

# RECORD OF SOCIETY OF ACTUARIES 1988 VOL. 14 NO. 3

## THE FUTURE OF THE MANDATORY SECURITIES VALUATION RESERVE (MSVR)

Moderator: JAMES F. REISKYTL  
Panelists: BARRY PAUL  
            PETER L. SMITH, JR.  
Recorder: THOMAS K. HARTMAN

- o What situations was the MSVR designed to handle?
- o Is the current MSVR still effective in these situations?
- o How do the proposed changes in the valuation law affect the MSVR?
- o Does the MSVR provide sufficient protection to a company investing in high risk securities?
- o How should the MSVR be treated in the actuarial opinion required by New York Regulation 126?

MR. BARRY PAUL: I will share with you my views on the MSVR, how well it's working and the changes I believe need to be made. I'll start with an overview of the purpose of the MSVR and briefly describe how it operates. I'll then cover an analysis of the impact of the MSVR on the industry. I'll close with my critique and share with you my view for the future of the MSVR.

First, some basic facts. As most of you know, the MSVR is recorded as a liability on the balance sheet of U.S. statutory statements. This contrasts with Canadian practice, for example, where the investment valuation reserve is treated as an appropriation of surplus. The MSVR is a statutory balance sheet item only. In other words, the operation of the MSVR has no impact at all on the statutory income statement, of the U.S. statement. The change in MSVR flows directly through the capital and surplus account. One other interesting point to note, the MSVR is required for U.S. life insurance companies only. Property and Casualty companies have no such requirement. The purpose of the MSVR, in a nutshell, is to stabilize statutory capital and surplus.

The MSVR has two components: a bond and preferred stock component, and a common stock component. For the rest of this presentation, I'll refer to the bond and preferred stock component simply as the bond component, and I'll refer to the common stock component simply as the stock component. The purpose of each of these components is quite different. The intended purpose of the bond component is to at least partially offset and cover losses on invested assets that may result from asset depreciation or default. The purpose of the stock component is to stabilize statutory surplus against swings in market values. Later in the presentation I'll discuss how well each of these purposes is being served in actual practice.

Let me now briefly cover with you some of the mechanics of the MSVR's operation. There are several ways that the MSVR is funded. First, each component

## PANEL DISCUSSION

has required annual additions based on a prescribed formula. Second, in addition to the required annual additions, voluntary contributions can also be made to fund the MSVR. A third source of funding for the MSVR is capital gains and losses, both realized and unrealized capital gains are added to the MSVR, and realized and unrealized capital losses are subtracted from the MSVR. The fourth source of funding is transfers. Funds can be transferred from one component to the other, subject to certain rules and restrictions.

The annual funding from all sources for both components is subject to well-defined maximums. Table 1 shows the required formula additions and maximum values for each component. For common stocks, the MSVR formula requires annual additions of 1% of the statement value of common stocks subject to a maximum of 33 1/3%. For bonds, the required formula additions vary depending upon the quality ratings of the bonds assigned by the NAIC Securities Valuation Office (SVO).

TABLE 1  
BASIC FORMULA

	<u>Required Additions</u>	<u>Maximum Value</u>
	%	%
Common Stocks	1.0	33.3
Bonds:		
Yes	0.1	2.0
No	0.5	10.0
No, No	2.0	20.0

"Yes" bonds are considered investment grade bonds by the NAIC. "No" bonds are below investment grade but still of average quality. "No, No" bonds are below investment grade and below average quality. "No, No, No" bonds are those that are in or near default. The annual increment for "Yes" bonds is 10 basis points, subject to a 2% maximum value. "No" bonds require 50 basis point annual increments, subject to a 10% maximum. The lowest rated bonds require 200 basis point annual additions subject to a 20% maximum.

It is important to note that this is only the basic formula for the required annual additions, for the bond component. There is also an accelerated funding provision which has been in effect in its present form since 1984. This is shown in Table 2.

TABLE 2  
BOND COMPONENT ACCELERATED FUNDING

<u>Ratio of Actual to Max</u>	<u>Funding Multiple</u>
0 to 25%	3.0
25 to 50%	2.0
50 to 75%	1.0
75 or more	0.5

## THE FUTURE OF THE MSVR

This provision requires companies with relatively low bond components to more rapidly build up the fund. For example, companies with less than 25% of the maximum bond component are required to triple their required annual contribution. If the actual to maximum ratio is between 25% and 50% then double funding is required. Conversely, companies that get up over the 75% mark are entitled to slow down their funding by dividing their required contribution in half. This accelerated funding feature is one of the reasons why the industry's bond component has increased so dramatically over the last few years, from an average of around 25% of the maximum in 1984 to close to 70% of the maximum in 1986.

Now with that as background I'll move on to the second agenda item. In 1986 the industry's total MSVR shot up to over \$15 billion dollars, a 45% increase over 1985. This represents 2% of the industry's total invested assets, and a startling 24% of the industry's total statutory capital and surplus. Table 3 shows the industry MSVR expressed as a percent of total invested assets. Note that 1986 shows the most recently available industry data; prior to 1986, the industry MSVR was relatively stable, averaging slightly less than 1 1/2% of invested assets.

In 1986, both the common stock and the bond components increased, with the bulk of the increase in the bond component. In fact, the bond component more than doubled in 1986 from its 1985 level. This increase resulted from several factors. The most significant factor was the tremendous volume of capital gains realized from bond calls as interest rates declined to their lowest levels in the last 8 years. The change in tax law also contributed to companies taking more capital gains in 1986, in anticipation of the tax rate increasing from 28% in 1986 to 34% in 1987. Also, since many companies were at the maximum common stock component, further increases resulting from capital gains were either transferred to the bond component or permitted to flow through surplus. And, as I mentioned earlier, the accelerated funding multiple also had a large impact on increasing the bond component.

Table 4 shows the industry MSVR expressed as a percent of capital and surplus. This Table shows that if MSVR was recorded on the statutory statement as an appropriation of surplus rather than as a liability, the industry's total statutory capital and surplus would be almost 24% higher. The ratio was at its highest level in 1986, but even the historical levels (ranging from 14-18%) represent a significant degree of conservatism in the statutory statements of U.S. life insurance companies.

Table 5 compares the annual growth rates in the industry MSVR with the annual change in the Dow Jones Industrial Average. I find this to be an interesting relationship to observe in monitoring the MSVR. For every year shown, the MSVR and the Dow have clearly tracked in the same direction. Prior to 1985, in fact, the MSVR and the Dow tracked in roughly the same magnitude as well. However, the recent growth in the bond component that I noted previously has caused the MSVR to increase more rapidly in 1985 and 1986 than solely a change in market value of common stocks would indicate.

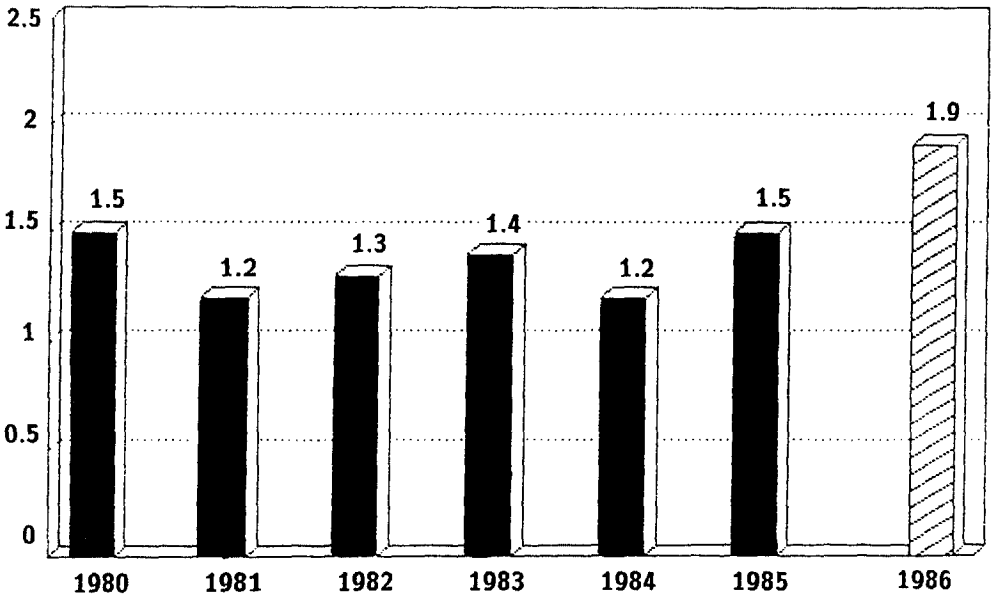
Now with that analysis of industry as background, I'll now share with you my critique of the MSVR.

First, I do not believe that the bond component is working as it should. My primary concern is that the MSVR is not a C-1 risk reserve, despite what I believe to be a widely held view to the contrary. As I described in a discussion

PANEL DISCUSSION

TABLE 3

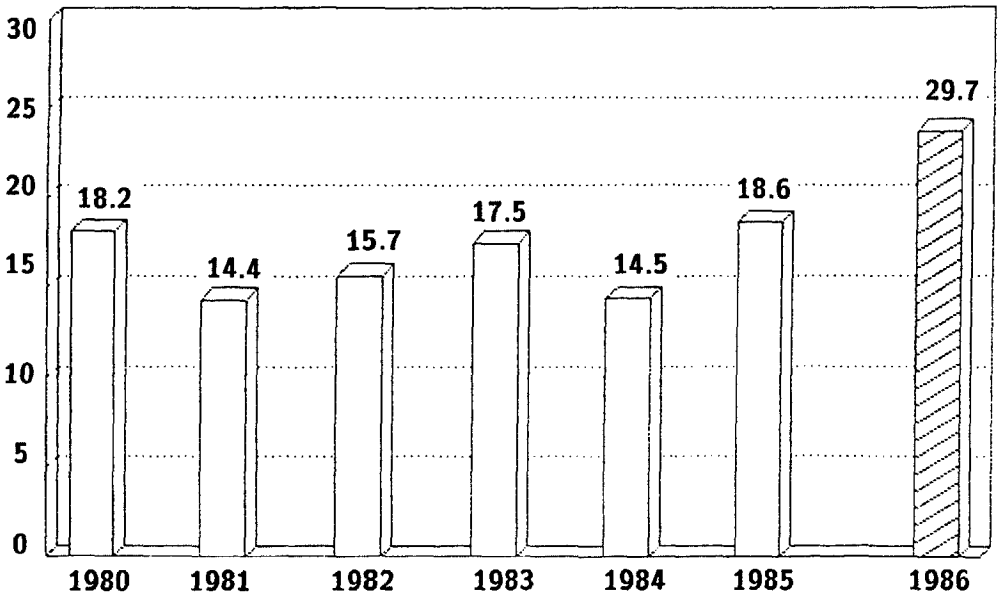
**INDUSTRY MSVR**  
**PERCENT OF INVESTED ASSETS**



THE FUTURE OF THE MSVR

TABLE 4

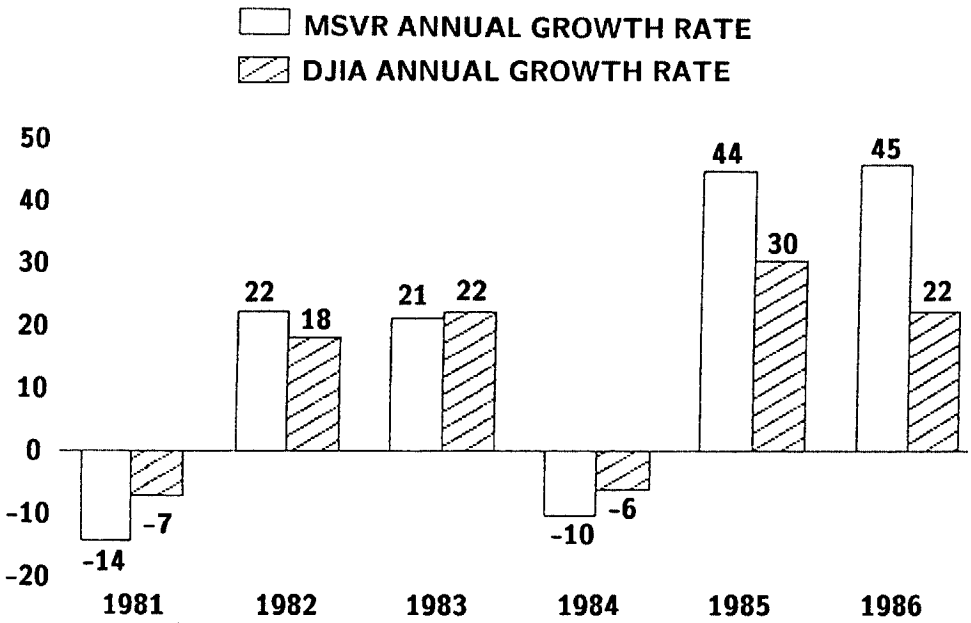
INDUSTRY MSVR  
PERCENT OF CAPITAL & SURPLUS



PANEL DISCUSSION

TABLE 5

**GROWTH RATES**  
**INDUSTRY MSVR VERSUS DOW JONES**



## THE FUTURE OF THE MSVR

paper that was published in a recent *Transactions*, the bond component has several major shortcomings when viewed solely as a C-1 risk reserve.

First, by its very nature, the MSVR does not take into account specific company circumstances which could impact on the level of C-1 risk. Since the MSVR is based on a set formula, it ignores such key variables as portfolio size, extent of investment underwriting, and term structure of the portfolio.

Second, the MSVR entirely ignores the risk of potential default on real estate and mortgage loans (other than mortgage-backed securities). However, as I pointed out in the discussion, these assets represent about 25% of the life insurance industry's total assets and such investments could have a significant impact on the level of C-1 risk in a portfolio.

Another key distinction between the MSVR and a C-1 risk reserve is the potential depletion of the MSVR while C-1 risk remains. In fact, the MSVR can decrease because of investment losses, even when the actual level of C-1 risk increases.

A C-1 risk reserve should be a function of the credit risk of a portfolio as of a valuation date. However, it is conceivable that two companies with identical investment portfolios with the same degree of C-1 risk could have completely different MSVRs. Given different historical development, one company could have a minimal MSVR while the other company could be near the maximum. Joe Buff's committee report gives several good examples of this type of situation. If you haven't already read this report, I would encourage you to do so. It's a good piece of work.

Another critical problem with the MSVR is the NAIC's investment rating process. The approach of the SVO, as I understand it, is outdated. It is basically a mechanical process which assigns bonds to either yes or no categories based almost exclusively on two ratios, an earnings requirement and a debt ratio. This quantitative analysis is very much lacking in subjectivity. The result of this process has very frequently been counter-intuitive. For example, a significant portion of investments rated as junk bonds by Standard & Poor's (S&P) or Moody's has, in fact, been classified as investment grade by the NAIC -- and viceversa: Many investment grade securities as rated by S&P or Moody's are designated as "No" bonds by the NAIC and fall in the 10% or even the 20% maximum MSVR categories. The NAIC has recognized these concerns and has accordingly established a SVO bond rating study group to address these issues.

Finally, I'll share with you my view of the future of the MSVR.

First, the common stock component appears to be serving its intended purpose well. The common stock component, I believe, has effectively served to stabilize the statutory capital and surplus of life insurance companies against fluctuations due to changes in market values, and, I would suggest that this component be retained.

However, I believe that the bond component of the MSVR should be replaced with a C-1 risk reserve which is specific to each company's investment portfolio. This should be accomplished as an integral part of the implementation of the valuation actuary concept. And, I should note, this conclusion is shared by Joe Buff's committee in its report to the NAIC. It now remains to be seen if this vision for the future of the MSVR can be realized.

## PANEL DISCUSSION

MR. DAVID MICHAEL BURRIDGE: I would like to know what type of formula you would use to determine a required annual addition, if there would be such a thing, to your C-1 Risk reserve that would take the place of the bond component of MSVR.

MR. PAUL: In my opinion they would be company specific. They would be basically asset default charges and perhaps the company would even use them in their pricing and they would be determined company by company based on studies of investment defaults, but also based on their knowledge of their own portfolio.

MR. DAVID C. ZIMMERLI: I'm not quite clear on why you want to keep the common stock components but not the bond components. In particular it seems that the common stock component is vulnerable to your concern about the completion, that it can be easily depleted without having any change in C-1 characteristics.

MR. PAUL: The key distinction there is that common stocks are valued at market on the statutory statements of U.S. life insurance companies and given market valuation of securities, I believe there is a need for a stabilization fund. What I take exception to with the MSVR is that it really tries to be too many things. It has two rather distinct purposes. One is trying to provide for defaults, the other is trying to stabilize surplus. The purposes are valid purposes but I don't believe they work well in combination. In response to the other part of your question, I think, if property and casualty companies, for example, had an MSVR related solely to common stock, some of them would be in a much better position today, or at least on October 19, than they turned out to be. The life industry weathered the crash quite well. We don't have B7 industry data available, but this seems to be the case on the statements I've seen, and it's not necessarily true for the property and casualty the industry where you have some big companies who were dropping their surplus.

DR. ALLAN BRENDER: Two questions: one, I gather that there is no component in there that deals with market value deficiencies for bonds; if bonds happen to be at some value which market wise is less than the book value, then that's not taken care of?

MR. PAUL: That's right. I mean basically bonds are recorded at amortized costs on U.S. statements.

DR. BRENDER: Yes, but from the solvency point of view, if you had to liquidate then, in fact, you're running some kind of risk; I'm surprised there isn't a component. There is a Canadian one.

MR. PAUL: Yes, if they are in or near default.

DR. BRENDER: And then the other question: why is there this whole question about annual maximum annual contributions? Why isn't it a matter of determining how much reserve you need to cover problems with assets in theory and requiring that it be put up?

MR. PAUL: I agree with that point. It happens not to be the way the MSVR works, that's all.



## THE FUTURE OF THE MSVR

MR. ARMAND M. DE PALO: One of the other things driving the MSVR of the industry up is that many companies have shifted much more heavily in the last 2 years into bonds in the 10 and 20% categories. Companies that historically had less than 5% now have 15-25% of their assets in the MSVR 10 and 20% categories. So this increase may not represent the increase in security of the MSVR at all, but a lagging recognition that these companies are taking on a disproportionate amount of risk so that the MSVR has not caught up yet. I also support immediate establishment of appropriate reserves.

MR. PAUL: From what I've seen of the actual distribution of the industry's assets in the 10 and 20% classes, that may be true for specific companies, but I haven't seen that true for the industry. The 20% category has been fairly stable as a percentage of the total for a number of years and I believe it's around 4% but I'm not sure.

MR. PETER L. SMITH, JR.: The opinions expressed herein are primarily my own. They may or may not express the views of other members of the New York State Insurance Department. Separate responsibility for valuation of the assets and liabilities of life insurance companies has been assigned in the NAIC valuation blank and within the insurance departments. Yet the two areas are not independent. The investments backing long-term obligations of whole life insurance have generally been long term. The valuation of life insurance reserves has generally been on a book value basis with the interest rates and mortality tables based on the issue date of the contracts. On the asset side, the major assets backing the obligations have likewise been based on book values, namely on an amortized basis for bonds in good standing. My main responsibility is with respect to the review of the actuarial opinions and memorandums under Regulation 126. Such regulation pertains to the matching of assets and liabilities for annuities and guaranteed investment contracts (GICs). Nonetheless I have to be aware of the effect of both the supporting assets and the valuation thereof on the reserves. I have to coordinate and check with those in the Department who have the primary responsibility as to the asset side. We have to try to make sure that we are neither duplicating nor contradicting our efforts aimed at solvency. One of the areas affecting the various risks is the MSVR.

An MSVR seems like a logical reserve to recognize that some assets will default and that some assets will be sold prior to maturity with resultant capital gains or losses. If the MSVR is likened to a liability for uncollectable debts, then one has no problem accepting the MSVR as a liability rather than as part of designated surplus.

If long-term bonds were carried at market values and life insurance reserves were carried at book values, then there could be tremendous fluctuations in surplus even without any sale or default of the assets, as the market value of the bonds varies with the rate of return on new money investment which is the rate any buyer of a bond would expect. Such fluctuations might result in an excess of liabilities over assets, or negative surplus, or might result in tremendous increases in surplus, creating a demand, or even a requirement, for increased policyholder dividends in the case of mutual companies and a demand for stock dividends in the case of a stock company.

One solution may be to have market value of assets and market value of liabilities even for guaranteed benefits. While there has been some movement in that direction, such movement is still in the initial stage, and on an optional basis.

## PANEL DISCUSSION

In 1943, the NAIC set up its own SVO to prepare the annual Book of Valuations of Securities, formerly prepared by a private agency.

The MSVR was first required in 1951 by the NAIC as part of the annual statement, and in turn, required by each state. The formula and procedure have been criticized, reexamined and revised from time to time. At one time due to minimum reserve requirements, the MSVR failed to act as a cushion for surplus fluctuation and instead resulted in a larger strain when bonds fell into lower classifications requiring higher reserve accumulations and higher maximums.

The rules adopted by the NAIC in the years 1951-1953 established the three major parts of the system of valuation of securities: (1) the use of stabilized values for all bonds and preferred stocks having an acceptable quality, (2) the use of specific tests of investment quality in terms of the ratios of earnings to fixed charges and debt coverage in balance sheets, and (3) the buildup of a reserve, the MSVR, (a) through annual "formula addition" with maximum reserves varying by the amounts of securities in several categories of quality and (b) through accumulation of realized and unrealized capital gains on securities. In 1965 the rules were changed to broaden the ranges of bonds carried at amortized cost, to carry preferred stocks at cost, to increase the annual additions and maximums, to abolish a minimum reserve, and to add a common stock reserve component. Common stocks had grown in size and were carried at market values which tended to fluctuate widely from year to year.

In 1975 the rules were changed to provide for a more adequate annual accumulation to the MSVR and for temporary use of capital gains on common stocks to offset surplus losses due to the common stock losses in 1973-1974 exceeding the common stock reserve.

In an article "Perspectives on the Valuation of Securities Held by Life Insurance Companies" in the October 1976 edition of the *CLU Journal*, George A. Bishop wrote "The investment reserve serves two purposes: (1) to provide for possible losses on securities of firms that may encounter financial difficulties, and (2) to insulate surplus to some extent from fluctuations in common stock prices." This first purpose applies to the bond component and clearly is aimed at the C-1 default risk assuming amortized values for stability of statement values for good bonds based on an invest and hold pattern.

In 1981 the NAIC and the ACLI agreed to fund jointly a study of the adequacy of the MSVR in the light of recent and prospective economic and financial conditions. Such environment included spiraling new money investments, increased policy loans, emergence of group GICs with high interest guarantees for relatively short periods, individual deferred annuity contracts sold in competition to bank's certificates of deposit, and interest sensitive whole life. The need for liquidity and short to intermediate term assets was recognized. The initial report produced by three consultants was distributed by the ACLI Investment Bulletin No. 850 dated March 30, 1983. This report gives an excellent history of the MSVR, the experience thereunder and 15 recommendations. Page III-1 quotes from the NAIC-1981 Volume 1 and notes the NAIC Valuation of Securities has described the function of the MSVR as follows: "The essential purpose of the common stock component is to limit fluctuations in the statutory surplus of a life insurer that could result from changes in the market values of those securities; the bond and preferred stock component is primarily a reserve to cushion surplus against possible write-downs in the value of bonds and preferred stocks."

## THE FUTURE OF THE MSVR

This statement recognizes that many insurers have actively traded bonds, at times for tax purposes, at other times to improve the insurer's rate investment insurance and that capital losses may result for reasons other than default, namely reflecting the difference between amortized and market values of bonds sold.

With the increased prominence of individual and group annuity and GICs, there was increased activity in the valuation of liabilities during the 1970s and 1980s. In New York there were annual circular letters as to the valuation interest rates for new GICs which in turn were based on the returns of new investments of the major insurers doing business in New York. The NAIC amendments in December 1980 provided for dynamic valuation interest rates determined for each calendar year based on a formula linked to Moodys Monthly Average Corporates and varying by duration of guarantee, type of product and transfer conditions.

When New York Law was revised in 1982 to reflect these changes, the use of the higher of 2 sets of valuation interest factors was conditioned upon an acceptable actuarial opinion and memorandum as to the assets supporting the liabilities considering the length and type of the assets, the investment income and the call features thereof and the length and magnitude of the interest guarantees and the terms of the pay out and the withdrawal or transfer rights. Such requirement was in tune with the movement towards the use of of the valuation actuary as evidenced by the Joint Committee of several professional actuarial organizations AAA, SOA, CIA, CAS and CAPP.

The New York Insurance Department Circular Letter 33 (1982) December 31, 1982 set forth a definition of "Qualified Actuary" and guidelines concerning requirements for an actuarial opinion and memorandum for certain reserves for guaranteed interest and similar contracts. Such guidelines were based on an advisory committee's recommendation. The following quote is taken from page 10 of Exhibit 2 of the circular: While the actuary is expected to examine the scheduled investment earnings and repayments of principal from the assets supporting the reserves, and the extent to which these cash flows may vary with changes in future interest rates, it is not expected that the actuary will be called upon to express an opinion with regard to the underlying quality of the assets and with regard to the risk of asset default as to interest and/or principal. In this regard, it is expected that the actuary can rely on the company's valuation of assets in accordance with NAIC asset valuation bases and procedures. The actuary may wish to include provision for an asset valuation reserve in the investment cash flow projections and, if so, this should be stated in the memorandum."

The liberalization of investment laws in most states (e.g., in 1983 in New York) permitted investments into lower-grade bonds or so called "junk bonds" which focused new attention on the risk of default. In New York, Regulation 130 limited the percentage of assets which may be invested in junk bonds. In addition thereto, the MSVR has a higher accumulation rate and a higher maximum for junk bonds.

On May 7, 1985, ACLI Board of Directors approved the recommendation of the Task Force on Insolvency Prevention that the concept of a "valuation actuary" should be supported as an important contribution toward developing means to reasonably assure solvency of companies and a special Task Force should be created to study this concept in more detail. The Task Force on Insolvency Prevention with reference to quality of assets believed that such regulation

## PANEL DISCUSSION

should not be supported as an insolvency measure since it could lead to overregulation and to objectionable investment restrictions. The Board did not approve such recommendation. The Board believed the subject of the quality of assets should be included in the further discussion of the concept of the valuation actuary and so instructed the Task Force on the Valuation Actuary which it then appointed.

The Valuation Actuary Task Force Report, dated August 1986, states "the actuarial profession has not yet developed any generally accepted methodology and techniques for taking quality of asset information into account in determining the adequacy of reserves. Until such generally accepted methodology and technique exists, and are codified in standards of professional practice, it would be inappropriate for regulators to require the valuation actuary to make any comments as to the effect of quality of assets on the adequacy of reserves." The Task Force Report did not contain any recommendation. The ACLI Board of Directors approved the Report on September 5, 1986. The ACLI letter of October 14, 1986 noted the Board resolution "put the ACLI on record as encouraging the actuarial profession to develop accepted methodology and techniques for taking quality asset information into account in determining adequacy of reserves."

With the emphasis on the link between default risk and quality of assets, the New York Insurance Department believed the valuation actuary could not ignore the effect of quality of assets. Section 95.9(B)(5) of Regulation 126 dated December 16, 1986 requires that quality of assets be considered. The Department believed that a material item could not be ignored and that pending development and acceptance of methodology, the actuary must use his best judgment.

During 1986 many insurers had capital gains, some because companies decided to take advantage of the tax laws; others resulted from borrowers calling bonds at a price higher than the amortized value. In any event, such bonds were generally replaced by lower-yielding assets. In prior years capital gains on the bond and preferred stock component had been fairly rare, occurring only twice for small net capital gains based on an ACLI survey of 140 companies for years 1969-1981.

Where high-interest yields were required to support high-interest guarantees or high discounts of future obligations, then even ignoring the risk of default, there may be a need to strengthen reserves due to the replacement of high-yielding assets by lower-yielding assets. The need for reserve strengthening may be indicated by the cash flow analysis or by a comparison of the yield of the supporting assets less a margin with the valuation interest rate and the use of a revised valuation interest rate. In such a case, if the capital gains are put into the MSVR and reserves are also strengthened, then surplus is lowered rather than being stabilized.

One solution is to revise the formula for treating capital gains as an addition to the MSVR and giving priority to first strengthening reserves. At a meeting in July 1987 with the New York Insurance Department, this was suggested by the then chair of the Special Advisory Group to the NAIC on the reconstitution of the valuation laws. At that time it was decided to have the NAIC groups on valuation of liabilities meet with the NAIC group on the valuation of securities and the MSVR. It is my understanding that such discussions are currently proceeding.

## THE FUTURE OF THE MSVR

Another procedure being considered is to capture the capital gains into a reserve such as Exhibit 8 and release each year that amount which would have otherwise been included in investment income if the capital gains had not been taken.

We have seen one example of a mutual life company that experienced so much in capital gains during 1986 that it filled its MSVR to the maximum and the excess spilled into surplus. This insurer then exceeded its surplus limitation. Rather than have a spike in the dividend scale, this insurer came to the Department, explained the situation, presented a plan for increased dividends over several years and received approval thereof.

This insurer had mostly high-quality assets. It could have increased its MSVR maximum and absorbed the capital gains if it invested in junk bonds, but it chose not to invest in junk bonds.

The MSVR can only perform its function as stabilizing surplus and not requiring spikes in the policyholder or stockholder dividends only if it is carried as a liability rather than as allocated surplus.

*There are many companies today that are active traders and are continually turning over their investment portfolios. Some believe that in any regulatory test comparing the investment income with interest required to maintain reserves, capital gains should be added to investment income. This area needs further study. Unless reserves are strengthened, if the full amount of capital gains is taken into account rather than spread over the life of the asset sold, and if the MSVR is moved to surplus or if the capital gains overflow the MSVR into surplus, such procedure could mask and delay the detection of a problem, depending on the type of liabilities involved. Perhaps a procedure to set up a reserve for the future income loss and to release each year into investment income that portion that would have been part of the investment income if the original asset had been retained would be a more reasonable procedure.*

In the case of Regulation 126 we have been discussing various revisions with an advisory group. One revision is with respect to the default risk to cover all assets, not just junk bonds, and not just those covered by the MSVR.

While we are awaiting advisory groups to develop the necessary methodology for default risk in the cash flow testing, we believe that we can advise insurers either in the regulation or advise insurers of our administrative procedures as to what we would accept under Regulation 126. As of now, we will accept for assets covered by the MSVR, either a reduction in annual income or an expense charge equal to 75% of the basic contribution to the MSVR; and for other assets, some reasonable provision based on the actuary's judgment. Under this procedure, no assets assigned to the MSVR may be used in the cash flow test. We will allow assets assigned to the MSVR to be used in the cash flow test provided defaults are explicitly modeled, at least as great as 100% of the basic contribution and the insurer can demonstrate that such assets are not used for risks other than the C-1 risks. Other procedures subject to the specific prior approval of the Superintendent may be used.

We realize that we are on the cutting edge of the valuation actuary concept and that new methodologies and techniques must be developed. We look to the experts in the field for advice and recommendations for developing and revising our regulations.

## PANEL DISCUSSION

A great deal of discussion has already taken place this past year between the Department and the advisory group. We expect further developments in future revisions.

I have one question. Barry mentioned this with respect to NAIC, that the last report was Joe Buff's report. My understanding is that there is a subsequent report that John Tweedie has been involved with. Is there anyone who is familiar with this?

MR. JOSEPH L. DUNN: I believe the report you're referring to is the report that Metropolitan prepared for presentation to the NAIC committee. At this date it's just Metropolitan's proposal. It was basically our proposed changes to the MSVR, where we proposed to keep a formula base reserve similar to the current reserve, but we wanted to modify to correct most of the deficiencies that have been exposed here.

I didn't really come prepared to speak on the subject, so I don't think I can do so adequately. If anybody would like a copy, its available from me at Metropolitan Life.

MR. BURRIDGE: You commented about some companies that are exceeding the maximum bond component shifting into junk bonds so that they can have a larger maximum in order to avoid having to pay policyholder or stockholder dividends. Forgive me for not knowing this but is that just a New York thing? I've never heard of that before.

MR. SMITH: If you were to shift your portfolio to a lower investment category you could make a higher contribution to your MSVR, and that would be in any State. This is a unique example and it's probably not worth . . .

MR. BURRIDGE: I'm talking about the dividends thing; I've never heard of a company being forced to . . .

MR. SMITH: In New York State there is a maximum surplus that mutual companies can hold. There is a 10% of liability limitation on surplus, so that if you've got maximum surplus, you could be in a position where you had to distribute dividends that you otherwise would not want to. That example is perhaps a distraction.

MR. DE PALO: Pete, you may want to comment on the fact that if you go back to the way MSVR was really designed, most companies held a large position of bonds. Today many companies actually have about 50% of the assets in bonds and have moved into different types of mortgages with equity kickers. How does the MSVR handle this type of asset?

MR. SMITH: As I think Barry referred to the different asset categories and the fact that there are no MSVR contributions for real estate and mortgages, that is a problem with MSVR.

MR. EDWIN H. KING: Would you go over again the numbers you had or the description you had of the treatment for the MSVR for the New York Regulation 126? Are those considered safe harbors?

MR. SMITH: Yes, they are safe harbors. The revised Regulation 126 includes a section for this question of treatment of MSVR in the actuarial opinion and

## THE FUTURE OF THE MSVR

memorandum. One method of doing it is to just treat defaults as an expense item in the opinion and memorandum and the specified percentage in the regulation is 75% of the contributions of MSVR. Very few people would want to do that if they actually have some assets in MSVR, because really you can't take advantage of them. So that is one of the options that I would not expect many people to utilize. One of the other options is to take a pro rata portion of assets associated with MSVR for those blocks of business that are included in the opinion and memorandum and you can utilize those assets to the extent that your C-1 risk in your actuarial opinion and memorandum requires it. That's the method that I would expect most companies would use because it gives them some relief and some utilization of MSVR in the opinion and memorandum. The Department would also entertain other possibilities. There is provision for that. If somebody has a methodology that they feel very strongly about utilizing, we will consider it.

MR. ROBERT J. LOMBARDI: Just a follow-up on the last question. What was the rationale for the 75% factor?

MR. SMITH: I believe that an analysis was made and it was believed that about 75% of the MSVR component was primarily for default and 25% for stabilization. It's an arbitrary number.

MR. JAMES F. REISKYTL: Barry has done an excellent job of describing the MSVR and the situations it was designed to handle. He has also pointed out where he believes it is effective and where it is not -- suggesting that the bond and preferred stock component should be eliminated and replaced by building the C-1 risk (or default risk) into the reserves.

If you've been following through the program, you would see that Pete has covered most of the other questions. Pete has briefly reviewed the development of the MSVR with an emphasis on New York Insurance Department's actions over the years and has made the case for treating the MSVR as a liability, not designated surplus. He has also discussed the interaction of the MSVR and New York Regulation 126 and the questions we just had focusing on the default risk and quality of assets. As to possible interaction with the valuation law, Pete has suggested that first priority might be given to strengthening reserves under certain circumstances when capital gains are realized and then the remainder, if any, will be added to the MSVR or they might be put into an Exhibit 8 type reserve and partially released each year. To my mind that highlights one of the major difficulties of changing the MSVR and that is, whatever you do, it's not really obvious what the correct answer ought to be.

I have been asked to discuss the MSVR from the perspective of a major mutual company. Except for the fact that I believe one's views of the MSVR may differ if you are considering it from a "participating" or "non-participating" viewpoint, I am not sure that "large" or "mutual" has anything to do with my comments. Obviously, par or non-par business can be sold by either stock or mutual companies. I'll comment later on why I believe you might come up with a different view depending on par or non-par when I discuss the fixed income capital gain question.

My focus is on the future MSVR and how it fits in with the valuation law. Since the Special NAIC Industry Advisory Committee on the Valuation Law has just begun exploring various possible changes, this is obviously premature. On the other hand, it does give me an opportunity to present a conceptual framework

## PANEL DISCUSSION

for your consideration -- unencumbered by the conclusions of that committee (of which I am a member).

I considered suggesting another name for this new MSVR since I have found that names can inhibit thinking. As soon as you hear MSVR you may have preconceived notions as to its effectiveness and shortcomings and you may have already made a number of unspoken assumptions that may or may not be appropriate -- in fact they may get in the way. So pretend that you are looking at a new liability or allocated surplus and try to judge it on its merits.

Before discussing the actual proposal let's begin with a little background to set the stage. A little over a year ago the NAIC appointed a Special Advisory Committee on the Valuation Law to "reconstitute the Standard Valuation Law." Many subcommittees were formed, including one on Investment Valuation and the MSVR that last July recommended that the MSVR bond and preferred stock component be eliminated and that cash flow testing of policy reserves include testing C-1 risks. They also pointed out various shortcomings. Barry Paul summarized these very effectively earlier. I asked him earlier who originated these ideas -- I suspect he did and the committee liked them so well they adopted them.

There was quite a range of opinion among the members -- most I believe would leave the base reserves pretty much as they are currently -- strengthening where necessary. Some wished to eliminate the cookbook -- placing almost total responsibility on the actuary. Some even wished to reduce their current reserves via appropriate demonstrations. Obviously, one's views of appropriate reserve standards will/may also affect one's view of the appropriate role of the MSVR.

These discussions triggered internal discussions at New England Mutual Life. Although we don't "have a company position" per se, we do agree on basic concepts to be pursued. We believe that extensive annual cash flow testing is only required for a few products and that formula based reserves and MSVR will be necessary for the foreseeable future. This will not come as any surprise to those of you who have heard Armand and me speak on other occasions. Rather than adjust minimum reserves as some suggest, we would permit companies to vary their MSVR requirements based on cash flow testing or some other demonstration if they chose to do so -- it would not be required. Perhaps this would provide a compromise between "do nothing" and the full-scale "valuation actuary only" advocates.

Fundamentally, I believe that the MSVR should (1) reserve for risk (default) and (2) should insulate surplus (stabilize net worth) and (3) provide a mechanism to stabilize earnings. Most would agree to these objectives. They really are the same or at least consistent with the original objectives. But today's world is different than the 1960s or 1970s and Pete spent some time talking about the many changes that have taken place. We have to take a fresh look at this reserve in light of the many recent changes, including equity supported pricing, managed tax gains or losses, new products, fluctuating economy, shift to high yield bonds, etc.

Much to my pleasant surprise, I found out last February at discussions with John Tweedie of Metropolitan at the new NAIC advisory committee that they independently seemed to have come to very similar conclusions. It's always nice to find someone who agrees with you! In May they committed these ideas to a



## THE FUTURE OF THE MSVR

specific proposal. Although we don't agree on all the details, we seem to agree on many of the basic concepts. As a result, I'll intersperse (with John's permission) some of their ideas among mine as I describe this possible future MSVR -- the new "critter."

One other very important background piece that I hope we could all agree on, but one that may not be immediately obvious if you have not been thinking about this issue, is that there is no one clear-cut line between reserves, contingency reserves and surplus. Even these three categories are pretty arbitrary, in my opinion. The Committee on Life Insurance Valuation Principles suggested that minimum statutory reserves should "include presumed margins in interest rates and benefit rates and levels" to cover reasonable deviations from expected. (Note: It is also probably generally agreed that the minimums specified in the SVO don't always do that today but that's another issue -- for our purposes let's assume that they do.) They went on to suggest that designated surplus should provide for plausible deviations from expected. Other names for designated surplus are target surplus or benchmark surplus. Personally, I prefer "required contingency reserves" since that more clearly defines the item. One might even call them, or part of them, whatever the new name for the MSVR is -- if you were to adopt this new concept.

Finally the Committee suggested that larger deviations and other contingencies are to be covered by surplus. Surplus also provides for growth and change. Most importantly surplus ensures future solidity and vitality of the enterprise.

So we have responsible, plausible and worst case -- excellent concepts -- but little current agreement on where to draw the lines. The profession has made a lot of progress over the last few years but much more needs to be done before it is practically viable. Recent developments in product, pricing, asset liability matching and others described earlier by Steve surely complicate these efforts.

So what's my concept of a new MSVR?

1. It has two components: one for required contingency reserves (or at least part of them) and one for stabilization. The Met would limit the first component to default risks.
2. All types of assets, except possibly real estate, would be included in the contingency reserve component. The Met includes all assets. I'll comment further on this shortly.
3. Reserve component would be determined prospectively.
4. It would be a factor or formula method, permitting possible variations depending on cash flow testing, etc. (optional).
5. All capital gains or losses would be credited or charged to a stabilization component.
6. Stabilization component would be systematically amortized through separate items in gain from operations.

I realize I went over this concept rather quickly. I will repeat each point and add a few comments later.

There are a number of other nitty-gritty issues that must be addressed, including: Should there be a maximum on either component? On the total? A minimum? Can losses on one component be offset by amounts in the other? Do separate account products with guarantees require an MSVR? If not, can the company eliminate this requirement by developing new products with separate account base? How is this handled today? Can you eliminate the MSVR by

## PANEL DISCUSSION

shifting some surplus (via common stock assets) to separate account surplus? What about reinsurance -- does it affect requirements? As to consolidation, should the parent have the option of setting up a consolidated MSVR for subsidiaries that don't require a separate MSVR? What about a see-through arrangement where you trace the assets? For example, suppose you had an annuity subsidiary whose only assets are bonds; parent must increase MSVR for value of stock of subsidiary in parent's MSVR stock component. Should you be able to look through the whole thing and simply reflect the subsidiary in the bond component of the MSVR? Which makes more sense? How does one make the transition from current MSVR to the new version?

Frankly I don't have answers to all these questions. Our primary emphasis has been on the basic structure -- if we can get agreement on it then the others will be addressed. As a general principle one would assume that the total requirements (reserves, MSVR and surplus) for the same product guarantees should be identical regardless where the product is written -- but is this how it works today? I would hope that even though we may not necessarily agree on each piece we could agree on the total.

The Met proposal addresses many of these issues -- no MSVR maximum, minimum equals zero, you may offset one component with the other, the parent has the option to consolidate, and -- as to transition -- calculate new requirements; if current MSVR is greater, any excess goes to stabilization component. What do you think?

I have a simple overall rule that whatever is done, everyone ought to play by the same rules (and the rules ought to be consistent). Let's go back to the general concept and the six points I mentioned earlier. (1) All assets should be included -- obviously all assets have risks and all but Treasuries have default risk. If in doubt ask the Travelers or Equitable. I guess that's not fair but their problems have made the paper, so they are well known. There are likely a few other companies that now realize there are risks on other than current MSVR assets. Does anyone know why they excluded these assets originally? Frankly, I don't know. Do we have a historian in the group? Do you know Pete?

MR. SMITH: I think that someone in the audience made the comment, Armand. I believe that at the time the MSVR was developed, the investments were very standard and they tended to be publicly traded bonds.

MR. REISKYTL: (2) Earlier I commented about real estate. I think real estate raises a number of very practical problems. On the one hand we have the current statutory treatment, which is basically book less depreciation. On the other hand, real estate is an equity investment and at least arguably its market value should be reflected in some way in the MSVR. If so, how? Should the company determine a conservative market value annually -- say based on projected cash flows over the next 5 years or should, as the Met proposal suggests, a credit be provided in the MSVR for depreciation presumably assuming that the conservative market value is the purchase price? The IRS may look at this closely and conclude that there are new tax opportunities here. Is there one definition of conservative? How volatile would these results be, assuming individual judgments of each investment? Volatility will have a major impact on the appropriate MSVR factor for real estate -- to be discussed later.

(3) Contingency reserve components are determined prospectively so as to reflect current needs and to reflect them now. Consideration should also be given to

## THE FUTURE OF THE MSVR

shortening the grade-in to maximum for the contingency reserve portion. Some would suggest one should establish the full amount immediately! This would likely restrict high-risk high-rate investments (junk bonds). Some here may believe that that's okay; others likely would object.

Someone asked earlier why the MSVR has a grading period and I suspect this may be part of the answer -- to provide a buffer for defaults. Obviously, if you don't have adequate funds on hand to cover the risks within a short period of time, you have a concept not a buffer! This probably should work both ways; when the risk diminishes, the funds should be freed up quickly also.

(4) Factor or formula method -- factors provide a simple framework and are probably necessary at this time -- and perhaps for sometime to come. People may wish to debate this suggestion. Studies should be undertaken to determine the appropriate factors for each type of investment and risk class within these types.

One could also adjust the factors to reflect the investment portfolio structure recognizing the covariance among risks, the degree of asset/liability matching or any other relevant factors. We tend to focus on factors for each risk, but what about the interrelationships within a portfolio? Should they be reflected in some way?

Arguably the factors could also be adjusted to reflect cash flow testing or any other demonstration that lower requirements were appropriate. As a result, one company arguably could hold a lower MSVR component than some other company that hadn't done this work. Note: This structure keeps insurance reserves for all companies on at least the current statutory basis (solving the federal income tax problem) while giving some companies more flexibility in establishing total requirements -- including contingency reserves. (A good compromise?)

This variation of factors needs a lot of work to determine if it is viable and practical. No one would be required to do additional testing -- the MSVR factors would be determined assuming none was done. I believe separate factors should be determined for contingencies and for stabilization. As a result, the new contingency factors are likely to be lower than the current ones.

The work on the actuarial default analysis (C-1) is just in its infancy. There are no clear guidelines for the actuary to follow or rely on. Should the actuary base the assumptions on experience during the Great Depression or only that of post World War II, or the 1980s, or all three? The Met People suggest that given this limited guidance couldn't an aggressive company shop around for an actuary who is willing to make the necessary assumptions for the company to pass? A formula-based approach isn't accurate either but at least all play by the same rules and the Valuation Actuary can always (should) hold additional reserves if the formula-based ones are inadequate.

Mortgage loans may also require special treatment. Formally the factor ought to be quite high if not one of the highest -- depending on the particular risk. However, variability must always be balanced, in my opinion, with simplicity and ease of calculation. The burden should be on the former to demonstrate the adequacy, rather than the latter. Let's try to keep it simple yet meet varying needs wherever practicable.

## PANEL DISCUSSION

Does this contingency reserve component make sense to you? Reactions? Improvements? Comments?

The stabilization component is (5) increased by all capital gains regardless of source and decreased by capital losses. (6) They are also systematically amortized to the gain from operations.

Three comments: First, *all* includes government bonds, mortgages and all other assets other than real estate. Metropolitan includes real estate too and at first blush that makes a lot of sense, but as long as we value real estate at purchase price less depreciation you get a double whammy if you spread these gains. First you don't recognize any unrealized gains (losses) yet real estate is an equity much like common stock. Then when the property is sold the gains are spread, deferring them further! If some alternative means of establishing value were to be used, spreading may be more appropriate -- the two should go together. Higher equity also means higher taxes for mutual life insurance companies. There must be a way to achieve these objectives without increasing taxes.

Second, if all capital gains/losses were added to the MSVR, companies couldn't manipulate surplus or earnings by timing and selection of these sales. Depending on one's perspective that's either advantageous or disadvantageous

Third, logically these capital gains should be spread over the original life of the assets. For bonds and mortgages this is fairly easy to do. It isn't quite as clear if they were purchased as short-term investments (like a commodity) -- but determinable. How should one handle common stock? Some argue that common stocks should be spread over say six years; others argue take gains or losses immediately! The latter argue that since the gains are realizable daily -- buying and selling -- that's the real world -- they should be recognized immediately. Those favoring a longer spread-out argue that this smooths out fluctuations in the market and various cycles. I believe that's the way it's done in Canada. Each argument has merit; more discussion is needed. Metropolitan suggests 5% of the stabilization component should be realized to ordinary income quarterly noting that this provides a 3.4 half-life for any block of gains. To me, that seems a bit quick but it depends in large part on the proportion of common stock in the company's portfolio and one's view of an appropriate spreading period! Nevertheless, the revised formula suggested by Metropolitan deserves further study.

You might ask why should these gains be included in the MSVR -- why not in reserves? (as Pete suggested earlier). That's a tough one that needs much more discussion. It may depend in part on whether you have "par" or "non-par" priced product. Let's look at fixed income capital gains, for example, to see how it works.

For someone with a par product with adequate margins, future dividends may depend on spreading the fixed income capital gains so as to provide the same payout they would have had if the gains hadn't been taken. In fact, as was commented earlier one company has set up their fixed income capital gains in a dividend stabilization fund. I think that makes a lot of sense because as a result future dividends in effect properly ignore that the company took capital gains for tax purposes. The "future MSVR" could build this concept right into this fund and do it consistently for all companies thereby possibly avoiding

## THE FUTURE OF THE MSVR

increased dividend payout or maintaining scale longer than otherwise justified with larger-scale reductions later.

For non-par, where every dollar is needed to meet future guaranteed benefits, either the reserve must be strengthened as some have suggested or the new MSVR must provide the stabilization reserve required to meet these guaranteed obligations and the two pieces must be considered together.

For example, let's consider a company that had a fixed income capital gain on sale of assets supporting its current rate annuity. Let's further assume that every dollar is needed to meet the future guaranteed benefits. Either the reserves must be strengthened as Pete suggested earlier, and perhaps Barry, or the new MSVR component must be treated as a reserve as Pete suggested earlier in discussing the 126 requirements. Each viewpoint deserves further discussion. In either case, par or non-par -- these gains or losses should be accounted for separately and "reserved" to meet future benefits. Building one into the basic reserve and not the other could trigger different federal income tax treatment -- obviously that's another factor to be considered. If you got a deduction for building a reserve and you didn't get a deduction when you built it into the MSVR, there is little doubt where most people will put that money. Admittedly guarantees are different than dividends -- yet policyowner expectations, as a result of this transaction, are in both cases likely to be very similar if not identical.

With more product pricing assuming equity participation, whether par or non-par, this change would do a much better job of reporting income in the annual statement -- common stock realized or unrealized gains are already included in the statement. Should unrealized gains or losses on real estate or other investments be recognized in this component?

There you have our concept for the MSVR of the future. Briefly summarizing, it should provide a contingency reserve, a buffer to surplus and stabilization fund to smooth out all capital gains and losses.

This proposal, I believe, is preferable to the suggestion that we do away with the bond and preferred stock component. If this were done, surplus would be directly impacted by all these realized capital gains or losses, many of which have no real economic value!

Now it's your turn. Tell me what you think of this idea.

DR. BRENDER: I thought since some of these ideas sound somewhat like the Canadian approach, it might be useful to briefly review what we have. The newest one, which you may not have heard of, deals directly with your questions about real estate. There is a new requirement that you will have to re-value real estate by appraisal every three years. And I think you'll take the difference of market and book into income at the rate of 10% of the difference each year. And then the book value of the property will be appropriately adjusted so that the property is not held at market value. It will be held at some sort of adjusted cost which is moving towards the market value while periodically also adjusting market values. That's consistent with the way we do stocks and common shares. In Canada you buy shares and hold them at purchase price and then each year you look at the market value and take 15% of the difference into income and correspondingly adjust the book value of the shares.

## PANEL DISCUSSION

So you have this notion of spreading of capital gains as a matter of factor for shares; realized and unrealized are treated the same way. With respect to bonds we do precisely what you are saying. If there is a capital gain or loss when you sell then you spread it over the remaining life of the bond, but for not more than 20 years. That I think covers the major ones. We have an investment valuation reserve, whose purpose is, as near as I can determine, to do two things. Number one covers some asset default risk and number two covers market value deficiency. We don't have any concern about spreading because we have stocks at market value. The notion of trying to stabilize income or surplus is not a concern, so that function isn't there. But there is a market value deficiency concern, which doesn't enter into your fund. Offsets are permitted in the calculation of this reserve, which is an appropriation if surplus. Once you start looking at some of these offsets, it becomes irrational. At least in my mind, I can't decide what part of the reserve or calculation is doing what part of the job. It's compounded by the fact that this investment valuation reserve also has a provision in it for currency differences, which are probably more sensitive for us than they are for you. That part of it is a mess and I'd be very happy if we went to some sort of genuine C-I risk approach. It's very hard to find some numbers. We're also going to have this required surplus formula, which you may have heard of, that contains a piece relating to the C-I risk. There are factors that one applies to your asset holdings in various classes. There are even different factors for A bonds and B bonds and so on. But the factors, as far as I can tell, came out of the back drawer of somebody's desk and are totally unexplained. As a matter of fact, the factors are, quite literally, the ones that some company was using and nothing more than that. I haven't seen any justification for them. Anyhow, that's the kind of approach that's going on. Some of the features are things that you seem to be heading towards. Some of them are really ad hoc, just like all of these things are.

MR. REISKYTL: Is the spreading just done, or is it in a separate reserve? For example, common stock, do you keep the unspread portion somewhere?

DR. BRENDER: If you have a capital gain, let's imagine, realized or unrealized, then that capital gain goes into some phoney thing called an adjustment account.

MR. REISKYTL: What I'm calling the new MSVR.

DR. BRENDER: But it's not a liability. As a matter of fact, if you make plus \$10 what happens is the adjustment account is called minus ten. You take 15% of it into income and the remaining \$8.50 which is in the minus goes into the balance sheet to adjust the value of your stocks.

MR. REISKYTL: You actually adjust the value of your stocks?

DR. BRENDER: It's sort of assuming that if you made a capital gain on stocks that you're going to reinvest it in stocks. So the value of the stocks you have, the actual year-end value, is what you really are holding. But you don't want to recognize \$8.50 of it so you take it off. And next year you bring 15% of it through and so on. The adjustment account decreases the actual value of the assets you're holding. And gradually you spread the thing through, with the spreading coming in through income -- that's one of the major differences I think.

## THE FUTURE OF THE MSVR

MR. REISKYTL: My thought was to bring it gradually through income, but you are doing it more directly, without going to a side mechanism, adjusting the asset value and income.

DR. BRENDER: I don't want to be a chauvinist, but, I hear you say that we're doing it correctly. I won't claim that. I do hear U.S. companies when talking about internal financial reporting mentioning more and more doing a Canadian type handling of these things. If you want to call that correct, fine.

MR. REISKYTL: I should be very careful when suggesting anything is correct. But I do admire your approach and it's easy to like people who agree with your ideas.

MR. BLAINE M. BARHAM: When you mention real estate, the first thing that came to my mind was mortgages. I was just wondering whether or not there is a concern for mortgages and mortgages in default, because there is this concern about bonds and bonds in default. My second question is whether or not the duration of assets should somehow get into the calculation.

MR. REISKYTL: Would you expand a bit on your first question? I'm not quite sure about the connection between mortgages in default and real estate.

MR. BARHAM: You brought up real estate.

MR. REISKYTL: Yes, and some of the problems dealing with it. Are you suggesting this is another one? Or are you just asking?

MR. BARHAM: Yes, and I was wondering if mortgages in default were thought about.

MR. REISKYTL: They should be. I haven't given any particular thought to them other than the general comments I made earlier. Barry or Pete, did you want to add anything?

MR. PAUL: I guess I'm wondering why you don't calculate a reserve on mortgages now.

MR. REISKYTL: I believe that all assets should be included with possibly only one exception, real estate. I am currently grappling with the most appropriate way to handle real estate. Clearly you and I agree that mortgages should be included. You also asked about how the duration of assets entered the calculation. Quite likely this is one part of the concept I suggested of possibly moving the MSVR up or down, depending on testing. To repeat, I prefer to keep the current minimum statutory reserve structure as is for everyone and let the fluctuation, if any, depend on whatever testing is used, and be reflected in lower or higher "new MSVR" requirements.

MR. EDWARD L. ASTRACHAN: A couple of technical comments, one on bond capital gains. Some portion of the gain may come from the convertibility feature. I don't know if it's necessarily appropriate to have to spread that gain over the remaining life of the bond.

Secondly, another class of assets that is somewhat significant in our portfolio. I think somewhere between 1% and 2% of our assets are in stable, limited partnerships, which tend to have very similar characteristics to real estate. The real

## PANEL DISCUSSION

values of those properties have gone up considerably, at least during the period we've had them. I assume you would treat them something like real estate.

MR. REISKYTL: Good point, thank you. Other questions? How do they do it in Canada?

DR. BRENDER: At some of the other sessions at this meeting I've been hearing how investment types seem to be born and die in two years. There are all kinds of new investments that exist now that didn't exist a year or two ago. They'll be more next year. How are you going to write a rule that encompasses all these things? It would seem to me you want to. But how do you proceed?

MR. REISKYTL: My reaction is somewhat like the comment made earlier, and that is you have to make the fundamental determination whether you do this at the company level or the NAIC level. I guess since I'm not an expert in this area and don't pretend to be, I would like to see the NAIC hire qualified people to deal with new investments, assuming that they would work with an industry advisory group who would help them make the determinations. The world will never be perfect. If we get things pretty near the holes where they belong that's pretty good. Keep in mind that the MSVR will fluctuate with changes in the world -- we don't need every "i" dotted and "t" crossed. Peter or Barry, would you like to comment further?

MR. SMITH: I agree. One of the concerns that we've seen in the valuation actuary concept in the U.S. is the difficulty small companies have in dealing with problems. Those exotic state-of-the-art investments are frequently purchased by the most aggressive and sophisticated companies. The valuation procedures have to be practical and fit the types of things that most companies are doing. For the companies we're really concerned about, what you really need is a much more practical type of methodology.

MR. REISKYTL: I think uniformity has merit. I like the Canadian approach. We should all be playing by the same rules -- at a minimum competitor to competitor and hopefully within the financial industry. One of the points Barry made earlier was that we should have some reasonably comparable treatment.

DR. BRENDER: I have a philosophical question. I'm not sure how capital losses affect the kind of reserve or MSVR that you have proposed. Even if I knew how to properly calculate some kind of securities valuation reserve, I would have a problem. When things start going bad and the contingencies that this reserve is supposed to protect against start to emerge, do I release the reserve to make up the losses I suffered because it seems that's why it's there or do I get concerned and say if it's gotten this bad it's going to get worse so not only do I not want to release reserves, but I better tuck some more away. I don't know how the fund you're proposing is going to work.

MR. REISKYTL: I could give you my answer but I've been doing a lot of talking. Let me give Barry a chance. I believe you have the same situation if C-1 risks are included in the basic reserve.

MR. PAUL: Yes, I think it goes right to the heart of C-1, which is, if assets are in default you release reserves to cover those assets but you also have to evaluate your remaining portfolio to see what kind of investment risk remains in the portfolio. If you need to be strengthening at the same time that you are releasing then, I think, that's the reality of the situation.



## THE FUTURE OF THE MSVR

DR. BRENDER: Your approach always is to look at the remaining portfolio and the risks associated with it.

MR. PAUL: That's correct.

MR. REISKYTL: I agree. I don't want to put words in Barry's mouth, but I think what he has said is that the reserve goes down because you've incurred a loss on that investment. Unless you replaced that investment with another one with the same requirements, the MSVR ought to be reduced. If you replaced it, you better make other changes in your portfolio or have enough surplus to cover the risks. I guess many of us who have studied the current MSVR have thought it could be improved -- in this case in its handling of losses and subsequent contributions.

MR. SMITH: Bob Callahan has from time to time made some comments with respect to MSVR. Since his views have substantial weight within the Department, I should probably repeat them. With respect to inclusion of the increased reserves when you purchase lower-yielding assets, his preference is that the reserves be increased rather than the MSVR because of the tendency to view MSVR as allocated surplus, rather than as a reserve. Then with respect to the stabilization element and the default element, he prefers to see some kind of requirements in terms of the extent to which they could offset. I think that's just a question of degree of conservatism. I don't think that's an earthshaking difference from what you said.

MR. REISKYTL: That again gets to that core issue -- is this new thing a reserve? You notice I didn't say whether it was a reserve or surplus. I think there are good arguments on either side. Surely if Bob means the money should be set aside and not taken down in some inappropriate way -- I agree.

MR. LOMBARDI: The concept about gradually bringing capital gains and losses into earnings -- what about companies that don't actively trade their investment portfolio? Could they take gains to influence their earnings and ride out a bad period? I wonder how effective that would be to prop up earnings and how gradually you would bring in gains? But I guess my real question is in reporting capital gains: should we show earnings both before and after capital gains so that outside groups could focus on whichever number they prefer?

MR. REISKYTL: I prefer to show them on a separate line and let the individual decide. If they are included in another line, as some prefer, there are no options or information as to their effect on the results. Another related question is do you include only realized or also include unrealized? Obviously for common stock that's not an issue unless we change the current rules. What about other equities -- we are back to real estate.

I believe John Montgomery has suggested that the California Insurance Department does not believe that capital gains would distort earnings any more than many other transactions already do. Timing of other purchases and sales can also affect your earnings. So reasonable people can have different opinions. Do you believe this is worse than or as good as some of the other things companies can already do?

FROM THE FLOOR: Can I just add one comment from a stock company perspective? This discussion about the treatment of realized gains and adding them to reserves is very interesting. There seems to be a general consensus for

## PANEL DISCUSSION

spreading them and several intelligent proposals for different ways of doing that. What I find fascinating is that this is sort of a dig at the FASB. For those of you who are not familiar with FASB 97, the accounting profession has said that capital gains will be reported in income and in no event will they be spread and in no event can you defer the recognition of that income. When they developed the proposal they were adamant that this is the way it had to be for GAAP. I found it fascinating that they couldn't even see the logic behind doing it and the economics of needing to add to the reserves when you take gains.

**MR. DE PALO:** I just want to note that you really can't detach the MSVR from reserves, especially since the adoption of the dynamic interest rates. The industry had to adopt dynamic interest rates to be competitive with other products that were in the marketplace to compete for investment dollars. There is no doubt that the interest rates that were allowed to be used for valuation of certain annuity type structures in 1982 and 1983 were much higher than prevailing interest rates, but they were correct at that point.

Underlying the valuation law, though, is the actuary. If his underlying assets are not earning the required interest that is needed for his reserve, he should go back and strengthen his reserves. Now this is why these are going to conflict. First I want to give an example of two assets that earn enough to support the products that in a decreasing interest environment perform drastically different. One example is you back your product with a series of zero coupon bonds mixed in with some other bonds to get some cash flow and interest rates drop. Substantial capital gains will result if you choose to sell those bonds, even though if you held them they would exactly equal the liabilities that you've matched to. Other companies back their product with mortgage type structures, like Ginnie Maes. If interest rates drop, the Ginnie Maes will get called and not yield the income stream that the actuary had expected for his reserve. Why did I make up this example? It shows that in one case the actuary had a source of capital to strengthen his reserve. In the other case he had no source of capital to strengthen his reserve. This example clearly shows why mortgages should be in the MSVR -- and that being called and being matured before the anticipated date should also be considered.

The next issue is a unique problem with New York State. New York State has a quirk embedded in its Law on participating business. It states that if you choose to strengthen your reserves you must increase values for the participating policyholders. So if a New York company chose to increase its whole life reserve from what they had to stronger reserves, that money would go into reserves and would also go into additional cash values to the policyholders. This is a little known fact that probably has to be wrapped into all the discussions of MSVR also because they can't be detached from it. And what we're finding as we get deeper and deeper into the subject is that it can't be looked at freestanding. These are just my comments. I don't know what the solutions to any of them are, but they all have to be considered.

**MR. HARRY PLOSS:** Jim, you had mentioned real estate equity and whether that should be considered in the MSVR. Certainly the depreciation on real estate is very significant and can be considered comparable to an annual contribution to an MSVR. So I think it would be really double counting if that wasn't integrated in there. Today high-yield bonds are a very important subject in life insurance company investments and it seems to me the extra coupon that you get in a high-yield bond is more than the extra total return that you'll get over a long period of time on high-yield bond vs. investment grade. You will get some

## THE FUTURE OF THE MSVR

extra because you are taking extra risk, maybe you are also getting diversification compared to just investment grade bonds. But it seems that some portion of that extra coupon should be put away for a rainy day. The fact that high-yield bonds will have a 10 or 20% reserve component seems logical to me and so the annual contribution, I think, is logical rather than being forced to put up 10% or maybe some smaller percentage immediately. When you enter into the investment you are doing it because of your future economic prospect. Why should some significant accounting event be triggered at purchase?

Something you've talked about seems very attractive and that is somehow we're talking about matching of assets and liabilities and somehow the assets that one invests in would somehow be part of the policy reserves. There is a certain appeal to that. But when we match assets and liabilities it seems that we do it in the aggregate. In other words we value liabilities seriatim, we value assets seriatim, although the MSVR is sort of an aggregate calculation. But when we match them, we can't match them individually and it seems that it would be hard to develop a methodology in which the reserves included the corresponding assets, unless we could go to some kind of aggregate valuation procedures like pension actuaries do. So there is some historical methodology that needs to be changed. I think when you do an asset/liability analysis that takes into account the surplus rather than just the reserves, then the past income taxes that you've paid, in a sense for let me say an after-tax analysis, you'll find more favorable than a pre-tax analysis because you can recover past taxes.

There may be great merit to having some kind of reserve that is deductible. I mean great economic value, in addition to any personal benefit our companies would gather. I was wondering if you would comment on where we are with respect to some kind of reserve methodology that took into account assets and if there would be some merit to deducting modern taxes.

MR. REISKYTL: Can you say that again, some deduction beyond the reserve is that your fundamental question?

MR. PLOSS: Yes, get a deduction for reserve with an asset component.

MR. REISKYTL: The current valuation law says here are the minimums but the real minimum is what the actuary says it is. It may be 6.5% 1980 CSO but if you believe that's inappropriate for your product or your liability, the individual who's responsible should establish a larger reserve. If I had my choice, that would be tax deductible. There is no question that the government prefers the cookbook approach. They want common deductions for everyone. They are reluctant to provide the individual actuary with any say in establishing deductible reserves. The tax authorities generally believe that all actuaries want to do is raise deductions by inflating their reserves. There is a line between required reserves and inflated reserves. Pretty clear I'm sure to the people in this room, but the IRS has a different line. As to any progress, I believe you have to build it into the basic minimum life insurance reserves as much as possible. Any reserve or liability in which you have control is likely to be treated as allocated surplus. The tax law now says you must use the lowest possible reserve for that block of business. Therefore as long as we have the current law, minimums are controlling. Flexibility, if that turns out to be viable and practical, should be built into the new MSVR and best case developed for appropriate tax status. As to your other point about the proposed MSVR aggregate versus individual, or seriatim, is an excellent point. Asset/liability matching is being discussed in a lot of circles and hopefully we'll eventually come up with an

## PANEL DISCUSSION

agreed-to answer. My thinking about the MSVR to date has been on an aggregate basis.

MR. PAUL: I just want to make one other comment to follow up on what Armand said much earlier in the discussion. I have with me a copy of the annual ACLI survey of the MSVR results for a sample of a large number of companies. I think it represents close to 80% of the industry MSVR. In 1985 the industry MSVR in the 10% category was 1.4% of total assets and in 1986 that went to 2.6% so we went from 1.4 to 2.6 in the 10% category. In the 20% category it stayed level at 3.6% for both years 1985 and 1986. The 2% maximum category stayed fairly level as well: 75.8% in 1985 and 74.7% in 1986 -- a slight drop. So just to follow up on that comment, there is really nothing dramatic here in terms of the shift in the industry.

MR. BRUCE J. BOHLMAN: This may seem silly, but if New York wants to put more reserves up, and since the rating agencies treat the MSVR as part of surplus, why don't we treat MSVR as part of surplus, move it there and treat it like everybody really does think of it -- as allocated surplus.

MR. SMITH: There are a couple problems. Mutual companies have to distribute their surplus and we have a maximum surplus limitation in New York. If it goes into surplus, it needs to be distributed and so that's problematic. The other problem, I believe, is more of a political concern on the ACLI level; I'm not particularly knowledgeable about this, but I've heard that the ACLI is opposed to doing what the Canadians have done of segmenting the assets into contingency reserves. I believe that's been their position.

DR. BRENDER: Basically what we've done is have this appropriation of surplus, which is like designated surplus. What I understand of our regulators is that they also have a very basic concern about moving things into surplus even if you call it designated, appropriated, or something else. Why? Because when push comes to shove and you are up in front of a judge because the regulators are trying to get an action against the company, management will try to fight back and say they are still solvent. The judge understands classical accounting which says that assets greater than liabilities means that you're still afloat. The judge doesn't understand that there is something wrong when your assets don't exceed your liabilities by some required appropriation of surplus. That's the regulator's basic fear. They want to keep things clearly labeled as liabilities so that it's very clear what being solvent means. I think that is really at the root of it all.

MR. REISKYTL: To conclude -- Obviously I'd prefer an approach that does not put the C-1 risk in basic reserves, nor capital gains. I'd rather have the MSVR be a buffer than have my reserves bounce around. From a mutual company perspective that's very desirable. Barry disagrees. Think about it -- Do you want it to show up directly in reserves?