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MINORITY RECRUITMENT PROGRAM

by James C. Harrison

The Society's Career Encouragement Committee is continuing its program of recruiting minority and women students for the actuarial profession through the subcommittee on Minority Recruitment. This is a brief report on the program's recent progress.

The Actuarial Summer Institute, designed to prepare these students for Part 1, is held annually at Lincoln University in Pennsylvania. Thirteen of the students attending the Institute in the past two years have been successful in passing Part 1. Four of these students have also passed Part 2. These results show the progress the program has made.

We are also pleased with the success of our scholarship recipients. During 1975, both Araba Quansah and Kwasi Osei completed degree requirements at the University of Michigan with Miss Quansah becoming an Associate in the Society and Mr. Osei adding Part 3 to his credit. In addition, three scholarships were granted in 1975 to Alwyn Powell, Leonard Gates, and Andronics Castillo. These students are attending Georgia State University, the University of Michigan, and the University of Minnesota, respectively.

During 1975, the subcommittee received several inquiries from potential employers who were interested in offering employment, both full and temporary, to participants of the Summer Institute. We are gratified by these responses and we are grateful to the employers, actuarial clubs, and members whose contributions have made this program possible.

Financial support is needed for the 1976 program. Anyone wishing to make a contribution may do so by making his or her check payable to the Society of Actuaries — Minority Recruitment Program, and forwarding it to James C. Harrison, North Carolina Mutual Life Insurance Company, Mutual Plaza, Durham, N.C. 27701. □

INCOME TAX AND RESERVE VALUATION

by August C. Chow

I would like to comment on John Fraser's fine paper published in *The Actuary*, November, 1972.

Mr. Fraser made a very careful analysis of the relation between the current earnings rate and the taxable interest. In his illustrative calculations, he showed clearly that there was an optimal spread between the current earnings rate and the assumed reserve interest rate to produce the maximum interest deduction — "An increase in the earnings rate above the point at which 'tabular interest' reaches its maximum generates taxable interest of over 100% of the increase in earnings." He further concluded that "companies . . . . must pay a heavier price in taxes than they did in the past for any additional interest yield . . . . as the company's earnings rate increases."

The following is an analysis of the after-tax yield effect which was not discussed in that paper.

Current Earning Rate	"Tabular Interest" Deduction	Taxable Interest	Tax (50%)	After-Tax Yield	Marg. Rate (M.R.) of Taxable Interest	M.R. of After-Tax Yield	Marg. Tax Rate
1	1.200	−.100	0	1.10	−4.5%	100 %	0 %
1½	1.725	−.075	0	1.65	4.5	100	0
2	2.200	0	0	2.20	13.6	100	0
2½	2.625	.125	.0625	2.69	22.7	88.6	11.4
3	3.000	.300	.1500	3.15	31.8	84.1	15.9
6	4.200	2.400	1.2000	5.40	86.4	56.8	43.2
6½	4.225	2.925	1.4625	5.69	95.5	52.3	47.7
7	4.200	3.500	1.7500	5.95	104.5	47.7	52.3
7½	4.125	4.125	2.0625	6.19	113.6	43.2	56.8
8	4.000	4.800	2.4000	6.40	122.7	38.6	61.4
11	2.200	9.900	4.9500	7.15	177.3	11.4	88.6
11½	1.725	10.925	5.4625	7.19	186.4	6.8	93.2
12	1.200	12.000	6.0000	7.20	195.5	2.3	97.7
12½	.625	13.125	6.5625	7.19	204.5	−2.5	102.3
13	0	14.300	7.1500	7.15	213.6	−6.8	106.8

The first three columns are reproduced from Mr. Fraser's paper, the first column shows the current earnings rate, the second column shows the "tabular interest" deduction and the third column shows the taxable portion of the interest earnings. The fourth column shows the tax figures, asssuming that the corporate tax rate is 50% of the taxable interest. The fifth column shows the after-tax yield of the current earnings rate, including the earnings on the assumed 10% surplus. The sixth to eighth columns show the marginal rates of taxable interest, tax and after-tax yield respectively for each ½% increment in the current earnings rate.

The results are:

(1) The after-tax yield increases as the current earnings rate rises, peaks at an earnings rate of 12% and then decreases.

(2) Deductions for required interest increases from zero as the current earnings rate rises, peaks at an earnings rate of 6½% and then decreases to zero.

(3) The taxable interest and the tax increase homogeneously as the current earnings rate rises.

There would appear to be no relationship between the peaking of the tabular interest deduction and the marginal tax effect — in fact, the marginal tax rate increases at a constant rate 4.5% for each ½% increment in the current earnings rate.