

aged wife, mother, child, potential widow's benefit of aged wife or mother, and lump-sum death benefit, but excluded those arising from potential wife's and widow's benefits of young wives currently ineligible for benefits because of age.

In the same study, if only old-age benefits and lump-sum death payments were considered, the value of contributions (compounded at 3 percent) as a percentage of the value of benefits (discounted at 3 percent) would be 7 percent and 4.1 percent for male and female beneficiaries in sample 1; 9.7 percent for males and 4.8 percent for females in sample 2.

For different categories of persons selected on the basis of their family status and occupation, Elizabeth Deran has presented contribution-to-benefit estimates for imaginary individuals.³ For the workers whose benefits were influenced by *family status*, their contributions as a percent of benefits ranged from (a) 9 percent for a married man age 65 with a never-employed wife age 35 and two children ages 3 and 5, to (b) 13 percent for a married man age 65 with a never employed wife age 62 and one child age 15, and to (c) 21 percent for either a single man age 65 or a married couple, both age 65 and both of whom had worked. In the group of those whose contributions were affected by *occupation* because of the different dates at which various occupations first came under social security, the percentages ranged from (a) 8 percent for a military serviceman with wife never employed, both age 65, to (b) 10 percent for a farm worker with wife never employed, both age 65, and to (c) 23 percent for a nonfarm self-employed individual.

Miss Deran's figures were computed with the following assumptions: (1) For an employed person, only his or her portion of the social security taxes was considered; for a self-employed individual, the entire social security taxes paid were taken into account; (2) workers always earned at least as much as the maximum taxable earnings; (3) contributions were compounded at 3 percent interest and benefits were discounted at the same rate; (4) contributions were made for 29 years from 1937 through 1965; and (5) benefits were received for 10 years from 1966 to 1975.

Colin D. and Rosemary G. Campbell have also considered the relationship between contributions and benefits.⁴ They estimated that these workers retiring in 1967, 1972, 1980 (their respective ages in 1937 being 35, 30, and 22) will all be gainers, for their contributions will last only 2.3, 3.9, and 7 years, respectively. Their estimate also showed that a retirant in 1992 (age 22 in 1949) would about break even, with his contributions a little more than necessary to pay benefits for 14 years.

The following assumptions used by Campbell & Campbell were different from those in other studies: (1) They considered only the old-age benefits, and they used only 80 percent of contributions (that is, allowing 20 percent of contributions as the cost for survivors and

³ Elizabeth Deran, "Income Redistribution under the Social Security System," *National Tax Journal*, vol. XIX, No. 3, September 1966, pp. 280-283.

⁴ Colin D. and Rosemary G. Campbell, "Explanation of Computations of Contributions versus Benefits Under the Federal Old-Age Insurance Program," an unpublished manuscript by courtesy of the authors.