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# RISK-BASED CAPITAL

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| Moderator: | CANDE OLSEN |
| Panelists: | MICHAEL ALBANESE* |
| | ROBERT J. CALLAHAN |
| | JAMES F. REISKYTL |
| Recorder: | CANDE OLSEN |

- NAIC formula update
- The regulator's viewpoint
  - The need for a risk-based capital (RBC) formula
  - After implementation
- Rating-agency viewpoint
  - Reaction to NAIC formula
  - Limitation of RBC as a rating tool

MS. CANDE OLSEN: I'm a vice president and actuary with New York Life and a member of the National Association of Insurance Commissioners (NAIC) Industry Advisory Committee on RBC. Several sessions at this meeting have touched on RBC, but this will be the only session that is devoted entirely to RBC, focusing mostly on NAIC risked-based capital. Jim Reiskytl of the NAIC Industry Advisory Committee will give us an update of the formula and the model law. Bob Callahan is one of the regulators who is a member of the NAIC Working Group, and he will give us the regulatory viewpoint, which will address the need for RBC and how the model law will be implemented. Mike Albanese is from A.M. Best and will give us the rating agency viewpoint on RBC and its use.

Jim Reiskytl is a vice president of tax and financial planning at Northwestern Mutual. His department's responsibilities include tax planning and compliance, financial planning and projections, and special financial projects. Jim has a long list of actuarial credentials of which I'll probably only have time to name a few. He's currently chairperson of the Technical Steering Committee for the Mutual Life Insurance Company Tax Committee. He's vice president of the Society of Actuaries and has served on the Board of Governors and various committees of the Society. He is chairperson of the Asset Valuation Reserve (AVR) Steering Group for the NAIC AVR/IMR Industry Advisory Committee, as well as a very active member of the NAIC Risk-Based Capital Industry Advisory Committee. He'll also be chairing a workshop on RBC at this meeting.

Bob Callahan is chief life actuary of the New York State Insurance Department and is chief of its actuarial valuation bureau. He has worked for the department for about 41 years now. He's an active member of the NAIC's Life and Health Actuarial Task Forces, with emphasis on the areas of actuarial opinion and memorandum, asset/liability matching, and nonforfeiture for both life and annuities. He has participated in other NAIC Working Groups, including those dealing with AVR and interest maintenance reserve (IMR), financial reinsurance, securitization of assets and surplus notes, and last, but not least, life RBC.

* Mr. Albanese, not a member of the Society, is a Senior Financial Analyst at A.M. Best Company in Oldwick, New Jersey.

Michael Albanese is our guest speaker. He's an assistant vice president of the life/health division of the A.M. Best Company and has been directly involved with the rating process since he joined the company in 1986. Mike participates in the analytical and rating review of life and health companies appearing in *Best Insurance Reports* and related publications. In this capacity, Mike leads a group of analysts who perform the quantitative and qualitative rating evaluation of insurers, based on information from statutory financial statements, supplementary financial data, meetings, and correspondence with insurance company senior management. In addition, he contributes many articles and reports appearing in A.M. Best periodicals. Representing A.M. Best, Mike has presented and prepared testimony for several congressional subcommittee hearings on the various life and health industry-related issues. He's also been active in speaking to diverse groups, like this one, on Best's rating process and important life and health insurance topics.

MR. JAMES F. REISKYTL: To give you a little background before I describe some of the most recent changes, I thought I would begin with a brief review of the current capital standards. We have a very interesting regulatory situation at this time. You can be in the life insurance business if you have a certain minimum amount of capital. This standard has little to do with what you invest in or how you've priced your products. That is, it has little to do with the risks that you're taking. It really doesn't reflect the quality or diversification of the asset or pricing structures or any part of these structures. It simply says, if you have some money, you can be in business. In honor of our moderator, as an example, I'll say the minimum capital for New York Life is $300,000. If it only had $300,000 in capital, does anyone believe it would be an AAA-rated, adequately capitalized company?

Does that mean that current regulation is totally inadequate? Of course not. Various tests are being done, and some states have begun their own work developing a better measure of financial strength -- a risk-based approach. Wisconsin and Utah had done something awhile back. New York, Canada, and Minnesota have recently developed their own RBC formulas. Each of these approaches was specifically designed for regulatory use. The new NAIC standard reflects size, because risks vary by size, and the risk profile for each part of the insurer's business operation. It should help the insurance departments do a better job of allocating their resources so that they can, like us, focus more on managing exceptions. In this case, the exceptions are the weakly capitalized companies that need the most attention. This new standard is designed to give the regulators the authority to take early, effective action where necessary. Having taken such actions, we hope to see fewer insolvencies in the future. This new tool, however, is only one tool; a very valuable one, but not the only one.

How was this process started? The NAIC established an advisory committee to develop a formula that would measure both risk and capital, that would address the many technical issues involved (e.g., product, investments, and size) and develop a law or regulation that would enhance the regulatory process and thereby minimize the number of companies that get into a severely weakened condition.

There are always some ground rules. The ground rules they gave us were that we should use annual statement information and current statutory accounting practices. We weren't totally limited to information that was in the annual statement; if additional data were needed, we could request it. In fact, the new formula requires some data that is not currently available in the annual statement. Some might think we added items deliberately so that no one could prematurely publish accurate results. That really wasn't the motivation, but these additions do provide important confidentiality at this time.

The process uses a formula. We identified major items that are exposed to risk and developed factors to measure these risks. The product of the amount of each item times the appropriate factor is the risk-dollar measurement for that item. The sum of these products is the total risk capital needed. Our overall objective was to cover about 92-95% of the losses. Let me point out the obvious to this group, that the precision achieved in these factors varies from item to item in some cases. Where we could, we used stochastic techniques based on actual results for many years. In other areas, where the information is scanty at best, we used the judgment of actuaries and other experts to establish the factors (the Delphic approach). Also guiding us in the development of these factors was a logical consistency with other factors. One good example of this is commercial mortgages, where we set the factor between those of Category 2 and 3 bonds.

Surely I don't have to tell anyone in this audience that this formula is based on the basic "C" factors: default, pricing, interest rate, and business risks. The first three have been discussed often. The C-4 risk is equally well known but probably the most difficult part of the surplus formula to quantify. We know there are any number of general business risks, including legal, punitive damages, the ability to change investment strategies, tax, you-name-it, but it's very difficult to develop annual-statement-based measures for them. So, what did we do? We used the risk charge for guaranty fund assessments as a proxy for all these business risks.

I want to emphasize that this formula is a threshold formula, not a target formula. The two key words in this statement are *threshold* and *target*. Threshold obviously means this formula is not to be used in your individual companies to decide how much surplus is needed. If the industry were to move in that direction, it would be most unfortunate. Threshold means that we're looking for a minimum surplus level so as to identify weakly capitalized companies. Clearly, a target surplus formula would require higher factors and further refinements. In developing your own target formula, you would and could use more information than is generally available in the annual statement. You could also do cash-flow testing and a variety of other things if you wished to do so.

To repeat, this formula is designed only to identify companies with capital levels that require regulatory attention. It isn't designed to differentiate among adequately capitalized companies. I don't know if you could design a simple formula that could do that. Clearly, that is not how this formula was developed.

The model law at this point refers to four levels of action: a company-action level, a regulatory-action level, an authorized control level, and a mandatory control level. Let's begin with the company-action level. What is it? What do companies that are in it have to do? It's the first level of regulatory action. It means that your surplus relative to your RBC has fallen into the range of a potentially weakly capitalized company. I say *potentially* because, obviously, the formula is just that -- a formula. It may or may not work well for your company. For example, it may not work well because you're growing very rapidly, but that won't continue. Or it may not work well for a variety of other reasons. This is your opportunity to either explain why the formula has inappropriately identified your company at this point, or if appropriate, what you are doing, or plan to do, to correct it. Each company so identified must provide a plan and financial projections that show how the company will move back into a stronger position. In this case, the burden's on you or the company. I'd like to highlight three key points for this level of regulatory action: (1) the company has crossed the threshold level, (2) the company must prepare a confidential business plan, and (3) the onus is on the company to suggest what is needed to move back to an appropriate level.

The next level, the regulatory-action level, as its name implies, means either that your plan didn't work, or the time period was too short, or whatever, and now the regulators come in and make changes. They can bring in any experts they need, such as consulting actuaries and investment people, and now they tell you what to do. They may suggest that you change some pricing, sell a line of business, change investment strategy -- they may do any number of things -- because your capital relative to risk is approaching the danger zone.

The danger zone is the authorized control level. At this point, the regulator may take control of the company. I wish to highlight the word "may" because in this case the company has already been working closely with the regulators. They have a plan and have made changes; unless, of course, it all happens very quickly, which should be rare. It could be that the company's surplus has just dipped below this level, yet the regulators believe it will improve shortly. Given these circumstances, they have the option of giving the company more time. On the other hand, they may know that the plans simply aren't working. So, they will take over this company immediately.

The fourth level will replace the one I described at the beginning, minimum capital being $300,000 for New York Life. If your adjusted capital goes below your mandatory control level, the company must be taken over. Does that mean you're totally insolvent? No. There may still be some salvage value left, but it is so low that someone else will rehabilitate, sell, or operate the company.

These new procedures and required actions should minimize and maybe even eliminate future takeovers. One technical side note -- everything is expressed as a percentage of the authorized control level RBC.

As to disclosure, the annual statement will only show two lines; everything else will be confidential. One line will be the authorized control level RBC, and the second will be total adjusted capital, which is defined as surplus, plus the AVR, plus half the dividend liability (as a cushion against adverse experience), plus any voluntary investment reserves for real estate or mortgages (until 1995). The latter was added temporarily, because many companies may phase out their voluntary reserves during the phase-in of the new AVR. Note that the two amounts shown will be only in dollars; there are no ratios!

What else has changed since the earlier exposure draft? What has been done since it was released last December? The test results of over 1,100 companies have been reviewed and analyzed. More than 150 comment letters were carefully considered and discussed within the advisory committee and, in turn, with the NAIC Working Group. The working group has seen every letter and the industry advisory committee's response to each recommendation or comment. So what's new? First, the results are expressed as absolute dollar amounts, not ratios, to minimize its misuse as an industry standard or basis for rankings, and to reemphasize its use for identifying companies that are weakly capitalized. Regulatory action levels and the details of the annual statement presentation have been determined. A model law and regulations have been developed, and a number of refinements and corrections were made in the formula. As an aside, and a happy one, the 1991 test results show significant improvement for many companies during 1990. Surplus has increased for many companies, and many have taken corrective actions that may or may not have anything to do with this new proposed standard.

What else did we change? I can assure you that we didn't make 150 changes in the formula as suggested, but we did make a number of them, based on four criteria. First, was the change suggested theoretically sound? Second, was it practical? It is always a challenge to find improvements that are both theoretically sound and relatively simple to do, that can be done from the annual statement or a supplement. The third criteria was, did it improve our ability to identify weakly capitalized companies? In my opinion, most, if not all, of the suggestions clearly belonged in a company's target surplus formula. There's always judgment involved as to what refinements belong in a threshold formula. The fourth criteria was, did it correct an error in the formula? We did make some errors. One, for example, occurred for variable life insurance. Someone pointed out that we had forgotten to deduct the reserves in determining the net amount at risk for this coverage. Others were clarifications or misunderstanding the instructions.

With that, I'll just highlight a few of the changes that were made to the formula. The first involved the asset concentration factor. One person suggested that perhaps unintentionally we were inappropriately encouraging large investments in low-risk bonds to move high-risk assets out of the top 10. We thought about it and agreed. As a result, all Category-1 bonds and other assets with factors less than 1% were excluded from the concentration-factor calculation. The intent was to get at higher risk, and clearly these investments are not.

The second major change gained much discussion. It involved the treatment of certain experience-rated group pension business. A series of presentations were made that suggested we should adjust the RBC default component for this very important block of business that either could not be withdrawn or had a market value cash-out. We agreed to exclude this business with reserve rates no greater than 4% (that also met other defined criteria) from the C-3 component only. We also excluded certain guaranteed separate accounts from the C-3 component. In the old days, everyone understood that separate accounts were for variable products with no guarantys on the cash values. Separate accounts include just about anything. Separate accounts with guarantees of 4% or less are excluded. Any others are assessed full C-1 and C-3 risk.

The third area that we changed involved the treatment of certain mortgages. Questions were raised about factors for farm mortgages and residential mortgages and whether we were being too harsh based on recent experience. We concluded in each case that we should lower the factors.

Another comment that led to a change was about group dental. After further review, we decided to put this with usual and customary major medical coverage, and this reduced the factor on this line of business. Questions were also asked about federal employees group life insurance (FEGLI) and service employees group life insurance (SEGLI). Shouldn't this coverage always have the lowest factor regardless of size of the net amount at risk of the company? We agreed. We also decided to treat preferred stock of affiliates the same as common stock to avoid possible manipulation.

The final change that I will describe involves the C-3 factor, with or without an unqualified Section #8 actuarial opinion. Actually, this change takes on the characteristics of beauty being in the eyes of the beholder. Originally, if you didn't provide a clean Section #8 opinion, you had to increase the risk factor by 50%. The new formula increases the factor by 50% for everyone and then gives a one-third credit to those who provided an unqualified Section #8 opinion. This feature was discussed for some time; the regulators decided to continue to make this distinction in the final formula.

A number of transition features were also added. One I previously mentioned permitted voluntary investment reserves to be treated as part of total adjusted capital until 1995. The second uses 50% of the book value for property/casualty subsidiaries until the actual property/casualty RBC formula is completed and becomes available. That should be within a year.

Two major new sensitivity tests were added. One reduced total adjusted capital by capital contributions made during the year. The other applies a 10% factor to affiliated assets (other than affiliated common stock). In each case, we wanted to flag any unusual transactions for the regulators' consideration. A few more changes were made in the formula, as well as other changes that I won't cover, to clarify the instructions.

Our goal was to keep the formula fairly simple, yet complex enough to identify weakly capitalized companies. Another major issue was possible formula abuse. I would like to read from the proposed NAIC model law so that there will be no misunderstanding of intent. "The judgment of the legislature is that the comparison of an insurer's total adjusted capital to its RBC or any of its RBC levels is a regulatory tool which may indicate the need for possible corrective action with respect to the insurer." It clearly is not intended as a means to rank insurers generally. "Therefore, any advertisement or any public announcement or reference to the RBC of any insurer or of any component derived as a calculation thereof by any insurer, agent, broker or other person engaged in any manner in the insurance business would be misleading and is, therefore, prohibited."

Finally, what are the next steps? There's going to be a public hearing on November 9, 1992 in Boston. If you feel that we haven't given your comments sufficient attention or would like an opportunity to tell the regulators about it directly, this is your chance. Speak to them in Boston. After that meeting, the working group will make final adjustments to the formula, if any are needed. It will then go to the NAIC for adoption in Atlanta in December 1992. Companies will be asked to provide their 1992 data to the NAIC, on a confidential basis, for additional testing. Even though the formula won't be in effect until 1993, we would like to see how the formula's working. Frankly, we also want to be sure that the changes are clearly articulated and understood.

There will be a one-year phase-in of the regulatory-action levels described earlier, with each one being pushed up a step. So, the future regulatory-action level will be the company-action level in 1993, authorized control becomes regulatory action, and so on. Note that the formula and annual statement presentation begin in the 1993 annual statement, whether or not individual states enact the model law. The model law must be adopted by each state to change its minimum capital standards. I wish to emphasize the new model law does not include the formula. The law describes the regulatory-action structure and refers to an NAIC formula. In addition, if this new process is to be effective, the formula has to be dynamic, reflecting changes in the industry as they occur. Next, Bob will present NAIC risk-based capital from the regulators' perspective.

MR. ROBERT J. CALLAHAN: I'm not going to talk about the factors of life RBC, or the development thereof, but rather how life RBC will be used as a regulatory tool by the regulators. First, let us get a general overview.

Regulation of financial condition and of solvency is done primarily by the state in which a life insurance company is incorporated or domiciled. According to the NAIC database as of October 1991, there are approximately 2,375 life insurance companies in the United States. Only 1,862 of these companies, however, file financial data with the NAIC central office in Kansas City.

The top six states according to the number of domiciled companies filing with the NAIC are shown in Table 1.

TABLE 1
Top Six States

| State | NAIC Life Companies | | State Population | |
|---|---|---|---|---|
| | Filing | Potential | Millions | Rank |
| Arizona | 281 | 753 | 3.7 | 23 |
| Texas | 277 | 278 | 17.0 | 3 |
| New York | 98 | 98 | 18.0 | 2 |
| Illinois | 88 | 87 | 11.4 | 6 |
| Louisiana | 67 | 91 | 4.2 | 20 |
| Delaware | 62 | 63 | 0.7 | 45 |
| All states | 1,862 | 2,375 | 243.2 | – |

As you can see, Arizona, which ranks 23rd in population, based upon the 1990 census, has potentially 753 companies filing, although the actual number filing is only 281. In this case, many of those companies are special-purpose companies, licensed only in the state of Arizona; many of them are captive reinsurers that do not do direct business. The second largest state is Texas, with a potential of 278, and 277 actually filing financial data with the NAIC central office. Texas ranks third in population among the states. New York then comes next with 98 domiciled life insurance companies, ranking second in population. Delaware ranks sixth in domestic life insurers with 62 companies, but it is 45th in population.

We notice in Table 2 that, based upon data supplied by the National Organization of Life and Health Guaranty Funds Association, 188 companies became impaired and insolvent during the period 1981 through 1991. The number of companies appears to be somewhat on the increase, but in particular the dollar amount of the insolvencies has grown. The figure of over $1 billion for the years 1985-86 represents the Baldwin United subsidiaries, and the figure of over $3 billion for 1991 includes the figures for the Executive Life Insurance Company.

TABLE 2
Life Companies
Impaired and Insolvent

| Year | Number | Amount ($ millions) |
|---|---|---|
| 1981-82 | 9 | $ 33.7 |
| 1983-84 | 24 | 275.7 |
| 1985-86 | 21 | 1,064.1 |
| 1987-88 | 32 | 179.8 |
| 1989-90 | 74 | 858.5 |
| 1991 | 28 | 3,217.2 |
| Total | 188 | $5,629.0 |

The Guaranty Funds Association had not been in effect in all states for this entire period of time. We see in Table 3 that the total assessments for 1972-91 combined for the five largest companies do not show figures that approach either $1 billion or $3 billion.

TABLE 3
Total Assessments by Life and Health Guaranty Funds Association 1972-91
Five Largest by Company in Millions

| Company | Health | Life | Annuity | Total |
|---|---|---|---|---|
| Executive | | $ 73 | $ 83 | $ 156 |
| Diamond Benefit | $ 33 | 33 | 27 | 93 |
| Baldwin United Subsidiaries | | | 61 | 61 |
| MidWest | 4 | 3 | 54 | 61 |
| Mutual Security | | 21 | 38 | 59 |
| All 159 Companies | $522 | $323 | $399 | $1,244 |

The largest assessment is for the Executive Life Insurance Company, and that was assessed only for the year 1991. In the case of the Baldwin United subsidiaries, the guaranty associations were not applicable to most of that business. The shortfalls on most of that business were covered by contributions from both the investment industry and the life insurance industry.

According to data provided by the American Council of Life Insurance in its 1991 *Life Insurance Fact Book Update,* the total number of companies incorporated in the United States approximate the figures presented before by the NAIC. One interesting fact that the American Council of Life Insurance (ACLI) notes is that as of year-end 1989, 1,521 of the total 2,270 companies were incorporated for a period of less than 25 years.

Perhaps it has been too easy to incorporate a life insurance company since the initial dollar amounts of capital and surplus have been very low, and such dollar amounts vary by state.

New York State might have one of the highest minimums for capital and surplus among all the states, and yet even in New York, according to current law, a new stock life insurance company could be incorporated with only $6 million of capital and surplus and could be maintained with only $2 million. In practice, higher amounts are required.

Under current New York law, the major reasons to rehabilitate or liquidate a New York domestic life insurance company are:

1. Insolvency – statutory liabilities exceed the statutory assets as evidenced here by a financial statement or report on examination of a company.
2. Hazardous conditions to the company or the policyholders; however, this may be difficult to administer.
3. Failure to make good an impairment, that the company's liabilities plus its minimum surplus exceed its assets.

Obviously a minimum amount of capital and surplus as low as $2 million is ridiculous for companies with, for example, $100 million or $1 billion of liabilities. One of the things that has given impetus to life RBC is the fact that the rating agencies consider a company's surplus in relation to its assets and its liabilities. Also, the regulators would prefer to work with the companies, so as to take corrective action before a company's surplus gets too low.

If the company's surplus does reach a certain low relative point, then the regulators want to have the authority to be able to step in and take over the company before conditions deteriorate to an extent where there is a serious shortfall along with heavy assessments against the life insurance industry, which in turn affects the taxpayers of various states when there are premium tax offsets. The public as a whole would generally look at surplus in relation to the liabilities or the assets.

An RBC model act has been drafted and has been exposed for comment by the NAIC. In fact, there will be an all-day public hearing on November 9, 1992 on the RBC model, followed by an all-day meeting of regulators on Tuesday, November 10. The model provides for the identification of weak companies, requires a company to develop a plan for corrective action, authorizes the commissioners to order corrective action, and finally authorizes the commissioners to take over the company before the assets become insufficient.

With these various plans and levels of action, the number and amount of insolvencies should be lessened, and there will be fewer lawsuits and delays in recovering monies from an insolvent insurer.

There are several key definitions in the model act. One of the key definitions is total adjusted capital. Certain items are treated as liabilities in the statutory annual statement, but which for purposes of RBC, are added to the capital. Perhaps this adjustment is in part due to the influence of the rating agencies that have, for example, considered the mandatory securities valuation reserve (MSVR) as part of the capital and surplus rather than as a liability. RBC is simply defined as the amount that the application of the factors in the formula produces. The RBC report is the report the company fills out by the application of the formula to its block of business. An adjusted RBC report is that which the commissioner may come up with if he or she disagrees with the company's RBC report. An RBC plan is a plan that a company must file if it triggers one of several levels of regulatory action. A revised RBC plan is just that; it's a plan that has been revised by a company to meet any objections of the regulators.

What are these RBC levels? There is, first of all, what we call the company-action-level RBC, which is 200% that of the base-adjusted capital. The next level is the regulatory-action level, wherein the commissioner may issue a corrective order. This level is 150% of the base-adjusted capital. The base-adjusted capital is 50% of the RBC (the amount produced by application of the formula). The minimum adjusted capital at which the regulator is mandated to take over the company is 70% of the base-adjusted capital.

It would have been far simpler to define company-action-level RBC as the amount produced by application of the formula, but regulators wanted to put the focus on the level at which the regulators are authorized to take over a company, rather than the first level, which is intended to trigger a plan proposed by the company.

Various events may trigger one of the various actions.

In the case of a company-action-level event, there are three triggers. The major trigger is when the company files a RBC report where (1) its total adjusted capital lies between 150% of its base-adjusted capital and 200% of its base-adjusted capital (in other words, where its total adjusted capital lies between 75-100% of its RBC; or (2) its total adjusted capital is greater than 200% of its base-adjusted capital, but less than 250% of its base-adjusted capital, and there is a negative trend. The second trigger is where the commissioner makes an adjusted RBC report that shows one of the above conditions and the insurer does not object. The third trigger is when the commissioner rejects any challenge to the adjusted RBC report.

Nine things can trigger a regulatory-action-level event. The major trigger is when the total adjusted capital lies between 100% of the base-adjusted capital and 150% of the base-adjusted capital. Because the commissioner may challenge the plan at the plan level, however, or the commissioner may calculate an adjusted report, or the commissioner may reject a revised plan, and because the company may or may not challenge the commissioner's action, the various combinations of events total nine.

The authorized-control-level event occurs when the RBC report shows total adjusted capital lying between 70% of the base-adjusted capital and 100% of the base-adjusted capital. An authorized control level event can be triggered five ways.

The last level is the mandatory control level, where the total adjusted capital is less than 70% of the base-adjusted capital, and action by the commissioner is mandated. There are three ways to trigger this level of action. The first way to trigger is by an unadjusted RBC report; the second way is if the commissioner adjusts the report, and the company does not challenge; and the third way is if the commissioner adjusts the report, and he or she rejects any challenge, at which point the company has a right to go to court to challenge the commissioner's actions.

What actions are required at the various level events? Section 3 of the model is titled "Actions by the Commissioner," but it also mandates actions by the insurer.

In the case of a company-action-level event:

1. The insurer must file an RBC plan within 45 days. The plan shall:
   a. identify the conditions of the insurer contributing to the situation;
   b. propose corrective actions;
   c. project the insurer's financial results for the current year, plus four succeeding years, with and without the effects of proposed corrections, including projections of statutory operating income, net income, capital and/or surplus;
   d. identify the key assumptions impacting the projections and the sensitivity of the projections to the assumptions; and
   e. identify the quality of and problems associated with the insurer's business.

2. The commissioner must then notify the insurer within a specified number of days whether the RBC plan is satisfactory or unsatisfactory. If unsatisfactory, the commissioner shall set forth the reasons and may set forth proposed revisions.

3. Upon notice of an unsatisfactory plan or upon notice of a rejection of any challenge, the insurer shall submit a revised RBC plan.

4. If the commissioner finds the revised RBC plan unsatisfactory, he or she may specify that the notification constitutes a regulatory-action-level event.

5. Any filing with the states, other than the domestic state, shall be conditioned on the other commissioner making a request in writing and upon the other state having a provision for confidentiality.

In the case of a regulatory-action-level event, the insurer must file an RBC plan for corrective action within 45 days. The commissioner may then conduct an examination and an analysis of the assets, liabilities, and operations of the company. The commissioner may issue a corrective order. The commissioner may retain actuaries and investment experts to aid in the analysis, such cost being borne by the insurer involved.

At the authorized control level, the commissioner may take actions similar to that of the regulatory action level, or he or she may take control of the insurer; however, the insurer does have protection under summary proceedings of the law and can challenge the commissioner's effort to take control of the insurer.

At the mandatory control level, if the insurer files an RBC report, which shows that its total adjusted capital is less then 70% of its base-adjusted capital, then that is sufficient for the insurer to take action without any contest. If, however, the total adjusted capital is less than 70% of the base-adjusted capital, on the basis of an adjusted RBC report, then the insurer has protection to take legal action to challenge the commissioner's efforts in court.

Insurers have been concerned that perhaps there may be some danger in a bad report precipitating a run on the bank. The model act provides that the following shall be kept confidential: the RBC report (which shows all the factors and the contribution of each of the elements in the formula), any RBC plan that the company may present at either the company-action level or at the regulatory-action level, and the report of any exam or analysis, as well as any collective audit that the commissioner may order at the regulatory action level. There is one exception; in the case of necessity to enforce any of the above, the material could be made public for such purposes.

In the annual statement, however, based upon what has been proposed, the total adjusted capital and the authorized control level RBC in dollar amounts will be shown. Obviously then, anyone can go and take those numbers and calculate the various ratios.

The RBC is still in its infancy, and some of the factors may need to be changed, but it's not designed to rank companies. The law contains a provision prohibiting use of RBC in competitive situations, such as advertisements or any public announcement, by any insurer, agent, broker, or other person engaged in the business of insurance. An insurer, however, can respond to a material falsity stated by anyone.

For the model law proposed by the NAIC to be effective, it must, in turn, be adopted by the various states. In recent years, the NAIC has beefed up its model laws to help prevent insolvencies. It has an excellent system of insurance regulatory information; it has excellent hardware and software. There is personnel at the NAIC central office in Kansas City, and it has also, more recently, set up a unit in Washington, D.C., to develop factors to identify troubled companies. In June 1989, the NAIC adopted financial regulation standards, the accreditation program, accrediting states that have adopted regulations that are substantially equivalent to the financial regulation standards. It was adopted in June 1990, and as of the end of September 1992, 14 states have been certified. It is expected that life RBC will become part of the accreditation standards.

To further make the accreditation process effective, proposals have been made that companies domiciled in a nonaccredited state be examined by an accredited state. A recent suggestion made by the New York insurance commissioner at a congressional hearing was that the federal government pass a law prohibiting companies domiciled in a nonaccredited state from selling insurance in other states. Thus, there is incentive for both the insurance companies and the insurance commissioners to have life RBC enacted. Will the effect be to lessen legal contests to takeover? The model law would mandate the commissioner to work with potentially troubled companies at an early point. It may lead to more, rather than less, contested actions, however, particularly if the commissioners act on the basis of their adjusting the annual statement figures, based on advice from lawyers, examiners, actuaries, and investment people. In practice, I suspect that most of the events will be triggered by financial reports adjusted by the commissioner.

One might ask whether the commissioners are looking to put more insurers into rehabilitation. In some states, the administration of insolvent insurers may be a source of jobs for staff, as well as a lucrative source of revenue for consultants. Generally, commissioners consider it a black mark for an insurer to go insolvent during their watch, and the desire is generally for commissioners to see that their companies are healthy and stay healthy. New commissioners, however, might be more willing to act and blame their predecessors. We do expect that experience with the new proposals will indicate the need for revision. To this end, there is a proposal that the NAIC Risk-Based Capital Working Group and its advisory group be made permanent to monitor experience and make necessary adjustments.

RBC should form a cornerstone of any federal or state regulatory system. RBC should result in maintaining insurers in a solvent position, lessen the financial impact on guaranty funds in case of an insolvency, and build public confidence in insurers and in regulators.

MR. MICHAEL ALBANESE: Leverage represents the relationship of overall insurance and investment risk to permanent capital and surplus funds, and is perhaps the most important objective area for A.M. Best in determining the appropriateness of a rating. All companies must meet capital-adequacy requirements, based on a number of factors, to qualify for a particular rating classification.

The RBC concept integrates many factors that have traditionally been incorporated into the A.M. Best review process. The individual components, however, have historically been viewed separately under our profitability, leverage, and liquidity analysis. Since RBC encompasses many of the specific elements reviewed in these areas, a capital-adequacy model, which is similar in many respects to that of the NAIC's model, has been added as an additional tool as part of our objective review process.

Although our RBC model is designed to be more responsive to the current changes in the life/health insurance industry and financial markets, our other profitability, leverage, and liquidity measures will continue to be utilized to round out (or differentiate companies within) our comprehensive quantitative rating review.

**ANALYSIS OF RBC (A.M. BEST COMPARED TO THE NAIC)**

The A.M. Best RBC formula closely follows the NAIC calculation and utilizes the C-1 through C-4 risk classifications. Like the NAIC model, our formula also contains a covariance adjustment. Rather than addressing each weighting factor, it is perhaps more appropriate in this type of forum to highlight some of the more significant differences that exist between the A.M. Best and NAIC RBC formulas.

**C-1 SIZE FACTORS**

Although Best's C-1 risk classification structure is roughly the same as that of the NAIC model, a significant difference arises with regard to the treatment of a company's spread-of-asset risk. The A.M. Best model utilizes a size factor that is intended to account for risk spread among all major asset classifications and is not limited solely to the number of bond issues.

Our size factor (or spread of investment-risk adjustment) is based on the amount of all nonaffiliated investments made in bonds, common and preferred stocks, mortgages, investment real estate, and cash and short-term investments. Best's size factor is based on an assumption that, as holdings increase, a distribution within a particular classification occurs. Although this assumption serves as a starting point, the default factors may be adjusted, based on our qualitative review of the underlying asset portfolios. If distributions within the particular asset classes remain relatively concentrated, the size factor is adjusted accordingly.

**SINGLE CONCENTRATIONS**

In addition to our size factor, Best's RBC calculation has an adjustment for concentrations in single investments. Twenty percent of capital and surplus (including MSVR) has historically served as our single investment limit, but consideration is currently being given to reduce this threshold, and a limit in the 10-15% range will most likely be adopted. Concentrations in individual securities that exceed this limit receive additional capital requirements.

Our treatment of single investments contrasts with the NAIC's concentration factor, which is established for a company's 10 largest investments. The NAIC model exempts class-1 and government-backed bonds, common stock, properties occupied by the company and policy loans, among other holdings, from their concentration factor. Under the A.M. Best model, all assets, with the exception of government-backed issues, home-office buildings, and insurance affiliates, are subject to a single investment factor.

The additional capital requirement applies to amounts in excess of the single investment limit, at which point factors are double those required for the respective asset class. Unlike the NAIC's largest asset factor, our single investment requirement is not capped at a maximum 30%.

**MORTGAGES**

Mortgages are also treated differently under Best's RBC analysis. We start out with default factors that are somewhat more conservative than the NAIC requirements. Our analysts spend a substantial amount of time in this area, however, adjusting for the specific characteristics of companies' mortgage portfolios, to provide more precise and appropriate weighting factors. Specific adjustments are based on substantial supplemental information that is requested and obtained from virtually all companies with significant exposures in this area.

**OTHER INVESTED ASSETS**
Our RBC model has default requirements that are consistent with the NAIC model. Due to the dissimilar risk characteristics of holdings that appear in Schedule BA, factors are then adjusted according to a qualitative review of the underlying holdings. For example, securities, such as small-business loans (which are government backed) as well as speculative real estate or energy-related joint ventures may be carried in this schedule. It would be inappropriate for us to assign the same weighting factors to these securities that have substantially different risk characteristics.

**CMOs**
Finally, in the area of C-1 risk, we are not ignoring risks associated with the prepayments of CMOs. Although we are still considering the feasibility of applying standard adjustments for such risks to all companies, due to the lack of appropriate disclosure relating to the myriad of risk profiles that exist, particular adjustments for these securities are presently qualitative in nature. We do intend to request additional information pertaining to CMOs as part of our supplemental information requests, with the intent of making more quantitative adjustments for CMO risks in the near future.

**C-2 RISK**
Minor differences exist between the A.M. Best model and that of the NAIC, especially as applied to mortality risk.

In general, in the area of C-2 risks, A.M. Best may have additional differentiation in its weighting factors that reflect a review of a company's specific product risks, its underwriting practices, and its distribution methods. If these items are significant, capital requirements may differ slightly from company to company, despite similar lines of business.

**C-3 RISK**
Although the A.M. Best treatment of C-3 risk resembles the NAIC model, we have four risk categories, rather than the three classes incorporated in the NAIC calculation. In this area, the range of factors between our highest and lowest weightings do not materially differ from those of the NAIC. Our extra classification, however, provides some additional differentiation based on more specific risk characteristics.

Best's treatment of C-3 risks is derived from information concerning the withdrawal characteristics of products found on page 17B (note 9d) of the annual statement. The factors are then adjusted based on a qualitative analysis of all items that might have a bearing on disintermediation risk, such as liquidity profile, distribution channels, size of contracts, asset/liability management practices, and general policyholder confidence issues.

**C-4 RISK**
Finally, in the area of C-4 risk, we do utilize the NAIC charges as a starting point. Additional requirements may also be included at varying levels, based on qualitative assessments of off-balance-sheet items, such as guarantees or other commitments to affiliates, contingent liabilities, outstanding financial reinsurance (and/or the anticipated recapture of reinsurance), or any other items that might encumber a company's surplus growth or preservation. Rather than using a set sensitivity test, adjustments may be made with regard to any items that might influence a company's financial

performance over either a short- or long-term horizon. In fact, our RBC analysis is done in an interactive mode by our analysts who adjust RBC requirements based on various scenarios.

One of the specific scenarios that is run for each company concerns our treatment of by-line losses. Due to the limitations associated with virtually all objective measures, RBC inherently does not account for the prospective treatment of continued losses (or future operating profits for that matter) in its derivation of capital needs. As a result, for those who are familiar with our traditional gross and net leverage calculations, it is also common for our analysts to reduce capital for by-line losses, either in whole or in part, under a stress-test analysis.

**EVALUATING THE NUMBERS BEHIND THE STATEMENT**

The RBC concept represents a significant departure from the previous fixed-capital regulatory surveillance mechanism. Unfortunately, the financial disclosure needed to accomplish the goal of accurately assessing a company's particular risk-adjusted capital posture is not currently met through the annual statement.

To overcome the constraints and limitations of the annual statement, we have historically requested that companies supply us with supplemental information concerning virtually all aspects of their operations. In addition, we try to maintain ongoing dialogues with company managements to understand their companies' operations and the numbers behind their statutory filings. The information that we request and discuss has been extended to cover much of the additional information necessary for us to conduct an informed RBC analysis.

The supplemental information on which our quantitative and qualitative adjustments are based may be obtained from the following sources:

- Supplemental questionnaires that are sent to each company requesting supporting information on the specific products written, investments made, and/or reinsurance arrangements that exist
- State insurance examination reports
- CPA audit reports
- SEC filings
- Annual stockholder and policyholder reports
- Business plans
- Meetings and correspondence with management
- Asset/liability reports

It is largely from these materials that we make qualitative assessments of the "numbers behind the statement" that are compiled for each company (where significant). The following are some of the more significant items adjusted for during our qualitative analysis:

1. **Less-than-Investment-Grade Bonds**
   For companies maintaining exposures in this area, we are interested in reviewing the maturity schedules, subordinated or secured credit status, and call provisions of both publicly traded and privately placed noninvestment-grade bond holdings.

2. **Mortgages**
In addition to the information that is obtained from the annual statement, we review the loan types (office, retail, industrial, apartment, residential, hotel, and miscellaneous), seasoning, sizes, geographic dispersion, loan-to-current-market-value, underwriting procedures, debt-coverage requirements, scheduled balloon payments, restructure and foreclosure practices, and rates of return received on nonperforming loans. In addition, an important area that we consider is companies' experience and capability to manage their portfolios, particularly in instances where emerging or on-going problems exist.

3. **Disintermediation Risk Profile**
This applies to total reserve and deposit-fund liabilities. In this area, we are interested in evaluating all reserves and deposit-type funds as to risk classifications. Information provided on page 17B of the notes to financial statements serves as our starting point for C-3 risk analysis. We do attempt, however, to classify all pertinent risks with greater differentiation than is available solely from information contained in the annual statement. Such differentiation might involve an annuity-reserve breakout. Where appropriate, a profile of annuity reserves is normally compiled and compares annuity reserves on a postsurrender basis with the outstanding reserve. This information generally provides a better picture of annuity-reserve conservatism than is available from Exhibit 8, Part B of the annual statement.

4. **Asset/Liquidity Profile**
In addition to the normal liquidity tests that are run for each company, we are interested in ascertaining the level of immediately liquid assets that are held. We do not expect a company to maintain an ability to liquidate its investment portfolio overnight, but we are interested in evaluating the amount of liquid assets that are maintained, in relation to surrenderable liabilities and to other companies with similar product risk profiles.

5. **Product Breakdown and Distribution**
We find it useful to review business production and performance by product line and by distribution channel (i.e., we want to know what products are sold through what distribution systems). In connection with this review, it is important for us to understand a company's average policy sizes and target markets/niches.

6. **Reserve Basis**
In addition to material pertaining to reserves held on mature business and new product reserving methods, specific information is requested as to credited-versus-earned rates of interest-sensitive business.

Finally, the review of a company's strategic business plans is of great importance in understanding the numbers behind the statement. For example, numbers produced by a company that is prudently growing its business and building values for the future will be viewed differently under our analysis than a company that is in a contracting mode and merely running off its existing book of business. Strategic plans also enable us to anticipate a company's capital needs on a prospective basis, reflecting its growth objectives and its ability to sustain or support its plans through operating earnings or other abilities to access capital. Finally, understanding target pricing margins and the assumptions that a company includes in its strategic planning process are also important to us in assessing its potential capital needs.

**INDUSTRY IMPACTS**

RBC and its implications will be substantial and will result in broad changes throughout the life/health insurance industry. The following are among some of the more significant effects that we expect to arise from the regulatory transition from fixed-capital minimums to RBC requirements:

- Perpetuate the "flight to quality." RBC will provide additional motivation for life/health insurers to restore consumer confidence, by reducing leveraging or speculation on company balance sheets. The increased risk tolerance that was evident as companies competed for investable consumer dollars has been substantially reduced. As a result, we have seen increased efforts by company managements to sustain profit margins by maintaining realistic interest-crediting rates.

- Raise the previous fixed-capital requirements. Current capital requirements vary by state from approximately $500,000 to $6,000,000. Generally, these fixed requirements are used regardless of specific risk maintained by individual companies.

- RBC thresholds will likely produce lower levels of required capital than are maintained by prudently managed and highly-rated companies, based on quantitative as well as qualitative factors, such as business plans.

- Capital-raising efforts may become more difficult and expensive as the attractiveness of life/health companies is diminished from an investment perspective. RBC may limit the availability of dividend payments and reduce stockholder returns on equity.

- Reexamine new product design and future liability structures. RBC will be an additional incentive above and beyond actions already taken in response to policyholder runs. Since higher risk charges are associated with more immediately surrenderable contracts, many product designs will involve less risky liability characteristics. We have already seen a movement by many of the larger companies to variable or participating pensions, or fee-based management-type contracts.

- Resurrect the contradictory federal taxation and solvency legislative agendas. As RBC raises surplus requirements, there is a real potential for companies with RBC levels well in excess of the minimum threshold to be viewed as "overcapitalized." This may not be as dramatic as the California Proposition 103 rate rollback legislation on property/casualty insurers, but taxation proposals similar to the $8 billion tax burden levied on life/health insurers in 1990 may resurface. Consequently, RBC may have an unintended effect of weakening certain strongly capitalized companies. This may become particularly acute for accident and health companies that are in the midst of substantial federal regulatory scrutiny of their loss-and-expense postures as to the contribution to the national health care crisis.

- Restructurings of investment, reinsurance, or affiliated arrangements may be sought to circumvent the formula. As can be expected with any large population, there will always be a select segment that will go to great lengths to beat objective formulas.

- RBC will contribute to the accelerating trend in consolidation. With approximately 2,000 licensed life/health insurers, there is a tremendous amount of capacity available. Increased sales of companies and blocks of business, mergers and liquidation activity will result as companies fall near or below heightened capital requirements.

- RBC can play a role in reducing the costs of failures by providing an enhanced mechanism of detecting weakly capitalized companies. RBC will provide a considerably improved means by which a more effective structure of solvency regulation can be based, particularly when combined with other NAIC efforts, such as the state accreditation program and enhanced financial reporting efforts.

- RBC by itself is not sufficient for preventing all potential life/health failures. There is no entirely effective safeguard for abuse and mismanagement, and RBC by itself does not supplant the need for adequate funding, personnel requirements, and necessity for the effective use of state insurance department resources to keep up with the evolving complexity of the life/health industry.

**IMPACT OF RBC ON BEST'S RATINGS**

A.M. Best agrees with the NAIC RBC Working Group that RBC, by itself, is insufficient and inappropriate for use as a rating or ranking system. As is the case with any purely objective formula, RBC does have limitations. As such, it would be inappropriate to conclude that ratings assigned by the A.M. Best Company, which are based on a full complement of quantitative as well as qualitative considerations, will correlate to their respective RBC ratios.

Capital adequacy and the use of RBC as part of leverage analysis are important to the A.M. Best rating process. Leverage targets in most cases, however, serve solely as an objective hurdle that companies are required to meet to qualify for a particular rating range. The integration of all of the qualitative factors are considered during our review process, along with the objective standards, and serve as the basis for our rating decisions.

MR. BRIAN L. HIRST: Mr. Callahan, as the law is structured, can you tell us how the disclosure works between the insurance company and all the other states in which the company is licensed to do business (other than the state of domicile)?

MR. CALLAHAN: Any state in which a company is licensed has the authority to request information of that company. If the state is not the state of domicile, it still has that authority to request that information. A provision in this life RBC model law says if the commissioner of another state requests a copy of the risk-based capital report, or a copy of the RBC plan, then the company must give that commissioner that copy, unless that state does not have on its books laws as to confidentiality. Therefore, if you were to have life RBC adopted by 14 states, and any one of the other jurisdictions requested a copy, and they didn't get it, their only recourse would be to yank the company's license. The model law says that unless that other state has laws on its books regarding confidentiality, the company doesn't have to give out the copy, and so you're going to run into a conflict here between the other state's right to get information and the state of domicile's law that says you don't have to give it unless it has on its books a provision as to confidentiality.