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## VALUATION AND NON-FORFEITURE LAWS

by John K. Booth

The last major change in the Valuation and Non-forfeiture Laws occurred during the 1940's when the work of the Guertin Committee resulted in the adoption by the National Association of Insurance Commissioners (NAIC) of the Standard Valuation and Non-forfeiture Laws. While there have been a number of amendments to these laws since their adoption, both insurance department and company actuaries have concluded that there is need for a general overhaul of these standard laws to make them more responsive to today's business and regulatory needs.

The Society of Actuaries established a Special Committee on Valuation and Non-forfeiture Laws and the NAIC established a Technical Task Force to review these laws. The report of the Society's Committee was published in January 1976 (see *The Actuary*, March 1976) and was reviewed by the NAIC Technical Task Force and the Actuarial Committee of the American Council of Life Insurance (ACLI). Subsequently, the Society's Committee made further studies covering items not previously reviewed and enlarging some of the recommendations of the original report.

The conclusions reached by the Society's Committee have proven generally acceptable to the other committees realizing that, in some instances, details have yet to be agreed upon before the recommendations become law.

Some of the subjects of major interest are as follows:

**Basic Framework of Laws** — The existing system has worked well over the period of its use and has in practice preserved reasonable equity between terminating and persisting policyholders. The Committee endorsed the principles underlying the present law and urged the retention of its basic framework, at the same time recommending a number of changes intended better to achieve its objectives.

**Mortality Tables** — The Society Special Committee made a number of test calculations of non-forfeiture benefits using a modern mortality table, but made no recommendations to replace the 1958 CSO Mortality Table. They did suggest an age setback of six years for females as a reasonable approximation to values developed from a separate female table. Subsequently, both the NAIC Technical Task Force on Valuation and Non-forfeiture Regulation and the American Council of Life Insurance asked the Society of Actuaries to develop new life insurance mortality tables separately for males and females in order to recognize mortality differentials by sex more pre-

cisely. The Society of Actuaries has appointed a Committee to Establish New Mortality Tables.

**Linkage Between Valuation and Non-forfeiture Assumptions** — One of the important recommendations of the Society of Actuaries Special Committee is the elimination of the linkage between non-forfeiture values and reserves. This recommendation was subsequently supplemented by a special analysis of the problem — see article by John R. Gardner in the November issue of *The Actuary*.

The Committee emphasized in this area and elsewhere that equity is best served by cash value factors that are closest to asset share assumptions and that reserves are not relevant in this regard.

**Expense Allowances** — The Society Special Committee examined the excess initial expense allowance used in the determination of minimum non-forfeiture benefits and concluded there was no urgent need to update it but that revisions could take the form of higher percentages of premiums and lower per thousand amounts. One of the members of the NAIC Technical Task Force did extensive work on this subject with the cooperation of the Life Office Management Association and the assistance of the Special Committee. He concluded that an updated initial expense allowance for all plans should be based upon 125% of premium plus \$10 per \$1000 of insurance rather than upon the present formula which is 65% of premium plus \$20 per \$1000 of insurance for the whole life plans. Because of the shift away from higher premium forms of insurance such as endowment and limited payment life plans, it was felt desirable to simplify the formula rather than to retain the characteristic of the current formula which grades down expense allowances as a percent of premium for the higher premium plans.

The new recommended formula is based on a functional cost analysis of expense data submitted to the Life Office Management Association by 25 large insurers and is more or less representative of the median results of this group of companies. No allowance is made for future inflation in excess first year costs largely because of the conclusion by the Society Special Committee that companies would make provision for such increases when establishing premium rates. The Society Special Committee verified the conclusions of this study but at the same time noted that it marked a significant departure from the approach of the Guertin Committee which attempted to set excess initial expense allowances at a level which would accommodate high cost companies.

(Continued on page 4)

## Valuation and Non-Forfeiture Laws

(Continued from page 1)

*Single Premium Life Insurance Policies and Paid-up Non-forfeiture Benefits* — Under current conditions, new money yields would produce gross single premiums lower than the minimum cash surrender value required by law. The Society Special Committee recommended the adoption of a higher non-forfeiture interest rate for single premium life insurance than that for annual premium life insurance but for conservatism suggested the use of an interest rate to set minimum reserves for single premium life insurance lower than that for single premium annuities.

The Committee also recommended that, in computing minimum non-forfeiture benefits and the minimum cash surrender value of such benefits, companies be permitted to use an interest rate higher than that used to determine cash surrender values for the basic policy. This would enable an insurer to offer more liberal amounts or terms of insurance as a paid-up non-forfeiture benefit on the basis of its current single premium life insurance rates without having to increase cash surrender values.

*Legislation* — In October 1976, draft legislation incorporating the recommendations of the Society Special Committee was submitted to the NAIC Technical Task Force on Valuation and Non-forfeiture Value Regulation and was released by the NAIC as an exposure draft in December 1976. Meanwhile a number of other changes in the Standard Valuation and Non-forfeiture Laws were developed by the NAIC Technical Task Force and the Council Actuarial Committee. The following important recommendations come under this head:

*Standard Non-forfeiture Law for Individual Deferred Annuities* — In recent years the rise in investment yields and the favored treatment of Individual Retirement Annuities under ERISA have increased the market for deferred individual annuities dramatically. About the time the Society Special Committee finished its report, the NAIC Technical Task Force and a Sub-committee of the ACLI began working on a non-forfeiture law for individual deferred annuities. The result of over a year's effort is the Standard Non-forfeiture Law for Individual Deferred Annuities which was proposed by the NAIC Task Force and adopted by the NAIC in December, 1976.

The new law marks a significant departure from past non-forfeiture legislation inasmuch as it is the first such law to base minimum non-forfeiture values directly on gross annuity considerations. The retrospective approach was adopted since many annuities sold today are of the flexible premium variety which makes it difficult to use a prospective approach because of lack of knowledge of future premiums and benefits. The proposal defines minimum non-forfeiture values in terms of an accumulation at 3% interest of 65% of the net considerations for the first contract year and 87½% of net considerations for the second and later contract years. Net considerations are defined as gross considerations less an annual contract charge of \$30 and less a collection charge of \$1.25 per consideration credited. For single premium deferred annuities,

non-forfeiture values are defined as an accumulation at 3% interest of 90% of the net consideration where the net consideration is equal to the gross consideration less a single contract charge of \$75. The level of minimum non-forfeiture values appears to meet the guidelines expressed by the Society of Actuaries Special Committee which suggests a conservative long-term interest accumulation rate, allowance for policy fee and accumulation percentages which provide ample margin for covering reasonable acquisition and administrative costs and also reasonable provision for profit and dividend margins and the cost of annuity guarantees.

*Increase in Statutory Interest Rates and Other Changes In The Standard Valuation Law and In The Standard Non-forfeiture Law For Life Insurance* — Of all the proposed changes in the valuation and non-forfeiture laws, the most urgently needed are increases in the statutory interest rates. Insurers are hindered in recognizing current yields in pricing life insurance and annuity products by reserve requirements based on too low a statutory interest rate. Excessive reserve requirements cause surplus strains, unless insurers either limit their sales or increase prices. For those policies for which non-forfeiture values are required, unrealistic statutory interest rates prevent insurers who wish to do so from offering contracts with lower gross premiums and lower non-forfeiture values than those used for their current policies.

Along with the rise in insurers' investment earnings which averaged about 6.5% for the industry in 1975, has come a greater refinement in the pricing of different products to recognize the higher yields on new investments as compared to the average portfolio yield. For 1975 the yield on new fixed-income investments by 60 companies accounting for about 65% of assets held in general accounts of life insurance companies averaged 9.87%.

The NAIC Technical Task Force assisted by the ACLI developed specific recommendations to increase and refine the structure of statutory interest rates in the Standard Valuation and Non-forfeiture Laws which were approved by the NAIC in December 1976. These recommendations will:

- (1) Increase the statutory valuation interest rate for newly purchased group annuities and for newly issued single premium individual immediate annuities from 6% to 7½%.
- (2) Increase the statutory valuation interest rate for newly issued life insurance and individual deferred annuities from 4% to 5½% for single premium business and to 4½% for annual premium business.
- (3) Increase the statutory non-forfeiture interest rate for newly issued life insurance from 4% to 6½% for single premium business and to 5½% for annual premium business.
- (4) Remove the provisions in the Standard Valuation and Non-forfeiture Laws which stipulate that all statutory valuation and non-forfeiture interest rates shall be 3½% on and after January 1, 1986.

The removal of the provision for automatic reversion of statutory interest rates to 3½% in 1986 is especially important. Since a drop of statutory interest rates in any state to

(Continued on page 5)

## Valuation and Non-Forfeiture Laws

(Continued from page 4)

the 3½% level would affect all companies doing business in that state, the provision threatens to produce such abrupt surplus strains as to severely dislocate or curtail the sale of new life insurance and annuity products.

In addition to the changes in statutory interest rates, the proposal of the NAIC Technical Task Force eliminates the linkage between valuation and non-forfeiture interest rates, defines the commissioners reserve valuation method for most individual deferred annuities and makes a change in the computation of minimum reserves for policies which have heretofore been subject to the deficiency reserve statute.

**Annuity Reserve Valuation Method** — The new definition of the Commissioners Annuity Reserve Valuation Method is designed to clarify the intent of the existing statute. The method would require the comparison of the present value of future guaranteed benefits at each duration with the present value of future required premiums to that duration. The greatest excess revealed by these comparisons would be the minimum reserve for the contract. Thus, if an intermediate non-forfeiture value under an individual deferred annuity, when compared with required premiums to that point, produced an excess with a greater present value than the excess of the present value of the normal annuity benefits over all scheduled future premiums, the former excess would establish the minimum reserve.

**Deficiency Reserves** — The change in computation of reserves for policies which have heretofore been subject to deficiency reserve requirements, would define the minimum required reserve on such a policy as the present value of future benefits less the present value of future valuation net premiums calculated by the method (commissioners or net level) actually used in computing the reserve for that policy but using the minimum valuation standards of mortality and rate of interest. However, the gross premium on the policy would be substituted in this reserve calculation at each contract year where it is less than the valuation net premium described above. If the reserve calculated according to the mortality table, rate of interest and valuation method actually used for the policy were a greater reserve, it would become the minimum reserve for that policy. Thus, a company could strengthen its reserve without being subject to additional reserve requirements if its gross premiums are less than actual net valuation premiums but greater than minimum net valuation premiums.

**Increase in Statutory Valuation Interest Rate for Existing Group Annuities** — Another recommendation under consideration by the NAIC would increase the statutory valuation interest rate used in determining minimum reserve requirements from 3½% to 5% for group annuities purchased prior to the operative date of the 1972 NAIC Amendments to the Standard

Valuation Law. This change would recognize that maturities and reinvestments of the funds underlying much of the old group annuity business which was purchased in the 1940's and 1950's, have raised the average yield on this block of business to about 6%. Any destrengthening of group annuity reserves to the new minimum standard would have to be approved by the insurance commissioner just as any other reserve destrengthening. If excessive reserve requirements on old blocks of group annuity business were reduced, pension writers would have increased capacity either to write non-par group annuity business to fund terminated pension plans or to increase dividends to group annuity contract holders. One principal argument for reducing excessive reserve standards for pension business is that if the private sector, because of too conservative reserve standards, is unable to provide coverage for terminated pension plans, the federal Pension Benefit Guaranty Corporation will have to provide it, and an important segment of the insurance market will be lost to the government.

**Prospects For the Future** — The recommendations of the Society of Actuaries Special Committee and of the NAIC Technical Task Force are probably the most significant proposed changes in the Standard Valuation and Non-forfeiture Laws since they were adopted in the 1940's. As already mentioned, the NAIC adopted or is expected to adopt certain of these recommendations.

When these changes are enacted into law, they should have a material effect on pricing and on the availability of insurance products in the years ahead. However, periodic changes in statutory interest rates represent only a partial solution to the problem of keeping the valuation and non-forfeiture laws in concord with changes in the economy. At a time when the pricing of many life insurance and annuity products is closely related to yields on life insurers' new investments, it is essential to develop a valuation system which can respond to changes in interest rates in a timely manner without being retarded by the years-long process of changing 50 state laws. Although it has been suggested that the valuation and non-forfeiture laws might be abolished so that this objective could be accomplished by regulation, there is no guarantee that such regulation would be uniform throughout the states. What is needed is a new form for the Standard Laws that will make them respond uniformly, automatically, and appropriately to changes in the economy. This could require a complete overhaul of the valuation system and the methods of determining solvency that have been used throughout the past century in the United States. Already committees of the Society of Actuaries and the American Council of Life Insurance have begun to work on this project, but because of its complexity any solution may be several years away. A better means to keep the valuation and non-forfeiture laws both uniform and current would restore and maintain the industry's ability to respond more effectively to the insurance needs of the public. □

### Actuarial Meetings

May 12, The Baltimore Actuaries Club  
May 25, Joint Meeting of Boston and  
Hartford Actuaries Clubs

### Death

Dennis N. Warters