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# MEETING THE NEEDS FOR FINANCIAL INFORMATION

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- What are management's basic needs; how are they met; can financial systems continue to meet the challenge?
- Are fundamental changes ahead for GAAP reporting?
- Is it time for mutual companies to provide more meaningful financial information?
- Can current regulatory reporting meet the needs of the 21st century?
- Can separate statutory and GAAP systems continue to coexist?
- Will the United States regulatory environment reduce our global competitiveness?
- Variance analysis why your predictions were wrong
  - Which variances are acts of God?
  - -- Which variances should be blamed on somebody?
  - How to deal with interest rate fluctuations
- Market valuation, why?
  - What questions are being addressed with market valuation?
  - -- What does market value mean for liabilities?

MR. R. STEPHEN RADCLIFFE: We will discuss the relevance of today's financial statements in managing the affairs of an insurance company. A modern insurance company is a very complex organization. As many of you know, managing an insurance company is difficult even when there is good information available. It is almost impossible with some of the information available. We will address the relationship between financial statements and managing insurance companies. The key issue is management's ability to understand the fundamental driving forces of profitability when using financial statements.

I will first talk about statutory statements, then Bruce Darling will discuss Generally Accepted Accounting Principles (GAAP) statements and finally Mike Mateja will focus on some other alternatives for providing financial information. Each of us will discuss the strengths and weaknesses of these financial instruments in understanding the dynamics of insurance organizations.

Let me move on to my part of the discussion. I will cover three topics: (1) the primary need for statutory statements – keeping track of capital, (2) some problems with statutory statements, and (3) a few suggestions for improvement.

The basic premise of my presentation is that statutory statements are useful by definition. They measure the amount of statutory capital – the lifeblood of any insurance company. Without capital a company cannot operate and in today's environment without the right amount of capital a company may not be able to operate effectively. With the plethora of alternative financial statements, it is sometimes easy to ignore this simple and obvious fact. In today's world, capital is king. Like it or not, statutory statements are a fact of life and the only measure of capital.

The trouble is that many misuse these statutory numbers and try to make them do more than they were intended to do. As you will hear from the other speakers, entirely different forms of information are needed to truly understand what makes a company a success or a failure. What you will hear from me is that it is important to pay close attention to statutory results. I, therefore, will not have any proposals for fundamental changes in statutory accounting, just a few suggestions for improvement. Changes that will make these statements more clear and effective in doing what they are supposed to do — measure capital.

There really is no point in suggesting fundamental change for the statutory blank because there is little chance of that occurring any time soon. Consider some of the uses for statutory accounting that are embedded in our current system. As I mentioned before, it determines solvency, probably the most crucial of all financial results. Most pricing is based on statutory book profits with return on equity profit goals. The Valuation Actuary cash flow testing will be measured against statutory results. Lately there has been a move toward value-added statements, all of which are statutory based.

With most industrial firms, cash is the basic element of the financial statements. Cash is a basic element of life insurance companies also. However, it is also helpful to think of statutory earnings as a basic element of capital formation in life insurance companies. Thinking of statutory earnings as a basic element helps illustrate how important statutory accounting principles are to our system. GAAP earnings are another way to portray earnings, but statutory earnings are the basic element. It is interesting to note that whether we look at cash, statutory, or GAAP, the fundamental underlying profitability of the company does not change.

I have found it helpful to think of statutory reserves as cash to emphasize statutory earnings as the basic element. To illustrate the point, think of a parent company that is capitalizing a new subsidiary. The parent pays the subsidiary capital infusions and then the subsidiary pays back the parent "dividends" equal to statutory earnings. If the subsidiary holds no capital, then the "dividends" are equal to the statutory earnings. If the subsidiary holds capital equal to target capital, then the "dividends" are equal to what has been labeled distributable earnings. I often use this model when figuring out the underlying profitability of products and product divisions. The ROE can be calculated by discounting the distributable earnings to zero. In this way statutory earnings become directly analogous to cash flows in an industrial firm.

Now that we have considered the importance of the statutory earnings, let me outline a few of the problems with the statutory blank. The statutory blank is loaded with data. For my company, it takes from 12-20 megabytes of memory to store the blank on the computer. That's equivalent to a 4,000-5,000 page novel. It holds an incredible amount of data, but it is weak on basic information. There are just too many distortions and confusion in the current blank.

What we have, unfortunately, is a 19th century document to serve the 21st century. Let's consider just a few examples to illustrate this point: deferred premiums, the dividend liability, and nonadmitted assets.

Deferred premiums are a product of the 19th century. They were introduced to allow calculation of reserves given the technology of the day. Deferred premiums were invented to put reserve calculation on a policy-year basis to facilitate the calculation of reserves. In those days, without the computing power that we have today, this simplification was absolutely necessary. This process was developed so that policyyear reserve factors could be put in tables for ease of calculation. Policy-year reserves were then calculated and interpolated to get calendar-year reserves. With today's computer power, this process is no longer necessary. We can calculate the calendaryear reserves directly and eliminate the need for deferred premiums. As a matter of fact, deferred premiums no longer serve any useful purpose and actually cause distortion and confusion that inhibit good analysis. Eliminating deferred premiums would also eliminate the need for a line on the income statement that no one has ever understood - line 24 "Increase in Loading on Deferred Premiums." There would be no effect on the bottom line because there would also be offsetting changes in the premium line (the increase in gross deferred premiums) and the increase in reserve line (the increase in net premiums).

The dividend liability is also distorted because it too is calculated on a policy-year basis. This liability is calculated assuming that the dividends declared will be paid on the next policy anniversary. The entire amount of the dividend is reserved (with some adjustment for lapses). However, I would point out that since the annual statement is on a calendar-year basis that not all of that dividend is "earned." The "unearned" portion should be excluded from the liability. This is the reason that many evaluations of insurance companies will make an adjustment for dividends and add some portion of the dividend liability back in to capital. Why not save the need for this adjustment and set the dividend liability right in the first place?

The issue of nonadmitted assets has long been a source of frustration for those who would like the annual statement to present a fair and realistic financial position of life insurance companies. Every other industry on the planet is allowed to take credit for assets that are disallowed by the adjustment for nonadmitted assets. Isn't it time for us to join the real world and change the annual statement to allow these items if they represent real value to the company? This would also produce a side benefit. It would eliminate the noneconomic activity of arranging sale-leasebacks and other financial transactions to get credit for assets that really do have value.

I have a few other suggestions for improvement but the list is by no means exhaustive. These suggestions come from one who prepares and uses annual statements. I am not involved in any official capacity involving the NAIC or any other organizations that are working for change. I am introducing these ideas only from the perspective of improving the usefulness of the statutory statement.

The first suggestion involves the presentation of reinsurance. Reinsurance transactions are impossible to unravel in the current annual statements. This has caused much confusion and mistrust about reinsurance. As a result, there are many regulators who would like to ban certain types of reinsurance. All of this could have been avoided if reinsurance had been clearly presented in the first place. My suggestion is simple. We should add one exhibit that would break the income statement on page four into five columns. The first column would show the income statement for all direct business before any reinsurance. The second column would show all

reinsurance assumed. The third column would show all traditional risk transfer reinsurance ceded. The fourth column would show all reinsurance ceded that is not on a traditional risk transfer basis (i.e., financial reinsurance). The fifth column would show what is traditionally shown on page four and would be the sum of columns one and two less columns three and four. This suggestion would have a side benefit. Both of the lines for reinsurance allowances could be eliminated because allowances would be clearly presented in this exhibit on the commission line. This exhibit would give an understanding of reinsurance that might make the regulators more comfortable with its use as a financial instrument. This would be very beneficial for our industry in today's environment.

My second suggestion is to officially recognize something that the rest of the world already does unofficially. Let's put Asset Valuation Reserve (AVR) in surplus where it belongs. It is designed to provide for fluctuations in asset values which certainly seems to qualify for treatment as capital. As a matter of fact, the AVR should be exactly coordinated with the Risk-Based Capital (RBC) formula and then the AVR would just be a part of RBC and shown as designated surplus. To take this concept further, we might as well show all of RBC in surplus. Then the surplus account would be shown in two pieces: required surplus (as defined by RBC) and free surplus.

Earlier in this talk, I mentioned that we should be allowed to include nonadmitted assets. The other side of that coin is to show offsheet liabilities as true liabilities. Such items would include the following: (1) deferred income taxes (such as taxes on discount bonds not yet matured); (2) retiree benefits (as may be required by *SFAS 106*); (3) known losses; and (4) any offsheet guarantees (such as mortgage guarantees or guaranteed lease payments). In addition, of course, the new valuation actuary law will require posting higher reserves as determined by the appointed actuary.

Many of us are working overtime to provide extra information to the rating agencies. Much of this information involves various asset summaries. I suppose it is too much to hope that the NAIC would coordinate with the rating agencies and provide information in the blank that would give the rating agencies the information they need. However, the NAIC should provide less raw data in Schedule D and more information in the form of summaries.

One final suggestion. We should require consolidated statements for company groups that do not allow stacking of capital. Double counting capital has been a contributing cause of some of the recent insolvencies.

I have thrown a lot out to think about, but probably only scratched the surface. I hope that those in the position to change the annual statement blank will have an opportunity to consider these suggestions. Our industry is in critical need of credibility. What could be simpler than a few simple changes in the statutory statement that would make it more understandable and useful to all?

MR. BRUCE R. DARLING: My role on this panel is to talk about GAAP and management reporting based on GAAP or GAAP-like principles. Thus, I'll be talking about financial reporting for both stock and mutual insurers.

Being an actuary with an accounting firm, I see all sorts of technical guidance and interpretations of GAAP accounting to assist the industry in dealing with the increasingly complex rules they have to deal with. GAAP are far from set in stone, and I'll be discussing some of the major movements in those principles — such as market-value accounting or fair-value accounting as it's called.

Also, I have been involved with a group of more than 30 of the top mutual life insurers in the country that share information about their management-basis financial reporting practices. Mutuals historically have not been subject to GAAP guidance for accounting for insurance products, although that may change, and I'll come to that soon. The point I want to make is that because mutuals have been free of GAAP rules, each mutual was able to tailor its own accounting rules to its pricing practices and its own management needs.

Now, some may say that's an optimistic interpretation of the facts – that a number of mutuals are still struggling with basic principles – developing a disciplined balance sheet for example, once they have an income statement, or driving the accounting and reporting down to the business segment level and dealing with allocations of assets, expenses, investment income and capital gains, equity, and so on.

But that's not so different than many stock companies that are still trying to get meaningful ROE results by line of business and relate them to their enterprise-level financial objectives relative to the use of capital. I'll deal with reporting at the line of business level for both stocks and mutuals later, too.

In approaching certain questions, it seems to me you first have to identify the users of the financial information we are talking about to understand their needs and how those needs may be met or how those needs may change.

From a GAAP perspective, "regulators" really means the Securities and Exchange Commission (SEC). Now, the SEC has essentially delegated rule-setting for GAAP to the Financial Accounting Standards Board, the FASB, but it reserves and exercises the right to challenge individual companies on their accounting and reporting, including the extent and content of related notes and disclosures. The SEC used to be fairly benign, with more of a focus on the quality of disclosure rather than on more substantive issues.

Now the SEC is on the warpath. Many public insurance companies have received extensive comment letters challenging their accounting and presentation of results. Walter Schuetze, chief accountant at the SEC, has been extremely vocal about the need for market-value accounting in the insurance industry to fairly represent surplus. This has spawned projects at the FASB related to recognition of asset impairments, market-value disclosures, and others.

Management's needs for information tend more toward analysis of use of capital and ROEs, with a focus on actionable information that is useful in allocating resources, making decisions whether to invest in particular business segments, and on incentive compensation.

Other users may have anything from broad to specific needs. However, relative to management, they suffer from the lack of specific information at a detail level, including line of business information at levels below the segment information provided in 10Ks.

One class of user deserving special attention is the interested investor. This poor Joe never gets enough information in my opinion.

What kinds of information are we talking about anyway?

It seems to me that you could make an analogy with baseball, where you have the standings – how you rank in relation to others, the score – whether you win or lose – and statistics – where you find out what helped you to win the game and what you need to work on. In GAAP financial reporting, you have the enterprise level ROE – that's the score – and then you have line of business ROEs and source of earnings information – those are some of the statistics. Keeping score is definitely important, but there's more to it.

Now, in sports over the last decade or so, there's evolved the specialty of "sabre-metrician" — the guy who can tell who to send to bat against a left-handed pitcher with glasses under the lights in a stadium with a right field fence shorter than the left field when the temperature is between 40-50 degrees. Well, in insurance companies, the actuaries and accountants should fill the role of sabremetrician. How well do we do? Do we just keep score, or do we add some value to management's and other users' understanding of the business? Do we provide actionable information? You tell me — I'd like to hear how actionable you think GAAP information is in your company.

Your standings are also important – how you rank in relation to others. *Fortune* magazine devotes whole issues to ranking GAAP earnings. Unfortunately, there is scanty information, either in the reporting media or in annual reports, regarding ROE on specific lines of business. But your intelligence net needs to be much broader than an awareness of your competitor's size and returns.

This gets into scouting reports. Not just ratings or competitiveness of your rates, but the efficiency of your distribution system and of your administrative capabilities, your returns relative to those of others in your market, and the adequacy or strength of your capital resources. Fundamentally, you need to know your market beta as well—how your risk/return stacks up against your competitors.

Let's talk about what kinds of GAAP or management-basis information about your own company might be considered "actionable." Recently, I helped to outline and draft a monograph for Life Office Management Association (LOMA) on profitability management. In that paper, we dealt with the cycle of setting corporate financial objectives, implementing those objectives through pricing, following progress against objectives through financial reporting at appropriate levels, and taking corrective action to ensure the original objectives are being met. Thus, we believe the fundamental issue in meeting the financial information needs of management is to build and use a financial management and reporting structure that holds together throughout the

management cycle I just described and that gives actionable information to management.

In this world view, the fundamental financial questions at the total enterprise level revolve around the use of capital and the ROEs demanded in relation to the level of risk. Now, everybody talks about the risk/reward relationship these days and that's because it's the central financial issue in running a business. I want you all to think about that one as we go through the rest of our discussion, because the ability of a financial reporting system to measure that relationship is at the heart of a great many of today's financial reporting issues.

Return on equity questions can be forced down to the business segment level, but they start to become imprecise once you get down to the product level, into pricing, and into measuring GAAP results against objectives. At these fine levels, the information necessary for profitability management simply isn't ROE, but some proxy that will translate into ROE at aggregate levels or over time represents Internal Rate of Return (IRR), which can be measured against enterprise-level ROE hurdles.

The types of proxies I am talking about would include interest spreads, persistency, mortality and so on — the traditional domain of actuarial analysis. GAAP information can be forced down to source of earnings level, but it often requires considerable adjustment to translate into a meaningful management tool.

As I said earlier, the ROE is the score by which you keep track of whether you win or lose. Failure to achieve your target ROE means you are destroying value by investing equity in that business segment. The mechanics of setting appropriate targets are still the subject of great debate. Some observers seem to believe that if you increase risk surplus or equity, then the expected return will fall to the corporate target level. Others believe that line of business return target should vary with the risk. In our firm, we believe that there is some of both – target surplus that is greater with greater risk, and also a higher required return – not just to cover the expected cost of the additional risk but to add a premium for accepting that risk. So your target ROE probably is going to vary by product or business unit.

Practices in measuring ROE are continuing to evolve, both among stock insurers and mutuals. Recently, I conducted a survey of equity allocation practices in measuring business segment ROEs for a client.

Basically, what we found was an evolution toward a set of what I'd call "Better Practices" in this area. Essentially, those practices include allocating assets in an amount equal to stat liabilities plus target surplus, so GAAP equity is defined as the difference between required assets and the net GAAP liability.

A number of the respondents to my survey indicated that the migration to this approach is still incomplete in certain respects. In particular, it is still common for target surplus balances recognized in pricing to vary from the target surplus amounts used in measuring ROE. Also, in many companies, line of business financials are not prepared using this allocation of assets by line, but on some other basis such as statutory liabilities or even net GAAP liabilities. Then, too, in some companies,

especially those without a corporate line, excess surplus may find its way into the line of business financials.

Now this process implies that you can identify the "required assets" for a business segment — where target surplus is more the residual item than the driving influence. "Required assets" would be the same no matter what your statutory valuation basis for your liabilities might be. If you subscribe to the concept that a basis of accounting sets liabilities, the accrual of which shapes reported earnings, then we've defined a new basis of accounting — the missing link between stat and GAAP — through these ROE mechanics in which the liability is essentially the "required assets."

Level ROE accounting and its relative, the value-added accounting, in fact use this definition as their basis. They differ mechanically in using different discount rates in computing the value of business asset comparable to deferred acquisition costs in GAAP. Level ROE discounts "capital flows" at the product internal rate of return, while value-added discounts the capital flows at a risk-adjusted market rate.

One of our agenda's questions is whether statutory and GAAP accounting differences will persist. My answer is simple – Definitely. Statutory accounting and GAAP accounting will continue to coexist because they serve different purposes. Form follows function, and stat and GAAP have fundamentally different perspectives.

Statutory accounting is about conservative estimation of liabilities and assets on the way to a determination of surplus that will provide a measure of the company's ability to stay in business and meet its obligations. GAAP we think of as focused on earnings, although there's more to GAAP than that. Certainly, even without regard to net policy liabilities, there are many adjustments moving from one basis to another.

- Recharacterization of Mandatory Securities Valuation Reserve (MSVR) as surplus
- Readmittance of nonadmitted assets
- Revaluation of certain assets -- for example, in substance foreclosures
- Financial reinsurance treated as financing
- Calculation of a deferred tax item, to name a few.

For more on the reasons why statutory and GAAP differ in purpose and use, I'd refer you to Bob Stein's article in the original *Valuation Actuary Handbook* dealing with the complementary natures of GAAP and statutory accounting.

Where I believe statutory and GAAP are converging is in the area of disclosure and valuation of noninsurance items, especially regarding invested assets and liabilities for such obligations as postemployment benefits. Many CPAs believe that GAAP is more highly evolved in its guidance for accounting in these areas – at least in terms of fostering consistency and comparability. Statutory reporting, that is those practices prescribed or permitted by the 50 state insurance departments, is less disciplined, and what we often see is the NAIC following the lead of the FASB or American Institute of Certified Public Accountants (AICPA) in accounting for such items.

To most users, GAAP seems to be focused on recognizing earnings in an orderly way that matches revenues with performance under the contract. Thus, we see certain

balance sheet items – namely the deferred policy acquisition cost asset and the unearned revenue item – related to premiums for traditional insurance products and estimated gross profits for Universal Life (UL)-type contracts.

In fact, the engine that really drives GAAP earnings is a rather strict adherence to recognition of accounting events. Many of you are old enough to remember the television commercial with the line "No wine before its time" well, GAAP says, "no earnings before their time."

Now, this preoccupation with timing permeates GAAP, not just GAAP for insurance products but GAAP for financial instruments – that is, invested assets and GAAP for just running the business end – that is, recognition of liabilities for pension and other postemployment benefits.

When it comes to resolving timing issues under GAAP, the FASB has been very plainly moving toward removing arbitrary or historical differences among industries.

Now some users and even preparers of GAAP financials have the idea that this concentration on earnings implies that earnings should emerge smoothly from GAAP without fail, and that's just not the case, especially under *SFAS 97*.

GAAP earnings emerge "in relation to" various bases shown here for the various product classifications in *SFAS 60* and *SFAS 97*. In other words, GAAP says these bases are the appropriate way to measure performance under these classifications of contracts. Since you have to prepare the financial information in these particular ways, you may as well learn to manage the products using that information.

Unfortunately, that's more difficult than it sounds because GAAP doesn't do a number of things that some might want it to.

GAAP doesn't produce level ROEs, for example, even when experience assumptions underlying prospective reserve calculations for traditional business or Deferred Policy Acquisition Cost (DPAC) amortization schedules are being met. Presumably, this aspect of GAAP is widely understood at this point. At one time, it was not. Thus, if you're managing a product line using a GAAP ROE bogey, you'd better be doing so by reference to an expected value that's a composite of plan/issue year projections and not just a corporate hurdle rate or a simplified aggregate projection.

GAAP also doesn't always match pricing, although it can, or perhaps I should say it may. Pricing often uses definitions of acquisition costs or marginal expenses that do not match with GAAP definitions. Also, pricing often depends on "optimistic" assumptions with regard to persistency or expenses again not matching GAAP definitions.

GAAP also doesn't use expected values, at least on traditional business where there's provision for adverse deviation. SFAS 97 at least corrected that particular criticism for UL-type products.

Unfortunately, SFAS 97 has its own quirks that disrupt earnings patterns, like retrospective adjustment of amortization schedules, what we commonly call

"unlocking." A user of a GAAP financial statement that includes the effect of an unlocking is going to have a difficult time figuring out what is going on without a good deal more information and analysis.

GAAP is imperfect. It is possible to get to actionable information and manage the UL or Single Premium Deferred Annuity (SPDA) business using *SFAS 97* reported results, but it takes a good deal of extra information and effort to do so, you can't just take the bottom line and run with it. If we were reinventing GAAP, perhaps as actuaries we would prefer prospective unlocking instead of retrospective to avoid the types of earnings spikes we see with retrospective unlocking.

Fortunately or unfortunately, depending on your point of view, GAAP continues to evolve. A good current example is market-value or "fair-value" accounting. Walter Schuetze, the Chief Accountant at the SEC, calls amortized cost accounting for bonds rather disdainfully "psychological accounting" since it relies on intent to hold, which may be somewhat subjective. Let me give you a little background on this issue.

On the asset side, GAAP, in *SFAS 60*, allowed amortized cost accounting for bonds "if the insurance enterprise has both the ability and the intent to hold the bonds until maturity and there is no decline in the market value of the bonds other than a temporary decline." The traditional way of interpreting that was to assume that all bonds are being held to maturity and are eligible for historical rather than market-value accounting. Further, most companies interpreted "other than temporary" to mean permanent, and only marked to market when a permanent impairment was obvious.

Now with the SEC pushing, GAAP is moving toward market value for the valuation of assets held for trading and lower of cost or market for assets subject to sale. Many companies have received comment letters from the SEC requiring detailed disclosure regarding past sales of assets. The SEC has reacted strongly to companies that use book value for assets that are being traded — which in today's active asset/liability management mode could be *every* asset. Further, "other than temporary" no longer is being interpreted as "permanent" so a lot more impairments are having to be recognized.

The current FASB staff proposal says that only assets that will definitely be held to maturity, not probably but definitely, may be valued at amortized cost. But this attitude is tied to recent historical events, namely the failure of savings and loans (S&Ls), due to drops in market value. What will these groups say when market values risk again, and bounce around from period to period at levels in excess of amortized cost? Then, too, if the industry's assets go under water on a market valuation but not an amortized cost valuation, would the SEC really want to push companies into receivership?

These are tough issues. However, the debate currently depends more on practicality and cost issues, volatility issues, and the inherent problems of an imbalanced balance sheet where the asset side is marked to market while the liability side is not. I think everybody realizes just how difficult marking liabilities to market would be; for example, some might push for cash value instead of account value as the definition for ULtype contracts, throwing the entirety of SFAS 97's guidance for such products into disarray. Others might push for an option-adjusted calculation as the result of

multi-scenario stochastic projections, tremendously increasing the costs of valuation. The problems are enormous.

Our firm is advocating a delay at least until SFAS 107 financial disclosures have been around long enough to find out what a market-value balance sheet really does to earnings and equity over time.

We also are trying to steer the debate toward better recognition of changes in value of impaired assets, which tends to get lost in the mark to market debate. The big problem for accountants here has been in setting the threshold at which impairment should be recognized. A recent FASB exposure draft on loan impairment which incidentally doesn't apply to debt securities such as Collateralized Mortgage Obligation (CMOs) specifies that on restructuring, fair value on the restructured loan would be calculated by discounting restructured contractual future cash flows at a current market interest rate commensurate with the risks involved.

GAAP for mutuals is another hot topic at the SEC and the FASB. The FASB has issued an Exposure Draft with some dramatic implications for mutuals. The proposed interpretation would clarify that enterprises that issue financial statements described as prepared "in conformity with GAAP" must apply all applicable authoritative accounting pronouncements in preparing those statements. Thus mutuals that have been saying statutory is GAAP would have to adopt all FASB statements except those with specific exemptions for mutuals, that is, 60 and 97. That means, for example, that annual reports of mutuals would have to include balance sheet provisions for deferred taxes and Postretirement Benefits Other Than Pension (OPEB) among other things even if the underlying basis of accounting is statutory. Of course, the FASB and SEC wouldn't mind seeing mutuals report using 60 and 97 even if not required to.

The mutual GAAP rules would be effective for financial statements issued for fiscal years beginning after December 15, 1992. The comment deadline is November 16, 1992.

The upshot of all this is that GAAP is not dead, in fact, the evolution of GAAP is accelerating. GAAP is not converging with statutory, although both are highlighting asset quality and value. And managements everywhere are struggling to keep up with accounting and reporting changes and to make sense of reported results.

Let's turn to management-basis or internal reporting for a moment. As we've seen, GAAP reporting has enough limitations and quirks that it begs for modification. Those modifications take two forms – movements to change what constitutes GAAP itself and movements to create derivatives or alternatives for management use.

As I said in my introduction, mutuals have the opportunity to customize their own system for management reporting, which results in a fair amount of diversity of practices. For example, about half the mutuals in our survey group spread capital gains in order to better match pricing expectations, something that is not done under GAAP. Some even anticipate earnings on equity investments such as real estate, at the rate of x basis points over treasuries. Others may report capital gains below the line as stock companies did before *SFAS 97*.

Another area where we see a fair diversity of practices among mutuals is in the level of deferrable expenses. A number of mutuals defer expenses in excess of the GAAP definition of deferrable acquisition costs — "costs that vary with and are primarily related to the acquisition of new and renewal insurance contracts." Such excess deferrals may do a better job of matching pricing for such companies.

Mutuals also may use a much different pattern of amortization than under GAAP for particular lines of business, and practices vary quite a bit on traditional par business. You have earnings emerging on everything from premiums per *SFAS 60* to margins a la *SFAS 97* or equity per the SOA task force recommendation a few years back. Other mutuals may base their management accounting on pricing or dividend "funds" where earnings arise from profit charges assessed against the funds.

Another area where the mutuals have an advantage is in simplifying the mechanics of their financial reporting system — for example, by using simpler models in valuations or by taking shortcuts in deferred tax calculations.

But why stop with customizing GAAP? GAAP is not the only system of accounting that purports to focus on earnings, and in fact, level ROE methodologies have a theoretical advantage in many people's minds — look at the SOA task force on mutual company GAAP some years ago. In fact, the real question, it seems to me, is not whether GAAP and Stat will someday merge, but whether management requires even more reporting bases to manage their business effectively.

Still, without a mandate by regulators -- the NAIC or the SEC for example -- it is difficult to get enough steam behind yet another reporting method that is to find the budget, staff, or user time to make it worthwhile in addition to the already mandated methods.

You need to have a strong reason to create and use an extra accounting basis over and above the minimum number required by the authorities, whether they be state regulators, the Internal Revenue Service (IRS), or the SEC. That reason comes from the top down. A mutual's board of directors may say, those management-basis numbers sure are neat — they tell us how we're doing versus our original pricing and all — and by the way it's great that they're audited too, but what do they mean in relation to other companies' results or in relation to our ability to grow relative to our surplus growth? So, that mutual's actuaries are going to try to figure out how to get comparable values for their board. Similarly, the U.S. subsidiaries of some overseas firms may need to prepare a variation of value-added reports for their parent's needs.

So, how many bases of reporting are enough? Realistically, I'd say financial reporting for two accounting bases — that is statutory and GAAP — is about as much as any company can comfortably handle, although I know of some that report on three or even more bases, sometimes value-added, sometimes customized GAAP. More than two bases seems to really strain the ability of the organization to produce and use the information. I'd be interested in hearing later from anyone who is successfully managing using more than two bases.

The most important single piece of guidance I could give you is this "form follows function;" get your people the information they need to effectively manage the business. That's the bottom line.

MR. MICHAEL MATEJA: I will focus on the broad issue of management's needs for financial information. It is perhaps the most critical issue facing the insurance industry today. These are the specific issues I will address.

First, I will take stock of where we are. There is an abundance of financial information available, but how much of it really responds to management's needs?

Next, I will present my assessment of the real needs. My assessment is premised on understanding the underlying economic value of the insurance business.

Finally, I will talk about responding to the real needs. Understanding underlying economic value and the associated risks is a real challenge.

Some years ago, in preparing the final report of the Combination of Risks Task Force (I was chairperson of this group), I stated that insurance fundamentally was a cash-flow business. Further, I observed that only by understanding the behavior of the underlying cash flows could management really understand the business. I truly believe this is the foundation for responding to management's needs for financial information.

As I was preparing my thoughts for this presentation, I couldn't help but think of my first exposure to the issue of management's needs for financial information. Back about 20 years ago, I had a brief assignment as the planning officer in the Group Division of Aetna. To make a long story very short, the financial information in the hands of management at that time consisted of the following:

- Statutory and GAAP accounting statements;
- Several internal reports on interest margins and the expense formula, which included risk and profit charges; and
- New business and in-force data.

The reason I mention this experience is that it illustrates what I believe to be the legacy of management financial information. Historically, management financial information was synonymous with accounting information, and that was about all that management used to keep tabs on the business.

I also remember, as part of the planning process, preparing forecasts of the financial information in the statements, both the balance sheet and the gain from operations. These forecasts were simple extrapolations on historical results. The only way to characterize the historical approach to financial forecasts is rudimentary. We were guessing, pure and simple. In retrospect, some of the results were not that bad, which I believe reflects that the business was a lot simpler back then. How many of you are still using this approach to develop your projected financial information?

#### ASSESSMENT OF CURRENT SITUATION

These four areas provide a framework for taking a look at where we are:

- Reliance on accounting data
- Preoccupation with risk
- Management-basis accounting
- Return on equity

First and foremost, I think management still relies heavily on accounting data for financial information.

The recent twist in financial information is the concern about risk. Risk is truly becoming the four-letter word of the insurance business.

Many managements are doing internal accounting to meet their needs.

And, finally, concerns about returns are generating a great deal of new financial information.

#### RELIANCE ON ACCOUNTING DATA

- Statutory -- solvency
- GAAP investor needs
- Accounting information =? Management Financial Information

In most companies the primary focus of management financial information is still on the accounting data prepared to fulfill statutory and GAAP accounting requirements. This focus is understandable given Bruce's account of how published financial information is used. If management is going to be measured by their standing relative to peers using statutory and GAAP financial results, you can bet that they will pay attention to these results. The issue then becomes whether business success can be achieved by producing the right accounting results. I'll remind you of Baldwin-United to make the point that accounting success doesn't equate to business success.

The primary goal of statutory accounting is to assure solvency. The increase in the number of insolvencies in recent years is testimony that this goal is not being achieved. The simple truth is that regulators as well as management recognizes that there is something wrong with statutory accounting.

The situation with GAAP isn't much better. GAAP supposedly responds to investor's needs. As an investor, I was shocked when the FASB ruled that capital gains and losses should be reported as part of current income. I don't want to get into the details of this issue, but it points out that accounting results are not what management needs to understand and successfully manage the business. Bruce characterized GAAP as a moving target, and from my perspective it is still well short of the mark.

The major shortcoming of both statutory and GAAP accounting is that they are too far removed from the underlying economics of the business.

#### PREOCCUPATION WITH RISK

- Insurance = Risk
- Accounting treatment of risk
- Risk-based capital

During the last ten years or so, managements of insurance companies have discovered that there is real risk associated with their business. First it was mismatch risk, and now it's asset default. Junk bonds, commercial mortgages, and CMOs are the focus of concern. Recent accounting changes for these asset classes have not fundamentally changed management's ability to identify, quantify, or manage risks.

The major shortcoming of accounting information in general is that it masks the presence of risk. By this I mean that the accounting information lags the real economics of the business. This, perhaps more than any other factor, is responsible for much of the financial difficulty in the industry today.

The regulatory response to a perceived increase in risk in the insurance industry is risk-based capital standards. Fundamentally, these standards will become another management constraint. Standings will be computed, and management will be forced to get the score "right." Will the new standards get the results management (the regulators) need? There are some great investment opportunities in commercial mortgages at current market prices; the standards discourage investment in this sector. The current focus on credit quality is a five-year-old problem. We need to focus on the current economics of the business to deal with the problems that lie ahead

#### MANAGEMENT BASIS ACCOUNTING

- Statutory/GAAP shortcomings
- "Useful" financial information

Recognizing the shortcoming of both statutory and GAAP accounting, managements of some companies have predictably tried constructing their own accounting basis. Most of the refinements in management-basis accounting address shortcoming with GAAP as Bruce has already developed. One area that I mentioned earlier that is of particular concern is treatment of capital gains and losses. The right answer is an amortization process consistent with the recent Interest Maintenance Reserve proposal for the MSVR.

The goal of management-basis accounting is to produce useful information to run the business. The very fact that management is looking for alternatives is evidence enough to suggest that current accounting information is not what management needs to run the business.

#### RETURN ON EQUITY

- Effective use of capital
- Problems with calculation

Management of most companies has been forced to understand more about the returns on their capital, and to use their capital more effectively.

The return issue is complex enough to be the subject of a separate session, and I don't want to get bogged down in the details. The important point is that a lot of time and energy are now focused on determining total capital requirements, allocating capital on some basis that makes sense, and determining earnings on a corresponding basis. The results are influencing management's judgments about their respective businesses, and line managers are working to get their return score above the threshold level. Probably more than with any other financial data, the financial information produced on returns has the potential to have the most lasting impact, not necessarily favorable.

The problems with computing returns on segments of a total company are numerous. Briefly, here are a few:

- Determining required capital is essentially a management problem. There's no right answer.
- Allocating capital is at best an approximate process. Again, there's no right answer.
- No one pays much attention to reserve conservatism, which is a form of equity.
- Discretionary reserves cause a problem with both the numerator and denominator of the return calculation. This is a real problem for multiple line companies with property/casualty business.

I'm sure that the analysis of the current situation could continue for the remainder of the session. Certainly, what I've covered gives some flavor for the current state of affairs, and the impression I'm left with is that management's needs for financial information are poorly met at present. Much of the problem seems to be associated with financial accounting, which produces most of the information that comes to management's attention. Bottom line, the accounting information isn't doing the job, and management's self-help efforts aren't doing much better.

#### REAL NEEDS FOR MANAGEMENT INFORMATION

- Value-added to organization
- Risk profile of organization
- Financial projections
- Market/book-value assessment of assets and liabilities

So much for the indictment of our past efforts to provide management with the financial information needed to run their business. What are the real needs?

First and foremost, I believe that it is essential to recognize that current accounting does very little to inform management about the underlying economics of the business. Understanding the economics of the business, which is the critical idea associated with value-added, is what ranks first on my list of management's real needs. Knowing whether you have a good deal or a bad deal will always help management make the right choices.

The second need is to understand risk. There is a trade-off in the marketplace between risk and reward (i.e., value-added), and management needs to have some assurance that any increase in expectations for value-added is not at the expense of unacceptable risk.

Third on the list is financial projections that translate the underlying economics of the business into the financial statements that will be submitted to regulators or the investment community. We've all heard the story about how great a particular business was, but it just didn't account well. As long as management is going to be measured in terms of the published financial results, it is essential that they have some basis to understand what the scorecard will look like. The need here is not only for current-year results but for results over an extended period.

The final need is for market value information. There has been a lot of discussion about market-value accounting, and Bruce has provided some perspective on this in his comments. I view market-value as another way to understand both value-added and risk in the business. If I have a market-value of surplus that is positive and growing, I can be relaxed.

Some of you may note that the list doesn't include anything on ROE. The omission is a conscious one. If the measure of value-added is realistic, then it should be possible to measure period to period changes in value-added to determine a real economic return that is being achieved.

#### RESPONSE TO NEEDS

- Understand cash flows
- Corporate financial simulation models

How do you get at the underlying economics of the business? How do you develop a risk profile of a company? This group more than any other should have some convictions about how to do so.

For the last ten years or so, valuation actuaries have been doing cash-flow analysis to support opinions about reserve adequacy. Implicitly, cash-flow analysis recognizes that for our interest-sensitive business, economic value in valuation reserves is not constant, but rather varies with the level of interest rates. Changes in economic value provide some indication of the level of risk, and this in turn can provide a basis for making a judgment about reserve adequacy.

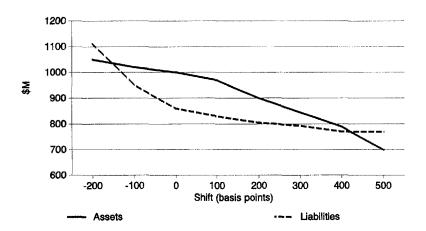
Cash-flow analysis is one approach to understanding the underlying economics of the business, but I personally haven't had much success in communicating results to management on this basis. At Chalke, we develop a computer financial simulation model of a book of business or a company as a whole, which permits us to do some sophisticated analysis of the underlying cash flows. The analysis uses Option Pricing Theory (OPT) to evaluate the various options associated with the assets and the liabilities of the company. Option pricing theory is complicated, but all you need to understand is that it provides a discipline to value or price an option in a financial instrument. Wall Street has been using OPT for years to value assets, and Chalke has adapted the theory to insurance liabilities. The practical result is that we have

transformed our understanding of the cash flows associated with our business into something that is easy for management to understand.

#### **RISK PROFILE**

Chart 1 is an example of how we try to present the risk profile of a company — with Price Behavior Curves. A Price Behavior Curve is the end result of OPT — it is a graphic representation of the relationship between interest rates and the price of a financial instrument. In this case the financial instrument is the entire asset or liability portfolio of a company. Price Behavior Curves have been used for some time to analyze assets in the financial community. The value-added at Chalke is development of Price Behavior Curves for the liabilities. Since there is no market for insurance company liabilities, we match the liability cash flows to Treasury instruments and derivatives, and then use the Price Behavior Curves for the collection of Treasuries to represent the Price Behavior Curve of the liabilities.

CHART 1
FPMsm Life Insurance Company: 1st Quarter, 1992
Option-Adjusted Value of Assets and Liabilities



I think this graph provides a vivid image of the risk profile of a company. Management can readily understand the origins of a major source of risk in the business and see why earnings will fall off if interest rates increase or decrease significantly.

The difference between the Price Behavior Curves for assets and liabilities yields an economic or liquidation value of surplus. Tracking this measure of the underlying value of the business can provide some real insight about the business (Chart 2).

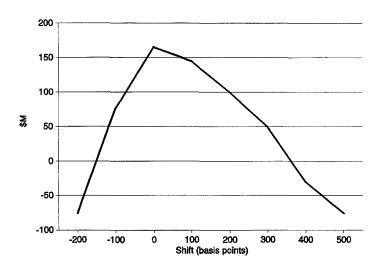
If management really focuses on the risk exposures evident through this form of analysis, then it is possible to make some practical decisions about how to manage

the risk. Hedging is beyond the scope of this presentation, but you should understand that practical hedging strategies are possible using Price Behavior Curve analysis. Hedging, at a very fundamental level, represents an attempt to reconfigure future cash flows on a basis that will eliminate some of the risk. The practical result is an economic value of surplus that is less vulnerable to changes in interest rates.

## OPTION-ADJUSTED VALUE OF DISTRIBUTABLE EARNINGS (OAVDE)

Another measure of the economic value in a company or a book of business. In modern finance theory, the value of any financial instrument is represented by the future cash flows associated with the financial instrument. OAVDE represents an attempt to capture the free unencumbered cash flows from an insurance company.

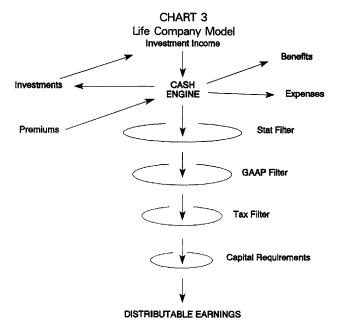
CHART 2
FPMsm Life Insurance Company: 1st Quarter, 1992
Option-Adjusted Value of Economic Surplus



The easiest way to understand OAVDE is to start with the underlying cash flows as presented, and then impose the various accounting disciplines (i.e., statutory, GAAP, FIT) to determine a potential contribution to surplus. A portion of this contribution is normally retained to meet management's surplus requirements and those of the rating agencies. Any excess can be considered free or distributable earnings. The free earnings could be dividended out or used for any other corporate purpose. Chart 3 showing the financial dynamics of an insurance company illustrates the process.

Unlike accounting results, which have a retrospective bias, OAVDE looks forward. This analysis is usually done with a new business assumption to recognize the added value of a growing concern. OPT is applied, just as in the development of the Price Behavior Curves of assets and liabilities, to present a price behavior curve of OAVDE. Note that the underlying value of the company varies with the level of interest rates,

but some of the volatility evident in the Price Behavior Curve analysis has been dampened. This is the dampening effect of accounting (Chart 4).



Consistent application of this methodology will reveal a great deal about performance of a company, far more than will be evident from the financial statements.

#### **FINANCIAL PROJECTIONS**

Once you have a financial simulation model capable of reproducing the future cash flows of a company, it is a relatively straightforward matter to develop the accounting statements that would be associated with these projected results.

Balance sheets, income statements, cash-flow analysis, and Risk-Based Capital calculations can be produced routinely. Such projections provide the linkage between the underlying economics of the business and the real world that management needs to understand.

The amount of paper that can be produced here is overwhelming, so it is common to use a base-line level interest rate projection. Practically, it is possible to produce the financial projections for any of the future conditions reflected in the price behavior curve analysis. Most managers value "good" financial projections more than any theoretical analysis based on Price Behavior Curves or OAVDE. We've become so conditioned to using accounting information that really useful financial information about the economics of the business is difficult to accept.

#### MARKET VALUE OF ASSETS AND LIABILITIES

Market value of a financial instrument is usually approximated as the discounted value of future cash flow using the current term structure of interest rates. This calculation

is relatively straightforward once the future cash flows associated with the business are understood.

CHART 4

FPMsm Life Insurance Company Option-Adjusted Value of Distributable Earnings as of 12/31/91 \$M 150 145 140 135 130 125 120 115 100 -200 -100 O 200 300 400 500 Shift (basis points)

Here is an example of the kind of management report that is possible. The information on assets is probably routinely available from most investment departments. But the relationship between book and market value for the liabilities is not. If market value is greater than book value for any part of the liabilities, this is the first hint of reserve trouble (Chart 5).

Given the rapid movement in interest rates in recent years, this kind of analysis simply makes good sense. It is very difficult to capture the changes in the underlying economic values in an insurance company through any other analysis.

# ASSESSMENT AND CONCLUSION

The reports I have just presented represent the foundation for meeting the needs of management for financial information. I think the emphasis on understanding underlying economic value and risk is conceptually correct. I believe that poor understanding of these areas is responsible for most of the current financial problems in the industry.

Responding to management's need for a better understanding of economic value and risk is probably the greatest challenge in the industry today. I think this is an actuarial challenge, and it represents one of the best opportunities available for actuaries to carve out important new responsibilities in their companies.

The key to responding to this new challenge is a flexible financial model where the behavior of asset and liability cash flows can be analyzed and ultimately managed. Insurance is a cash-flow business. When actuaries really understand the behavior of cash flows, we will truly be in a position to produce better financial information to manage the business.

