

**1989 VALUATION ACTUARY
SYMPOSIUM PROCEEDINGS**

THE MANDATORY SECURITIES VALUATION RESERVE (MSVR)

AND THE VALUATION ACTUARY

MR. JOSEPH L. DUNN: My assignment is to share some of the thinking on the subject of the MSVR that is embodied in the Report of the Special Advisory Committee on the Valuation Law (SAC/VL), the Tweedie Committee. I had a hand in drafting some of the proposals and I was present at all the committee meetings, so I think I can give you a fair idea of the committee's thinking.

I'll give you a brief outline of what I hope to discuss. First, I'll describe the reasons the committee considered the MSVR. I hope to go through some of the proposals that were discussed in the course of the committee's deliberations and also to highlight some of the important issues that differentiate the proposals. Finally, I'll give you a brief status report on where things stand now.

Reasons the Committee Considered the MSVR

The primary reason that the committee considered the MSVR was the question of what assets are to be used when the actuary renders an opinion that the assets are adequate to discharge liabilities (Slide 1). Until a couple of years ago the matter hadn't been given much thought. Can the actuary use assets equal to just the Line 1 reserves or assets equal

SLIDE 1

REASONS THE SAC/VL CONSIDERED THE MSVR

- Which assets are available in the testing?
Assets = V , or
Assets = $V + MSVR$

- New York allows use of MSVR up to present value of default charges

- What about C-3 gains in MSVR?
Capital gain leads to
lower i which leads to
increased V and increased MSVR

- Is the MSVR a real reserve?

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to the reserves plus the MSVR or some piece of the MSVR? The question is of more than theoretical interest for the companies that are doing business in New York. The New York requirements were somewhat unclear initially. The current regulation allows the use of the MSVR up to the present value of default charges. In other words, New York is viewing the MSVR as a reserve for the C-1 risk only. The MSVR is not available to cover other types of contingencies, in particular the C-3 risk.

Well there's a certain problem with this. What happens to a capital gain that's due simply to an interest rate movement? If the capital gain is realized in a matched portfolio, no money is gained or lost. However, the capital gain would lead to lower projected future interest rates which would result in an increased basic reserve, but the capital gain would also have to be credited to the MSVR. The result is a double hit. The company would have to put up the additional funds because it took a capital gain!

One of the reasons that's been offered for this kind of treatment is that a number of people don't view the MSVR as a real reserve. Credit analysts will frequently move it into surplus, and I suspect many of you have moved it into surplus when you're trying to persuade people how much you're worth. It was the committee's belief that the MSVR is a real reserve but that as it is presently constituted its status is unclear. The committee wanted to reorganize

the MSVR framework so that it serves a clear and real function and is appropriate for use in the testing.

The Metropolitan Proposal

Metropolitan responded with a proposal to break the MSVR into two components, corresponding to its two functions (Slide 2). As we saw it the MSVR serves a stabilization function and a default reserve function. We wanted to make sure that the default component was adequate. One of the difficulties with the current MSVR is that it's retrospectively accumulated, and therefore the current balance in the MSVR doesn't necessarily have anything in particular to do with the company's risk profile. For instance, a company can switch from a portfolio invested entirely in Treasuries to a portfolio invested entirely in junk bonds without immediately affecting its MSVR. We felt that wasn't appropriate and that at least the default component of the MSVR should be determined on a prospective basis and should make provision for all types of assets. We had in mind a formula similar to the formula for the maximum MSVR now. The capital gains and losses on all assets, not just corporate securities would go into the stabilization component. The stabilization component would be amortized through the gain. One of the difficulties we saw with the current MSVR is that it's possible that money can get tied up in there. There's no systematic way to release the buildup from the C-3 type of capital gains other

SLIDE 2

MET PROPOSAL

- **MSVR = Stabilization component + "Default" component**
- **"Default" component determined prospectively**
- **Capitals gains & losses to stabilization component**
- **All types of assets included not just corporate securities**
- **Stabilization component is amortized through gain**
- **For testing:**
 - Assets = V + MSVR**
 - PV Defaults = Default component**
- **At Transition**
 - New MSVR = Old MSVR**
 - with stabilization as balancing item.**

than by charging capital losses to the MSVR or reducing the company's risk profile and reducing the maximum.

We wanted an MSVR that would work and make sense even in the absence of cash-flow testing, but we also wanted an MSVR that would be easily integrated into the cash-flow testing. A company would be allowed to use assets equal to the policy reserves plus the MSVR. We added one further wrinkle in that we wanted to get the actuary out of the business of credit analysis. The proposal would allow the actuary to assume that present value of the defaults equals the default component.

At transition the new MSVR would equal the old MSVR, and the default component would be calculated by the prospective formula with the stabilization component being the balancing item. I've glossed over a few issues, in particular, maximums and minimums, but they're not immediately relevant here.

The Prudential Proposal

Now one of the features of the committee deliberations was that there was quite a variation of opinion on how things should be done, and there was soon a counter-proposal which I'll call the Pru proposal (Slide 3). This wasn't really a formal proposal, but some suggested amendments to the Met proposal, so not everything was in the proposal and the transitional

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SLIDE 3

PRU PROPOSAL

- MSVR is unitary
- Target level determined prospectively
- Capital gains and losses to MSVR
- All assets are included not just corporate securities
- Excess of MSVR over target is amortized through gain
- For testing:
$$\text{Assets} = V + \text{MSVR}$$
- At transition:
$$\text{New MSVR} = \text{Old MSVR}$$

rules would be pretty much the same as the Met proposal. Under this proposal there would be a single MSVR. It wouldn't be broken down into components for stabilization or default. A target level would be determined by a prospective formula which formula would be analogous to the formula for the default component in the Met proposal. Capital gains and losses would be credited or charged to the MSVR. All assets, not just corporate securities would be included. The excess or deficit of the current MSVR over the target would be amortized into the gain from operations. For testing purposes the actuary would use assets equal to the reserve.

One of the reasons that some committee members preferred this proposal to the Met proposal was the fact that there are no sudden changes in surplus under this proposal. Under the Met proposal, if a company switches from Treasuries into junk bonds, the default component goes up immediately, and there would be an immediate reduction in surplus. Under this proposal, if a company makes such a switch, the target default level goes up, but the MSVR itself will only gradually increase. Those who favored this proposal felt that requiring companies to immediately put up the money would work an undue hardship on rapidly growing companies.

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The Interim Proposal

The Tweedie Committee wanted to get its report done by June 1989. It became apparent that the committee wasn't going to be able to hammer out an MSVR proposal that everyone could agree to and so the final report includes what we call the interim proposal (Slide 4) which contains the minimum changes to the current system that the committee felt were needed to allow for the actuarial opinion and actuarial testing.

Under the interim proposal the company would be allowed to use assets equal to the policy reserve plus the smaller of the Bond and Preferred Stock Component of the MSVR or the present value of defaults. This tracks what New York is doing now in Regulation 126. There would be explicit default shaves. However, a company would be allowed to use the capital gains that it would otherwise credit to the Bond and Preferred Stock Component of the MSVR to strengthen its policy reserves. In effect the company is allowed to move its C-3 gains from the MSVR to the policy reserves.

The Current Draft Proposal

The committee report also included our latest working draft on which there is clearly work to be done. It's more complicated than the initial proposal, but I think you'll see that, in light of its history, its mechanisms aren't as complicated as they might seem (Slide 5).

SLIDE 4

INTERIM PROPOSAL

- MSVR is same as currently except
reserved strengthening up to the amount of the capital
gains on bonds and preferred stock during the year may
be charged to MSVR
- For testing:
$$\text{Assets} = V + \text{Min}(\text{MSVR}, \text{PV of defaults})$$

Explicit default shaves

SLIDE 5

CURRENT DRAFT PROPOSAL

MSVR Structure

Stabilization	Default (Amortized) Component	Basic Component (Liability)
	Default (Unamortized Component)	Add'l Component (Earmarked Surplus)

- Total of default components equals prospectively determined "Target Default Amount"
- All assets are included in target default calculation
- Capital gains (losses) on all assets other than real estate are credited to stabilization component
- Stabilization component is amortized through the gain
- Increases in target default component are credited to additional default component
- Additional default component is amortized into basic default component

SLIDE 5 - Continued

- For testing:

$$\text{Assets} = V + \text{Min (basic default component, MSVR)}$$

$$\text{PV defaults} = \text{Target default component}$$

- Reserve strengthening can be charged to stabilization component

- At transition

$$\text{New MSVR} = \text{Old MSVR}$$

$$\text{Basic Default} = \text{Target Default}$$

$$\text{Additional Default} = 0$$

$$\text{Stabilization} = \text{Old MSVR} - \text{Target Default}$$

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This proposal is a compromise. The new structure would have an MSVR subdivided into two components, a basic component which would be a true liability, composed of a stabilization subcomponent and a default subcomponent, and an additional component which would be earmarked surplus. The entire reserve, including the surplus piece, would be equal to the total MSVR under the original Met proposal. The basic component would be equal to the MSVR under the original Pru proposal. In effect we're saying that, while it might not be appropriate to declare a company insolvent simply because it traded one type of asset for another, something ought to happen if insupportable risk is assumed. Therefore, we introduced the additional component, which is earmarked surplus. Presumably if actual surplus were less than earmarked surplus, the company operations would be restricted in some way although it wouldn't be declared insolvent.

Let me go through the mechanics. The total of the basic default component and the additional component is called the target default component and is equal to the default component under the Metropolitan proposal. Again, all assets are included in the target default calculation with the exception of real estate. Our feeling was that real estate accounting already results in a large deferral of income. Properties are shown as depreciating even though they are usually appreciating. It is not appropriate to further defer those capital gains and losses. So we would allow the real estate capital gains and losses to go directly into surplus, whereas the capital gains on all other types of assets would

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be credited or charged to the stabilization component and the stabilization component would be amortized through the gain. There was also some sentiment on the committee for treating other types of equity in a manner similar to the real estate method. Again, there was no unanimity on any of these points. If the target default component increases at any point, that increase is immediately credited to the additional component, a part of surplus, and then the earmarked component is amortized up into the basic component. I find it easier to understand all this by looking at it as a melting of the Met and Pru proposals rather than going through the actual mechanics.

For testing purposes we would allow assets equal to the policy reserve, plus the minimum of the basic default subcomponent and the basic component of the MSVR. Thus, if the stabilization component is negative, the company must value using the basic component, that is the basic default subcomponent reduced by the stabilization subcomponent. However, if the stabilization component is positive, it is not available for use in the testing. In both cases although there might be a piece of earmarked surplus, we're not allowing the use of it in the cash-flow testing. The fund above the line should be sufficient to discharge the company's liability. There was some sentiment originally that the company should be allowed to use the funds in a positive stabilization to discharge its liabilities in the testing. However, we couldn't reach an agreement on that, in particular, we couldn't persuade the representatives of New York State on that position. However, one of the features of the

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proposal is that reserve strengthening can be charged to the stabilization component. So if a company wants to use funds in the stabilization component, it must strengthen its policy reserve and move the funds from the stabilization component up into the basic reserve.

Finally, at transition the rules are roughly the same as in the earlier proposals. The new basic component of the MSVR equals the old MSVR, and the default subcomponent is set equal to its target. There'd be no earmarked surplus initially, and the stabilization component would be the balancing item.

The Important Issues

Should an increase in the company's risk profile immediately impact surplus? Consider the experience of savings and loans. When many of those companies got into financial difficulties, they doubled their bet, that is, they moved into even riskier investments, and we're now seeing some of the consequences of those actions. In the original Met proposal we tried to protect against this by requiring the money be put up immediately. On the other hand, there was sentiment that such a requirement might work an undue hardship on rapidly growing companies.

Which type of capital gains should be amortized: all capital gains, all the capital gains other than those on real estate, or only fixed income capital gains?

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How should capital gains be amortized? None of the proposals actually contained a proposal on exactly how to amortize anything. There was an illustrative example that I believe was 5% a quarter, but it was not really part of the proposal. There are a number of other alternatives we might consider. We could amortize over the remaining life of the original security as the Canadians do, or we could amortize over the life of the liability.

What should be done with unrealized gains on real estate? We felt that having a high C-1 requirement on real estate for which there was a large unrealized capital gain on the books was somehow not appropriate, and we suggest some mechanisms by which the unrealized gain might be used to ameliorate the C-1 requirements. Again the proposal is very tentative on this point.

Current Status

Let me bring you up to date on developments on this matter. The Tweedie Committee has completed its mission. It produced the report that contained the interim proposal on the MSVR, and the committee has now become dormant. The matter is now before the NAIC, EX 4 Committee, which at its recent meeting, requested Bill Ward's Industry Advisory Committee to reconstitute itself to consider the types of changes in the MSVR that the SAC/VL suggested. Bill Ward is now attempting to assemble that committee.

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MR. ARNOLD DICKE: Are defaults amortized?

MR. DUNN: We treat defaults as recognized capital gains. If a capital gain is recognized for the purpose of the annual statement, it would be amortized. In particular, on a default the company has to write the asset down immediately. This is a recognized capital gain even if it isn't a realized capital gain, and it would be the kind of thing that would be amortized.

Question: What about unrealized gains on common stock?

Well, you always recognize the capital gains on common stocks, so they would be in the amortization.

