Article from:

Small Talk Newsletter

December 2000 – Issue No. 16

The New Life Risk Based Capital C-3a “Formula” m abd How it Affects Small Companies

by Robert A. Brown

The NAIC has been concerned that the factor approach that has been used for measuring interest rate (C3a) risk was insensitive to the nature of the assets or the relative duration of assets and liabilities. It was decided to refine the formula, capitalizing on cash flow testing models in use for reserve adequacy testing. The resulting new method is effective 12/31/2000. There are two changes to the previous formula:

a) Some companies will have to do stress testing of certain products using stipulated scenarios to develop the RBC amounts for these products

and

b) Companies holding assets that could prepay at the valuation date for a lower amount than the annual statement value must reflect a new item: 50% of the excess of carrying value above the price that would be realized on current prepayment. Callable assets used in the scenario testing required by part (a) would be excluded from this calculation. Typically, this factor would apply to residential mortgage backed investments: IO’s and CMO’s and pass-throughs purchased at a premium.

Although company size doesn’t enter into the RBC instructions or formula, the testing in part (a) only applies to products that were cash flow tested for reserve adequacy. So companies that have no such testing, such as most “Section 7” companies, would have no stress testing to do; the only change would be item (b), above.

For those companies that do cash flow testing, there is an exemption test. Companies “pass” the test if a) The factor-based C3a component is less than 40% of the sum of all the RBC components and b) the company’s RBC ratio would be above 100%, even if the testing for annuity and single premium life products produced results 7.5 times the standard factor.

Review of the RBC filings from 1999 suggests most companies will be exempt from scenario testing as a result of these tests.

So most small companies will be affected by the RBC changes only with respect to the callable asset component. Although it is anticipated that the financial impact of that will be small for most companies, the process of identifying the assets subject to this calculation and determining current “call price” for them needs some attention, since this particular process has never been needed in the past.

“Although company size doesn’t enter into the RBC instructions or formula, the testing in Part ‘A’ only applies to products that were cash flow tested for reserve adequacy.”

“C-3a”

For companies that do cash flow testing and are not exempt, cash flow tested annuity products and single premium life are stress tested using a defined set of 12 severe scenarios or 50 relatively bad scenarios (which include the 12). A weighted average of the resulting capital needs is calculated and used in place of the standard factors. The result may be higher or lower than that produced by the factor approach and the total C3a component is allowed to increase or decrease as a result, but not below half nor above double the result obtained using the factors. Those limits may be widened in the future. Companies that are exempt from the testing may not choose to do it as a way to reduce their capital requirement.

More details of the scenario testing, including the scenario generator itself, as well as the weights to be used in the weighted average and the actual instructions and worksheet, may be found at www.naic.org/products/finance/lrbc3/index.htm.

Robert A. Brown, FSA, MAAA, assistant vice president and actuary at CIGNA Retirement & Investment in Hartford, CT. He can be reached at **bob.brown@cigna.com.**