying power and have stayed in the business. But it is not the same asset/liability issue. It is a different universe.

MR. ROBERT P. CLANCY: I wonder if the panelists from the rating agencies might comment generally on how much of an impact they might see developing in the near future here with regards to the real estate market and whether that is going to perhaps have some significant effects on insolvencies or rating stability or instability.

MR. CAVANAGH: Frankly, at S&P, most of the rating downgrades that have occurred in the last 18 months have been related primarily to problem mortgage portfolios. In

general for the industry, results are going to deteriorate. I mean that there are going to be more delinquencies and more foreclosures. We do not see this as an industry-threatening situation at all. There are going to be some losses taken for the industry on average. There are some reasons why the industry has done better long term than banks and S&Ls, and, certainly in the near term has done better than banks and S&Ls. They have been more conservative in the way they have approached the mortgage market. They are the permanent mortgagor after development, after lease up, where, at least, when the mortgage is initiated there has been good coverage of the interest. The property values were more firm at the time the mortgage was placed. Loan to value ratios were typically at the 75% level. It has been done on a more conservative basis. Now certain companies, if you will, did stray from that situation, did become more aggressive, did become more involved in development, did go after some risks more aggressively. Those certain companies are going to be hurt significantly. That is not an industry-wide phenomenon. Things are going to have to get a lot worse economically for it to be a real problem for the industry.

MR. BROSSMAN: I agree with everything that Bill said. The old traditional rules that Bill was articulating were: you don't own more than 75% of value, you don't do any construction loans, you don't buy bare land, you don't get into home mortgages or into commercial real estate with poor tenants on the corners. So if you go into a company that is in trouble with real estate, if they stayed by those rules they will probably recover. The thing about real estate is that the magnitude of the holdings is not as large and if they stayed reasonably close to those rules, their principal is intact and it is primarily a loss of income. Frankly then you ask: well what happened to the poor leases, what is your cash flow? Then you are talking about some of the companies that have strayed from these rules, and there are three or four such companies. But some of the companies that Ralph Nader named are some of the strongest companies in the United States. Some of the stuff that's going on with people buying a database, crunching a few numbers, and publishing things is criminal. It's criminal and irresponsible. Some of those companies, if you know those companies, are some of the strongest companies in the United States. It's just irresponsible. You shouldn't be allowed to do that.

MR. ISADORE JERMYN: The question I have relates to the issue of asset/liability management for traditional products as compared with (say) universal life or annuities. The question is directed primarily to the rating agency people. To what extent do you request a supply of validity results for traditional portfolios or products and to what extent do you receive them?

MR. CAVANAGH: We ask for the information on the total portfolio. We focus a lot more on annuities than traditional whole life. For some companies we do get information. I admit it is not where we are targeting our concerns. To the extent that you have a large well-matured book of traditional whole life insurance, we are not as concerned. If it has survived the last 10 years, it is going to survive many more so we do not frankly devote a lot of rating attention to that business and we do not know how you model it either.

MR. BROSSMAN: The old whole life business which companies have great history on is essentially washing off the books. Although for Mass Mutual, I know, 95% of what

you sell is whole life. But you do get good information and companies know how that business will act. If they took their entire life business, a lot of it is interest sensitive and you have some other stuff in there. So the product has basically changed. The same thing with universal life, the concern there is not so much asset/liability matching, because a lot of the stuff is current money pricing and the durations are much shorter. You are really concerned about defining lapses and whether there really is enough cash flow coming in so that you make money on the business. We find increasingly on the product pricing side, with termination charge pricing, that nobody is pricing products. In the old days you priced a life product to go profitable individually maybe in seven or eight years. Now you have products which are priced to make money from lapses; if you do not get enough lapses, you cannot make money. It is a new day.