RECORD OF SOCIETY OF ACTUARIES
1991 VOL. 17 NO. 4B

MARKET-VALUE BALANCE SHEET

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Regulatory authorities, SEC, NAIC, etc., have been talking about the need to modify GAAP and statutory balance sheets to more closely reflect market values. Most of the focus has been on the market value of assets. This session will cover:

- Current regulatory thinking
- Problems associated with only looking at assets
- Practical implications
- Use of results as a management tool

MR. REED P. MILLER: The topic of market-value balance sheets is really an evolving topic that has had a lot of attention focused on the asset side of the balance sheet. The Financial Accounting Standards Board (FASB) has been dealing with this issue and others have as well. We want to make sure that we emphasize the importance of looking at the entire balance sheet, both the asset side and the liability side. On the liability side, it's my perception that there has been significantly less done in trying to define what is meant first of all, and then take the definition and actually put it into practice in defining just exactly what the market value or economic value of liabilities might be. Keith Drzal has done an informal phone survey among some insurance companies, and found that very few companies have really spent much time trying to define or quantify what we mean by a market value of liabilities. We have a panel that will discuss a number of the issues surrounding this particular issue.

We've assembled a panel that addresses the issue from the perspective of the FASB, the SEC, from the perspective of a public accounting firm, and also from the perspective of a company that has attempted to deal with this issue in a practical sort of way and has thought through the conceptual issues and tried to apply it in a practical, real world environment. Wayne Upton joined the Research and Technical Activities staff of the FASB in July 1984 and now is the project manager on present-value-based accounting. He's a consultant on other postemployment benefit projects, pension plan accounting for guaranteed investment contracts (GICs) and reinsurance. Additionally, he's a consultant on all FASB projects with regard to their implications for small business. Bob Stein is the National Director of Actuarial Services for Ernst & Young and he's also a member of the Board of Governors of the Society of Actuaries. Keith Drzal is an actuary and director in charge of asset-liability management at Allstate Life Insurance Company. In that capacity, he provides in-house assistance to all profit centers in analyzing product risk profiles, risk-return trade-offs of alternative asset classes, and use of derivative securities. His previous position at Allstate was director of its GIC profit center.

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MR. WAYNE S. UPTON, JR.: I've titled my remarks "The FASB and the Market Value of Financial Instruments." That is an appropriate title, since the market value of financial instruments is an element in several topics currently on the Board's agenda. I plan to touch on several elements of the broad project on financial instruments before returning to the question of market value. The Board has approached market-value questions in two ways:

- The disclosure of information in notes to financial statements. The exposure draft that we will discuss deals with disclosure.

- The recognition and measurement of amounts in the face of the financial statements. Recognition and measurement is the subject of a narrower project that focuses on debt securities. I will spend little time on that project, since it is not as near to completion.

Most of the discussion to follow deals with disclosure. The Board has moved farthest in disclosure and expects to issue a statement this year. The consideration of market value, however, is limited to financial instruments. There is no move to market-value accounting for nonfinancial assets like inventory or office buildings. In addition, many financial assets and liabilities have been excluded from parts of the project (for the time being).

A HISTORY OF THE FASB FINANCIAL INSTRUMENTS PROJECT

In May 1986, following requests by the SEC, the AICPA, and others, the FASB added a project on financial instruments to its technical agenda. Many of the Board's constituents expressed concern that existing accounting literature was not up to the challenges presented by innovative financial instruments. In addition, they were concerned that ad hoc solutions to individual problems would leave financial reporting without a coherent approach.

This is the largest project that the Board has ever undertaken, both in its potential implications and the resources devoted to it. The FASB is not alone in its concern about accounting for financial instruments. Major projects are underway in Canada and Great Britain and are involving the International Accounting Standards Committee. The Board hopes that the project will lead to broad standards that will aid in resolving today's questions about accounting for financial instruments and questions that may arise in the future. In pursuit of that goal, the Board has tried to focus on financial instruments in general, rather than specific types of instruments.

SFAS No. 105, *Disclosure of Information about Financial Instruments with Off-Balance-Sheet Risk and Financial Instruments with Concentrations of Credit Risk*, defines a financial instrument as: . . . cash, evidence of an ownership interest in an entity, or a contract that both: (a) imposes on one entity a contractual obligation (1) to deliver cash or another financial instrument to a second entity, or (2) to exchange financial instruments on potentially unfavorable terms with the second entity; and (b) conveys to that second entity a contractual right (1) to receive cash or another financial instrument from the first entity, or (2) to exchange other financial instruments on potentially favorable terms with the first entity.

This definition includes a variety of assets and liabilities found in insurance company financial statements, including bonds, notes, and loans. The definition also captures a property-liability insurer's claim liabilities and a life insurer's provision for policy benefits. It excludes some instruments that are routinely settled in cash, like commodity futures contracts, and contracts that require delivery of goods or services.

The Board began the project as it has others, with disclosure. In 1987 the Board issued an exposure draft, *"Disclosures about Financial Instruments."* That document would have required a variety of disclosures about off-balance-sheet credit risk, interest rate risk, liquidity, and market values. The 1987 exposure draft met with considerable opposition, in part because of the wide variety of disclosures required. The Board responded to the comments received, stepped back, and broke disclosure into several phases. The first phase was completed in March 1990 with the issuance of Statement 105. In December 1990, the Board issued an exposure draft, *Disclosures about Market Value of Financial Instruments."* We will return to this exposure draft in a moment.

As I said, disclosure is the first step. The Board is also moving ahead on other issues in the financial instruments project. In August 1990, the Board issued a discussion memorandum, "Distinguishing between Liability and Equity Instruments and Accounting for Instruments with Characteristics of Both." A discussion memorandum is a neutral presentation of issues and differing views. It is designed to elicit comment and gather information, and not to suggest the Board's position. This is the first of what promises to be a series of discussion memoranda on financial instruments. A second, dealing with recognition and measurement of financial instruments, will be issued in the next few days. A FASB research report, "Hedge Accounting: An Explanatory Study of the Underlying Issues," was issued in September 1991.

I especially recommend the discussion memorandum on recognition and measurement for your consideration. A professional who deals regularly with a full array of sophisticated instruments may find little new in this document. The rest of us would spend a considerable amount for as good an overview of modern instruments and finance. I know of no other document that so thoroughly examines modern financial instruments in the context of their financial reporting implications.

In particular, the discussion memorandum pursues the building-block approach based on a set of fundamental financial instruments. Historically, financial reporting has focused on generic categories of financial instruments -- mortgages, bonds, guarantees, and the like. The discussion memorandum takes a cue from chemistry and looks at financial instruments as a collection of smaller, indivisible parts. Just as a molecule of water is the combination of two hydrogen atoms and one oxygen atom, a financial instrument can be viewed as a combination of fundamental financial instruments. A conventional home mortgage becomes a molecule with 360 unconditional receivables and an option. The Board hopes that viewing instruments in this way will help in evaluating accounting issues. This building-block approach, by the way, is the same technique followed by the "rocket scientists" who design many of the most innovative financial instruments.

The Board has developed a list of six fundamental financial instruments, including:

- Unconditional receivables and payables
- Conditional receivables and payables
- Financial forwards
- Financial options
- Financial guarantees and other conditional exchanges
- Equity instruments

A simple property-liability insurance contract is a conditional payable of the insurance company.

While the Board's goal was to focus on financial instruments generally, constituents have asked for quicker action on specific issues. The Board and staff are currently working on questions concerning subsequent measurement of marketable debt and equity securities, impairment of loans due to collectability, measurement methods using amortized cost for instruments with prepayment risk, offsetting of certain contracts, and accounting for reinsurance. All of those projects are important, but the long-term goal remains a general approach to accounting for financial instruments.

THE EXPOSURE DRAFT ON FAIR VALUE DISCLOSURE

The exposure draft on market-value disclosure is the centerpiece of our discussion. This document was issued in December 1990. The board held hearings in May 1991 and has been working steadily on the project ever since. That work is substantially complete, and the staff is preparing drafts for Board review prior to balloting.

The final statement would require all entities to disclose information about the fair value of all financial instruments – assets and liabilities – for which it is practicable to estimate fair value. The information disclosed includes the fair value and the methods and significant assumptions used to estimate fair value. This requirement extends to all financial instruments, including those not recognized in the entity's financial statements.

Fair Value

The term *fair value* is a change from the exposure draft, which referred to market value. Many respondents expressed concern about the application of the term *market value* to instruments for which no active market exists. The essence remains the same. The current working definition of fair value of a financial instrument is: the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale. If a quoted market price is available for an instrument, the fair value to be disclosed for that instrument is the product of the number of trading units of the instrument times that market price.

This definition of fair value is designed to focus on the going-concern value of financial instruments. For a traded instrument, fair value is always equal to quoted market value. Respondents to the 1987 exposure draft expressed concern that the then definition of market value connoted a liquidation value. By looking at the value of a single trading unit, the definition makes it clear that valuation should not be influenced by the size of an entity's holdings (sometimes called blockage).

A definition based on single trading units does not imply that all financial assets or liabilities must be evaluated individually. Groups of instruments may share similar characteristics and lend themselves to portfolio valuation. This may be true of credit card receivables or parts of an insurer's GIC portfolio. The objective is to produce an estimate of fair value based on individual trading units, not necessarily to value individual assets or liabilities.

The exposure draft does not provide detailed guidance about how an entity should estimate fair value. The Board recognizes that many financial instruments do not trade regularly or trade only in principal-to-principal markets. Those who prepare and attest to financial statements must make the judgments about methods and assumptions to be used. The exposure draft provides general guidance, including a number of suggestions about techniques that may be appropriate in particular situations. Those techniques include reference to quoted prices of similar instruments, option and matrix pricing models, and the present value of estimated future cash flows.

Even traded instruments have a variety of prices that might be described as fair value. For example, an equity or debt security might be valued at:

- Asked price
- Bid price
- Price at last trade (closing price)
- Price at last trade (closing price) adjusted for broker's commission
- Average of bid and asked price

The definition of fair value allows any of those amounts.

The general guidance in the exposure draft is not a cop-out by the Board. Rather, it is a recognition that this is an evolving area. New financial instruments are developed every day. Techniques appropriate for one instrument may be unsuited to another.

The board also weighed the costs of implementing detailed guidance against the benefits of having timely information based on fair value. An entity may already be equipped to apply a particular approach, and the board did not wish to impose additional cost with new or different requirements. This will lead to some lack of comparability among companies. The board concluded that the less costly approach outweighed the loss of comparability.

Finally, we should note that many have complained about what they see as overly detailed and specific requirements. We could debate whether some pronouncements are overly detailed or designed to ensure consistency. Still, this group of constituents should be pleased by the broad general guidance provided in the exposure draft.

Practicability

The exposure draft introduces the idea of practicability. This is a new notion designed to avoid excessive costs that an entity might incur solely to comply with the requirements of the new statement. Practicability is a dynamic concept. What one entity finds practicable may not be the same for another. What is impracticable in one year may become practicable in the future. Practicability also represents a continuum. Obtaining the fair value of a traded instrument is always practicable. Obtaining the

fair value of an interest in a closely held corporation may not be. Between those extremes lies a wide variety of situations.

If it is not practicable to estimate fair value for an instrument or class of instruments, then an entity must disclose information about the instruments and the reasons why it is not practicable. The exposure draft also required management's evaluation of the carrying amount relative to market value. Is the carrying amount about the same as, significantly more than, or significantly less than market value? The Board has tentatively decided to drop this requirement in the final statement.

Exclusions

The exposure draft excludes ten classes of financial instruments, including insurance contracts other than financial guarantees and investment contracts. The exclusion of insurance contracts should be of particular interest to this audience. This is the same exclusion adopted in Statement 105. It reflects the Board's recognition of the difficulties inherent in valuing obligations subject to risks beyond those usually encountered in financial markets. This is especially true of the claim liabilities and incurred but not reported (IBNR) claims of property-liability insurers. The actuarial and accounting professions have not even developed an approach to discounting those liabilities, much less estimating their fair value. The Board has two discussion memoranda that deal with the valuation of insurance liabilities -- the recognition and measurement document I described earlier and the discussion memorandum, "Present-Value-Based Measurements in Accounting."

The exclusion of insurance contracts is not the same as an exclusion of contracts written by insurance companies. Insurers write several contracts that are not considered insurance in the framework of GAAP, including most GICs and many annuity and pension contracts. SFAS No. 97, *Accounting and Reporting by Insurance Enterprises for Certain Long-Duration Contracts and for Realized Gains and Losses from the Sale of Investments,* is the controlling document. If a contract satisfies Statement 97's definition of an insurance contract, then it is excluded from fair value disclosure. If not, it falls within the scope of the exposure draft.

Transition

The Board has tentatively decided that the final statement will be effective for years ending after December 15, 1992. This is a one-year delay from the date proposed in the exposure draft. Entities with less than $150 million in total assets need not apply the statement until years ending after December 15, 1995.

SOME POINTS OF INTEREST TO ACTUARIES AND INSURERS

Transition

The three-year delay for certain entities is straightforward. If the number at the bottom of the balance sheet's asset column is $150,000,001 or more, then the 1992 date applies. This has an interesting implication for insurers. The FASB staff understands that about a third of the insurance companies that are SEC registrants fall below the $150 million cutoff. However, the Board also has a project on its agenda that addresses the accounting for reinsurance. The cornerstone of that project is the Board's current tentative conclusion that reinsurance amounts currently reported net, assets offset against liabilities, should be reported gross. It is not clear whether gross reporting of reinsurance will push total assets for some entities over the threshold.

Asset-Liability Management
Well-managed insurers are attuned to the relationships between particular liabilities and assets. Duration matching and similar techniques are clearly important management tools, but they have limited relevance in establishing the fair value of assets and liabilities. A GIC matched by U.S. Treasury securities does not necessarily have a different fair value from a similar contract matched by corporate bonds. Unless the assets affect the marketplace's evaluation of the issuer's credit risk, or asset performance is shared with the holder, the two contracts should have similar fair values. The objective is to estimate value in the marketplace, not value to the entity. The marketplace cares not about the liability against which an asset is matched, and vice versa.

The same notion applies to the servicing element present in some financial instruments. An entity may believe that its cost structure gives it a comparative advantage, or disadvantage, in certain types of financial instruments. Management may see this advantage as a source of future profits. Again, the marketplace does not reflect an individual entity's comparative advantage.

Core Deposit Intangibles
The notion of a core deposit intangible is a term of art in depository institutions. It refers to the identified intangible asset represented by customer relationships. The exposure draft states that entities shall not consider this intangible asset in estimating the fair value of deposit liabilities. Stated differently, the value of a passbook liability is the amount repayable on demand. On the surface, this prohibition seems of little interest to insurance companies, but there may be a related issue in some of the investment contracts covered by the exposure draft. I expect a persistency assumption will play a role in estimating fair value of those contracts. That seems appropriate over the term of contracts in force. An additional adjustment, designed to reflect renewals or continuing relationships beyond the contract term, would be akin to a core deposit intangible and could not be included.

THE OTHER MARKET-VALUE PROJECT

The Board is also working on a project that would require entities to "mark to market" on the face of the balance sheet certain marketable debt and equity securities. Insurance companies already follow this practice for equity securities. The project, as currently conceived, would extend the practice to marketable debt securities. Other financial assets, including loans and private placement securities, would be excluded. The Board has yet to settle questions about the market value of related liabilities. The reporting of unrealized gains and losses -- in income or in "dirty surplus" -- also remains unresolved.

Please note that this project is in addition to disclosure, not instead of disclosure.

A CLOSING NOTE

I have intentionally avoided a detailed review of the comment letters and public hearings on the exposure draft. I do not intend in doing so to minimize their importance. The Board adopted several changes in response to comments, as it almost always does. There is one group of comments, though, that I should address. This group asserts that disclosure about market value should not move forward at all.

Some suggest that market-value disclosure is not a "cure-all." They are right. It isn't. Market value information tells little about duration mismatch, relative risk, or liquidity. No single piece of information serves all purposes or always provides the same relative benefit to financial statement users.

Some suggest that a market value "snapshot" tells little about an entity. Assets and liabilities may change by the time financial statements are issued. The respective market values certainly will. But every balance sheet is a snapshot, a picture of a frozen moment in time.

Finally, some suggest that market value information is irrelevant. Here I disagree strongly. The acid test of relevance is the capability of information to influence decision. Good financial disclosure gives financial statement users the ability to evaluate management's decisions. Management may choose to hold or to sell investments, and both may be good decisions in particular circumstances. The user of financial statements cannot even begin to make that evaluation or act based on that evaluation, without some information about market value.

MR. ROBERT W. STEIN: The financial community's interest in market value has increased considerably in recent months, although little has been said about how the disclosure and reporting initiatives under consideration would impact the insurance industry. To help put in perspective the activities of the recent months, let's review the long history of activity of the AICPA, FASB, and SEC in this area. To understand the current proposals' possible impact on the industry, the objectives of recent professional activity is reviewed and a number of significant conceptual implementation and business management issues are discussed.

The financial community has had market-value disclosure and accounting topics on its agenda for many years. For the purposes of this discussion, we can begin with 1974. During the latter part of 1974, the AICPA began to seriously consider requiring banks to adopt market-value accounting for certain portions of their portfolios. As many will remember, at the time, banking portfolios, as well as insurance company portfolios, were significantly underwater. Despite the obvious impact that market-value accounting would have had, the AICPA had reason to believe that banking regulators were supportive of the proposals. That, however, was before hearing from the chairman of the Federal Reserve, who quickly made it known that he opposed the proposal and warned that the initiative presented a severe risk to the U.S. economy and its financial markets. Not surprisingly, the proposal was tabled. Now, some question the wisdom of the decision to abandon market-value accounting and disclosure concepts.

In 1987, the AICPA returned to the market value issue with an exposure draft entitled, "Disclosures about Financial Instruments." The outcry was reminiscent of the 1974 concerns, complete with warnings about the economic damage that would result and the likelihood that investors would abandon long-term instruments as they sought to avoid volatile reported earnings. Once again, the drive for market-value information stalled.

Several years later, in March 1990, FASB, in issuing SFAS 105, began to address the market-value issue. In a sense, SFAS 105 represents a shift in the accounting

profession's approach to the market-value issue as it addresses disclosure matters and only in narrowly defined areas.

The pace toward market-value accounting quickened in May 1990 when another AICPA exposure draft was floated, seeking to unify the accounting for debt securities held as assets by financial institutions. Once more, market-value accounting proposals were sharply criticized and quickly, but quietly, withdrawn.

The excitement really began in September 1990 when the SEC called for market-value accounting for banks. The SEC's near demand for market-value accounting not only raised the stakes for financial institutions, but put extraordinary pressure on the AICPA and FASB to respond.

Feeling the pressure from the SEC, and having recently aborted the exposure draft on market-value accounting, the AICPA once again turned its attention to the disclosure of market-value information. And in November 1990 the AICPA issued Statement of Position (SOP) 90-11 that addressed the disclosure of information by financial institutions about certain debt securities held as assets.

The AICPA was not alone in wanting to respond quickly to the SEC intrusion into the accountants' domain. FASB, also under attack, issued an exposure draft in December 1990 that, like the AICPA SOP, retained a focus on disclosure, but had a significantly broader scope. And finally, in June 1991, FASB agreed to place a market-value accounting project on its already tight agenda.

The accounting profession's experience with this issue has been sporadic. A cynic might see a series of politically motivated, or at least expedient, actions taken to mollify regulators, rather than dealing with the legitimate concerns of the users of financial information. In any event, the profession has leapt from accounting to disclosure and back again and has yet to come to grips with the basic issues.

Where does this leave the insurance industry? All that must be known to understand the issues facing the industry is that the FASB exposure draft is concerned only with the disclosure of market value information, but includes all companies, not just financial institutions, and all financial assets and liabilities. FASB's research project on market-value accounting should further heighten the industry's concern, particularly as the scope of the types of assets included in the study and the treatment of related liabilities remains uncomfortably vague.

OBJECTIVES OF THE RULEMAKERS

As these steps already have been taken by the accounting profession, it would not be inappropriate to question the objectives of the parties. Unfortunately, the objectives of the parties have not always been clearly stated. For example, the SEC's objectives do not appear available, except as presented in speeches and press releases. Nonetheless, as gleaned from the SEC's public comments, some of its objectives appear to include the following.

First, there is no doubt the SEC is reacting to the S&L crisis, in general, and is seeking a means of obtaining more advanced notice of troubled situations in particular. While laudable, it is unclear as to whether the proposals now under study would have

prevented the S&L situation from developing. More specifically, the SEC appears to be seeking to prevent perceived accounting abuses, including "gains trading" (the realization of gains on appreciated assets, while avoiding the recognition of losses on impaired assets) and the manner in which asset impairments are recognized. Clearly both matters are problems under historical accounting conventions and need to be addressed.

In fact, there is general agreement that historical accounting for invested assets and other financial instruments can be deceptive at times. Further, there is a fear that if accounting information strays too far from economic reality, poor decisions will be made by those using that information to manage their businesses. Thus, many agree that a reexamination of the information made available to users is needed. But, the lack of clearly delineated objectives has increased the level of confusion surrounding the issue and has prevented the formation of a reasonable basis for evaluating alternative courses of action.

Not surprisingly, the FASB has more clearly defined its objectives. In general, it seeks "better" information for the users of financial statements, particularly investors and regulators. Their interest is in providing more relevant, useful information to those who rely on reported financial information to make decisions about those companies. In this context, the challenge facing proponents of market-value disclosures or accounting information is the need to demonstrate that the information will in fact be more useful. Most of the recent discussion on this topic has addressed the bank's situation. And it is not clear whether market-value accounting for banks is applicable to the very different business of insurers.

In particular, virtually all of the proposals seem to ignore the basic nature of the insurance business and the role of the investment function. Unlike traders, insurers are intermediate to long-term investors that invest to support specific liability structures. Not being traders, the success of the insurance business cannot be reasonably measured by assuming that all assets must be delivered immediately, particularly if the liabilities they are funding are not similarly valued. Thus, market-value accounting (and even disclosures) appears at odds with the fundamental nature of an insurer's business. Since accounting should reflect the nature of the business and the manner in which assets are used in the conduct of that business, many observers believe that market-value concepts are simply not compatible with insurance company operations and will not provide relevant information to users.

WILL USER UNDERSTANDING BE ENHANCED?

This, of course, is the central question. Will users' understanding of financial information be enhanced or impaired by the disclosures and market-value accounting proposals now under consideration? While the concept of "user understanding" could be debated endlessly, the unusual outcomes that would accompany adoption of the AICPA or FASB proposals may shed light on this question as it applies to insurers.

First, one must recognize that any accounting proposal will apply only to public (i.e., stock) companies. Mutual insurers will not be affected. The result is obvious. Substantially different information will be available for stock and mutual companies operating in the same marketplace. The impact on their competitive positions is difficult to estimate, but is sure to be substantial. Further, the remarkably different

information would only confuse the consumer, further damaging the reputation of the industry and increasing the costs of already scarce capital.

Similarly, the possible effects on the insurance industry regulatory and company rating processes are unpredictable. Insurance company regulators currently rely on statutory information, which would not be changed by the accounting profession's proposals. Is one to believe that solvency regulation would remain based on historic cost information, even while some segments of the industry were publishing market-value information? Market-value information for stock companies could not be ignored. The effects of utilizing GAAP information in the regulation of the stock companies and statutory information in the regulation of mutual companies cannot be predicted. However, it is a situation that could not be tolerated.

MANY CHALLENGES HAVE YET TO BE DEFINED

But what will the specific proposals add to the information pool? While the proposals have not yet been fully formed, it is clear that substantial conceptual, implementation, and business issues remain unaddressed.

Many of the conceptual uncertainties inherent in the current proposals must be addressed before those suggestions can be seriously considered. Clearly the most important matter is the notion that the market value of insurance company assets could be recognized, but that the corresponding market-value liabilities could be ignored. Most observers of commercial banks and, no doubt, virtually all insurance professionals, would consider the proposal's failure to approach the market-value issue in a comprehensive and consistent manner a fatal flaw. Many would consider the results not only meaningless, but damaging to users. Nonetheless, at this time FASB appears only willing to consider the concept of consistently valuing related liabilities at market value. In fact, the first proposal for valuing banks' related liabilities was rejected as being too complex.

While most observers believe it is essential to value related liabilities at market, it must be recognized that market-value concepts represent a fundamental redefinition of insurance accounting principles. There is no doubt that insurance liability concepts, expected patterns of earnings, and reported earnings will be dramatically changed by any market-value methodology. The impact of current proposals is unclear, as liability valuation methods have not yet been defined. Nonetheless, there appears to be no recognition of this basic problem and no discussion of it as a fundamental issue.

The current uncertainty regarding the conceptual basis of the proposals and their flexibility in application are likely, if adopted, to create inconsistent reporting over time within a company and create a lack of comparability among companies. For example, the applicability of the proposals to various asset types has not yet been made clear, nor has their valuation processes. Thus, companies may have considerable discretion in applying the guidelines. For liabilities, applicability is highly uncertain, and, if included, valuation methods are not close to being defined. This too suggests that results may not meet the objectives of enhancing user understanding, but may create a confusing environment, with little uniformity of practice.

From the insurers' standpoint, a more positive aspect of the proposals is that they seem to embrace value-added concepts. While there is unanimity regarding the

advantages of value-added reporting systems, these market-value initiatives raise the question as to whether an enhanced, carefully defined value-added approach could be developed to better meet the needs of sophisticated users of insurance company financial information.

On a more practical level, questions on how to implement asset and liability market-value concepts abound. And, as the resolution of these issues will determine the balances to be reported, the way these implementation issues are addressed will have profound implications on the quality of the information developed.

First, questions have been raised regarding the basic ability to value assets at market. Many do not believe that marketable securities have specific, reliable values. Many financial instruments traded on regulated markets do not have regularly quoted values that fall within a reasonable range. Most disconcerting is that for such instruments, such as high-yield bonds, market-value indications are most unreliable at times of market uncertainty, precisely when users of financial information need better data. Before adopting market-value proposals, more attention should be devoted to examining the quality of the data that is being represented as market-value information.

For other assets of great significance to insurers, such as private placements and mortgage loans, there are no publicly available market values. While methods to compute market values are available, they are highly complex and extraordinarily sensitive to many assumptions. While FASB staff may view the lack of specific guidance on the computation of such market values as an advantage of the proposals, it can only lead to a wide and diverse range of practice. As a result, market values generated by companies are likely to be inconsistent among various asset classes and over time within an asset class. Companies will almost certainly take different approaches to determining the market values for such instruments, resulting in a lack of comparability within the industry.

Turning to the practical application of market-value concepts to insurance liabilities, the biggest issue is the lack of definition for the market value of such liabilities. Whatever the outcome, profound reporting changes will result. Two choices for liability market values are those based on the discounting of cash flows. Following some of the views expressed with respect to the banking industry's demand liabilities, cash values easily could be recommended as the basis for the market value of annuity and other investment product liabilities. Also, individual life liabilities might be valued on a demand or cash value basis if they are permitted to be valued at their market values.

If discounted cash flows are utilized, it still must be determined whether a net investment earnings rate or an investor's risk rate of return would be used in the computations. The former would result in a value comparable to a gross premium valuation and result in the virtual complete front-ending of profits at the time the business was written. On the other hand, the use of an investor's risk rate moves towards value-added concepts and may offer attractive opportunities to make significant improvements in the usefulness of financial information. Whatever the conclusion, the reporting implications of valuing liabilities at market are immense. Of course, these changes would apply only to stock companies, as mutuals are not affected.

Practical barriers will arise no matter what methods are used in computing liability market values. All methodologies are very complex and extremely sensitive to minor assumption differences. As a result, liability market-value calculations may be largely unauditable, at least on an economical basis, and, like assets, will produce inconsistencies over time among liability categories and will lack comparability among companies.

In light of these significant implementation questions, one must challenge fundamental suggestion that better, more relevant and useful information will be made available to the users of financial statements. Further, FASB should carefully examine the practical implications to ensure that any proposal meets a reasonable cost-benefit test. At present, cost-benefit justification appears difficult to support.

THE EFFECT ON MANAGERS WILL BE PROFOUND

While the conceptual and implementation issues seem staggering, many believe that the basic business issues raised by market-value proposals dwarf other challenges.

First, all proposals, even those involving the full adjustment of liabilities to market value, will produce extreme volatility in reported earnings and capital. In the public markets, this volatility and uncertainty will cause the cost of capital to rise, fueling an increase in product prices. The subsequent deterioration of the stock segment's competitive position is almost certain. But is it likely that mutual companies could avoid the inferences drawn from the stock company information? Not likely, and, as a result, an industry already short of capital would be put under further pressure.

Returning to the basic objectives of the proposals, one is reminded that a basic premise of financial reporting is that it provides useful and relevant information to aid users in making decisions. Thus, the availability of market-value information would be expected to affect management decisions. Some observers are concerned that in order to avoid the undesirable effects of volatile earnings and capital, basic investment strategies will be changed. For example, perhaps the industry would abandon the long-term debt markets in favor of short-term investments. Without considering the impact on the long-term markets themselves, this investment strategy change would have a significant impact on product costs and prices. While potentially affecting only stock companies, mutual companies are likely to be influenced by the same evaluations made by an uncertain public.

Because of the importance of the regulatory and rating processes, it is worthwhile to return to the thought that statutory information will be available for both stock and mutual companies, whereas market-value data will be available only for stock companies. In such an environment, can solvency regulation remain statutorily based? Can users of financial information be expected to be able to evaluate the different and confusing data available for stock and mutual companies? It appears highly likely that this bizarre situation would create significant uncertainty in the insurance marketplace. The result of such uncertainty will be a demand for more capital by an uneasy public, further eroding the competitive position of the life insurance industry.

Finally, most believe the insurance industry is slowly moving through a period of increasing globalization. As international companies compete within a single capital

market, regulators are struggling to achieve common accounting standards and measurement criteria. Adoption of market-value concepts would make U.S. stock companies unique in the global capital markets and would place U.S. companies at a decided disadvantage. The importance of the U.S. market and the role of the U.S. companies in the global market already are in decline. This would just speed up the process.

It is hard to convey the complexity and impact of the issues related to market-value accounting proposals in a few paragraphs. While most agree that additional information must be provided to users, market-value accounting proposals are unusually complex and go to the heart of the way the insurance industry manages asset and liability exposures.

Conceptually, full-market-value accounting has many advantages. But it is also an extraordinary, complex undertaking and is not a basis on which one can readily build a public reporting system.

Regarding the insurance industry, the proposals seem insensitive to the structure of the industry, ignoring the fundamental stock-mutual dichotomy. Furthermore, it fails to recognize the unique feature of the industry, in which statutory information is used for regulatory purposes and GAAP information is used for investor reporting by stock companies. Any proposal affecting only the stock companies must be seriously challenged within this context.

The FASB's apparent failure to recognize that market-value concepts will result in a fundamental redefinition of GAAP accounting for insurance companies is surprising. Having just finished the tortuous debate on SFAS 97, it seems incredible that an even more massive change in accounting and reporting could be proposed, without fully analyzing the implications on the reported earnings of the industry.

Improved information regarding the financial position of insurance companies is clearly needed by primary users of financial information. However, the process that has been followed to date appears to have been been politically motivated and lacks an adequate analysis of the issues. While further delay on this issue may result in a confrontation between the SEC and FASB during 1992, the dangers of embracing dramatically new principles that have not been thoroughly examined is more severe than the dangers associated with completing an adequate analysis of the ramifications of these proposals on the insurance industry.

MR. MILLER: Keith Drzal will try to describe some of the conceptual issues in practical implications of trying to implement a market value or fair value of liabilities.

MR. KEITH A. DRZAL: We've had some lively discussions in my company for the past year and a half on the topic of market-value accounting. They have ranged from the implications of income statement recognition to disclosure information only. I have found that theorizing can be interesting, but attention really peaks when accounting pronouncements are made. This appears to be a general viewpoint shared by other companies. As this process evolves, there will be more discussion arising. My presentation will touch on some of the issues we have discussed in my firm. I'm not going to give you a list of all possible interpretations, with pros and cons of each.

Instead, I will suggest a process for liability valuation, with supporting arguments for its validity. As Wayne mentioned, the disclosure draft is not a cookbook. I'll share with you an outline for my recipe.

My presentation summarizes my personal viewpoints. I know some of you will disagree with a number of things I will say. I state this with confidence because the concept of liability market value is not well developed. I find however that actuaries have strong, preconceived notions about the topic. Your perspective will be affected by your training and background.

I am currently an investment actuary and you will find that my viewpoints are very much influenced by asset valuation. I will state the mechanics to perform the liability valuation, and you can decide whether you see any merit.

I'll touch on five areas. First, I'll discuss the general concept of market value. Then I'll outline a three-step process for determining a market value. This involves cash-flow projection, the interest rate process development, and interest rate adjustments for discounting purposes. I think these are important because the exposure draft does not define the concept, so as to either direct the mechanics or restrict possible variations. Implementation of this financial statement will require animated discussion within each company. Finally, I'll highlight some implications that I foresee.

MARKET-VALUE CONCEPT

To set a good foundation for the rest of this presentation, we need to establish a working definition of "market value" or "fair value." Let me propose this straight-forward definition: market value is a value today that is deemed to be equivalent to the receipt of future cash flows, discounted for the time value of money and the degree of uncertainty as to the timing and amount of such cash flows. This definition is true whether we are talking about common stock, real estate, bonds, or mortgages. It's true if we are investing in such entities, or using them as means of raising cash.

To determine a value we first need to project the future anticipated cash flows. This can be straightforward or it can be very complex, depending on the product. For example, it is quite simple for noncallable bonds. It is much more complex for mortgage-backed securities or collateralized mortgage obligations (CMOs). Not only are they complex, but their modeling is based on subjective opinion. But I argue that asset cash flows are no different than liability cash flows. Future cash flows of nonbenefit-responsive GICs are fairly easy to project. Annuity buyouts and structured settlements can be projected with a reasonable degree of confidence. On the other hand, single premium deferred annuities (SPDAs) are the adjustable rate mortgages of the liability side of the balance sheet.

Once one has the cash flows projected, a discounting process must be attached. Most assets and liabilities are priced relative to treasury rates as a benchmark. So too for liabilities. It's important to remember that to the extent cash flows vary according to interest rate levels or the path of interest rates, the discounting process must correspond to the interest rates that give rise to the cash flows. Otherwise, the result makes no sense.

One reason an asset market value makes intuitive sense is that we can observe it. Bonds and stocks trade regularly, so we have feedback as to their value. High-yield bonds may trade infrequently and private placements or real estate may not trade, but we can infer with varying degrees of accuracy their value. How? We can compare observed values of other issues, or use discounting processes similar to those assets whose prices can be observed. This is called calibrating to the market.

A difficulty people have with the concept of liability market value undoubtedly stems from the lack of observed prices. We observe a price when the product is sold. It is pretty clear what the time value of money is for a GIC at sale. It is less clear for an SPDA. However, there is information with each sale. This is from whence I view the liability calibration arising. This is the observed liability value.

There is a mirror image between asset and liability values. One person's asset is another person's liability, and vice versa. The bonds we hold on the asset side of our balance sheet are held on the liability side of the issuer's balance sheet. Just as we assign a bond market value as a representation for its current worth, so too would the issuer assign the same value to its liability. If a company holds a 9% one-year treasury in an 8% environment, and were to value it at a discounted price of $101, why wouldn't a 9% one-year GIC in an 8% GIC environment also be valued at $101? If this makes sense, then why wouldn't the liability market value be $101?

Borrowing from the field of physics, I suggest the Law of Conservation of Market Value. Since in the grand balance sheet of the universe all assets must balance with all liabilities, so too must the market value of all assets balance with the market value of all liabilities.

At point of sale, a book value balance sheet equates assets and liabilities. If we sell a $10,000 SPDA, we book a $10,000 asset and a $10,000 liability (excluding built in conservatism). At point of sale, the asset and liability are also both at market value. We choose to invest the cash received in financial instruments or pay expenses. The policyholder has chosen to give us cash in return for future considerations he deems to be of comparable value.

This does not mean that we do not anticipate to make future profits. Realized profits create assets that are balanced by additions to surplus. The book value balance sheet is not a statement of future profitability. Similarly, I don't believe a market-value balance sheet should contain a statement of future profitability. The market-value balance sheet can be interpreted as containing some sort of a statement of relative profitability. I'll come back to this later with some examples.

The balance sheet provides a point-in-time snapshot. Accounting methodology controls the degree to which the balance sheets reflect change. A market-value balance sheet would change rapidly to reflect the changing economic and interest rate environments. Financial assets and liabilities are obviously quite sensitive to interest rates.

Asset-liability mismatches are not necessarily reflected or penalized in book value balance sheets; at least not until events occur that cause recognition, such as asset sales or write-downs. Other than by varying levels of conservatism built into liability

reserves, an estimate of gamble from interest rate bets are not part of book value balance sheets. They can be part of market-value balance sheets.

Potential impacts from changes in credit risk do not highlight themselves on the asset side of book value balance sheets until they are "other than temporary." Credit exposure differs from interest rate exposure, in that the decline in asset market value due to credit risk is not immediately offset by changes in liability value. Obviously, recent declines in high-yield bond and real estate values are of interest to policyholders and lenders, and they would like to understand their potential impact.

Credit perception changes affect not only assets, but also liabilities. The marketplace is telling us something if company A can sell a GIC at 9%, but company B requires a bid of 9.25% to be competitive. The market, whether efficient or not, assesses the creditworthiness of each of us everyday. Shouldn't this information be incorporated into a statement of company value?

CASH-FLOW PROJECTION

I'm going to briefly discuss the concepts used to value assets today, but I won't go into tremendous details of option pricing theory. I do this for two reasons. First, the theory of asset valuation (and particularly fixed-income valuation) has been the subject of a great deal of research over the past decade. How better to begin rationally discussing liability valuation than by understanding the current state of the art of asset valuation? After all, are not our liabilities cut from the same mold? Second, I believe that assets and liabilities must be valued consistently to have any hope of producing market-value balance sheets that are remotely deemed to be of any value. FASB has the same concern. Let me quote from the exposure draft. "The Board's decision to require disclosures about market value of financial liabilities is based on its belief that the information will complement the market-value information provided for financial institutions. Users of financial statements will be able to assess more completely an entity's management of market risk."

The simplest asset valuation is one of noninterest-sensitive cash flows. You can think of a noncallable treasury or corporate bond. The value today is merely the summation of spot-rate or zero-coupon discounts of each future cash flow. For treasuries the discount rate is the treasury spot rate. For corporate bonds the discount rate is a treasury spot rate plus a spread, which represents predominantly a premium for credit exposure.

In the case of callable or putable bonds, quite often a lattice or tree of future interest rates is used to model possible future states. Since the cash-flow payment is independent of the prior interest rate path, but is determined solely by the interest rate level assumed to exist at that time, a backward discounting method can be used. I won't go further into the details, since it is not directly applicable to liabilities.

The third method of valuation is Monte Carlo interest scenario modeling. This is necessary for assets like mortgage-backed securities and CMOs, since prepayments are a function of the then current interest rate and the outstanding mortgage balance, which depends on the entire prior history of interest rates, thus the term *path-dependent.*

I'll distinguish between fixed and flexible liabilities on the liability side. Fixed liabilities (generally) have noninterest-sensitive cash flows. Examples are GICs, annuity buyouts, and structured settlements. Obviously, benefit responsiveness in GIC contracts will be affected by interest rate levels. One might argue that unlimited participant rights to book value withdrawal create a market value that always equals book value. The theory is consistent with a put option value, which rises and falls as interest rates rise and fall. Each company will have to determine the extent of option value it believes it has in its GICs and thus the degree of market-value fluctuation that results. However, when one starts to look at the practicalities of a market-value process, GICs are likely to be valued as noninterest-sensitive, with some adjustment for the benefit-responsiveness feature. A somewhat simple and straightforward method to use is spot-rate discounting of a vector of future cash flows.

INTEREST RATE PROCESS

The interest rate process is used to discount cash flows and is a necessary component in the development of anticipated interest-sensitive cash flows. As I see it, consistency between asset and liability valuation is at the crux of the interest rate process. A cash flow is a cash flow whether or not it appears on the asset or liability side of the balance sheet. The valuation of each cash flow should be consistent. That does not mean identical in terms of a discounting rate. Obviously, particular asset discount rates will differ from those of asset cash flows. The point is, except for these differences, the underlying process should be fundamentally identical.

For noninterest-sensitive cash flows, spot-rate discounting is appropriate. The most obvious example is the GIC yield curve. A GIC yield curve is an example of a spot curve. It differs from the treasury spot curve, due to factors such as insurer credit perceptions, liquidity, and supply and demand. If five-year GIC rates are yielding 50 basis points over the five-year treasury spot rate, then that is a reasonable representation of a discount rate for the insurer's book of five-year GIC cash flow.

When one begins to discuss interest-sensitive cash flows, such as a block of SPDA liabilities, the question takes a sizeable leap into complexity. But the complexity of the process does not provide grounds for inconsistency. Future SPDA cash flows must be modeled under multiple scenarios. Once we have this matrix of cash flows and interest rates, we continue the asset analogy by discounting the cash flows in each scenario by the interest rate path of that particular scenario. The average present value over all scenarios provides a market-value representation. Because of the interest-sensitive nature of these liabilities, the multiple scenario process is necessary to capture the embedded option value.

There is obviously an infinite number of future interest rate scenarios that can possibly be generated. Are there guidelines that can help distinguish an appropriate set of paths from an inappropriate set? The answer is yes. Again, remember the necessary condition of asset and liability consistency. An appropriate set of interest rate paths to generate and value liability cash flows is one that reasonably prices assets. Use an asset option pricing model to value the liabilities. Now this is not exactly a viable solution. There is work being done to extend asset-based models to incorporate simultaneous liability modeling, but much work remains. On a practical level, I suggest that you test the interest rate generation process you use for liability valuation to ensure that it reasonably reproduces asset prices. A simple test would be to see if

it reproduces treasury prices. This is termed *calibrating* to the treasury market. Your model yield curve generator probably has variables that control mean reversion, reflection points, and stepwise volatility. Treasury calibration focuses on mean reversion, which controls the central tendency of the process. It does not specifically calibrate volatility, which requires comparison to prices of optionable securities and is a higher level test. Even more complex is the question of model inconsistency, which allows for possible arbitrage situations. But these are beyond the scope of this discussion.

You will now begin to see the point of potential greatest controversy. The calibration of the yield-curve scenarios to the observed asset marketplace incorporates the current shape of the yield curve. The yield curve is the marketplace average representation for the time value of money. Interest rate scenarios used in asset pricing follow what is termed the *risk-neutral* environment. Future interest rates are simulated to vary around a central tendency, which follows the forward interest rate curve. This is also known as the expectation hypothesis for future interest rates. Now, this is where I normally begin to hear moans and groans. This does not mean that you have to believe the expectation hypothesis, which suggests that forward rates are the best indicator of future interest rates. This is not to say that you cannot have what is called a risk preferential view of a different outlook for future interest rates. You and your company can price products on a risk preferential outlook.

The concept I'm emphasizing here is based on the following three points:

1. Assets have a currently widely accepted valuation process and liabilities do not.
2. I heartily suggest and believe that assets and liabilities be valued consistently.
3. The marketplace representation for the time value of money should be used to produce unbiased results for liability market values.

SPREAD ADJUSTMENT

One final piece of the puzzle is the spread-to-treasury adjustment to calibrate to the nontreasury marketplace. This produces a relative value. That is to say the price of a corporate bond for the same coupon and maturity is less than that for a treasury bond, due to the existence of numerous factors, the most predominant being perceived credit risk. The most widely used process is a fairly simple one, where a constant spread is added to the treasury discount rates. This is termed an options-adjusted spread (OAS). An analog of the OAS can reasonably be added to the scenarios of treasury rates. These then become the rates used for discounting liability cash flows. The final question is how to determine the liability OAS. This is theoretically difficult to do precisely, but a simplified process can be performed. An asset OAS is determined by calibrating to observed prices. Liability observed prices are new business sales. This represents an acceptance in the marketplace for the product as quoted. One can model future anticipated scenario cash flows using interest rates consistent with a forward curve walk and then determining the spread-to-treasury adjustment that causes the discounted value to equate to the initial deposit. This spread can then be used to discount projected future cash flows generated from the in-force block. The obvious drawback is that the new business product may not be identical to the in-force liabilities in such things as surrender charges. But the purpose is to find a spread that measures the marketplace risk premium for your company and

general product line. The specific characteristics of in-force liabilities will be captured in projected cash flows.

EXAMPLES

To try to get some flavor of market-value balance sheets, it is useful to model simple asset and liability portfolios. Let's assume we sold a five-year compound GIC with a guarantee of 9.5% (Chart 1). On that date, the five-year treasury spot rate is 9.0% (effective annually) so we sold the GIC at a 50-basis-point spread to treasuries. Further assume we simultaneously invested the proceeds in a five-year zero-coupon bond, with an effective annual yield of 10%. The asset is priced with an OAS of 100 basis points, and our margin is 50 basis points.

Chart 1 is a graphical representation. There are only four actual cash flows. The $10,000 deposit receipt and its simultaneous bond purchase are on the left. The bond and GIC maturity proceeds are on the right. The $363 represents future net proceeds from the transaction. The curved lines connecting the points represent the GIC fund balance and a constant yield-bond accrual. Conversely and synonymously they also represent the present value of future anticipated cash flows at discount rates commensurate with both asset and liability markets at point of sale. In other words, they are market values given the initial interest rate environments. The fact that they equate at issue does not mean a zero-profit scenario. We know we will have $363 of excess cash flow.

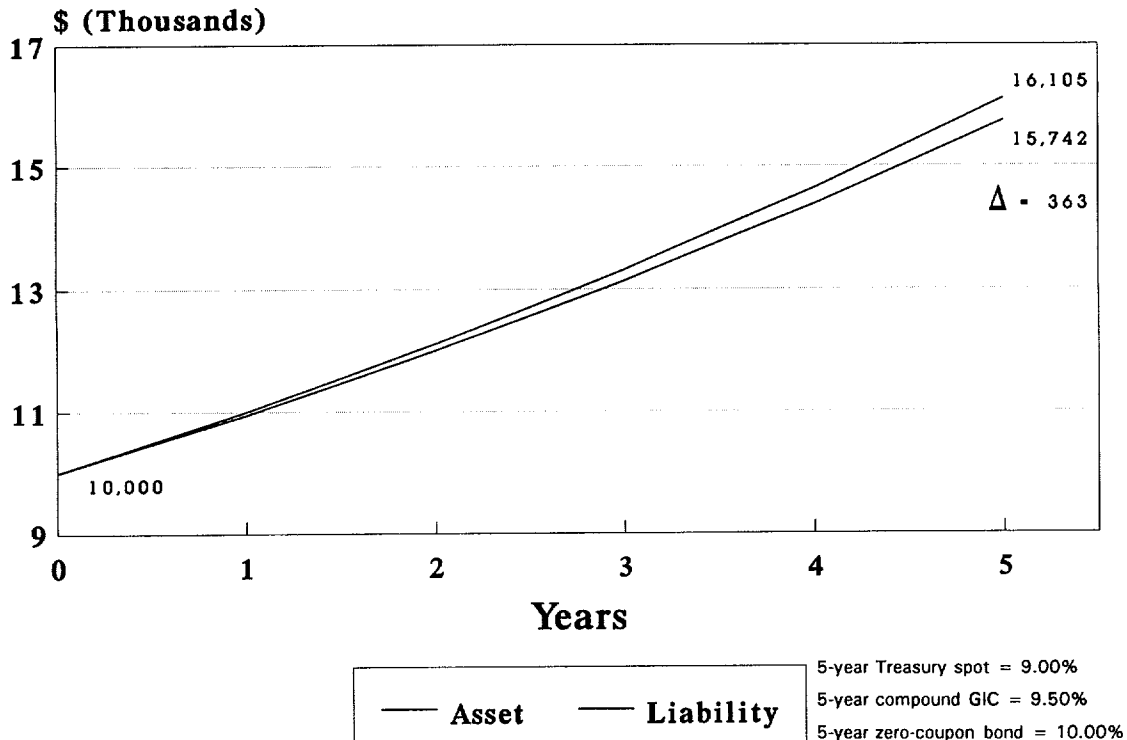
I've now assumed an instantaneous upward movement of 200 basis points in all yields (Chart 2). The asset market value has declined to $9,137. Since we are exactly matched, the liability market value has declined to the same value (except for latitude I took with rounding). This is a reasonable result and exhibits the need to reflect liability value changes in conjunction with asset changes.

A slightly more interesting example is one where a mismatch exists (Chart 3). Here we support a five-year compound GIC with a seven-year zero-coupon bond. I've assumed the bond returns 10.25% effective annually. On a book value basis, the bond will accrete in five years to a level to produce a $547 profit. This is valid assuming the bond can be sold for that value, either externally or internally via disintermediation.

If interest rates were to rise 200 basis points instantaneously, we would see the asset and liability market values slipping (Chart 4). Due to the mismatch, the asset declines in value more than the liability, producing a surplus of ($320). Does this suggest this block of business will lose $320? No. It suggests that relative to the base case expectation of profit, the block will provide $320 less present value of profit. This is a relative statement. Coincidentally, at the five-year point, the asset accretes to the liability value. If the asset is sold at this price, asset and liability cash flows will equate, producing zero profit (excluding expenses and contingency charges). We took a risk by mismatching, and it looks like an unwise decision.

Without belaboring the point, let's examine one last scenario (Chart 5). Let's go back to our matched example and assume that both the five-year treasury spot and zero-coupon bond rates rise by 2%. Suppose that due to insurance company credit concerns, a flight to quality occurs and the current five-year GIC rate rises only

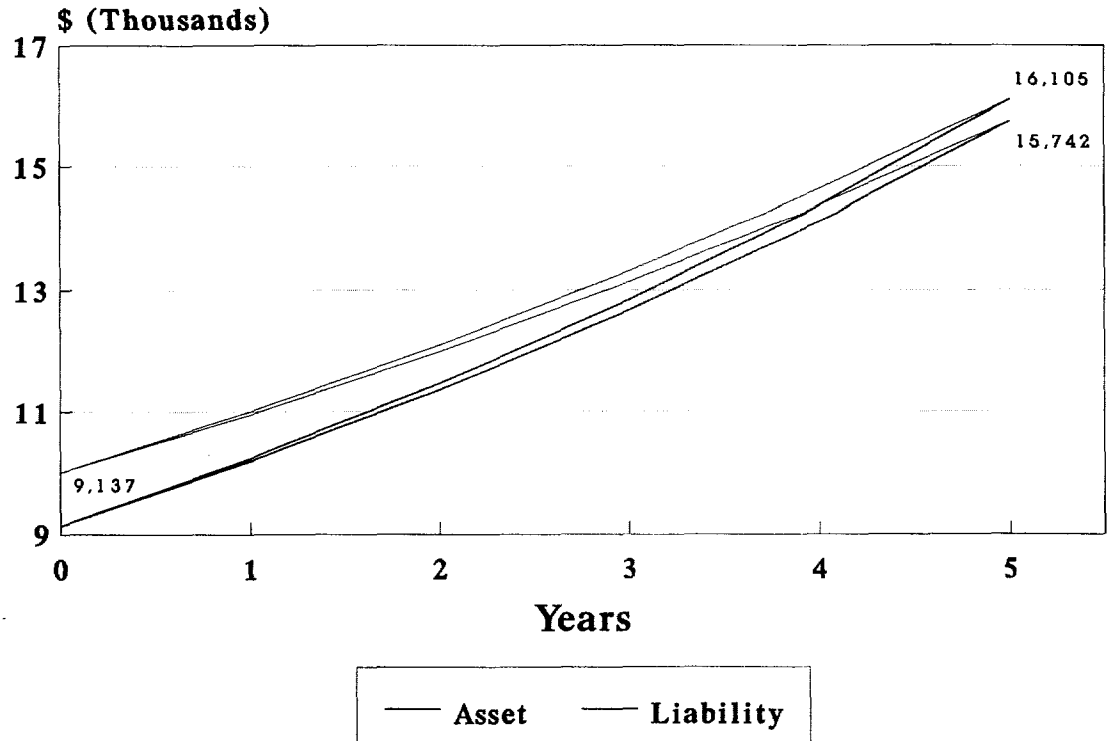
Matched GIC Example



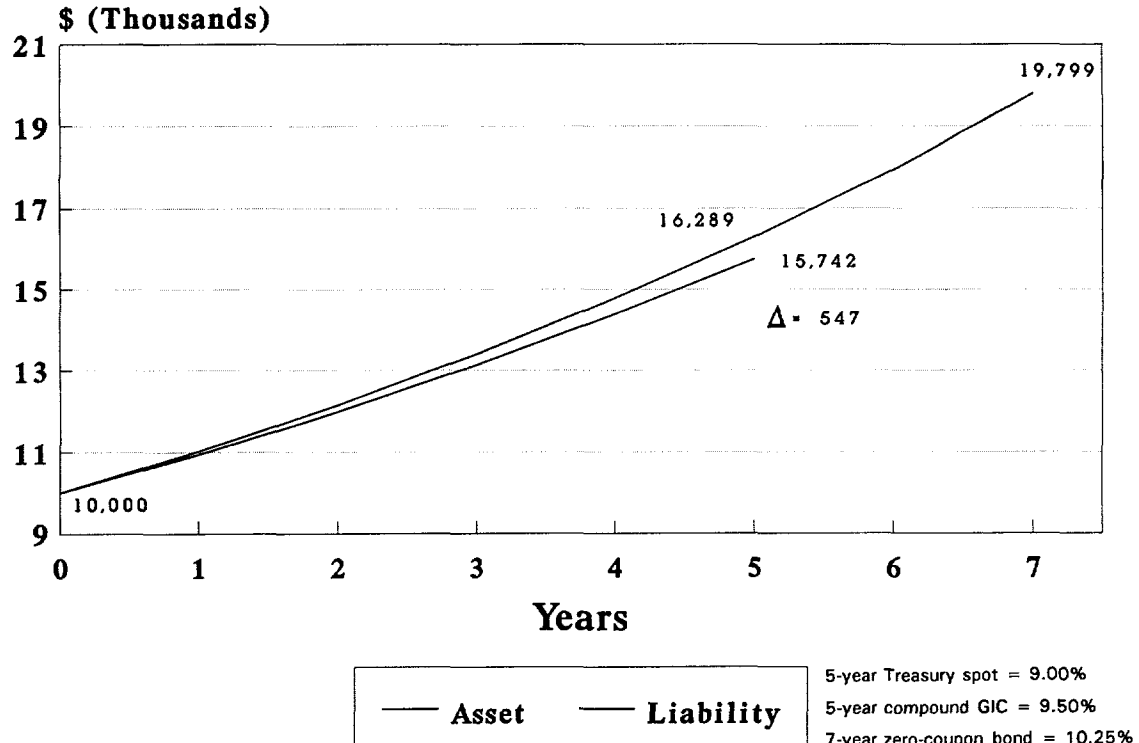
MARKET-VALUE BALANCE SHEET

CHART 1

Matched GIC Example: +2%



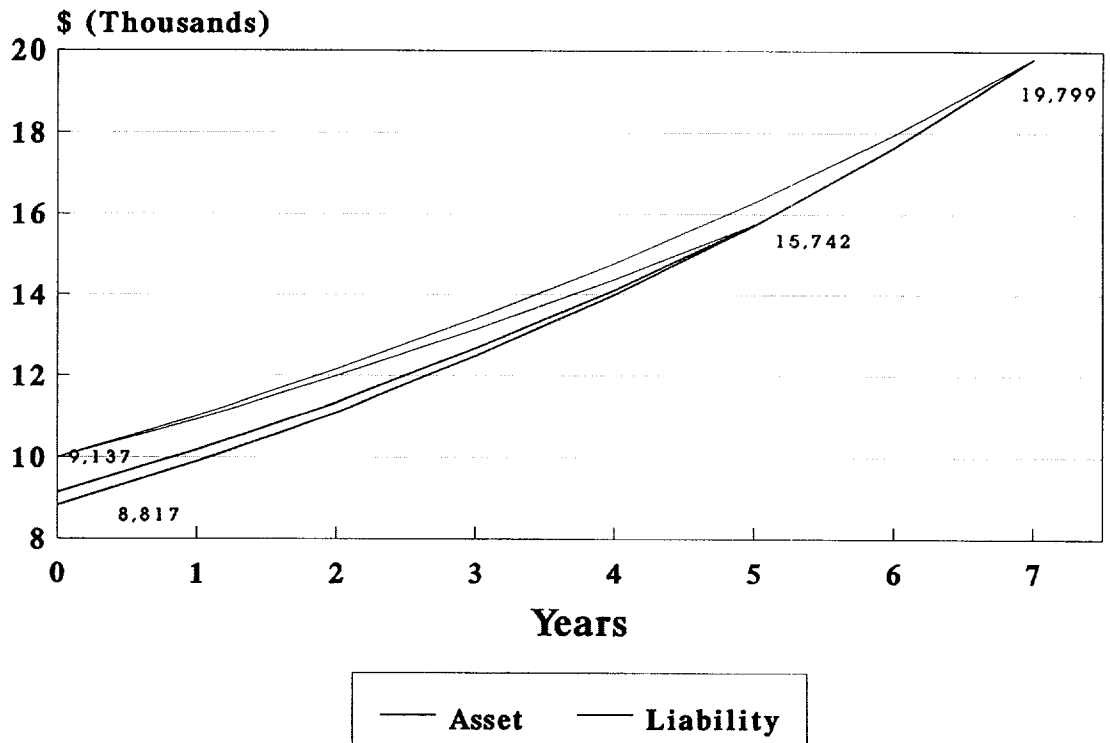
Mismatched GIC Example



MARKET-VALUE BALANCE SHEET

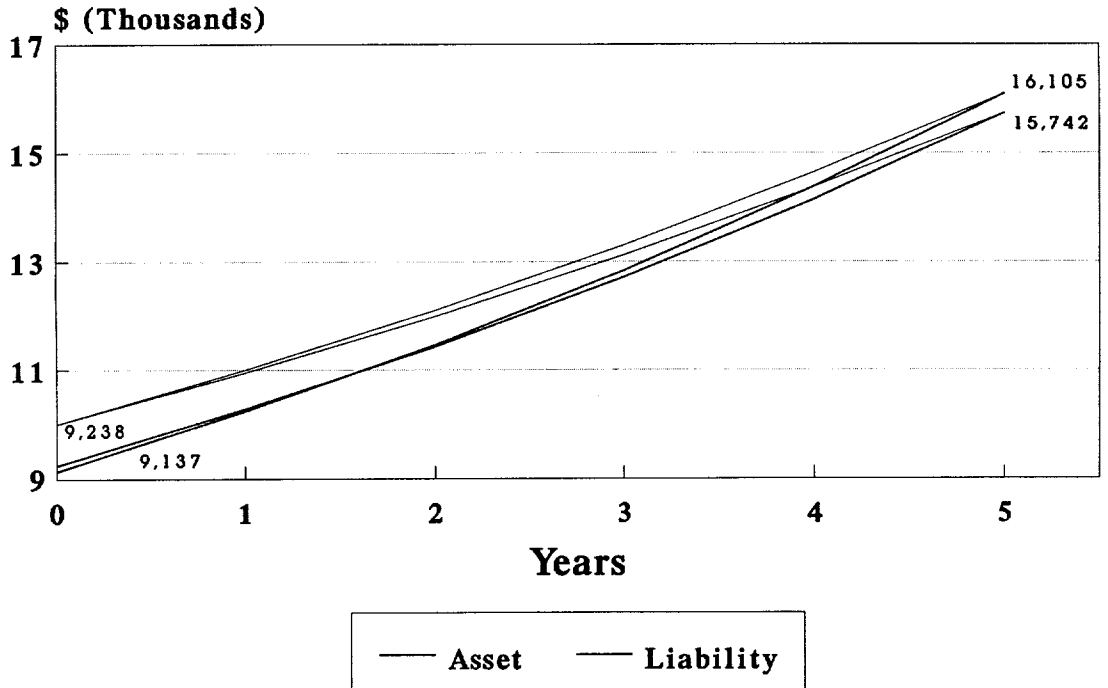
CHART 3

Mismatched GIC Example: +2



Matched GIC Example: +2%

Spread Change



MARKET-VALUE BALANCE SHEET

CHART 5

1.75%. We see that in the matched situation, the liability market value exceeds the asset market value by $101. What does this suggest? The current GIC market as measured for this company allows a 75-basis-points margin (assets earning 12%, liability crediting 11.25%). However, the in-force block is returning only a 50-basis-points anticipated margin. Thus, again we have a relative valuation statement. The in-force block is less profitable than new business.

Now this sounds a bit strange. If the company was one whose credit quality was impugned, and the market required a guarantee of 11.75%, the results would have been different. Because new business spreads are less than in-force business spreads, the asset market value would have exceeded the in-force liability market value. Does this make sense? Yes and no. Try viewing it from the perspective of the pension plan holding the GIC as an asset. If all else remains constant, and the quality of a creditor appreciates, the value of that fixed-income asset appreciates. The perceived likelihood of timely payment of maturity proceeds has increased. This is true for bonds and should be true for insurance company liabilities. Conversely, if the assumed likelihood of final payment has decreased, then the liability market value should also decline. If one views the liability market value from this perspective, the example makes some sense. However, insurance company management will be concerned about financial statement user inferences. The fact is that market value of surplus declined will likely be viewed as a sign of weakness and not strength as suggested.

Furthermore, consider the situation where valuation laws increase strain and this results in increased pricing margins. This can cause liability discount rates to be reduced and thereby increase in-force liability market values.

IMPLICATIONS/INTERPRETATIONS

As I stated, I don't believe that the present value of future profitability should be incorporated into balance sheets. Since we are valuing assets and liabilities using spreads to treasuries from their respective markets, the market-value balance sheet incorporates adjustments that equate to a relative profitability statement. With liability spreads derived from company-specific competitive levels, the particular company market value will increase or decrease for that company's products. All else equal, this suggests that a strong company would have a lesser market value of surplus. Of course, this comparison must really incorporate the asset market-value differences. Most likely the market perceptions would be influenced by the asset portfolios. The weaker company would likely already have experienced a market-value decline. We cannot make an a priori statement regarding a market value of surplus comparison.

Also, how liability spreads caused by regulatory matters such as statutory strain need to be considered.

We noted that asset-liability mismatches would result in greater volatility of results. This is the type of information financial statement users desire and find lacking in book value financials.

Are all conclusions from the results correct, and are all correct conclusions interpretable from the results? Unfortunately, no. The assets and liabilities that are market-valued are not in balance, so no proper market value of surplus calculation is possible.

Furthermore, life-contingent liabilities, such as annuity buyouts, are not included. Assets supporting these liabilities are likely much different in duration from most other insurance company assets. Financial statement users may infer improper conclusions. Consolidation of results will result in less appropriate comparisons, unless the company actively seeks to add clarity.

After having done some modeling on our assets and liabilities, I find it very likely that financial statement users will arrive at erroneous and questionable conclusions, rather than profound insightful statements. The release of this data will cause concern for company managements. But at least it provides a first step in the process.