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THE ACTUARY'S POTENTIAL FIDUCIARY RESPONSIBILITY WITH RESPECT TO INVESTMENTS

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- How far can an actuary go in giving investment advice before he or she is considered to be an "Investment Advisor?"
- What is the minimum investment advice an actuary must give lest he or she be considered irresponsible?
- Case studies
  - The 1979-1981 interest spike
  - Deliberate mismatch
  - The dishonest investment officer
  - The president overrides the actuary's advice
  - Fund fails to match Standard and Poor's experience

MR. HOWARD H. KAYTON: The topic is the Actuary's Potential Responsibility with Respect to Investments. I am Howard Kayton, moderator of the discussion. The discussion is sponsored by the Investment Section of the SOA. For enrolled actuaries it does qualify as a noncore requirement.

We have as our panelists Gary Simms, who is General Counsel of the Academy; Larry Bader, an FSA who is Vice President in Salomon Brothers Bond Portfolio Analysis Group, who is involved in pension problems; and John Guthrie, a Chartered Financial Analyst (CFA) who is Vice President in the Portfolio Strategy Department at The New England, who has several FSAs reporting directly to him. We hope to have Gary set the background regarding the actuary's responsibility; have Larry give the perspective of the pension actuary on Wall Street; and then have John explain how an investment officer sees his interrelationship with actuaries.

For those of you who attended the Investment Section luncheon, Bill Nemerever, who's a CFA and an FSA working for Fidelity Funds, gave us some insight into how well qualified or unqualified we as actuaries are to be involved in investments. We are now going to take that concept a little further.

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Our first speaker is Gary Simms, who has been General Counsel of the Academy for the past five years. He is the Academy's principal staff person in government relations activities in Washington, D.C. and provides legal advice to the Academy's leadership and committees. Prior to joining the Academy, Gary was Assistant Director of Collective Bargaining Services for the General Contractors Trade Association and prior to that he had service with the Federal Election Commission and the Peace Corps. He is also well qualified to argue many additional issues since he is married to a litigation attorney.

MR. GARY D. SIMMS: Let me start off by saying that actuaries tend to consider lawyers to be arrogant. They don't know what the heck they are talking about. Actually, I told Howard that lawyers tend to think of actuaries as technocrats and he said, "No that's not right: only 15.3% of lawyers think that they are technocrats."

This subject is particularly interesting because it is ground breaking. While actuaries are familiar with number crunching, financial reporting requirements, and rating and pricing issues, their relationship to investments has traditionally been tangential.

However, with the growth of interest-sensitive insurance products, the consideration of the Valuation Actuary concept, and the increasing use of asset matching in pension plans, actuaries have lately become concerned with the asset side of the balance sheet.

We find, however, that progress in ethical considerations on the part of the various societies is lagging behind these developments.

Let's start at the very beginning. Membership in the AAA obligates its members to observe the requirements of the Academy's Guides to Professional Conduct. Those Guides state that:

> The member will bear in mind that the Actuary acts as an expert when giving Actuarial advice and will give such advice only when qualified to do so. [Guide 1(b)]

If we assume that providing investment advice is "actuarial advice" (an assumption to which I will return shortly), then we must next look to Interpretative Opinion 5 for additional guidance. There we find that:

> Whether or not the Actuary is qualified by training and experience to give advice on a particular assignment is a decision which the Actuary must make. [Opinion 5(a)]

The Guides further state that:

> Absent more stringent requirements, an Actuary will be considered qualified to give advice in a specific situation if general experience involving the application of Actuarial studies and training equips the Actuary to understand such situation and to produce (with such professional consultation as may be necessary) solutions, opinions, or recommendations whose likely consequences that Actuary should be able to ascertain.

Thus, the Guides and Opinions essentially tell us that the call is up to the individual as to whether qualifications exist to undertake the assignment.

The Academy also produces qualification standards which offer the actuary and the public guidance as to appropriate experience and educational prerequisites for some particular assignments. To date, these standards are limited in scope to financial reporting assignments and have not yet been extended to cover the wider range of actuarial assignments. Given the now tenuous link between actuarial expertise and investment advice, it is not likely that the Academy Qualifications Committee will soon be promulgating standards in this area.

That means, in brief, that it will be up to the the individual actuary to decide whether he is qualified to give what we are calling investment advice.

Similarly, the Actuarial Standards Board (ASB), which just began full-time operations this past June, has been focusing its attention on what we might call "Core" areas of practice. To date, most standards which the ASB has reviewed have been aimed at issues such as basic pension calculations, considerations necessary in the valuation of health and welfare plans, health rate filings, and similar matters. On the agenda are some broader standards, such as considerations of data quality, disclosure requirements in general, and risk classification matters. As you can see, the emphasis for the near future at least is on strictly actuarial issues, with little time left over for the more esoteric areas of actuarial practice.

Let me go back to the original assumption, namely, that actuaries offering investment advice are offering "Actuarial advice" as that term is used in the Guides.

When the actuary is asked to perform a cash-flow match for a pension plan, is that "Actuarial advice?" Certainly, when the actuary prepares estimates for anticipated disbursements of benefits, that is actuarial. It is also actuarial when he concludes that X number of bonds maturing at Y dates are needed to match the anticipated payments. But I would contend that the actuary leaves the actuarial practice area when he states that the bond portfolio should be composed of Ginnie Maes, General Motors, or New York City issues.

When the actuary stays within the sphere of traditional actuarial advice as above, he enjoys the protection of generally accepted actuarial standards or practices. (Now that applies regardless of whether those standards have been articulated by an ASB or deduced from the literature.) And at the same time, the actuary is obligated to comply with those generally accepted standards. Similarly, when acting within that sphere, the actuary is obligated to comply with the ethical considerations outlined at the outset of these remarks and is subject to discipline for a failure to abide by those qualifications standards or by those standards of practice.

As I mentioned above, at the present time, pure investment advice is not considered to be "actuarial" in nature. This is because there are no articulated standards of practice, and more importantly because investment advice is not now a part of the actuarial curriculum in its broader sense. As time progresses, and as the actuarial profession continues to take an interest in investment matters, and demonstrates this interest by educating and examining on investment-related matters, then we will be able to say that investment advice indeed can be deemed "actuarial" in nature.

But for now, I would argue that investment advice is not inherently Actuarial. When the actuary goes outside of his area of actuarial expertise, he or she is obligated to disclose this to the client or employer. My advice to those of you who wear two hats is to make sure that your employer or client understands fully what hat you are wearing when you open your mouth or put pen to paper.

A related issue to the internal ethical considerations for practice is the potential applicability of regulations of the SEC regarding registration of investment advisors.

At the Federal level, investment advisors are regulated under the Investment Advisors Act of 1940, and about 40 states regulate the activities of advisors under state laws that typically are substantially similar to the Federal Act.

In recent years, the question has arisen regarding the necessity of pension actuaries to register under the Act. A recent staff memorandum (Release Number IA-1092, October 8, 1987) from the SEC seems to indicate that the answer to that question is "yes" far more often that one might anticipate.

Pension consultants typically offer, in addition to administrative services, a variety of advisory services to employee benefit plans and their fiduciaries, based on an analysis of the needs of the plan. These services may include:

> Information on funding media available to provide benefits, general recommendations regarding what proportion of plan assets should be invested in various investment media, or advice on specific securities or other investments.

It is in this area of investment advice that the actuary may most frequently encounter the need to register under the 1940 Act.

Section 202(a)(11) of the Advisors Act defines the term "Investment Advisor" to mean:

> Any person who, for compensation, engages in the business of advising others, either directly or through publications or writings, as to the value of securities or as to the advisability of investing in, purchasing, or selling securities, or who, for compensation and as part of a regular business, issues or promulgates analyses or reports concerning securities.

Whether the pension actuary in general, or the Enrolled actuary in particular, falls within the definition of investment advisor and therefore must register depends on all of the facts and circumstances of a particular case.

The SEC Staff Memorandum that I referred to before tends to indicate that an awful lot of Enrolled Actuaries indeed fall within this definition.

The SEC Staff has stated that:

> A person who provides advice, or issues or promulgates reports or analyses, which concern securities, but which do not relate to specific securities, generally is an Investment Advisor.

> The staff has interpreted the definition of Investment Advisor to include persons who advise clients concerning the relative advantages and disadvantages of investing in securities in general as compared to other kinds of investments.
>
> Similarly, a person who advises employee benefit plans on funding plan benefits by investing in or selling securities, as opposed to, for example, insurance products, real estate, or other funding media, would be "advising" others within the meaning of Section 202(a)(11).

The definition of investment advisor also requires the advisor to engage in the business of advising others for compensation.

This may be a loophole that some pension actuaries can utilize. But that loophole is very narrowly drawn.

According to the staff:

> The determination to be made is whether the degree of the person's advisory activities constitutes being "in the business" of an Investment Advisor, the giving of advice need not constitute the principal business activity or any particular portion of the business activity of a person in order for the person to be an Investment Advisor, the giving of advice need only be done on such a basis that it constitutes a business activity occurring with some regularity . . . the frequency of the activity is a factor, but is not determinative.

The only loophole for the pension actuary is if he or she engages in investment advice in "rare, isolated and non-periodic instances." The staff of the SEC further notes that activities which require the individual to register include:

> A recommendation, analysis or report about specific securities or specific categories of securities, (e.g., Industrial Development Bonds, Mutual Funds, or Medical Technology Stocks).
>
> It includes a recommendation that a client allocate certain percentages or his assets in life insurance, high yielding bonds, and mutual funds or particular types of mutual funds such as growth stock funds or money market funds.
>
> However, specific investment advice does not include advice limited to a general recommendation to allocate assets in securities, life insurance, and tangible assets.

In short, one can suggest without need for registration that assets be allocated among several groups. But one had best not suggest priorities among the allocations unless one is registered under the 1940 Act.

Whether pension actuaries are deemed to be investment advisors when performing their tasks under ERISA is a matter of some dispute. I have raised the issue informally with the Joint Board for the Enrollment of Actuaries, and have informed them because they didn't know about this recent SEC Staff Memorandum. One part of the government is not talking to the other, as not infrequently happens, and I have been informed by the Joint Board people that they see no

overlap between registration and enrollment, and that the two statutes are independent of each other, and they are not going to worry about it.

I asked them the question, "What will happen if we have an Enrolled Actuary who is found not to have registered, or is found by the SEC to be required to register and he has not registered? What would the Joint Board then do? Would they discipline an individual who should have registered?" And the answer to that question was, "We don't know; we'll see when that case comes up." Whether failure to register would be grounds for disenrollment by the Joint Board is an issue which has yet to be faced by the Joint Board.

Let us now turn to the questions of legal liability of the actuary when offering investment advice. As professionals, actuaries are held to a standard of practice which is normally expected among individuals with a high degree of knowledge and skill level. As such, if the actuary is sued for negligence or malfeasance, the standard which the court will apply to measure that malfeasance is that of a professional with special training and skill operating under similar circumstances.

The key matter therefore in the investment context is fairly obvious: If the actuary is acting as a professional actuary when giving financial advice, he will be held to a higher standard of care than that to which a nonprofessional would be held in similar circumstances. Essentially, a jury would have to decide whether an actuary giving investment advice has special skill and knowledge in the investment advice area. In such a struggle, a plaintiff would likely attempt to paint the actuary as highly qualified, and certainly as an individual with special knowledge and skill in the investment advice area.

The actuary is then placed in a difficult position. He can urge that he lacks the special skills associated with investment advisors, and that therefore he should not be held to the highest standard of care. But that, of course, opens up the actuary to disdain by a jury, who might logically question why the Actuary, admittedly not a professional investment advisor, had the nerve to offer such advice in the first instance.

My advice: If you are not a registered investment advisor, and if you cannot point to special knowledge and experience which provide a basis to impute professional investment advisor status, you should certainly make sure to disclose this fact to the client or employer, at a minimum. You should certainly make clear that the investment advice you are offering is to be distinguished from your professional actuarial judgement. It's obviously not always an easy task to apply that to the facts and circumstances of any situation you face. But general rules are general rules.

As I stated before, as investment advice becomes more of an everyday actuarial matter, the distinction between the actuarial function and the investment function will probably fade away, and the practitioner will not have to be as concerned about his choice of head coverings ("which hat am I wearing?").

Whether one works as a consultant or as an employee of the organization receiving investment advice is largely immaterial from a liability perspective. However, if acting as a consultant, the inference may be fairly drawn that the individual is holding himself out to the public as a specialist, and the advice provided is going to be subject to the closest scrutiny. Additionally, the employee of the organization (where he is doing in-house investment advice) may

have somewhat reduced individual liability, just because he cannot be as easily pointed to as the culprit in an adverse situation.

Time does not permit a full analysis of all of the potential implications of these problems, but we will have a couple of the individual case studies a little later, in which I hope to be able to explain some of the relationships between these general rules and some real-world situations.

MR. KAYTON: Having set the legal stage, giving us this framework, we are now ready for our next speaker. Larry Bader is a frequent speaker and writer on Pension topics. He is currently Vice President at Salomon Brothers in the Bond Portfolio Analysis Group. Prior to this he was Managing Director at Mercer-Meidinger where he was consultant to corporate pension plans. Larry is a member of the Board of the Academy of Actuaries and is the only actuarial member of the AICPA Committee on Accounting for Pension Plans and Pension Costs.

MR. LAWRENCE N. BADER: When Howard asked me to speak on this panel, I told him that I didn't really know much or anything about fiduciary responsibility in my area, but I'd be happy to talk about what it is I do, and especially having the benefit of the counsel to tell me what of that I should stop doing to stay out of jail. I was quite concerned listening to your talk, Gary, and I wonder if I should be waiving my right to remain silent so readily.

At any rate, I work in the Research Department at Salomon Brothers, which is quite a large enterprise there, comprising about 500 souls. I guess the average employee in the Research Department there is 19 years old with a Ph.D. in nuclear physics.

My work tends to be a little less esoteric. I'd say about 25% of it is outside of the Research Department. It would be just acting as a resource. For example, if someone in the Mergers and Acquisitions Group wants some advice on a possible target company, on the status of their pension plan, or on their retiree medical insurance, I would help with that. Or a company planning a takeover defense might have a concern about their pension surplus being used against them, or a company planning a leveraging or restructuring using an Employee Stock Ownership Plan (ESOP) and that sort of thing: standard actuarial consulting that you might do with a regular actuarial consultant firm.

The work I do in these areas tends to get wrapped up in much larger presentations and reports, so I don't think there are any particular fiduciary aspects to my contribution (which is generally limited to advising or planning or educating). I guess at the most that maybe there are some concerns about requirements for actuarial communications which I may fall a little bit short of (but not by material amounts or material items), because basically this is not so much my work product as something that I contribute to as an overall Salomon product.

Another quarter or so of my time is spent on hedging transactions. These would be situations in which a pension plan sponsor has decided to do a transaction such as a plan termination surplus recapture or a settlement or a spin off. He could secure a certain dollar result today, and wants, over the six weeks that it might take to consummate an annuity purchase, to ensure that his result at the conclusion of that period is going to be essentially what it would be today. This means that you have to protect against not only an asset decline but an increase in the annuity purchase rates at which the purchase would take

place. Now let's simplify the case: assume that all assets are held in cash. How would you go about hedging that?

Well, there are at least three basic approaches that we use. One would be to deal in the cash market to require a portfolio of bonds whose interest rate sensitivity matches that of the liabilities, so that if interest rates declined, and annuity purchase rates went up, the bond portfolio would appreciate at the same rate.

Another approach would be to use the futures market, which would be to take a leveraged position in bonds, and that would have substantially the same characteristics.

A third approach would be to use the options market -- to buy options on bonds or bond futures; in this way you would have a hedge position which would appreciate if interest rates fell. But if interest rates rose, you would not lose any money except for the option premium, so this gives you an asymmetrical reward pattern and might be attractive to a plan sponsor who has a definite view about which way interest rates are heading.

Now each of these three methods has certain costs and certain risks. Some of the risks are common to all of them; some are peculiar to one or more of the methods.

For example this yield curve risk. The hedging instrument might not have exactly the same yield curve exposure as the liabilities do.

There is credit risk: if you buy something other than Treasury bonds, there is the possibility that the bonds will default or lose value.

If you stick to Treasury bonds, then there is spread risk. The possibility that the lower quality that the insurance companies price off, the interest rates on that will move differently from the interest rates on Treasury bonds, so that your portfolio will move at one rate while the value of the liabilities will move at a different rate.

Finally, of course, there are just the vagaries of the insurance annuity purchase market as companies enter or leave the market or become more aggressive or more conservative.

What role can the actuary play in all this, that is using our traditional skills as opposed to just becoming able to operate at a hedge desk?

The primary role is by educating people as to how annuity pricing works. Do insurance companies, for example, price off Treasury bonds? The answer to us is obviously, "No," but that's not so obvious to investment bankers, who notice that the rates seem to work out about where Treasury bond rates are, after expenses and other factors are adjusted for. There are yield curve questions: how important is the shape of the liabilities? Is the insurance company interested in matching the exact pay-out of the dedicated fund or an immunized fund or none of the above? How about on extreme upward interest rate movements? Will insurance companies' pricing follow the market all the way up, or will they have to hold back because their reserve requirements are based on rates that are much "stickier" than the market and therefore they would run into surplus strain problems if they tried to follow the market interest rates all the way up?

Actuaries can also be helpful in better defining the objectives of a hedge. If the object of the transaction is just to recover a certain amount of cash from a terminating fund, then it's clear that you want to avoid having any kind of actuarial gains and loses. On the other hand, if the object is to achieve a certain earnings gain from a pension settlement under Financial Accounting Standard (FAS) 88, then you have a somewhat different task, because the earnings gain is the accumulated gains in the plan multiplied by the ratio of liabilities settled to total liabilities. So it is not enough simply to preserve the gains and losses; you must also watch for the interplay of that ratio with the gains and losses, and that requires a somewhat different hedge. Finally the actuary can just act as a translator between actuaries in pension practice and brokers. A very simple example, which causes more errors than you can imagine, is just in the way interest rates are referred to. Actuaries refer to annual interest rates and bond people refer to semi-annual bond equivalent rates. So their 10% is your 10.25%. You'd be amazed at how much trouble that causes!

In the hedging area, again I would say there's probably not much of a fiduciary issue, and my work tends to get wrapped up in that of other people. I think simply following the relevant provisions of the Actuarial Code of Conduct and probably the Ten Commandments is the way you need to stay out of trouble there.

The final part of my work, probably half of it, is in what I call strategic asset allocation. This is considering asset allocations not from a security selection viewpoint, or to try to achieve short-term objectives, but seeing how a pension fund should be deployed for the long haul. And the actuarial contribution in this area is to enable a plan sponsor to evaluate a strategy not by looking at dollars of assets gained or lost or rates of return, but by looking at the financial impact on the plan sponsor: through expenses, impact on P&L, on the balance sheet, cash flow. Basically it's the same sort of illumination that is shed by forecasts that actuarial consulting firms do. Obviously the difference is that we are much more ambitious on the asset side and less ambitious in terms of projecting the liabilities.

Here the work product that we come up with is distinctly actuarial and I do take responsibility for seeing that it meets the standards that the profession is expected to meet. I should add that all Salomon Brothers reports come with a very strong disclaimer that the investment advice that they are giving is not to be construed as investment advice, and so on, and that we're not managing money.

What are the differences between working on Wall Street and working in actuarial consulting? I see a few important ones; the most obvious is the method of compensation.

We do not manage money; we do not collect consulting fees in the asset allocation area. We get paid only for doing transactions as broker, and this means a few things. It means that sometimes we do work and don't get paid for it at all. (Not too often, hopefully.) Sometimes the payoffs are very much deferred, and often the payoffs are completely disproportional to the work done; disproportional in either direction. This can create some obvious conflicts of interests since, as I say, we get paid only for doing transactions. That means if we give a lot of advice that's valuable and the plan sponsor does not wind up doing any transaction, we don't get paid. They can pay us by doing some other transaction that we would ordinarily be doing. The payoff doesn't have to be direct.

But obviously this means that there may be a bias in our recommendations that we would tend to be transaction oriented.

Now the defense against that, I guess, is, first of all, our clients are completely aware of exactly how we get paid. It's very clear to them what our interest is. And secondly we tend to deal with a rather small number of very large pension funds, which talk to one another and talk to the public. So it's really not much in our interest to do a transaction which would make a lot of money for us but would ultimately leave the client dissatisfied and complaining about our services. We are looking for long-term relationships and good relationships with the community as a whole. And a transaction which is not in the interest of our clients is not going to earn many "high-fives" back in the office.

One last thing I want to mention is accreditation, which Gary spoke of somewhat. We are encouraged to become Registered Representatives. That's not the SEC registration, that's the National Association of Securities Dealers (NASD) test. It's an exam which I've been given to understand is probably not particularly difficult for someone who has been through what actuaries have been through, but it is not particularly rewarding either. I won't compare that with what we've been through as actuaries. I haven't, in fact, gone through this procedure; and the only practical effect has been that when I write a piece of research that is published by Salomon Brothers, I have to acquire a co-author who is a Registered Re.·esentative so that this investment advice which isn't investment advice can have the appropriate imprimatur.

MR. KAYTON: Our final speaker is John Guthrie, a CFA who is Vice President in the New England's Portfolio Strategy Department. John began his career as a stockbroker and as a common stock analyst before joining what was then New England Mutual in 1970. He worked in private placements until 1983, when he was selected to form the Portfolio Strategy Department, which is responsible for managing the portfolios that support the insurance and pension products of the New England and its affiliates. There's a total of about a $10 billion portfolio. In that role he has reporting to him, among others, three FSAs and one student. John is also President of the subsidiary that provides asset allocation services to pension funds. John, please give us your perspective on the role of actuaries and their responsibilities when giving investment advice.

MR. JOHN F. GUTHRIE, JR.: I got a call from Howard a couple of months ago. He said he wanted an investment expert to serve on his panel, and I thought of my favorite definition of an "expert." Well, "X" is an unknown quantity, and a "spurt" is a drip under pressure. So I told Howard I felt eminently qualified to serve as the investment expert.

But I am glad to be here, because I think it's important that the people in the investment area and in the actuarial areas begin to work more closely together. I keep comparing it to the song from *Oklahoma*! that says, "The farmers and the cowboys must be friends." And I think we have not been friends for many years; we haven't even been acquaintances for many years. And I think if the industry is going to be successful in the future, we are going to have to work more closely together. The cowboys and the farmers used to fight the Indians, and now the actuaries and the investment people are fighting the marketing departments.

We have had a couple of major changes in the industry in the last few years that have led to that. The first is that the industry has become much more

competitive than it used to be. If you go back ten years ago, people had no idea what they were earning on their insurance policy and really didn't care to know what they were earning. Today the clients, and equally importantly, the agents, would walk away from their mother for ten basis points; and that's just a completely new experience for the people in the insurance business.

The second thing that's happening is that the products are becoming much more investment products. I blame that partly on the spike in interest rates in the late 1970s and the early 1980s, but also partly on universal life in which people started publishing interest rates and selling their product based on the interest rates that they published. I think you people understand that the interest rate that is published has very little bearing on the net cost or the 20-year net surrender value; but in fact people are out there selling the interest rate, and so that's our competition.

We are also finding that as we look at how we can make our products more competitive, we try to take a sharp pencil to the expenses or to our mortality or underwriting assumptions that can save us a few pennies. But then just a slight change in the investment assumption just overwhelms anything that we're doing in any of the other areas.

I've made the comment in the past that, where we used to sell insurance products which (by the way) we'll do a little bit of investing for, we now sell investment products which (by the way) have a little bit of insurance attached to them. And that's what has changed the marketplace for both the investment people and the actuaries. And while that's maybe overstating the case a little bit, I think it's still generally a correct statement.

If you were to go back eight or ten years ago you would find that the people in the investment department were investing to back insurance products, and they had not a clue what those products were. They didn't understand the characteristics of the products; they didn't understand the options that were embedded in those products; and as we look back on it I think that most of the actuaries didn't understand that either.

But today the investment function is so crucial to what's happening that both the investment and the actuarial people had better be closely involved in what each one is doing.

As you get involved in the investment function, there are a couple of do's and don'ts that you ought to keep in mind.

The first is to try to remember your limitations in your knowledge in the investment area. The investment markets are very complex and until you have some specific experience in those areas, you'd better be careful about giving advice. Just for example you might look at your product and decide that you could use some commercial mortgages backing the product. But there's a big difference between saying, "I want some commercial mortgages," and on the other hand actually going out and deciding which cities you want to invest in, which property types you want to invest in, which builders really know how to build a building and then once it's built, know how to find tenants to fill it up. There's a big gap there and that's where the actuary wants to be involved in setting investment policy in strategy but not implementing it.

I said that there are some limits on your knowledge; there also are some real limits on the investment department's knowledge. The people in the investment area still don't understand your products. They don't understand the difference between mortality and morbidity. They don't know the difference between select and ultimate underwriting. They think asset share is the percent of their portfolio that they've got in junk bonds. They really don't understand a lot of your lingo and your language. On the other hand, it's possible for an Investment person to go through an entire career not understanding those factors (and I'm well on the way to doing that myself). But what they do have to understand is, for example, what are the crediting mechanisms in the product, and can the client surrender the policy, and are there some surrender charges, and are those surrender charges high enough to deter a client who wants to surrender and, more importantly, are they high enough to deter an agent who wants to generate a new commission?

And the investment people also have to be made to understand some of the nuances of your product; for example, in our participating ordinary life policy or pension policies, we can pretty much pass along the investment experience to the clients through the crediting mechanism or the dividend scale; and that would seem to be an open door to just take on as much credit risk as you want in order to provide a high up-front yield because then you can pass on any credit losses later. But I think in reality, if we were to have significant credit losses, the marketplace would not allow us to cut the rate to our clients. If we did, we would lose all of our clients and probably spend the rest of our careers fighting lawsuits. So the investment people have to understand not only the technical parts of the product, but also the nuances of how the product is sold and how it's bought and what it is the client is looking for when he buys the product.

I've said that you shouldn't be trying to dictate the investment strategy. But it is important for you to understand what the investment strategy is, because the investment strategy is going to determine how well your product sells, how profitable the product is in the long run. So you've got to understand and sign off on the investment strategy. The question then is, "How do I sign off on, and feel comfortable with, the investment strategy, given the limited amount of knowledge on both sides of the house?"

There's not an easy answer to that, but I think the two keys are education and communication. The first step is to get yourself as educated as possible about what's happening in the investment side, and talk to the people in the investment department and maybe have them put on some seminars for you. See if you can attend some of their staff meetings, departmental meetings and begin to learn what's happening on the investment side and then do the same thing for them.

Run some seminars for them and teach them about your products and what it is you are doing. We have actually had one of the actuaries come in and give us a course in actuarial science -- a brief course; but he's gone through, for example, how to construct a mortality table, and tried to give us a feel for what you people are doing and what's important on your side of the house.

At the same time I will remind you of the phrase, "A little learning is a dangerous thing." One of our investment officers was getting some private tutoring in actuarial science and he told our Vice Chairman, John Fibiger, that he was learning to be an actuary but quickly admitted that he probably knew just

enough to be dangerous and John told him no, he probably wasn't even dangerous yet.

Let me tell you a little bit about how New England Life has tried to address these problems. We've created (Howard was explaining to you just briefly) the Portfolio Strategy Department. We have eight people in the department; four of them are actuaries, three FSAs and one student; and the other four are investment people. When we first created this department, our Chief Investment Officer called us his experiment in genetic engineering, and called our department his beef-a-loos as he tried to bring the two groups together. I think it was unique at the time we were doing it, although I think today there are a lot more people, and most companies have much better cooperation and coordination between the two groups.

The main responsibility of our department is managing the portfolios that back our insurance and pension products that are sold out of the general account. Since we have some background in both, and we have both pension and ordinary actuaries, and since we've got some experience in product and some experience on the investment side, we feel we've got the ability and the expertise to develop the optimal investment strategy for each of our products.

But optimal does not always mean the one that provides the highest rate. What we are trying to do is balance the demands of the people in the marketing department who are trying to get (naturally) the highest rate that they can, and the needs of the actuaries who are trying to do the best they can to protect the company. So we are trying to keep both sets of people mad at us, and if we feel that anyone tells us we are doing a good job then we start to get nervous that we've obviously missed something. But it's kind of an uncomfortable position to be in, being in the middle between the two groups; but we feel that it's necessary that somebody be there and that we've made a real contribution to the company in being there.

Since we have the knowledge about the investment products, we have also gotten closely involved in new product design and pricing. We find that if we can be involved at the beginning when we're designing the product, and we can get some protection in there in the initial product design (which might be surrender charges or other things like that), then we can be much more aggressive in the investment strategy. So the investment strategy starts really with the initial product design, and so we really commit a lot of our time and effort to product design, and then once the product is designed, of course, to providing the investment strategy that gives us the best return that we can get.

We also get involved in peripheral areas, which might be providing quantitative support to the other investment departments or tax planning or marketing or kind of almost anything that happens to come along.

We do try to practice what I preached to you a few minutes ago: the two keys of education and communication. We are constantly trying to educate each side about what is happening on the other side, and communicate to them what's happening in either the investment marketplace or the product marketplace. This is so that we are able to have each side responding to what we need on the other side of the house. But I think that if we are going to be successful as we go forward, what we we are going to have to do is first have the people in the investment department recognize that it really does take an above-average level of intelligence to get through the FSA program and there are some pretty

bright people over there that we ought to be working with. And then if we can get the actuaries to admit that it also takes some pretty bright people to get through the CFA designation and maybe the investment people have something to bring to the session and we can get these two great intellects working together, then I think we can begin to combat the cretins over in marketing who are really causing all the problems.

MR. KAYTON: I think both of our professions have come quite a long way. When I first got into the profession many years ago, I think the actuaries didn't even know what floor the investment people were on. And even if they did manage to find that, they didn't have a common language, so there was no problem.

Now at this point, we're going to turn to our case studies. There are four case studies, and I've asked each of our panelists to start the discussion on each one of them. Our first case study is labeled, "The Case of the Sale of the Dedicated Portfolio," and I'd like to ask Larry to discuss that one.

MR. BADER: "What is the investment's actuary's responsibility in assisting in the sale of a dedicated portfolio to a pension fund in order to smooth expense volatility?"

This is something that I have been involved with a number of times, and it does create some very interesting sorts of conflicts. Assume that the plan sponsor is considering as the alternative some investments in the stock market which he currently holds, and is considering this shift into a dedicated portfolio. This is something we've seen a lot of in the wake of FASB 87 and October 19. A number of interesting issues arise.

There's the plan sponsor's own conflict. We generally assumed that over the long term equities are the asset of choice for a pension fund; that they deliver the highest expected returns; that they have the best fit to the real promises, that we think of pension funds as making over the long term. So the sponsor is caught in a conflict between his desire to smooth his expense over the short-term, but by doing so to accept somewhat higher long-term costs by sacrificing what is likely to be the best performing asset.

The Plan participants also have certain interests in this. I've heard people argue that the plan participants should only be interested in the long-term return of the pension fund; that to seek anything else is a violation of fiduciary responsibility. But I think that a dedicated fund which protects the ability of the pension fund to pay its benefits is also protective of the participants' benefit security in the short term, and so I think an argument can be made that there is also a trade-off for plan participants.

One aspect that I found interesting is that often when I get involved, I see that there are things in the actuarial basis that could be done to smooth volatility more effectively. For example, perhaps the bonds that are currently held in the portfolio are being valued on a smooth basis (five-year average market value) rather than current market value. That does not minimize expense volatility under FASB 87 where you have liabilities which are sensitive to market interest rates. You'd be better off having assets which are measured on a basis which is equally sensitive to market interest rates; otherwise you are not using the ability of bonds to track liabilities. So there have been situations in which a sale of a dedicated portfolio is at issue, but I can see that there are other

methods, simple actuarial methods, which don't require any change in investment strategy but which might achieve the same thing.

Now, this can put me into a conflict with our sales people, and also in conflict on occasion with the plan's Actuary who doesn't seem to be serving the client's interest in this case. Obviously I'll try to approach that very carefully. I don't want to get in that sort of a conflict for personal or professional reasons and for business reasons as well because plan actuaries do seem to carry a lot of weight. It has been interesting to be in meetings where we'll propose some change of some sort in the way the pension fund is administered, and half the plan sponsors say to us, "Oh, our actuary would never let us do that." I remember when I was a consulting actuary, I thought that my clients never listened to me -- so it's interesting to see it from the other side. At any rate, I don't have answers on this case study but I think there are a lot of interesting questions that arise and I'll be interested, when we conclude, in hearing some of your thoughts on those.

MR. KAYTON: Our next case is titled, "The Deliberate Mismatch," and here the question is, "What is the actuary's responsibility if he or she has a deliberate mismatch in portfolio, but interest rates move opposite to his or her expectations?" John Guthrie is going to discuss that one.

MR. GUTHRIE: I thought that I didn't have to spend too much time on this. I thought the answer was very obvious. If you have a mismatch and the interest rates move against you, I think what you've got to do is immediately march down to the Chairman of the Board's office. You don't stop with Senior Vice Presidents or Presidents or Vice Chairmen. You go right to the Chairman and you look him right in the eye and you say, "Remember that mismatch that you approved?" And I say that, half kiddingly, but also half seriously, that you should not ever, ever have a mismatch unless everybody in the company has supported that decision. I think there are only two reasons that you would want to have a mismatch. One is that you think you can forecast the direction of interest rates and you are going to make a bet because you can make a significant profit for the company. And if you do go into it thinking that you can forecast the direction of interest rates, you are wrong.

The second reason that you would do it is that you want to sell more product (and I think that is where the real pressure comes from), and if you create a mismatch in order to sell more product, the marketing people are going to be cashing large bonus checks whether you are right or wrong, because they will be cashing in the first year before it moves against you. And in subsequent years if it does not work out then you're going to be the one who has to suffer for it, and they'll be off with a new actuary in new mismatches and cashing new checks. Now, in order to sell products in today's market, you have to be taking some risk. Either you are taking some credit risks, or you are taking some interest rate mismatch risks, and so I am not going to sit here and say that none of us have mismatch risks and none of us should have.

I think the important thing is understanding how much of a mismatch you do have, and what are the boundaries within which you are willing to live. As we get into some discussion, I'd be interested in your thoughts on that because that's something we've really struggled with: how do you measure how much of a mismatch you've got, and you can use the Regulation 126 type of interest rate paths.

That doesn't make me feel altogether comfortable. To say that I'm well matched in all except one interest rate case and that's the one that ends up coming back to hit me, hasn't done me much good. But the question I think we have to get at is, "If there is a mismatch and if it moves in the wrong direction for us, how much can we lose, how much of a mismatch and how much of a loss do we have?" But in order to sell products, as I say, you have to be taking some risk. But I think it's crucially important that everybody in the company, the marketing, the actuarial, the investment people right up through the Chairman of the Board, understand what it is you are doing, and it's a group decision to do it. Because once you start with mismatches, especially of any significant amount, you really are beginning to bet the company on it. It's not just a question of whether we make a profit this year or next, but I tell you, if it's a significant mismatch, then that's too significant a decision and you ought to make sure that everybody's on board on that one.

FROM THE FLOOR: Howard, can I just add one comment on that? I'd like to add that while I concur that such a decision on a deliberate mismatch needs to be one that everyone signs off on, you also have to protect your own liability. I would suggest that in any case where an issue so potentially serious as a deliberate mismatch is under consideration, for your own records, for your own protection, it's absolutely necessary for you to lay out in an actuarial memorandum, what the potential impacts of this mismatch are, so that you are clearly on record on paper, with a copy at home or a copy in your safe deposit box. For that eventuality you need to protect your own liability. You really need steps to protect yourself in that situation because that is one of the few areas in which the actuarial department as well as the other decision makers in the insurance industry are really out there on a personal potential liability situation. The decision in that case had already been made not to protect the assets.

MR. KAYTON: I think the only modification I would make to John's initial advice would be on your way up to the Chairman's office, stop off in the legal department and pick up the general counsel.

Our third case that we want to discuss is "The Dishonest Investment Officer." Here they are saying, "What is the investment actuary's responsibility in situations where his or her superior, who is an investment person by training, has been 'insider trading' in anticipation of the actuary's recommendations? How would it be different if the investment persons are his or her subordinates?" I got Gary to comment on that one.

MR. SIMMS: What is the actuary's responsibility when his superior at the company engages in insider trading based on material that he expects to find in the actuary's report?

We have in this case a whistle-blower issue of significant concern. The Academy's Guides to Professional Conduct are of some assistance in defining the duty of the actuary in such cases.

The first issue to determine in this instance is, for whom am I working? Who is my client?

Typically there is a fairly easy way of saying who the user of your services is. Whose name appears on the paycheck that you receive? This is a very good indication in most cases. But in a corporate setting, as this seems to be, we have a situation in which the actuary has prepared a report for some amorphous

group of superiors and one of those people in the chain has used that report improperly and probably illegally.

Now in that situation, when we are dealing with a corporate actuary, his responsibility, his client, his main focus is the corporation itself and not the immediate supervisor, as difficult as that may be in real-world context. Corporations are "imaginary people," but they are represented here on earth by the Board of Directors or a CEO who has been appointed by the Board to oversee the operations of the corporation.

The Academy's Ethical Guides tell us that when an actuary is aware that third parties will rely on his report, the actuary must take reasonable steps to make sure that the actuarial aspects of the report are fairly reported to that third party, and the actuary is identified as the source of the actuarial information in the report, so as to be able to respond to questions.

But even though that's the closest thing to this situation that we have in the Guides, that doesn't really cover the situation here because there's no question that the report itself is going to go on through the chain; there's nothing wrong with that. Here we have a situation in which the person has taken the report, is not mangling it or changing it improperly, but is just taking that information.

So we have, in effect, clearly a straightforward whistle-blowing situation. So far, the Academy's Ethical Guides (or the Guides of any other part of the profession) don't cover this explicitly.

The current Guides tell us that the actuary must take care to uphold the dignity of the profession but fall far short of imposing any ethical mandate to blow the whistle on inside traders.

In other words, the current ethical requirements do not mandate any particular action, whether the inside trader is a superior or a subordinate.

There are some other considerations, however, and that is protecting your own assets. I would recommend in a situation like this that the actuary tell someone in the company (other than the boss who is misusing the insider information), probably the Counsel's office, that he's got these suspicions that his boss is insider trading. The Counsel's office is a good place to proceed if you know where they are. On the other hand, if that's not available, I would have no hesitation going into the CEO's office, or the Chairman of the Board, and saying that I've got these suspicions and here are the reasons for my suspicions. The reason that I say that it is important to do so is to protect yourself in this set of circumstances.

Insider training is an allegation which casts a very wide net in terms of who can be implicated, to the extent that you have written a report which someone has then used as a basis for insider trading, and you knew about this, but you didn't tell anybody else about it. You're going to be placing yourself in a very difficult legal position when the government says, "Well, we're going after insider traders," and they are going to get your boss and they are going to bring you into it too. So you need to protect yourself early in that situation.

The only other part of this question is what do you do if it's a subordinate, and the answer to that is, you fire that person. You do not countenance insider trading in any setting.

MR. KAYTON: I think that we have disposed of the "Dishonest Investment Officer." The next case is "The Case of the Presidential Override," and here we are talking of the situation in which the President overrides the actuary's recommendations regarding the types of investments or durations or the safety (the credit risks in the case), and as a result the company loses significant capital. John, do you want to lead off on that?

MR. GUTHRIE: Okay, fine. Those of you who heard Bill Nemerever talking about the difference between the actuary who will study something out to 16 decimal places, and the investment people who go a little bit more on "gut feel," will recognize that the actuary maybe expects to be right on every single decision he has thoroughly analyzed, and the investment person is shooting at 51%.

So to see something about the case when the President has made a mistake doesn't particularly upset me. I think the first thing I would do is march down to that safe deposit box that Gary told me about and make sure my memos are there showing what it was that I recommended. But I think you realize that, as we said earlier, in running the business you have to take some risks and you have to take some bets on asset mix or the amount of junk bonds you are buying or the mismatch that you are going to enter into. The President is the person who has the ultimate responsibility for that, and as such he has to make the ultimate decision. And if he's wrong, you shouldn't gloat too much because next week it will be your turn anyway. But if he is really, seriously wrong, then the Board of Directors is going to be making some changes and you can show your memos to the new President of the company. But really, the President is the one who has the ultimate responsibility and therefore the ultimate authority to make these decisions. Our position is to give him the best information we can on which to make his decisions, and to give him our best recommendation as to what he should do. But then once the decision is made, you've really got to think of it as a joint decision and everybody has to support it, and at least that's the type of atmosphere that we try to build and create at our firm.

MR. KAYTON: Gary?

MR. SIMMS: I think it's important in this set of circumstances to reiterate that as long as you as an individual can demonstrate that you gave the right advice when that advice was requested, and it was rejected, then your personal liability is minimal.

But the question that I would spin off from this one is, let's pose a situation in which you've given your advice to the President and he's rejected it and you think that the decision he made spells disaster. What do you do then? Do you have an affirmative obligation then to go to your Board of Directors and say, "The President of the company, I love him, I mean he hired me, but he's making a really dangerous mistake." What do we do then? And whether you have an affirmative obligation to do that, as an ethical requirement, is, I think, a very significant question.

The first step of that analysis is, does the Board know about your recommendations? Do they ordinarily get your back-up actuarial communications upon which these decisions are made? To the extent that they don't have your information, you don't have a real ethical obligation to go forward and talk to them about that if in the normal course of events the information stops at the President's desk, and you don't have an ethical mandate to proceed to tell them.

On the other hand, suppose the people on the Board are normally in the habit of receiving the information, and the President (to cover his own decision) has sort of massaged the data that you presented him. Then, yes, you have an ethical responsibility to go to them and say, "This is not the recommendation I made; I presented a different recommendation. You should know that as a result of this, from a strictly actuarial perspective, we can't sign off on the recommendation that the President is making at this time." You have to really take that bull by the horns and be prepared to go and defend your own recommendation in that set of circumstances.

But I must note that my own perception here may not be one which is shared by the Academy's Committee on Guides to Professional Conduct.

Now, this also is related to the subject I had just mentioned, that of whistle blowing. What's your ethical responsibility for whistle blowing? Either within the company or outside of the company? The prior example of insider trading was a question of whistle blowing outside. What is raised here is more clearly an inside issue.

The Academy's Committee on Guides to Professional Conduct, which is the body within the Academy which produces the ethical standards, has recently adopted the subject of whistle blowing as an area for thorough investigation and possibly for creation of some new standards. It's not easy right now to say exactly where this committee is going to come out, because they basically just started on this discussion. But they are clearly looking for help and advice and comments from anyone, actuaries, or non-actuaries. We'll be doing a lot of research to see what other professions do in this area.

Whistle blowing is a particularly difficult subject because it has immediate impact on employment. If you blow the whistle, you might be fired the same day for blowing the whistle. If you fail to blow the whistle, you might be fired a couple of months down the line, when what you should have blown the whistle on comes to the attention of people with more authority. So the Academy's committee recognizes the serious nature of this and is looking for input. The committee would certainly appreciate an expression of your thoughts on this issue.

But for now the only thing that I could advise in this kind of set of circumstances is to undertake what I like to refer to as the "Gut Test." It is a test which is easy to explain but sometimes difficult to apply. How does it feel in your gut if you remain quiet? How does it feel in your gut if you decide to speak out? Could you look at yourself in the mirror the next morning, if you don't blow the whistle, or if you do blow the whistle?

You have to do basically what you are comfortable with from an ethical perspective, in the absence of articulated ethical commands. So the gut check works frequently, at least in telephone calls that I receive from people who have ethical questions when the current standards are ambiguous. It seems to work, and it's one I recommend using in this set of circumstances.

MR. KAYTON: Okay, with that we are now ready to take questions from the floor.

MR. STEPHEN L. BROWN: I happen to be President of my company, so I find this last discussion particularly interesting. And I guess I'm also an actuary

and in fact I was once a chief investment officer, so I think I have developed different perspectives on all these questions as I've gone along in my career.

But all this talk about whistle blowing does bother me a little bit, because it seems to me, from my perspective, what actually happens in real life is that you get a lot of different advice, not only from actuaries or investment people, but also from a lot of other people; and it's very rare that you get the same advice from everybody. So based upon the case studies that we've looked at, it would appear that in almost every decision, we are going to have a bunch of people who (according to the panel) are going to put their little records of their advice in their safe deposit boxes to protect themselves. And it might even turn out once in a while that the President turns out to be right and the actuary turns out to be wrong, in which case I would assume that the panel suggests that all those people go back and burn up the records of their advice to the President. It just seems to me that the panel's advice in this area is a little bit unrealistic in the sense that people are giving advice on things that in most cases are not determinable in any precise fashion, and I thought that Mr. Guthrie gave a very good answer in that regard. That particularly with regard to investment matters, we are not looking at precision and certainty in actuarial formulas here. We are looking at uncertainty and opinions and judgements, many of which are always going to turn out to be wrong. I just throw out that opinion, for whatever it's worth.

MR. SIMMS: I tend to agree with you, and I think that one reason for the expressions you heard is because of the format that we utilized. When you deal in a hypothetical situation, you tend to draw out a worst case scenario. We have an expression in the legal profession, that "Bad cases make bad law," to a certain extent. Poor hypotheticals or extreme hypotheticals lead to extreme conclusions.

Here we were dealing with assumptions, and the assumption was that the President made the wrong decision and it's going to lead to disaster, or someone else is insider trading. That begs the question which you raise, and from that perspective perhaps the hypotheticals go too far and I think you are very correct in raising the word of caution that we are talking about one very rare end of the spectrum and it doesn't deal very much with the day-to-day kind of cooperation which I think we all agree is absolutely necessary.

Far be it from me to suggest that when actuaries work there, when they do their regular functions in an insurance or a consulting capacity, they should become so adversaries that they want to document and protect themselves on everything they say and every document that they ever write. Here we are speaking in an extreme hypothetical sense. I think it's a very good point that you raised.

FROM THE FLOOR: In fact, I think the only difference between the investment and typical actuarial issues is that here there is really an early determination of whether the decision is right or not. I mean, actuaries are making decisions on uncertainty all the time; and the recommendations often are being overridden by Presidents or others on similar types of decisions.

MR. KAYTON: We tried to present some insight into how actuaries are functioning in two growing investment areas. Our purpose is to remind you that as actuaries move into these nontraditional roles, it's not only an opportunity but it also carries a great deal of responsibility that actuaries should not overlook.

We are not trying to discourage you from expanding your areas of expertise, and John had a different definition of expertise and that's "an expert is someone from out of town." And since two-thirds of the panel is from out of town, you're a group of experts. Instead we're asking you to approach it in a way that avoids embarrassment to both the profession and yourself.