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SESSION 7

Regulatory Expectations from Asset Adequacy Analysis

J. Peter Duran

John F. Gies

Larry M. Gorski

Mark D. Peavy

REGULATORY EXPECTATIONS FROM ASSET ADEQUACY ANALYSIS

MR. J. PETER DURAN: I'm an actuary with Ernst & Young in New York City. We have a panel of three distinguished regulators to give you their perspectives on asset adequacy analysis. I'd like to introduce the panel and then turn it over to them. We hope to have a good amount of time for questions and comments.

We're going to start off with Jack Gies. Jack is senior valuation actuary for the state of Connecticut insurance department, and he has over 20 years experience in financial reporting and product development roles in the life insurance industry. He currently oversees all actuarial aspects of life and health financial condition examinations in Connecticut and is responsible for the resolution of interpretative issues and implementation of reserve compliance and adequacy standards.

Jack is going to be talking about the recently developed examination program in Connecticut and his views on the appointed actuary process. He will also talk about asset cash flows, particularly those related to mortgages and the reliances that actuaries place on investment professionals.

Larry Gorski has been life actuary of the Illinois insurance department since 1976. His responsibilities include reviewing actuarial opinions and supporting memoranda, developing investment activity monitoring systems, and reviewing corporate transactions. Larry is very active professionally. He is going to be talking about a number of topics of current interest, including reliance on other professionals, especially investment professionals. He will also speak about some of the more difficult judgmental areas that come up in the review of actuarial memorandums.

Our last speaker will be Mark Peavy. Mark is life and health actuary for the NAIC. He has been at the NAIC since 1991. Prior to that he was with the Florida Department of Insurance. Mark is going to be speaking about some recent developments at the NAIC level and what we might see coming out of the NAIC in

the short and long terms. He will also comment about the application of asset adequacy analysis to health insurance.

REGULATORY EXPECTATIONS FROM ASSET ADEQUACY ANALYSIS
Life/Health Regulatory Valuation Program in Connecticut

MR. JOHN F. GIES: A new regulatory environment is in place in Connecticut as the result of new staffing and new perspectives introduced by its insurance commissioner, and the effect of processes associated with NAIC review and accreditation efforts. The number of skilled insurance department staff, which includes actuaries and CPAs, has increased significantly in the last five years. As a member of the examination division, I have two reports, both of them actuaries, and am responsible for implementation of reserve compliance and adequacy standards.

The insurance department's primary regulatory focus is the industry domiciled in Connecticut. The industry is diverse, with major players, with extensive and sophisticated product lines, and with leading edge products supported by all manner of assets. As such, the insurance department strives for a high standard in administering its responsibilities.

The Regulatory Role and Asset Adequacy Analysis

Having high regulatory standards means, among other things, that the insurance department insists upon understanding the economics underlying the actuarial opinion. Where expertise is not resident, the insurance department readily refers to and obtains consulting advice. In summary, financial condition examination is more thorough and in depth than would have been anticipated only several years ago.

Our overarching perspective on statement of opinion and asset adequacy analysis is that these are first and foremost a work product directed at company management and its decision-making processes, and second a tool for the insurance department in understanding the quality of financial statement information. A logical extension of this outlook is the emphasis we place on the appointed actuary process, a phrase explained more fully in subsequent comments. This distinction between process and work product is based on recognition that profits, solvency, and the delivery of promised benefits is

controlled by company management, not the regulatory body. Our regulatory role, among other things, is to assess financial condition and ascertain that it is reported properly, and to intervene in circumstances where a company fails to meet minimum financial safeguards.

On a practical level, examination of reserves is based on a dual track process, which involves separate office and field examination procedures.

Office Examination Procedure

The office-based procedure includes annual review of opinions and very selective review of supporting memoranda. Criteria used to select memoranda for review include the company's RBC ratio and trend, NAIC and insurance department analysis and observations, time since last financial condition examination, and other events such as rating agency classification and changes.

Where there is a change in appointed actuary, we require certification on the part of the appointee and the former actuary that valuation matters are in order. This includes inventory of valuation issues that the former appointed actuary considers unresolved at the time of resignation, and may include comment with respect to adequacy of system and staff support, adequacy of controls on systems and databases, and organizational issues impacting formation of actuarial opinion such as scope, authority, or responsibility.

Field Examination Procedure

However, it is the periodic field financial condition examination that we find particularly productive in challenging and validating the underlying assumptions on which adequacy opinions are based.

The process for field-based examination includes the usual on-site assessment of reserve calculation routines and factors. It also includes in-depth review, challenge, and

verification of asset adequacy statements of the appointed actuary. This more thorough review focuses on realistic assessment of assumptions. As cited earlier, the insurance department readily employs experts and specialists in fields such as mortgage loan or real estate valuation, financial derivatives, and other areas where its own staffing or level of expertise may be lacking.

Finally, it is during on-site field examinations that the insurance department assesses the quality of the appointed actuary process.

The Appointed Actuary Process

The objective of this assessment is determination of the relative credibility of the opinion and the quality of business decisions and financial statements.

If, for example, the process for reserve adequacy analysis is narrowly confined to an actuarial exercise with little impact on company operations, then greater amounts of insurance department resources will be devoted to ascertaining the validity of underlying reserve adequacy assumptions. In this circumstance, the insurance department substitutes itself as proxy management for reporting not being conducted by the company. Our assessment of the appointed actuary process considers the following:

1. The management level to which summaries of reserve adequacy analysis are reported. The higher the level of reporting, the greater the insurance department's confidence that the process is more than a regulatory compliance exercise, and that requisite amount and quality of analysis is being performed.
2. The extent of peer group involvement in the reserve adequacy analysis. The insurance department's perception of whether there is appropriate scope and knowledge of company operations in the appointed actuary function is influenced by the extent to which such actuary interacts and is familiar with the work of the internal auditor, the company's investment professionals, and the work of pricing actuaries.

The insurance department will interview company personnel to ascertain knowledge of internal audit issues, awareness of actuarial standards of practice influencing the pricing of products and the determination of dividends, and will determine whether statements documenting dividends or nonguaranteed pricing elements are consistent with cash-flow analysis assumptions.

These assessments are to some extent subjective, but no less valid nor valuable to us in determining the condition of the appointed actuary process, and the place of the actuary's opinion and work product in the company's operations.

An unfavorable assessment of the appointed actuary process has several implications.

Unfavorable Assessment

The first consequence is disclosure in the report of examination. Any confirmation or challenge of reserve adequacy by the insurance department will cite deficiencies it finds in the appointed actuary process. As a minimum, a management letter documenting insurance department observations in this area could be anticipated.

Second, an unfavorable assessment means that company management can anticipate more proactive insurance department involvement in its valuation and cash-flow analyses than would ordinarily incur. There will be more frequent periodic reports, more explanatory correspondence regarding assumptions and conclusions, as well as the potential for limited scope on-site examination in addition to regularly scheduled quadrennial examination.

Summary

It is clear from these comments that the insurance department has high regard for the valuation actuary process. Regard for judgments of the appointed actuary is exceeded only by the conviction that the process must be independent, reflect conservatism

appropriate to a solvency perspective, and be a credible work product directed to and used by management in its decision-making process.

I would like at this point to speak about mortgage and real estate cash-flow assumptions.

Asset Analysis -- Mortgage and Real Estate Assumptions

As cited earlier, the insurance department uses periodic and targeted on-site field examination as a prime opportunity to challenge assumptions documented in the actuarial memoranda.

One area that is investigated in depth is cash flow and default costs from mortgage loan and real estate assets where those comprise a significant amount of the company's portfolio. This is an intensively assumption-driven asset category. The insurance department strives to develop a complete understanding of the company's process for acquiring, managing, and valuing these assets. This is an asset category with ample room for variance of opinion depending on the business purpose and perspective of the individuals considering the evidence. It is the insurance department's expectation that the appointed actuary should focus very clearly on realistic assessment of underlying data, recognizing the potential and likelihood for change, and incorporating a bias for conservatism based upon a solvency perspective as opposed to an expected value perspective.

For example, the examination will consider the source of the company's mortgage asset information and look for consistency between correspondent-based information, third-party valuations, internal and external audit information, and various management level summaries and reports of information. The review will consider the level of oversight and the quality of action exercised by management in the determination of "troubled" properties. Also examined in detail will be the process for determining watch list properties, and the company's framework for categorizing problem loans. It follows that the appointed actuary should be familiar with these aspects of company operations, at

least to the extent that he or she can challenge representations of the investment professionals. If third-party investment expertise has been employed by the company to independently value such assets, then certainly the actuary has a need to know and should have access to the information.

We also examine the consistency of projected asset cash flows (that is, the assumption set for asset/liability models), with the cited mortgage loan cash-flow experience base, including the outlook for future experience. There are two issues worthy of comment with respect to outlook for future experience:

1. There is the judgment as to forecast of future experience. The insurance department considers its accumulated experience in prior examinations, and the current state of industry mortgage and real estate markets. Outside expertise is used to develop independent assessment of whether valuations and cash-flow forecasts are suitably realistic. Again, this is an area where the appointed actuary is well-served to insist upon projection assumptions that are grounded in a solvency perspective and that consider the potential for downside risk, as opposed to an expected value perspective.
2. The insurance department considers the market environment and outlook at the "as of date" of the financial condition examination. For example, a current examination may be conducted as of a December 1992 financial statement, where subsequent events may reflect poorly on judgments made at the statement date. It is not our practice to second-guess forecasts based upon the evolution of experience incurred subsequent to the "as of date" of the examination. Such a retrospective is not appropriate considering the as yet undiscovered ability of appointed actuaries to predict future events. However, the reasonableness of assumptions at the "as of date," considering all the information available in company investment databases, is used for assessing the validity of assumptions.

Finally, and as cited earlier, the insurance department will determine the extent to which the appointed actuary is aware of and involved in the determination of all asset cash-flow

projection assumptions, including mortgage and real estate. It anticipates responsible use of reliance statements.

Responsible use involves awareness of any potential downside to investment forecasts, and healthy skepticism as to expected value forecasts, which may reflect perspectives and the potential bias of the author of the forecasts.

REGULATORY EXPECTATIONS FROM ASSET ADEQUACY ANALYSIS

MR. LARRY M. GORSKI: I found Jack's comments on the process of evaluating the work of the appointed actuary very interesting. From our perspective in Illinois, I would say we have focused more on the details of asset adequacy analysis, and only now are we starting to look at the bigger picture surrounding the whole process of the appointed actuary and the company's use of the results from asset/liability management. I think part of that change in focus is occurring because of my involvement in the development of the NAIC Model Investment Law, and some of its requirements for board approval of investments, the development of investment guidelines, and so on.

My comments will focus in on a couple of specific areas, starting off with reliance issues. Reliances are permitted by the NAIC Model Opinion and Memorandum Regulation, but they must be disclosed. The reliance must be recognized meaning that the person relied upon has certain responsibilities in terms of filing a statement with the annual statement. The nature of the reliance should be disclosed, but the reliance must not be a blind reliance. The actuary must review the data and information for reasonableness. I think this is where we get into a lot of confusion when I talk about reliance issues with actuaries. I don't think we all have the same understanding of reliance. If I'm an actuary for a company and I direct a subordinate to do a certain set of calculations and I set the assumptions and tell the actuary what model to use, I don't consider that reliance. Other people may consider that reliance. Other actuaries have different views. I think there needs to be some work done at the NAIC level and maybe within the professional ranks, also, in terms of getting a firm handle on what is meant by reliance. This issue is causing an awful lot of confusion in regulatory circles and in our dealings with companies. So I think we need to focus very carefully as to what is really meant by reliance.

Now that we are past the initial issue of the definition of reliance, let's assume we're dealing with a situation where an actuary has, in some sense, relied upon the investment officer. The kinds of questions I ask in the follow-up to that situation are: What did the

actuary ask the expert to provide? Did the actuary simply ask the expert to provide a set of cash flows on a level interest rate environment or a set of interest rate environments? Does the expert understand the request for data? Does the expert understand that the data are going to be used in forming an opinion for regulatory purposes? Can the expert provide a rationale for the assumptions provided? I think these kinds of questions have to be answered in the process of relying upon an expert.

During the past couple of weeks, I've had correspondence with one company dealing with documenting assumptions in the collateralized mortgage obligation (CMO) area. The company used a firm that is considered to be highly qualified to develop assumptions related to its CMO portfolio for cash-flow-testing purposes. I also consider the expert to be highly qualified. But we hit a stumbling block in trying to document the reasonableness of the prepayment assumptions and the modeling of the tranches held by the company. The company, when developing the asset cash flows, aggregated asset cash flows into various buckets supporting different lines of business. So I didn't have the opportunity to review the asset cash flows on a security-specific basis. These are the cash flows for this collection of CMOs, supporting this group of liabilities. I didn't have the ability to audit or review that information for reasonableness. So I think when people start using experts, they have to understand that regulators will be asking questions and challenging work, and there needs to be a framework in place for documenting the reasonableness of the assumptions provided by an expert.

Does the expert understand how the data are going to be used? Does the expert really know that this is going to be used in a regulatory filing such as the actuarial opinion? I know there's an awful lot of controversy as to whether the memorandum is designed for management or for regulators. I think the actuarial memorandum is a management document. Memoranda, I think, should be designed for management use. One of the best compliments I have received in this whole area over the last couple of years is that, after a company had completed its asset/liability management and its cash-flow-testing work and submitted its opinion to us, the actuary said that he and the management of the

company learned something new about their company and its risk profile. I think that's what this is all about. It's not simply a regulatory exercise, it's a tool to improve the management of an insurance company with an opinion on the results of the work submitted to the insurance department. So the expert needs to understand how the data are to be used.

Of course, the reliance issue is governed by both the standard of practice on Section 8 actuarial opinions, and the standard of practice on data quality. In both cases, the documents discuss the actuary's responsibility in determining the reasonableness of the data from a completeness, accuracy, and consistency standpoint. To me, it's absolutely essential that the actuary be very firm in his or her belief about the data. I question the actuary's belief about the data when the actuary makes an opening statement in the opinion such as: "I'm not an expert in the investment area. I relied on XYZ person. I feel the data are reasonable." From my standpoint, I find it very difficult to accept the first statement and the third statement in the same context. How can someone say, I'm not an expert, but yet I find these data reasonable? I have a tough time accepting that type of statement in an actuarial opinion. The issue of reliance is the issue that has really driven part of the work that I've proposed for the NAIC in terms of revisions to the Opinion and Memorandum Regulation. And I'd like to spend some time on that. I know that our next speaker will be talking about this within his presentation, but since I'm the originator of some of these comments, I'd like to focus in on the proposal.

A significant deficiency in the regulatory framework dealing with reliance is that there are no qualification standards for the investment expert that an actuary relies upon. One of the recommendations in the proposal I've made to the NAIC relative to changing the NAIC Model Opinion and Memorandum Regulation is to impose a requirement that the person relied upon either be a member of the American Academy of Actuaries or a Chartered Financial Analyst (CFA) and, in either case, that the person be qualified to provide the input that he or she is providing.

For those who are unfamiliar with this proposal, there's a pretty good discussion of some aspects of it in the August 1994 issue of the *Financial Reporter*. It includes a brief one-page discussion of the changes to the NAIC Model Opinion and Memorandum Regulation.

The proposal had been distributed at the June 1994 NAIC meeting. We have received about 20 comments or so about the proposal. There were a few comments that made me sit back and reconsider the proposal. One respondent stated that mortgage professionals tend not to be CFAs. For one reason or another, their expertise is not something that's covered in the CFA program, and they tend not to be CFAs. That's something I'm going to have to consider when I rewrite the original proposal.

And quite frankly, I'm not wed to these designations as being the only ones that are recognized. I chose the CFA designation because, first, it is a designation that's granted upon completing a series of exams. So it's like an FSA designation. Second, there are standards of practice and a code of conduct that come with the designation. There's a framework like the actuarial designation framework. So I found comfort with that. I think myself and others are willing to consider other designations as being appropriate for the person relied upon, but I think we're all pretty insistent that the person relied upon has to be qualified to do the work that he or she has been asked to do and that the qualification should be objectively demonstrable. Some of the comments that I received pointed to the standards of practice that exist and stated that there already are reasonableness requirements imposed upon the appointed actuary. My response to that suggestion is derived from the example I mentioned earlier. Actuaries have at times stated that they were not investment experts but that they found the investment cash-flow assumptions reasonable. I find the statements inconsistent, and I just can't find that acceptable.

The next comments will be on my favorite topic, CMOs. I'm sure there are many actuaries here who have dealt with me over the past couple of months as I have reviewed

the CMO portion of the actuarial memorandum in support of the asset adequacy analysis. There are two obvious things to do: document prepayment assumptions, and document modeling of the tranche. Obviously, when you model the cash flows of a particular tranche, you have to understand the cash flows for all the tranches that precede that particular tranche. My experience is that many companies' software severely limits their ability to accomplish a good job of modeling CMO cash flows. Because of this belief, I focus pretty thoroughly on this topic. Don't overlook credit risk. Private label CMOs do contain some degree of credit risk. My emphasis over the past couple of years has been with interest rate risk, which includes the prepayment risk associated with CMOs and with the risks associated with derivative instruments. I think it's probably about time that I start shifting gears and pay more attention to credit risk as Jack has pointed out. So if people see a change in my focus over the next year or two, it's not that I necessarily feel completely comfortable with the modeling that's going on with these instruments, but I'm starting to get a feeling that companies are looking more and more towards taking on credit risk as a way of improving their yields on their investments. So I, in turn, will probably spend more time on credit risk modeling and evaluation.

One thing that has been troublesome is the determination of market values of CMOs that need to be sold at future points in time in various interest rate environments. So you need to document that very carefully. If CMOs are part of the reinvestment strategy, document yield spreads to Treasury rates.

Some of the most complex CMOs are assigned to surplus or reserves not tested. I know that asset adequacy analysis is designed to be a test of reserves, and it's intended not to look at surplus. I think it would be naive to believe that regulators are going to limit themselves to a very narrow perspective. This really goes back to the question about regulatory expectations. I understand that reserve testing is very narrowly defined, but on the other hand, we're looking at this in the context of a bigger picture. So if I see a company that is assigning troublesome CMOs to surplus, or to the not tested line of business, I start asking bigger picture questions.

I did have a very interesting experience a couple of months ago when reviewing the opinion and memorandum for a particular company. It was a very small company, maybe a $100 million dollar company. It hasn't grown over the last couple of years. I reviewed the opinion and the memorandum executive summary, and the actuary made a statement in there that basically said that he had to rely upon investment returns on surplus in order to document that reserves were adequate. And in fact, reserves are not adequate in that circumstance, the actuary had to qualify the opinion in that case. About two months after receiving and reviewing the memorandum executive summary, the company had submitted a request for an extraordinary dividend. The company was going to pay a dividend of about one-half of its surplus. And the moral of this story is our department has integrated the reserve review process with the financial examination process. The analyst who was assigned to that company immediately notified me of that dividend request. I, in turn, exchanged information about the memorandum executive summary and the need to rely on earnings from surplus to support the business. And we were able to work with that dividend request and really understand to what extent there was a dependence on earnings off surplus to support the business. In the end we were able to approve the request for extraordinary dividend. But we are integrating the actuarial work, i.e., review of the opinion and memorandum, into all of our work in terms of financial regulation. In my view, this should be the direction of financial regulation.

I'm sure that many companies have had a chance to work with their regulators concerning questions over their company's CMO portfolio. The thing that regulators are using more and more is the CMO FLUX score. I'm sure many of you are familiar with that, but for those of you who are not familiar with the CMO FLUX score, there's quite a bit of information in your handout material. There is a Q&A that was part of a June 1994 *Risk and Return* article a couple of months ago coauthored by Chris Anderson and me. And there's also some statistical data that I put together that summarizes CMO FLUX scores for a broad universe of CMOs.

Basically, the FLUX score is designed to be a tool for regulators to get a better understanding of the cash-flow variability of a CMO. Each CMO has an NAIC Securities Valuation Office (SVO) rating of 1 through 6, which is an indication of its credit quality. It doesn't say anything about its cash-flow variability, which is the risk that asset adequacy analysis has focused on up until now. So the FLUX score is a way for regulators to look at a portfolio and conclude that certain tranches are stable from a cash-flow standpoint and no follow-up is necessary while other tranches are volatile and follow-up with the actuary is needed.

So, for those appointed actuaries, or other actuaries who have not had the opportunity to become acquainted with the FLUX score mechanism, I recommend that you do that because more and more regulators will be using this tool as a way of trying to grapple with the analysis of CMO cash flows.

This is the first year for this tool to be available, and so there are some bugs being worked out. The whole process is being reviewed. On the whole, things are going along quite smoothly. I have another short story to tell. One Illinois domiciled company happens to be a very aggressive investor in CMOs. We did an in-depth analysis of the company's portfolio using FLUX scores. We identified approximately 25 bonds with high scores. For the CMOs selected, we requested the actual cash flows over the first half of the year. We also requested the model cash flows for each of New York 7 scenarios. We also requested that the same information be supplied again six months later. We are in the process of identifying those companies with aggressive portfolios and reviewing the accuracy of the modeling of the CMOs as performed for the asset adequacy analysis.

Next I'll discuss some issues relative to derivative instruments. After CMOs, this is the area that I focus on most when reviewing actuarial memoranda. The basic issue here is whether the derivative instruments are included in the asset adequacy analysis. Many companies hold derivative instruments, and when I say derivative instruments, I'm

referring to options, futures, swaps, forward, and so on. I'm not referring to mortgage-backed securities at this time. Many companies do not include these instruments into the asset adequacy analysis work. They make the argument that these instruments don't necessarily modify the cash flows of the assets supporting the liabilities being tested. Because of this belief, they disregard these instruments in their testing. I find that argument unpersuasive. I have argued very strenuously with companies that ignore derivative instruments in the asset adequacy analysis. Assigning derivatives to surplus ignores and probably violates the usual regulatory requirement that derivatives be used for helping purposes only. I also require that the derivative portion of the company's investment strategy be captured by the investment strategy used in the asset adequacy analysis. One company that I reviewed had about 200 open futures contracts as of year-end 1993, and six months later it had about 2,500 open contracts. Clearly, these are a big portion of the company's reinvestment strategy, and that fact should be captured by the asset adequacy analysis. And also, don't overlook securities with exotic embedded options such as structured notes and floating rate instruments.

Getting to other difficult areas, an obvious one is expenses. In my view, the regulation permits a going-concern basis of incorporating expenses into the analysis. On the other hand, I think one has to consider overhead, at least to some degree, in the process. This goes back to the example I mentioned earlier about the company actuary telling me that the company was dependent on earnings of surplus to cover expenses, including overhead expenses. The regulatory expectation is based on the big picture of the company solvency. I think documentation is very important. In many cases, I have asked for an actual versus budget analysis. And when doing expenses, don't overlook the impact of inflation.

Stockholder dividends is another difficult area. Again, it's a question of reserve testing versus surplus adequacy, big picture versus narrow perspective. The March and August 1994 issues of the *Financial Reporter* contain an interesting series of letters going back and forth between the author of an article on recognition of stockholder dividends and

some respondents to it. I believe that, if stockholder dividends paid by insurance companies to its parent are needed by that parent to meet some obligations on its part, let's say to make debt service payments, those stockholder dividends should be incorporated into the asset adequacy analysis. I know that's an unpopular view among many companies, maybe most companies. But that is my view. I think in order to move the discussion along, I'll throw out on the table a rule to follow as to when the actuary should consider stockholder dividends when doing an asset adequacy analysis. It ties together risk-based capital also. This is not a final view on the issue, but it's a first step to move this issue along. I think that the recognition of stockholder dividends is a major regulatory expectation from asset adequacy analysis. I know there's an awful lot of sentiment on the other side of the fence from the industry. We've argued over this point. I think we have to get away from that argument and start addressing it in a positive way.

I have just a few concluding remarks. So far we haven't had the necessity of requiring a second opinion or making a referral to the Actuarial Board for Counseling and Discipline (ABCD). I think we're getting pretty close to the point. I can't speak to how other regulators view the second opinion or the referral issue. I've been reviewing opinions and memoranda for about three years. I have given actuaries many opportunities to improve the quality of their work. I've couched requests in terms of sensitivity analysis. Now the letters that actuaries are receiving from me are a little bit stronger in their tone. I have used statements like, "I find this unacceptable," and "This needs to be changed." I think we're getting to the point where asset adequacy analysis is beyond its early infancy. It's a recognized regulatory tool. I think that some difficult decisions are going to be made that will result in requests for second opinions or referrals to the ABCD. So I do see that on the horizon as being the next step in this process.

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MR. MARK D. PEAVY: For my presentation I would like to give a brief overview of the status of various projects at the NAIC relative to the Actuarial Opinion and Memorandum Regulation and asset adequacy analysis. I will also briefly touch upon the possible future direction of the various aspects of this project at the NAIC level. In addition, I have been asked to briefly mention how some of these items might pertain to health insurance.

In speaking with regulators from around the country, I get the definite impression that they view the process of asset adequacy analysis as very much in its initial phase of evolution. They are looking for assistance in not only understanding the variety of products and investment vehicles that exist in the marketplace, but also they want to develop a better understanding of the mechanics of asset adequacy analysis itself. Adding to the challenge of effectively analyzing the opinions that are submitted to them is the wide variety of experience of the personnel the state regulators are able to assign to the review.

The Life and Health Actuarial Task Force (LHATF) of the NAIC has begun at least a couple of projects to provide some assistance to the states. First, at two of its meetings each year the LHATF attempts to engage in a few hours of informal discussions relative to some of the opinions that have been submitted. The first meeting during the year is intended to identify those opinions that might warrant a follow-up to obtain clarification or additional information. The second meeting during the year is intended to discuss those opinions that raise issues that might have applicability to a broad range of companies. Given the company-specific nature of these discussions, the only attendees at these meetings have been regulators.

The LHATF is also aware that state variations exist in reserving requirements. About a year and a half ago a technical resource group was named to assist the LHATF in identifying differences that were merely timing differences in the adoption of statutory

and regulatory reserving requirements, and to make recommendations as to appropriate methods for reducing the impact of such variations. Second, the technical resource group was invited to identify areas of more substantive differences between the states and to make recommendations as to what possible approaches might exist for minimizing the impact of such differences (while still conforming with each state's laws). Given the crowded agenda of the LHATF, activity in this area has had to yield to other priorities, but it is hoped the LHATF will be able to pick up the effort during 1995.

One of the priorities the LHATF is more actively pursuing is a project to amend the Model Actuarial Opinion and Memorandum Regulation. The latest proposed changes to the model were included in an exposure draft that was circulated at the LHATF's meeting in Baltimore. Subsequent to that exposure the LHATF has received approximately 20 to 25 letters commenting on the proposed changes.

Essentially the proposed changes relate to three areas: (1) reliance on information provided by others relative to asset-oriented information and reserve data; (2) the submission of an executive summary of the memorandum for the purpose of identifying those companies that might warrant follow-up questions or a review of the underlying memorandum; and (3) additional documentation in the actuarial memorandum.

Regarding the first item, several comments were received relative to the changes in the reliance language and provisions. Some commentators thought the requirement that the person relied upon for the accuracy and completeness of asset oriented information must be either an actuary or a chartered financial analyst was too strict. Also, many writers thought the requirement to reconcile the data provided by others to annual statement exhibits and schedules was either redundant or unnecessary, given that the opinion already requires a listing of the liabilities tested. One writer suggested that even if such a reconciliation was necessary, such reconciliation could be performed by a supporting actuary rather than the appointed actuary, and the supporting actuary could attest to the reconciliation in his or her own statement of opinion. Finally, several writers made

general comments that clarifying language would be helpful to better understand what constituted normal reliance by the appointed actuary on the work of subordinate actuaries, versus a level of reliance that would require a backup statement of opinion to support the appointed actuary's statement.

Relative to the executive summary, there was some concern regarding whether such a summary might be counterproductive, in that the list of items to be included in the summary might not adequately reflect the diversity of specific company situations. Also, there was a concern that this was simply another administrative burden being imposed on the company. There were also several comments that requested a delay between the time the opinion is filed and the time the executive summary is submitted. A few comments were received about the requirement that ending surplus values be expressed on the market value basis under each of the required interest scenarios. Some thought the actuary was entitled to have more flexibility and should be allowed to state values on a statutory basis where appropriate.

The majority of the comments seemed to focus on the additional documentation required in the actuarial memorandum. One theme was that the increasingly detailed nature of the specifications for the memorandum conflicted with its role as a management tool. In other words, management should be allowed to specify the contents of the memorandum, and not the regulators. Also, there was concern expressed about the proprietary nature of the information being requested; the companies would prefer that certain information only be made available upon a specific request from a regulator. This particularly related to the proprietary nature of the mortality assumptions. Not too surprisingly, there were complaints about the added administrative burdens necessitated by the additional requirements of the memorandum. Specific objections included:

1. The required comparison of actual and expected lapse assumptions should be done on a general, overall basis as opposed to specific, year-by-year comparisons.
2. Precise anticipated yields on assets are sometimes not possible; sometimes only general, overall characteristics of an asset could be specified.

3. The requirement to reflect the impact of changes in assumptions used in asset adequacy analyses would require too much testing.
4. The requirement to show "schedules under each required scenario showing the cash flows by component for each year in the projection period" is too strict. Only surplus values should be shown, and only at the end of longer periods of time.
5. Concern was expressed regarding the ability and/or necessity of splitting expenses and commissions by line.
6. Concern was expressed regarding a company's ability to identify, with precision, aspects of an investment if that investment were handled by an outside advisor.
7. There were several objections to the language requiring "normalization" of the slope of the initial yield curve. Some comments asked for more specificity, while other comments requested more flexibility.

There are also activities occurring at the NAIC that could impact the valuation actuary who is involved with health insurance products. First, relative to long-term-care (LTC) health insurance products, the Nonforfeiture Working Group is attempting to wrap up its recommendations for a nonforfeiture standard during 1994. The working group is currently pursuing an approach that would provide a shortened-benefit period, i.e., provide the full daily benefits provided by the contract but for some period of time less than that provided while the policy was in a premium-paying status. Also, the NAIC at its Baltimore meeting adopted a rate stabilization standard for LTC products that limited the amount of increases in rates that could be imposed. Both of these projects could have a direct impact on reserving levels and cash flows.

Another project that has implications for the valuation actuary is work currently under way by the Ad Hoc Health Insurance Rating Working Group. This group is attempting to update the existing guidelines for health insurance rate filings and hopes to complete its work at its next meeting. The scope of its work relates to individual and small employer health insurance products (other than LTC, Medicare supplement, disability

income, capitated products, large-group products, and small-employer products covered by other state laws). The work currently being developed by the working group would raise loss ratios, limit renewability provisions to guaranteed renewable-type provisions and impose broader pooling requirements in order to hold down rate increases. Also, it should be noted that the State & Federal Health Insurance Legislative Policy (B) Task Force of the NAIC is working to further modify the small group rating constraints in the small employer health insurance models. Currently under discussion are considerations to limit rating differences to differences attributable to age, geographic area, and family status.

All of the proceeding discussion relates to either past activities of the NAIC or actions that are currently underway. That is difficult enough to concisely describe, given both the breadth of activity and the detailed nature of the projects. Attempting to go beyond that and predict what will happen in the future at the NAIC is even more challenging. However, I would like to briefly mention one idea that has been discussed. As a result of requests from both regulators and members of the American Academy of Actuaries, some meetings have occurred with representatives of the Academy regarding the feasibility of establishing an actuarial valuation department at the NAIC. The sole responsibility of this specialized unit would be to review the actuarial opinions and memorandums developed by the valuation actuary, and to assist the states in their analysis of those documents. While nothing of a specific nature has been developed regarding the structure of such a unit, it has been suggested that it might consist of roughly five to ten actuaries plus supporting staff and equipment. Obviously, this unit could potentially play a very important role in solvency oversight; that role could become even more important if ideas such as the recommendation of the Academy for the valuation actuary to annually provide a written report on surplus adequacy were implemented.

Creation of such a relatively large centralized actuarial staff would represent a major change from the NAIC's past staffing practices. While such an expansion is certainly

deserving of further study, it will require very careful consideration prior to being implemented. In order to avoid misunderstanding as to what its role would be, a great deal of work would be needed to clearly articulate its purpose and the procedures it would be required to follow. Development of those purposes and procedures would always have to be mindful of the high level of state autonomy in the NAIC structure. Second, it needs to be recognized that this would represent a huge increase in actuarial staffing at the NAIC level. Like most other organizations, particularly those which are in some way connected to governmental functions, the NAIC does face budgetary constraints, and a great deal of thought would have to be given regarding how to fund what would be a significant portion of the NAIC budget. While this is certainly a very important topic and worthy of additional resources, there are many critical issues that are currently before the NAIC, and the relative priority of this project would have to be carefully weighed against other pressing matters.

I have tried to give a brief overview of some of the projects currently underway at the NAIC relative to the actuarial opinion and asset adequacy analysis. On such a complicated and constantly changing topic, I am sure our work will never be finished but will always remain a work in progress. The NAIC's members are committed to being a constructive part of that process.

MR. MARTIN R. CLAIRE: This is a question for Larry Gorski. For the past two years, we've received an October letter. Are you formulating a letter for this year?

MR. GORSKI: I only hinted at in my comments that my focus will move away from what's called interest rate prepayment risk on CMOs to more credit-risk-oriented questions. So right now, at least, I think a good portion of that October letter will be directed towards credit, that is, C-1-type issues.

MR. THOMAS A. BICKERSTAFF: This could be answered either by Jack or Larry. I wonder if there have been any referrals to or findings and conclusions of the Actuarial Board for Counseling and Discipline (ABCD). I'm also wondering if either of you two gentlemen, either in your own departments or with respect to any other departments, are aware of rejections of opinions or memorandums.

MR. GORSKI: I'm not aware of any rejections or referrals. Let me just discuss a situation that did occur in Illinois that came very close to resulting in either one or both of those actions taking place. We received notification from a company that it was changing its appointed actuary, and in the notification letter, the company criticized the work of the prior actuary in several respects. And, of course, given our regulatory responsibilities in this whole process, we took that notification letter very seriously. We did a point-by-point comparison of the last memorandum prepared by the prior actuary with the first memorandum prepared by the new actuary. And it's still debatable as to what our department is going to do relative to the memorandum from the new actuary. I feel quite comfortable about the work performed by the prior actuary. It's the work by the new actuary I'm somewhat concerned about. I'm trying to be delicate in my comments now. We are in the process of sending an examiner to that company because one of the assumptions that was not made in the new work is an assumption that can be tested, I believe. Our examination staff will be testing that assumption, and depending on the outcome of that work, we may very well reject the opinion and memorandum. I'm not aware of any other state either rejecting or referring any opinions or

memorandums through the ABCD. But again, the meetings that Mark alluded to are semiannual gatherings of regulatory actuaries. There was more and more discussion about the possibility of doing that. So I do see that as a real option for regulators in many circumstances.

MR. GIES: Tom, I would mirror Larry's comments. We have not made any ABCD referrals, and quite frankly, I hope I never have an opportunity to do that, although that's probably too high an expectation. But that should be a very rare event in my estimation. Our focus should very much be communication. You should be speaking very freely with the Connecticut department. And I presume other regulators would feel the same way. There's plenty of room for differences of opinion, depending on your perspective and where you're coming from. In those few unfortunate circumstances where there is an out and out attempt to deceive, clearly, that has to be handled in an ABCD-type framework. But certainly, I would view that as being a very low-frequency activity. That would be my hope.

MR. PEAVY: There was a proposal from the Academy that was presented to the EX4 Committee of the NAIC in Baltimore that basically proposed that consideration be given to a body jointly composed of Academy and NAIC representatives to review the record of the valuation actuary in companies that have failed or experienced financial impairment. And I think part of the thought process was that some of those reviews might result in referrals to the ABCD.

MR. STEVEN A. SMITH: Larry, could you elaborate on what you mean by a risk-based capital (RBC) event?

MR. GORSKI: An RBC event is the crossing of one of the threshold ratios. The model law and the Illinois version of the law define a company action event and authorized and mandatory control level events. That's what I was referring to as an event.

MR. SMITH: Well how do you get to that event? The present value of "required" stockholder dividends is $100 million dollars or some such number. What do you compare that to? How do you figure it into the calculations to determine whether or not you have an event?

MR. GORSKI: Basically what I was suggesting is you take your total adjusted capital less the present value of the stockholder dividends and compare that to the risk-based capital amounts for determination of whether a threshold is crossed. It's a big question as to how you define required stockholder dividends. But that present value has to be a deducted element in the risk-based capital calculation.