

## PBR Life Subgroup

The subgroup asked the Life Reserve Work Group of the AAA to develop comments on the SOA/Milliman PBR report, a “field test” of 12 companies that computed PBR. The SOA has the 148-page report on its website.

The subgroup then spent 1 hour and 20 minutes discussing the Net Premium method (NPM) proposed by the ACLI. ACLI has outlined a method with these basic elements:

- Prescribed assumptions do not vary by company,
- Cash surrender value is a floor to the NPM on a seriatim basis,
- The required calculations, in order of testing, are –
  - NPM and stochastic, unless the company passes the stochastic exclusion test,
  - NPM and deterministic, unless the company passes the deterministic exclusion test,
  - NPM only, if the company passes both exclusion tests.
- The final reserves are the greater of NPM or stochastic/deterministic (if required), compared in the aggregate.

For scheduled premium plans (i.e. term and whole life), these specific assumptions apply:

- Mortality, prescribed by the NAIC, is currently 2001 CSO with the Preferred Class Structure,
- Interest is the schedule of rates as developed by the existing SVL,
- Prescribed lapses range from 1% for paid up periods, 5% for permanent level premium plans, 6% for term periods of 5 years or more, and 10% for term periods less than 5 years,
- Term plans with increasing premiums have prescribed shock lapses ranging from 10% to 80%, varying by length of renewal period and percentage of premium increase.

NPM prescribes “adjusted gross premiums” and sets limits on the ratios of PVBs and PVNPs:

- The first year adjusted gross premium is zero,
- Adjusted gross premiums for years 2-5 are 90% of the actual gross premiums,
- Adjusted gross premiums for years 6 and after equal gross premiums,
- At issue,  $PVNP = PVB$  (including death and surrender benefits) + \$2.50/thousand,
- Net valuation premiums are the respective adjusted gross premiums times  $PVB/PVNP$  from the preceding step,
- For any future “segment”, if the ratio of  $PVNP/PVB$  exceeds 135%, reduce those net premiums by a uniform percent such that  $PVNP/PVB$  equals 135%,
- Revise PVNP using the modified net premiums in the preceding step, and then re-compute the net premiums using the new  $PVB/PVNP$  ratio.

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Regulators, having seen the method today for the first time, were still absorbing the details, but did indicate the following concerns:

- Levels of lapse rates, especially shock lapses,
- Effects of mortality anti-selection,
- Potential elimination of the deterministic calculation,
- The degree of aggregation for the stochastic exclusion test and for the NPM calculation.

ACLI indicated that its next steps are to extend the test to reinsurance ceded and to UL with secondary guarantees, both of which it plans to complete by the December meeting. LHATF has some concern about meeting deadlines, since NAIC passed the revised SVL assuming that the Valuation Manual would follow shortly.

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30 October 2009

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