# Smaller Insurance Company Section <br> "A KNOWLEDGE COMMUNITY FOR THE SOCIETY OF ACTUARIES" 



June 2008, Issue No. 30

Newsletter of the Smaller Insurance Company Section

Published in Schaumburg, IL by the Society of Actuaries

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# Principle-Based Approach - Still A Work in Process 

By Norman E. Hill

The Principle-Based Approach (PBA) for reserves (PBR) and Risk-Based Capital (RBC, specifically C3, Phase 3) for life and annuities has been on the drawing boards for about two years. During this time, it has evolved from a seemingly onerous theoretical construct to proposed procedures that fit small insurers' needs more reasonably. To be more exact, the rigor of proposed procedures now varies with riskiness of products offered.

Procedures are more settled for life and variable products than for non-variable annuities. The latter is still in a state of flux, which undoubtedly will not be settled this year. Therefore, this article pertains to life and variable only.

The American Council of Life Insurers (ACLI) made a significant proposal for change. It wishes to introduce a new additional reserve floor computed on a net premium basis. The goal is to make it easier to integrate statutory PBR and federal income tax (FIT) reserve calculations. Testing formulas, (what items to include, such as expenses and commission and what changes, if any), to be incorporated by product, should take most of this year to resolve. The ACLI hopes to be completed during the fourth quarter, but this may be difficult.
$\boldsymbol{P B R}$ —For less risky products, the key test is based on ratios known as the Material Tail Risk (MTR) test, or a revised part of the Stochastic Exclusion Test. If these ratios fall below some
threshold (still to be determined), the product is deemed relatively low risk with low volatility. Deterministic reserves, with appropriate scenario testing, would be used. It appears that traditional, less risky products would be able to pass this test.

If MTR ratios are too high, stochastic reserve calculations are required. Reserves would be based on deterministic plus any excess of stochastic over deterministic.

A considerable number of meetings and conference calls have been expended on drafting two documents: A revised Standard Valuation Law (SVL) and a valuation manual (VM), which includes, among other things, the model regulation (VM20) to implement the new SVL. Much has been accomplished, but a great deal of drafting and some unresolved critical issues remain.

There have been some regulator-only drafting calls. Documents that reflect the most current views of regulators may not have not been exposed at the time this article was written. The most recent exposed versions of SVL and VM20 are now both dated 32908 . When drafting takes place with tight deadlines, there is always the danger that unwanted or unintended items will be inserted that might negate past gains for small insurers. (Such changes require further review and analysis).


At the NAIC meeting in late March, concentration was on SVL, rather than VM. Some areas of SVL were resolved, but key ones were not. Even ignoring the new net premium floor project, the SVL timetable won't meet its June completion goal.

Methodology—Areas that have not yet been completed include mortality and expenses. A mortality approach that seems to have wide acceptance includes a simplification for small blocks. A company can directly use assumptions from a CSO Table if the credibility of its data is low. On expenses, a key question is whether current wording allows a small company without current critical mass to assume sufficient growth so as to reach it.

A proposed portion of VM20 would allow companies the option from three to five years for initiating the PBR process or first including selected plans in it. This portion has not yet been signed off by LHATF, although no objections have as yet been raised.

Another unresolved proposal is to omit policy dividends and other non-guaranteed elements from reserves if other assumptions, such as interest and mortality, are sufficiently conservative so as to provide equivalent PBR reserve levels.

Among regulators, there are serious disagreements with regard to interest assumptions. New York is insist-
ing on an additional reserve floor to be specified in SVL. Besides the current cash value floor, it wants a reserve floor based on cash flows using a risk-free interest rate. This would probably be based on Treasury bill rates plus about 50 basis points.

It seems likely that PBR reserves on permanent policies will not differ much from currently statutory levels, especially if this SVL floor is adopted. Term reserves other than deficiency reserves are still likely to be reduced, due to use of lapse rates.
$\boldsymbol{R B C}$ - The alternative amount was introduced to provide some flexibility in methodology and possible relief from complete stochastic processing on all reserves for all issue years. It appears that a safe harbor to use the alternative amount will be based on the same MTR as for reserves. If MTR ratios are sufficiently low, then current RBC factors for C3, Phase 3, would be retained, rather than use of a total balance sheet or Total Actuarial Reserve (TAR) approach. The latter involves a higher confidence level (CTE) reserve (TAR) and RBC as the difference between TAR and regular reserves.

Regulator Reliance-In December, LHATF removed the requirement for an independent actuarial review. The reason was that many regulators said they could not legally rely on such review. Later, the Commissioner's PBA Oversight Working Group (EX)—which is charged with
supervising the entire PBA process-asked how, without such review, regulators could gain assurance of reserves where assumptions would not be prescribed and could vary each valuation year.

To go with the question of assurance, some actuaries believe that a required independent actuarial review of PBR reserves would enhance the status of the profession. The approach adopted by the Commissioner's EX was to build such a review into the state examination process. This leaves open how frequently actuarial reviews of PBR would be required, and what additional resources would be needed by insurance departments. Either way, PBR review should mean significant additional expense for companies.

Experience Reporting-MIB has proposed that, for all companies, calendar year reporting of mortality experience data, not policy year, would be required. This would be much easier than policy year, but, in most cases, would still involve extra procedures compared to today. Additional simplifications to small company reporting are still possible.

Also, a New York proposed regulation would exempt companies with $\$ 10$ million or less life premiums. Neither of these changes from the earlier $\$ 25$ million calendar year reporting threshold has been discussed at LHATF.

Corporate Governance-With PBR reserves and dynamic assumptions, a related question is: What responsibility does senior management have over reserves if they are required? So far, this issue has been less prominent than reserve considerations themselves.

The American Academy of Actuaries (AAA) has submitted a report on governance to the National Association of Insurance Commissioners (NAIC), recommending flexibility in approaches, rather than a rigid procedural approach. After a few conference calls, it is likely that regulators will want some specifics to make sure that review and resolution of issues and disputes have taken place.

In any event, the board of directors, senior management and the appointed actuary will

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all have to sign off to some extent on PBA calculations. This will likely be in addition to any management signoffs on internal controls and other aspects of financial statements.

## Significance of New Mortality Table-

 The Society of Actuaries (SOA) presented its new CSO 2008 Basic Table. Based on actual industry experience, it provides a great many new tables of preferred mortality, corresponding to company underwriting practices. Margins must still be added, so that the table can start the state legislative approval process.Even more than the preferred version of CSO2001, this table should alleviate most, if not all, deficiency reserve and even policy reserve redundancies for new issues. If the table could be further extended to deficiency reserve tests for old issues, it could wipe out much of total industry redundancies for statutory reserves.

Federal Income Tax (FIT) and IRS/ Treasury Notice 2008-18-My comments involve an analysis of this notice itself, rather than of any Society of Actuaries or Academy reactions to the notice.

This notice is quite unusual in that it was issued before any final PBR product was available. It covers three areas related to FIT, tax reserves, qualifying reserve ratios for life company status under FIT, and qualifying premiums under IRS code section 7702. The notice makes no final conclusions or rulings, but mentions several key concerns about PBR reserve proposals to date.

In all three areas, the notice does not say or imply that statutory calculations or assumptions have to correspond to FIT-prescribed assumptions and methods. In other words, PBR methodology and assumptions used in statutory calculations are not dependent on FIT requirements.

But the notice does come close to saying that, forFIT calculations, prescribed methods and as-
sumptions, specified in FIT statutes, and based on Congressional intent when the current tax law was enacted, must still be used. In effect, the notice implies that separate FIT calcula-tions-without integration with any new PBR approach—must still be used.

Some had hoped that, because of the cash value floor in PBR requirements, just as in FIT, tax reserves under PBR might be virtually the same as statutory. The proposed new net premium reserve floor might also serve to achieve this end.

Reserves-FIT reserves are close to current statutory amounts. Only the interest assumption differs, plus the limit on CRVM, instead of net level. A key implication of the notice is that the CRVM definition when the current tax law was enacted must govern. The fact that the NAIC may define PBR as "CRVM" would be irrelevant.

The notice states specific features of proposed PBR reserves that differ from traditional CRVM and might not be acceptable for FIT reserve calculations:

1. Inclusion of policyholder behavior (lapse) rates.
2. Dynamic assumptions that may vary each valuation year for a given issue year.
3. Use of gross premiums in a deterministic gross premium reserve.
4. Inclusion of a great many reserves in a stochastic calculation (although this may reflect a misunderstanding of the stochastic process).
5. Inclusion of expenses and commissions.
6. (Implied but not mentioned)-possible inclusion of dividends and non-guaranteed elements.

Some may argue that the IRS has already departed from such a rule by recognizing reserves under Regulation XXX as CRVM. However, the weakness in this argument is that XXX rede-


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fined reserves on the back end by introducing segments. A plan such as term to age 100 -with level initial premi-ums-followed by YRT premiums, might have to define a segment as the level initial premium period and compute reserves over that period. However, in this period, the same CRVM first year expense allowance and first year reserves equal to $1 / 2$ the mortality cost, are still used.

FIT reserves have a cash value floor. Also, they have a cap, equal to actual statutory reserves held. This implies that, if PBR reserves were actual statutory, they would serve as an FIT cap. So far, some have believed that PBR reserves would be significantly less than current statutory. If so, for FIT purposes, these PBR reserves would serve as the maximum FIT reserve.

If an additional PBR floor-as demanded by New York- is adopted, then it is less likely that PBR reserves would fall below the current type of FIT reserves.

Some reserve systems simultaneously apply two sets of factors to in force, statutory and FIT. If deterministic reserves are used as PBR statutory, they probably could be applied as factors. This might allow current calculation procedures under PBR, a statutory (deterministic) set and an FIT set. But, stochastic reserves are generally based on an aggregate approach, especially if deterministic reserves plus excess stochastic amounts are combined. This might require a completely separate calculation for FIT.

Life Company Qualification for FIT-The qualification ratio is based on reserves for life products being at least 50 percent of total reserves. The notice implies that reserves used in this test must comply with the type
of statutory reserves in effect when the current tax law was enacted. This would mean that traditional statutory reserves would be required for the test, and thus, must still be calculated.

Premiums calculations under Section 7702—Premiums computed under FIT-prescribed assumptions must comply with certain requirements. The notice implies that these must still be used to test premiums, and cannot be superseded by any PBR assumptions.

In summary, the notice does not imply that PBR reserves cannot be used for statutory. But, it does imply that PBR will not shorten any FIT calculations or eliminate the current FIT reserves and their prescribed assumptions. Further, the notice implies that, for certain purposes, current statutory reserves would still have to be calculated. If these conclusions are upheld in a final notice, it would not be fatal for PBR. However, it could make FIT calculations more difficult and duplicative than many had hoped.

## Conclusions

Much work remains before we arrive at a stable product. Currently, it is very difficult to judge at all how PBR would change the magnitude of statutory reserves. Small insurers need to keep a sharp watch to see that prior liberalizations are not erased and that final results are still reasonable and, hopefully, provide value to the industry. In any event, they stand to incur significant extra expenses from any PBA conversion.

