

**RECORD OF SOCIETY OF ACTUARIES  
1993 VOL. 19 NO. 2**

**FAIR-VALUE FINANCIAL REPORTING**

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Panelists:            S. MICHAEL MCLAUGHLIN  
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Recorder:            ARNOLD A. DICKE

- Market value/present value
  - Definition
  - Uses/abuses
- Economic value/value added
  - Definition
  - Pros/cons
- Financial Accounting Standards Board (FASB) initiatives
- Europe 1992

MR. ARNOLD A. DICKE: We have a distinguished panel. First we have Kimberley Ryan Petrone from the Financial Accounting Standards Board. Kim has been with the FASB since July 1989 and has helped in the development of *Statement of Financial Accounting Standards (SFAS) 106* ("Employers' Accounting for Postretirement Benefits other than Pensions"), *SFAS 109* ("Accounting for Income Taxes") and *SFAS 112* ("Employers' Accounting for Postemployment Benefits"). Prior to joining the FASB staff, Ms. Petrone was a corporate accounting and financial reporting manager with Savin Corporation. Her responsibilities included coordinating and reviewing all financial statements and reports prepared for both senior management and Security and Exchange Commission (SEC) files. She has had practical experience with the things that we are now going to face due to recent actions of FASB.

Our second speaker is Mike McLaughlin. Mike has spent nine years with public accounting firms and is currently with the Chicago office of Ernst & Young. He's the life and health practice leader for the western region of Ernst & Young. He is a member of the Committee on Life Insurance Financial Reporting (COLIFR) of the Academy of Actuaries. Mike and I represented the Academy before the FASB during public hearings on fair-value financial reporting held in January 1993. Mike will review the Academy's position because he also is the health liaison for the Committee on Life Insurance Financial Reporting.

I am currently executive vice president and product actuary for USLIFE Corporation. I've been involved in numerous Academy activities in recent years, including COLIFR, and also in Society activities, including the Committee on Actuarial Principles.

MS. KIMBERLEY RYAN PETRONE: My purpose is to tell you where this project stands at the FASB and to preview for you our soon-to-be-released statement on "Accounting for Certain Investments in Debt and Equity Securities."

- \* Ms. Petrone, not a member of the sponsoring organizations, is with the Financial Accounting Standards Board in Norwalk, Connecticut. Expressions of individual views by members of FASB and its staff are encouraged. The views expressed herein are those of Ms. Petrone. Official positions of the FASB staff are determined only after extensive due process and deliberation.

The FASB plans to put out a final Statement out sometime in June 1993. I'll talk a little bit more about that later. I'm going to give you background regarding where and how the board got to where it is, give you the details on the statement as it stands right now, and try to give you some idea of the basis for some of the board's conclusions.

First, the background. Why did the FASB take on this project at this time? There are four main reasons:

1. The current literature in the area of accounting for investments in debt securities is inconsistent among different industries and has resulted in diversity in reporting, as well as practice, where the literature is not actually applied as it is written.
2. FASB received a request from the American Institute of Certified Public Accountants' Accounting Standards Executive Committee (AcSEC) in October 1990, to undertake the project. The AICPA had previously tried to address inconsistencies by issuing a proposed statement of position that based the use of amortized cost on an intent to hold a debt security for "the foreseeable future" (interpreted as a one-year period). That proposal met with great opposition.
3. In November 1990, the board received a letter signed by the Big-Six Certified Public Accounting firms endorsing AcSEC's request that the board take on this project.
4. The urging by then SEC Chairman Breeden that serious consideration to reporting investment securities at market value for depository institutions.

The holding period currently required for use of the amortized cost method for debt securities varies by industry. Insurance companies and S&Ls use the method if securities are held to maturity, banks do so if the securities are to be held on a long-term basis, and mortgage banking activities follow a hold-for-the-foreseeable-future or hold-until-maturity guideline. As you can imagine, current practice does vary significantly from institution to institution, even within the same industry. In fact, at our recent public hearings, some of the major CPA firms did acknowledge that the current accounting literature is not always being followed in practice.

In addition to the reasons I just mentioned, there are other problems with current accounting that the board identified as areas that could possibly be addressed if they were to take on the project. Those are:

1. The lower-of-cost-or-market (LOCOM) method currently used to account for debt securities held for sale and for noncurrent marketable equity securities is not considered evenhanded because it recognizes the net decrease in value of the securities but not the net increase in the value of those securities.
2. Appreciated securities are sold to recognize gains, but securities with unrealized losses are held onto and, because the amortized cost method is used, those unrealized losses are not recognized. This is called "gains trading."

## FAIR-VALUE FINANCIAL REPORTING

3. Current accounting for a debt security is based on both the characteristics of the asset and on management's plans for holding or disposing of the investment. Accounting based on intent impairs comparability.
4. Some believe that fair-value information about debt securities is more relevant than amortized cost information in helping users and others assess the effect of current economic events on the entity.

It took seven months of extensive research before the board was prepared to decide whether or not to add the project to its agenda. During that period the board and staff met with representatives from various industries to better understand why investments in debt and equity securities are held and how they are used in managing interest rate risk. The board also discussed various detailed alternatives in trying to determine the objective of a possible project. Before adding a project to its technical agenda, the Board members wanted to reach some agreement about the direction of the project.

Finally, in June 1991, the board decided to add the project to its agenda. Its objective was to require investments in marketable securities and possibly some liabilities to be measured at market value.

After the project was officially added, the first issue facing the board was what debt instruments should be included in the project. At one extreme, some Board members wanted to include all loans whose fair value could be reliably estimated (such as conforming mortgage loans). At the other extreme, other Board members wanted to limit the scope to debt securities with readily determinable fair values (such as those listed in *The Wall Street Journal*). Finally they agreed to include all debt securities but not unsecuritized loans.

Although AcSEC's concerns focused only on the accounting for debt securities, the board decided to include the marketable equity securities addressed by SFAS 12 in the scope of the project because market value is at least as relevant for those securities as it is for debt securities.

The proposal includes in its scope all debt securities and those equity securities with readily determinable fair values. Excluded from the scope are options, futures, forwards, swaps, lease receivables, and loans that are not securities.

Why did the board consider liabilities and why did it end up excluding them? During its initial research, the board learned that some entities, particularly financial institutions, manage interest rate risk by correlating the maturity or repricing characteristics of their financial assets and their liabilities. Thus, the board discussed in detail whether to also report at fair value those liabilities that are related to the assets that would be reported at fair value.

The valuation of liabilities was considered as an option rather than as a requirement. Most board members do believe it would be preferable to permit related liabilities to be reported at fair value, especially if all investments in debt securities were required to be reported at fair value. However, the board was unable to identify an approach for valuing liabilities that it considered workable and not unacceptably complex.

Because many entities, including insurance companies, manage interest rate risk on an overall basis for all financial assets and liabilities rather than for specific financial assets and specific liabilities, difficulties arose in trying to identify which liabilities should be considered as related to the assets being reported at fair value. The board also was unable to agree on how deposit liabilities of banks and thrifts and the claim reserves of insurance companies should be valued.

By July 1992, the board had reached an impasse. Because they were unable to develop a workable approach for including related liabilities, they decided to abandon their original objective of requiring fair-value reporting for all investments in debt securities. Instead, the board agreed to a compromise approach that would introduce more fair value in the financial reporting for investments in debt and equity securities, but not change the valuation of related liabilities. The board believes that the compromise approach is appropriate because it is built on existing practice, which does not involve the valuation of liabilities.

Thus the Exposure Draft, issued in September 1992, was a significantly different product than the board may have envisioned when it initially decided to address the issue and identified some possible areas that could be improved. That is, the Exposure Draft does not broadly expand the use of fair-value reporting, it does not resolve the gains trading issue, and it does not eliminate accounting based on intent.

The Exposure Draft does two main things. First, it does eliminate the inconsistencies in accounting for securities among industries. It takes the hold-to-maturity notion that is required to be used by insurance companies and applies it across all industries. That is, to be able to use the amortized cost method of accounting for debt securities, an entity must have the positive intent and ability to hold securities to maturity.

The other major change from current practice is that the lower of cost or market method of accounting for securities held or available for sale is replaced with a fair-value notion. As I mentioned earlier, LOCOM is not considered evenhanded – use of fair value will treat gains and losses related to changes in fair value comparably.

For investments in debt securities that management does not have the positive intent and ability to hold to maturity, and for investments in equity securities with readily determinable fair values, the board concluded that fair-value information is more relevant than amortized cost information, in part because it reflects the effects of management's decision to buy a financial asset at a specific time and then continue to hold it for an unspecified period of time.

For example, if an enterprise invests in a fixed-rate security and interest rates fall, the enterprise is better off than if it had invested in a long-term, variable-rate security. Movements in fair values, and thus market returns, during the period that a debt or equity security is held also provide a benchmark from which to assess the results of management's decisions and its success in maximizing the profitable use of the enterprise's economic resources. That success, or failure, is relevant and should be reflected in the financial statements in the period that the event – the change in interest rates – occurs.

## FAIR-VALUE FINANCIAL REPORTING

The Exposure Draft in fact requires that securities be classified into one of three categories at the date of acquisition based on management's intent to hold onto or sell that security.

The trading securities category includes securities that are bought and held for the principal purpose of selling. Those securities would be carried at fair value, which is the same as current practice, but the changes in fair value would be included in earnings, not reported in a separate component of equity as is currently done.

The held-for-investment category is relabeled as held-to-maturity. This category includes those debt securities management has the positive intent and ability to hold to maturity. Those securities would be reported at amortized cost rather than fair value because if a debt security is held to maturity, that cost will be realized and any interim unrealized gains and losses will reverse.

The third category, available-for-sale (previously referred to as held-for-sale) is the catch-all. It includes those securities which do not fit into either of the other two categories. Securities classified as available-for-sale would be reported at fair value with changes included in a separate component of equity. As you can see, that is going to be a big change from current practice.

Now I'd like to talk about the board's due process procedure and how we get from the Exposure Draft to the final Statement.

As I said, the Exposure Draft came out in September. We had a 90-day comment period when anyone could write in and give opinions on the Exposure Draft and, hopefully, suggestions on how to improve it. The comment period ended in early December. To date, I think we have received over 600 comment letters. The last 100 came in well after the comment deadline.

After reading and analyzing the 400 or so comment letters that had been received, we held three days of public hearings at the end of December and in early January. Twenty-eight representatives testified in front of the board; Mike McLaughlin represented the American Academy of Actuaries.

After absorbing all the views of its constituents, the board began its redeliberations of the major issues in the Exposure Draft. The staff has met with the board in a public meeting four times thus far to redeliberate. At our last meeting in mid-April we did get majority support to proceed in drafting the final statement based on tentative conclusions reached by the board.

I should state that this draft is certainly still very much a compromise. It is not the first, second, or even third choice of any of the board members. But the members feel that the board has to do something – that it must compromise and at least get somewhere. We thought we were improving financial reporting at least to some extent.

The final standard as it looks now will not vary much from the Exposure Draft as I've explained it to you. It will retain the three-category approach with fair value for both trading and available-for-sale securities and will not address related liabilities. The

board did make a few changes to the guidance on what can be included in the held-to-maturity category, so I'd like to review that in detail next.

The board deliberately chose to make the held-to-maturity category restrictive because it believes that the use of amortized cost must be justified for each investment in a debt security. At acquisition, an enterprise should establish the positive intent and ability to hold a security to maturity, which is distinct from the mere absence of an intent to sell. The board believes that if management's intentions to hold a debt security to maturity are uncertain, it is not appropriate to carry that investment at amortized cost; amortized cost is only appropriate if a security is actually held to maturity.

The proposed final statement will include examples of situations in which the securities should not be included in the held-to-maturity category. Those situations include the holding of securities that management considers available to be sold in response to changes in interest rates, needs for liquidity, changes in the availability of alternative investments, as well as changes in the yield on those alternative investments and changes in foreign currency risk. Again, these are only examples of situations. The basic idea is if you think that it's possible that you're going to sell the security, it should not be in the held-to-maturity category.

The board did agree to modify the Exposure Draft to provide for two instances where selling a security classified as held-to-maturity prior to its actual maturity would be considered equivalent to holding it to maturity. Those two instances are:

1. If sale of the security occurs near enough to its maturity (such as three months) that interest rate risk is substantially eliminated. (This instance was set forth in the Exposure Draft, but involved a 30-day period.)
2. If sale of the security occurs after a substantial portion (such as 85%) of the principal outstanding at acquisition has been received. This change was in response to comments that many institutions routinely sell the "tail" portion of mortgage-backed securities because of the administrative cost of accounting for the remnants of the original issue.

The Exposure Draft provided that if an entity were to sell a security classified as held-to-maturity prior to its maturity because of significant unforeseeable changes in circumstances, in unusual and rare instances such a sale would not call into question its intent to hold other securities to maturity. The Exposure Draft included two examples of such unusual and rare instances – those were deterioration in the issuer's creditworthiness and a change in the tax law that eliminates the tax-exempt status of interest on the security.

The proposed final statement deletes the term "unusual and rare" but acknowledges that certain situations will arise where sale of a held-to-maturity security should not raise a red flag. Six changes in circumstances are proposed, and they represent an exhaustive list, not merely examples. In addition to the two included in the Exposure Draft, the final statement will list major business combinations or dispositions that would necessitate a sale or transfer to maintain an existing interest rate risk position or credit risk policy and certain significant changes in regulatory or statutory requirements.

## FAIR-VALUE FINANCIAL REPORTING

What happens if an entity does sell or transfer a security out of the held-to-maturity category?

There's really no penalty; there's merely disclosure. The entity must disclose the cost basis, the realized gain or loss, and the circumstances that led to the decision to sell the security. Again, I have to stress that such sale or transfer should be rare! Reliance is going to be placed on auditors to enforce this rule. Certainly, if a lot of transfers and sales out of this category are seen, it will begin to call into question your intent to hold to maturity the other securities you have so classified.

Another area of the Exposure Draft the board agreed to modify is in transfers between categories. The Exposure Draft required transfers to be accounted for as a sale and repurchase at fair value. At the time of the transfer, any unrealized holding gain or loss would be recognized in earnings if not previously recognized. A number of respondents noted that this requirement would facilitate gains trading – a transfer of an appreciated security would result in the gain being recognized in income. The board acknowledged that the proposed accounting would have permitted discretionary adjustments to earnings and, thus, decided to change the accounting for transfers.

Under the proposed final statement, transfers would still be accounted for at fair value, but the unrealized holding gain or loss would be recognized in a manner consistent with the category into which the security is being transferred. (For example, transfers into available-for-sale from held-to-maturity are recorded at fair value, any unrealized gain or loss is recognized in equity – the Exposure Draft would have had the gain or loss in earnings. The only unrealized holding gains and losses that would be recognized in earnings due to a transfer would be those related to a security transferred into the trading category.)

I'm going to wrap up now with the scope and the transition provisions. The statement applies to all entities that follow generally accepted accounting principles, except for not-for-profit institutions and entities that already use market-to-market accounting, such as broker/dealers and investment companies.

The statement will be effective for fiscal years beginning after December 15, 1993; that is, the first quarter of 1994. It would be applied initially at the beginning of an entity's fiscal year. That is, on January 1, 1994, a calendar-year company would have to determine its intent with respect to its currently held securities and classify them accordingly. There is no later effective date for smaller companies, as we sometimes provide in our standards.

Currently, early adoption of the proposed statement is not permitted, except if an entity's fiscal year were to begin after issuance of the standards, such as October 1. However, the Board will be discussing early adoption at the next board meeting. There is some interest in permitting companies to adopt the new statement prospectively in 1993. Regardless of how the board comes out on that, retroactive application to prior years or quarters would not be permitted.

As I mentioned, the board is going to be discussing this proposed statement at the next meeting. Another topic under consideration is permitting some minimum level of sales out of the held-to-maturity category without calling into question the entity's

## RECORD, VOLUME 19

intent with respect to the balance of its portfolio. We had a lot of people request a safe harbor clause. Basically, they are saying, "We need more flexibility. We can't say which specific securities we're actually going to hold to maturity, but we can probably tell you that we're going to hold 95%, so let us just sell 5-10% without calling into question the rest of it."

The board has discussed this twice in the last few months and it has not agreed to make that change. If the board should consider it, it would be a very small percentage, such as 2% or 3%.

As far as the current status is concerned, we do expect to issue a final statement in the second quarter, sometime in mid-June. There are meetings with regulators and the American Council of Life Insurance (ACLI) going on in Washington. I don't even want to guess what the chances are of anything changing, but the staff expects to issue a ballot draft within a week or two -- that is the draft upon which the board formally votes by written ballot. Assuming that all goes well, we expect to issue a final statement -- either *SFAS 114* or *SFAS 115* -- in early June. I'm hoping that 115 will keep up my track record of being involved in every third statement since Statement 106.

MR. S. MICHAEL MCLAUGHLIN: I'm going to talk about the Academy's response to the Exposure Draft in a few related areas. I'll begin with a brief chronology of some of the major milestones in the Academy's involvement with this Exposure Draft.

The issuance of the Exposure Draft took place on September 8, 1992. Most members of COLIFR had already seen the Exposure Draft and agreed that we should address it at a regularly scheduled meeting on October 1. A subcommittee was appointed by Arnold Dicke, the chair of COLIFR, and I acted as head of that subcommittee. We put together a team of people who were available to meet at short notice. We had a series of three meetings in which we put together a preliminary draft, held several telephone conference calls, and circulated drafts by fax. On December 1, we had a final draft that was circulated to representatives of the ACLI, the Society of Actuaries and the Academy's legal department. We issued our written response to the FASB on December 7. We requested permission to speak at the public hearings to be held January 7 and 8, 1993, and Bob Wilkins, the project manager, was kind enough to call the very next day to ask what time we would like to speak. We spoke on January 7, and we amplified the written comments and responded to questions.

On March 16, COLIFR submitted a follow-up letter to FASB prior to a FASB vote on March 17, at which there was a 4-3 vote to approve issuance of the Exposure Draft as a statement. Well, 4-3 is short of the super majority of 5-2 required. One board member changed his position at that March 17 vote and for a few days or weeks, it looked as if there was some hope that FASB would come to its senses, but it didn't. On April 13, another board member reversed his position, and the vote was in favor of adoption of the Exposure Draft as a statement.

At the October 1 meeting of COLIFR, we discussed whether we should even respond to this Exposure Draft. We knew that there were going to be hundreds of comment letters; what was one more? As actuaries and professionals, we decided that we



## FAIR-VALUE FINANCIAL REPORTING

should respond. Actuaries need to get involved with this issue and other issues of this type. Furthermore, we should get involved as representatives of the profession, not the life insurance industry, and that's an important distinction, which, perhaps, not everyone appreciated later on. We did not want to express the opinion of the life insurance industry. We felt that we could add a dimension – sort of "friend of the court" perspective – as professionals. We also felt that the life insurance industry had lots of eloquent spokespersons who could articulate its position very clearly. So we took our own professional perspective.

We submitted written testimony and in the verbal testimony to the board; on January 7, we amplified some of these particular points. By way of preamble, we drew an analogy to a situation that occurred in Sweden in 1967. The government decided to switch cars from driving on the left to driving on the right. At the time, Sweden was the only country in Europe where all cars drove on the left. There was a plan for a European highway system, and this change would facilitate integration into the highway system and require fewer options in the factories, and so on. So the government appointed a task force and laid out a plan for conversion. The road signs and the traffic lights would be remounted, repainted, and changed. The trolley cars were going to be retired from service because they would be too expensive.

A detailed procedure for the switchover was laid out: At exactly 1 a.m., all cars shall come to a complete stop, remain stationary for ten minutes. At that time, the driver shall proceed slowly to the opposite side of the road, and stop again. The car shall remain stationary for another ten minutes after which the driver should proceed with caution.

All cars are to switch on January 1. All trucks and buses will switch on February 1.

We told FASB that fortunately this plan was issued as an Exposure Draft, and at a public hearing, the plan was changed to something more rational. We then went on to articulate our written position.

Insurance companies have long-term obligations. We have to meet those obligations despite changing circumstances, changing interest rates, changing real economic value of our obligations (which our policyholders recognize) and act accordingly. We need to support those obligations with assets that are matched according to cash flow, duration, liquidity and so on. So we periodically buy and sell new assets, after the issuance of our contracts.

We feel that most assets are not held to maturity. As conditions change, some assets are sold and others are bought. We were not able to quantify this, but we did feel that it was safe to say that most assets would not fit the held-to-maturity category and would therefore be reported at fair value. Under the Exposure Draft, you can't report liabilities at fair value. So the liabilities that are held at book value will remain unchanged as interest rates fluctuate. Your assets will fluctuate to some extent, and so there's going to be a leveraged effect and surplus will be highly volatile.

We thought that surplus volatility, purely due to the accounting mechanism, would be misleading and we felt strongly that assets and liabilities should be treated

consistently. A decision point was reached here, where the committee and the Academy felt that consistent treatment is so important that we did not take a position as to whether we should retain assets and liabilities at book value, or whether we should switch them both to fair value, or whether we should switch some of the assets to fair value, according to whether they were traded on an active, secondary market or not. But we would have liabilities, designated liabilities, in an equal amount that would likewise be valued at fair value. So you can do one or the other or mix them, but they've got to be consistent. And so we did not strongly oppose the change to fair-value accounting that was contained in the Exposure Draft. This position led to a little controversy later on.

We took another position that also led to slight controversy later on. We said that actuaries have the capability to determine the fair value of liabilities, based on existing techniques. We already determine fair value in certain situations, such as purchase or sale of blocks of business, and our standard techniques can be modified with relative ease. We then restated that there were no obstacles to requiring the reporting of liabilities at fair value.

We also discussed a couple of other options, including whether we could modify asset categories to be treated differently, depending on whether assets and liabilities were matched. We also recommended deferral of implementation of the Exposure Draft until all the evidence was in from *SFAS 107*, the disclosure requirement. We also discussed the use of an interest maintenance reserve (IMR) to limit gains trading.

After the initial explanation by myself and other representatives of COLIFR, including Arnold Dicke, FASB came back to us with a question: Will the liability fair value depend on the specific assets of the insurance company whose liabilities you're valuing? I don't know whether we gave the very best answer we could have, but we said that actual cash flows of liabilities are dependent to some extent on the specific assets. Investing in all Treasuries, mortgages, or equities would have some impact on your asset cash flows. The insurance contracts would be more or less competitive in these different situations. So we answered yes. Fair value of liabilities would depend on the assets. And the reaction was astonishment. The board members were unable to comprehend why that might be appropriate. After all, the value of your assets and the specific corporate bonds that you hold are not dependent in any way on your liabilities. If those bonds are held to support universal life or deferred annuities, the trading goes on just the way it always did before, and so those asset market values are truly independent of the liabilities. Should that not apply to the market value or fair value of liabilities?

I thought that that was a good question and one that needed to be dealt with. But, in my mind, a bigger issue was the need to deal with the timing of emergence of profit. If we were going to go at a fair value of liabilities, it seemed to me that there's a real big issue which is, should future profits in our liabilities be somehow deferred? Should we post a slightly larger liability with a provision for margins, shall we say, in interest rates, such that profits emerge over time? Or, if we're going to show market value of assets, perhaps market value of liabilities is what you want. Perhaps there should be no margins, no profits to be released in the future. There's a substantial difference in approach there and that issue was not focused on very much.

## FAIR-VALUE FINANCIAL REPORTING

For completeness, we'll talk about the Academy's Committee on Property Liability Financial Reporting (COPLFR) and its position. Its representatives shared our time slot. They took a similar line of reasoning, but their emphasis really was different than COLIFR's, and they said something like this: The Exposure Draft is silent on liabilities, so we're going to keep liabilities at book value. It's conceptually inappropriate to mark assets but not corresponding liabilities to market; therefore, we recommend that FASB make no change to present accounting until we see what happens with *SFAS 107*.

There was good communication between COLIFR and COPLFR during the preparation of the responses to the Exposure Draft. We were aware of what they were going to say and they were aware of what we were going to say. We decided not to reconcile the two positions exactly, but to present both of those positions to FASB, which did not seem to cause any problems.

COPLFR's representatives also stated that if assets were marked to market, liabilities should be treated consistently. They even recommended a possible approach, namely using a discounted cash flow method with a risk-free interest rate adjusted downward so as to provide a margin. This would have an impact on the emergence of future profit.

They went on to explain that they felt more research was needed before they felt completely comfortable with the fair valuation of liabilities. The Casualty Actuarial Society Committee on Reserves has selected a small group to research the use and disclosure of risk margins with which the risk-free rates should be adjusted. The Casualty Actuarial Society Committee on Theory of Risk has issued a prize paper call in the area of development of a methodology to quantify variability of reserve estimates.

That research work is expected to be completed in 1993. During the course of 1994, it's anticipated that standards will be set, so that the research will be practically implementable. COPLFR's comment was that actuaries will be ready in 1995 to deal with fair valuation of liabilities, and it recommended deferral of implementation until that time.

The ACLI position was in vehement opposition to the Exposure Draft. It was said to be inappropriate, distorted, misleading, and the gains trading problem was capable of being solved otherwise. ACLI agreed with COLIFR's position that few assets will be held to maturity and, hence, surplus volatility will arise. The surplus volatility will result in duration mismatching of assets and liabilities, and uncertain cost of capital: If insurers shorten assets and go to four five-year bonds in succession, instead of one twenty-year bond, there's a substantially greater reinvestment risk, plus a lower return on capital. Long-term capital markets in which the insurance industry is a large net contributor would be seriously affected, in the ACLI's view.

The banking industry was also strongly opposed to the Exposure Draft, as was the Federal Reserve Bank, among others. So there was quite a loud chorus of opposition.

Shortly after the FASB hearings, representatives of the ACLI (most of whom were actuaries) visited the FASB to talk further about the issue. They were somewhat surprised to find that the Academy's position was not in outright opposition to the

Exposure Draft, but rather was an argument for consistency. COLIFR was asked to reexamine its position and clarify it with FASB. The committee issued a follow-up letter that reiterated:

- If you do fair value of assets, fair value of liabilities must concurrently be required or at least permitted;
- Actuaries have the techniques available to supply fair value of liabilities;
- More work would need to be done to develop the most appropriate techniques;
- Actuaries are willing to assist;
- A deferral of statement issuance was needed to allow time for all of this to take place.

This was really a slight shift of position for COLIFR. Although not a radical shift, it was one that brought COLIFR's position more into line with the positions of the other organizations.

As to which of all of these different positions was the most effective, you can decide for yourself, because in fact, none of them worked.

Let's deal with one of the controversial areas. Do actuaries have the capability to determine fair value of liabilities? To answer that, I'll take you quickly through an Ernst & Young survey of approximately 52 medium- to large-sized stock and mutual companies. We asked them what they were going to do about *SFAS 107*, which of course, was a requirement for year-end 1992.

Here's some of the comments that we got. All companies that responded were going to comply. They were going to use a variety of methods to determine fair value. Each company was able to supply multiple responses, depending on, of course, different lines of business. And so the totals here add up to more than 100%. But the "winning" method was the discounted cash-flow method, with some companies using book value as fair value or surrender value as fair value. Of course, book value and surrender value may be the same for certain types of products. A few other extraneous methods were reported: the purchase accounting method and "other," which consisted of primarily one or two companies that were going to use a CARVM method using credited interest rates as a fair-value methodology. There's four or five methods for you.

The products for which these methods were going to be used covered the whole gamut – deferred annuities and immediate annuities, and so on. For universal life, traditional life, and accident & health business, although fair-value disclosure is not required, there's nothing in *SFAS 107* that prohibits it. True, they represent a minority, but a few companies did feel that they would disclose fair value of this type of liability. Both book-value and discounted cash-flow methods were anticipated as being used for these blocks of business.

Not included in the survey are policy loans, partly because the treatment is obvious. Several companies felt that they were able to present fair value of deferred policy acquisition costs.

## FAIR-VALUE FINANCIAL REPORTING

For the discounted cash-flow method, there were several different interest rates that companies planned to use. Flat rates developed from corporate bond yields, Treasury rates (Treasury rates could be interpreted as including a margin for future profits, as compared to let's say, corporate bond rates or market rates), and other available interest rates were quoted. Most of these rates involved implied yield curves, so there was the use of an interest rate that was sensitive to the timing of the particular cash-flow element.

Approximately one-third of the companies planned to include risk or profit margins, mostly interest spread, so as to not have all profit released at the valuation date.

Can we draw a conclusion as to whether actuaries are able to determine fair value of liabilities? Well, they've already done it, so I think the answer is yes. Might these methods evolve and improve over time? Yes, of course. But I think that you can't take the position that actuaries don't know how to do fair value of liabilities, because we've been through year-end 1992. Could we use some standardization in methods? Because actually we're not short of methods. We perhaps have too many. The quick answer here is, yes, we need some standardization, otherwise people would be all over the place. I would submit to you that a better answer is, maybe yes and maybe no. Standardization has its advantages and disadvantages. It certainly has the advantage of conformity, if the standard has the effect of law and so eliminates some of the grosser variations in actual practice. But it does have the disadvantage of removal of the actuary's judgment, and in fact, we should be prepared to bring our professional judgment to problems and not necessarily rely on standards in all cases.

I think that standards can have the impact of limiting or even stifling innovation. Once we get a standard in place, deviations need to be very well justified. That is particularly harmful if the standardization occurs relatively early in the development of a new methodology. We should be doing fair value of liabilities for a period of time, either under *SFAS 107* or under some other statement, and after a period of time, we can evaluate the different methods and pick the one that seems to work the best.

We will have a new statement. We don't know exactly what it will look like. It's likely to be similar to the Exposure Draft, although I think that Kim has mentioned there are a few areas that have been clarified.

Remember that most companies with interest-sensitive liabilities are invested fairly long. I don't know what the average is. I've seen a lot of companies with average maturities in the 10-12 year range. That's not an accurate representation of duration, but it's much longer than the duration of typical liabilities, such as deferred annuities that have annual interest credited rate resets and relatively short-term guarantees.

If interest rates hold steady or continue to decline, balance sheets will actually improve when this new statement is promulgated. In fact, if early adoption is permitted, then year-end 1993, if interest rates hold steady, will probably show a net increase in equity in the insurance industry.

If interest rates climb slowly, then the industry probably will be able to adjust its asset portfolio. I think that there will be some improvement in the new draft of the statement that will allow companies to restructure assets or designate some as hold

to maturity. We might even be able to change our liabilities, shorten their term, make it more difficult to withdraw at book-value.

There will be a problem if interest rates climb rapidly. I think balance sheets will be impaired. You may see a "run on the bank" scenario. If you're familiar with the concept of surplus duration, there is a typically high surplus duration. Think for a minute of an insurance company with \$100 of assets and \$90 of liabilities. It has \$10 of capital and surplus. This would be a strongly capitalized company. If our assets have, say, a duration of five and interest rates go up one point, then the assets will decline in value to \$95.

If the liabilities have a duration of about two, their value would decline in value from \$90 to \$88. Surplus which was \$10, will go to \$7. So surplus has declined by 30% because of the hypothetical 1% increase in interest rates. So surplus duration is about 30.

If liabilities are held at book value instead, then the value of assets goes from \$100 to \$95. Liability values don't change. So there's a leverage effect. Surplus goes from \$10 to \$5 because of a 1% change in interest rates. In other words, surplus duration is 50.

I don't think that example is outrageous. I think there are a lot of companies that have surplus durations of 30-50. And what that means is that a sudden change in interest rates of two percentage points could wipe out the surplus of some companies. How likely is that? Who knows?

*SFAS 107* will not be superceded by the new statement. You can disclose what the fair value of liabilities is and hopefully that will avoid the run on the bank situation. Nevertheless, it would be pretty awkward to report a surplus of zero.

Finally, let me discuss some possible responses. First, clearly you want to adopt some kind of formal hold-to-maturity policy. There is a question as to what percentage of insurance company assets could really be designated as held-to-maturity. It's tough to designate specific ones as held-to-maturity. Could you operate effectively, could you balance assets and liabilities, with 50% of your assets held to maturity? That might work. What about 80%? 95%? There will need to be investigated the appropriate level of hold-to-maturity assets. Maybe the longest assets should fit into that category, which we can continue to hold at amortized cost.

Possibly we will make changes to the liabilities. Maybe we'll make the liabilities look more like the assets. And certainly there will need to be some acceleration of development of new liability valuation standards.

MR. DICKE: A fixed block of life insurance obligations subject to Generally Accepted Accounting Principles (GAAP) under *SFAS 60* or *SFAS 97* and the assets corresponding to these obligations make contributions, positive or negative, to shareholders' equity at the time of issue and over the succeeding years. The cumulative equity contribution attributable to the fixed block at time  $T$  is the value of the invested assets, plus the deferred policy acquisition cost asset (DPAC), less the benefit reserve:

## FAIR-VALUE FINANCIAL REPORTING

$$E(T) = A(T) + D(T) - R(T)$$

Current GAAP accounting rules set a "book value" for each component:

$A(T)$	Amortized Cost of Assets
$D(T)$	DPAC Asset (under <i>SFAS 60</i> or <i>SFAS 97</i> )
$R(T)$	Benefit Reserve

It is possible to express each of these as the present value of future cash flows. If  $i$  is a continuously compounded interest rate (force of interest) and if  $a(t)$  is the cash flow at time  $t$ , where  $a$  is assumed to be integrable,  $A(T)$  may be expressed as an integral:

$$A(T) = \int_T^{\infty} a(t) e^{-i(t-T)} dt$$

The integral may be regarded as a "functional"; that is, a function on a set of functions:

$$A(T) = V [ a; i, T ]$$

If  $A(T)$  is intended to be the amortized cost, then  $i$  is the internal rate of return (IRR) of the portfolio. We may call  $i$  the "book yield" of the portfolio.

Similarly, we may express  $R(T)$  and  $D(T)$  as functionals:

$$R(T) = V [ r; v, T ]$$

where  $v$  = valuation interest rate; and

$$D(T) = V [ d; j, T ]$$

where  $j$  = valuation interest rate; or average earnings rate; or credited rate; or 0 (for straight-line amortization)

The interest rate implicit in the DPAC functional depends on whether the policy is accounted for under *SFAS 60* or *SFAS 97* and on the choices made under those standards. For contracts, such as universal life contracts, that are subject to *SFAS 97*,  $R(T)$  is the account value. In order to use this formalism,  $r(t)$  may be taken to be expected charges to the account at time  $t$ , less expected credits. The interest rate  $v$  would be the expected credited rate. In addition to assumptions regarding actuarial risk variables such as mortality and lapse, an assumption regarding future premiums will be needed to set  $V [ r; v, T ]$  equal to the account value.

It is important to note that the functional expressions require the expected cash-flow functions  $a$ ,  $r$  and  $d$  to be independent of market interest rates.

The Exposure Draft that was described by Kim and Mike would require certain assets to be held at market value. Suppose this pertains to the assets backing the block of business described above. That is, suppose  $A(T)$  is replaced by  $A'(T)$ , the market value of the assets. The cash flows  $a(t)$  are unchanged. Thus,  $A'(T)$  may be expressed as a functional:

$$A'(T) = V [ a; i', T ]$$

where  $i'$  is by definition the financial discount rate for the portfolio. We will call  $i'$  the "market yield" for the asset portfolio.

Now, market values differ from book values, not only in initial level, but in sensitivity to the economic environment. Market values may recognize changes in interest rates, the value of any options, such as call options, represented in the portfolio, and market perceptions of the creditworthiness of the assets. The sensitivity of asset market values to these environmental influences means that their introduction into the accounting model could lead to a problem. Symbolically, the problem is that

$$A'(T) + D(T) - R(T)$$

will be improperly volatile with respect to interest rate changes.

Two "fixes" have been suggested for this problem (more are no doubt possible). Fix number one is straightforward:

Replace  $R(T)$  and  $D(T)$ , the book values of reserves and DPAC, with estimates of the market value of those quantities.

Fix number one would cause reserve and DPAC items in the balance sheet to reflect changes in interest rates, the value of any implicit options, and market perceptions of total eventual profit (on a present value basis).

How might such estimates of market value be made? Mike McLaughlin and I demonstrated in a letter to FASB how actuarial cash-flow projection techniques could be used to estimate market value. The steps in the process are these:

1. Estimate the market value of the block of business, assets as well as liabilities. This can be done using well-established actuarial appraisal techniques. The key assumption is the discount rate. An actuarial appraisal value will only represent a market value if the discount rate is the risk-adjusted financial discount rate for the type of business appraised. Financial theorists have several techniques for obtaining this rate; however, where there is an active market in blocks of business, the discount rate implicit in recent sales is often known. Such information could be used to determine the financial discount rate and thereby to estimate the net liability (reserve minus DPAC) market value.
2. From this value, the market value of assets could be subtracted to obtain an estimate of the market value of liabilities. While it would appear that the resulting value for net liabilities is independent of the asset portfolio, there is a sense in which this is not true. The investment strategy assumption, which is a key element of the appraisal, is usually set by actuaries with an eye to the actual assets on hand. Moreover, a sudden shift in investment strategy may cause "shock lapses" and thus impact the value of liabilities. More generally, a different investment strategy and different starting assets would affect the actuary's choice of lapse rate assumption. Finally, the financial discount rate for the block will in general differ from the "market yield" rate applicable to the assets alone. Thus, the appraisal value net of the asset market value is not the same as the value of the netted cash flows discounted at the financial discount rate.
3. The usual appraisal technique could be enhanced by adapting some of the cash-flow testing methods used in reserve adequacy testing. For example, a



## FAIR-VALUE FINANCIAL REPORTING

random scenario approach could be used to capture some information regarding implicit options. The results obtained in adequacy testing are accumulated values of cash flows under the various interest rate scenarios. To use these results to estimate market value (a) the values must be discounted back at a risk-adjusted financial discount rate and (b) the mean of the present values so obtained must be taken.

Each of these techniques, as I have said, is currently in use, but the full set often has not been employed simultaneously to estimate market value. It would be useful to study this approach in more detail to uncover any possible anomalies.

A second "fix" has been suggested by Dick Robertson in "Determining 'Fair' Value of Liabilities," (unpublished). This fix is aimed not at estimating market values of liabilities, but rather at finding alternate expressions for the reserve and DPAC assets that would fit in an accounting model that requires assets to be held at market. Robertson thus proposes to express the benefit reserve and DPAC asset as functions of market interest rates. Fix number two would reflect changes in interest rates but not the value of implicit options. Profit would be spread over the life of business, as is now the case, rather than being released at issue, as would happen if estimates of market value were used.

Fix number two may be stated in terms of two conditions:

Replace  $R(T)$  and  $D(T)$ , the book values of reserves and DPAC, with new functions  $R'(T)$  and  $D'(T)$ , respectively, which (1) are functions of the market yield; and (2) reduce to the old book values whenever the market yield equals the book yield.

Robertson's two conditions may be stated in terms of the functionals defined above.  
Condition 1

$$E'(T) = A'(T) + D'(T) - R'(T)$$

where  $R'(T) = V[r'; i', T]$   
 $D'(T) = V[d'; i', T]$   
with  $r'$  and  $d'$  independent of interest rates.

This condition says that  $R'(T)$  and  $D'(T)$  will be assumed to be functions of the market yield  $i'$ . Recall that this is the yield of the asset portfolio. Thus,  $R'(T)$  and  $D'(T)$  do not represent market values. However, the dependence on  $i'$  does bring in sensitivity to changes in market interest rates.

Condition 2  
If  $i' = i$ ,  
 $R'(T) = R(T)$   
 $D'(T) = D(T)$   
for all  $T$ .

This is a consistency condition. It requires that the balance sheet will be the same as the current book value basis if the market yield (of the asset portfolio) equals the book yield (of that portfolio).

These conditions can be used to derive the cash flow functions  $r'(t)$  and  $d'(t)$ . To do so, we need a simple lemma.

Lemma

If  $Z(T) = V [ z; k, T ]$   
 with  $z$  and  $k$  independent of  $T$ ,  
 then  

$$\frac{dZ(T)}{dt} = kZ(T) - z(T)$$

This lemma is easily derived using integration by parts.

Using the lemma and Condition 2,

$$r'(T) = r(T) + (i - v) R(T)$$

$$d'(T) = d(T) + (i - j) D(T)$$

for all  $T$ . This means that  $R'(T)$  and  $D'(T)$  are present values at the market yield of expected cash flows plus expected spreads.

In other words, Robertson suggests replacing the current benefit reserve with two pieces:

1. a reserve calculated in the same way as at present, but using the market yield as a discount rate; and
2. a new item consisting of the present value at the market yield of spreads that will develop between the book yield and the valuation rate.

Similar considerations would apply to the DPAC asset.

It would probably be possible to adapt the Robertson approach to reflect the impact of implicit options, if desired. However, it should always be remembered that  $R'(T)$  and  $D'(T)$  are not estimates of the market values of the benefit reserve and DPAC asset.

The purpose of this discussion has been to compare the Robertson proposal for fair-valuing liabilities to the direct estimation of the market value of these liabilities. The functional formulation (which was suggested by Robertson) is seen to be useful for such conceptual purposes. The application to the full variety of life insurance and annuity contracts covered by *SFAS 60* and *SFAS 97* will no doubt require considerable fleshing-out of the conceptual framework.

MS. GRACE L. MALLOY: I was wondering if any of the panelists are aware of any possible changes in the valuation of assets at the NAIC level for statutory accounting.

MR. MCLAUGHLIN: I'm not aware of any changes being contemplated presently. When this new statement takes effect, as I said, I think there will be a favorable impact on equity. It's unlikely that the NAIC would adopt a corresponding requirement for statutory purposes at that time. In the future, if interest rates should rise and the market value of assets only is seen as a conservative approach relative to

## FAIR-VALUE FINANCIAL REPORTING

statutory accounting principles, then there might be a change by the NAIC at that point.

MR. DICKE: The adoption of the interest maintenance reserve requirement by the NAIC represents another approach to eliminating the potential for gains trading that Kim was talking about. In a personal response to the Board, I recommended the IMR as a possibility. But it did not seem to fit the needs. My suggestion was that transfers out of the held-to-maturity category would be allowed, but if a company did so, it should set up an IMR so that there would be no gains from the transfer. This approach would allow you to sell the assets so that you wouldn't get in economic difficulty through holding something you don't want to hold. But it wouldn't give you any current gains or losses.

MR. PAUL S. BELL: At the time of the adoption of *SFAS 97*, a relatively wise man told FASB that capital gains had no business in our income in the first place. Had his advice been taken, we wouldn't have to worry about gains trading. Unfortunately, they didn't take his advice. *SFAS 107* came along and now there is *SFAS 115*.

I don't know how I would go back to my cohorts in Wilmington and tell them that it's been represented that we're ready to do current fair market values of liabilities for 40 countries, but I would offer any of you the opportunity to come down to Wilmington and tell them that – you need only buy a one-way ticket. I do not believe that the Society is in an appropriate position to recommend fair-market value of liabilities. I think we would be far better off doing what we did on *SFAS 107*: just let FASB go ahead and develop something that doesn't make any sense. If we try to make sense, I can't imagine my auditor leaving me. He will be auditing me for the rest of his life. We'll never publish another statement. My question to FASB is, did we generate any meaningful information out of *SFAS 107* for insurance companies? Did it add to our basic knowledge?

MS. PETRONE: I really can't answer that directly. *Statement 107* has just come out; it applies to 1992 financial statements. I've read in the press that it's not useful. But I'm sorry, I don't personally have the background to be qualified to answer the question. You probably wouldn't like my answer even if I was qualified.

MR. MCLAUGHLIN: I think it's just a little early to evaluate that. Year-end shareholder's reports are just coming out now. I'd be interested if anyone does a survey as to what kind of meaningful information comes out of those. I think it should be possible, for example, to look at the enhancement to equity as a result of those disclosures, but I'm not aware of anyone having done that at this point.

MR. DICKE: I understand that a company would be permitted to estimate fair value of liabilities and to disclose these values. That would be one way to supply useful information, especially if some of the volatility we talked about started to be seen.

MR. DANIEL J. KUNESH: I have two questions, one for Kim and one for the actuaries. Let me ask the actuarial question first. Given that this change is likely to occur, do you believe that the movement of mutual companies to GAAP will be slowed down significantly?

MR. DICKE: Let me say, for those who aren't aware of it, that FASB has taken the position that mutuals are not going to be able to continue referring to the statutory statements as being developed in accordance with GAAP. They'll have to use all the

relevant aspects of the various statements from FASB and not use statutory accounting. So that means that if they do want to put out a statement, the new statement on fair value of assets will be relevant and will have to be complied with. I was surprised by how interested mutuals were at the time that that statement came out. They got very excited about it. I don't know why. Maybe someone can enlighten me.

MR. MCLAUGHLIN: From what I have heard, the AICPA task force that's working on mutual company GAAP is on a pretty fast track. They will probably have a draft Statement of Position in June or July of this year. I'm told that it would not likely have an accounting effect until year-end 1994 or 1995, and that's if it moves on a relatively fast track. The task force will take into account this new statement, because it'll be issued before mutual company GAAP is defined. I think the existence of this statement may open up the range of options that's considered in the definition of mutual company GAAP.

MR. KUNESH: I think there is growing fear of the extreme pressure that Congress is placing on state regulators. The days of current statutory accounting, as we know it, may be limited. There may be a movement to a single accounting vehicle as being developed today.

MR. DICKE: I've never heard this from regulators, but some accounting friends at the AICPA suggested using GAAP accounting plus risk-based capital as a basis for statutory accounting. Statutory accounting would be different from GAAP only in that risk-based capital would be set up as a reserve, as opposed to part of capital.

MR. KUNESH: One question for Kim. I think this question has been asked many times before, but given all of the significant opposition that the FASB is seeing here, given fairly stable conditions in the marketplace, why are we seeing such an extreme urgency to get this thing through, in full recognition that there will be inconsistencies if you don't consider liabilities. Why is it happening so fast? The only thing I can think of is the extreme pressure from the SEC. But is that really a valid reason to change the entire accounting model?

MS. PETRONE: I'm not sure which part I'm going to answer first. The real thing, the driving force, is the elimination of inconsistencies among all the industries, so that everybody's applying the same rules. Second, it's to get rid of the unevenhandedness of LOCOM and, at least, to put available-for-sale at fair value. I have to say that it's not changing current practice for the insurance industry very much at all, because the insurance industry is currently at held-to-maturity. The urgency is from many of the major accounting firms saying that there's borderline anarchy out there. We've heard at the public hearings how current literature is being applied right now, and the fact that the SEC is starting to really enforce this, so it's not evenhanded between those companies that are regulated by the SEC and those that are not. The board intends to put everybody on the same level playing field at this point in time, and then hopefully, in the future, we will start addressing the other inconsistency: the assets versus the liabilities.

MR. DICKE: Kim, was the concern more with banks and other institutions rather than insurance companies?

MS. PETRONE: Yes.

MR. DICKE: It appears we got wagged along as the tail of the financial institutions group.