TABLE 5.—COMPARISON OF COST-BENEFIT RATIOS MADE BY MYERS AND OPPAL, PETERSON, AND CAMPBELL

IIn percentl

Retirement date	Myers and Oppal 1		Peterson		Campbell
	Interest rate used				
	3 percent	3 percent	3½ percent	4 percent	4 percent
	(1)	(2)	(3)	(4)	(5)
Married man: 1962 1965 1970 1980 1990 2000 2010 Single man: 2010	7. 6 10. 2 16. 0 31. 4 47. 8 66. 6 78. 6 132. 6	7. 2 9. 5 14. 7 29. 9 47. 6 66. 8 82. 7 139. 7	7. 9 10. 4 16. 2 33. 6 54. 3 77. 9 97. 9 164. 9	8. 6 11. 4 17. 8 37. 7 62. 0 90. 9 116. 2 195. 1	12 16 55 165 248

¹ Prior to 1965 amendments.

Source: Robert J. Myers and Bertram Oppal, "Studies on the Relationship of Contributions to Benefits in Old-Age Benefit Awards," actuarial note No. 20 (Washington, U.S. Department of Health, Education, and Welfare, Social Security Administration, June 1965, table 3; and Ray M. Peterson, addendum to table 3 of actuarial note No. 20, issued June 1965 by the Social Security Administration. Elizabeth Deran uses estimates by Ray M. Peterson in her study, "Income Redistribution Under the Social Security System," Nat. Tax Jour., XIX (September 1966), pp. 281 and 284. Estimates by Peterson were also used in the Tax Foundation, "The Economic Aspects of the Social Security Tax" (New York, Tax Foundation, 1966), pp. 48

Because both the study by Myers and Oppal and that by Peterson assume that the tax on the employer is not shifted to the worker, their estimates of cost-benefit ratios are considerably smaller than those made in this study. (See table 5.) This difference alone would cause their estimates of the cost to the worker of social security benefits to be one-half those in this study. Another difference between their estimates and those here is that they did not deduct 20 percent of the taxes paid in for survivors and disability insurance. This difference would tend to make their estimates larger than those in this study. A third difference is the interest rates used. The use of 3 percent by Myers and Oppal is lower than the rates assumed since 1957 in this study and would tend to make their estimated cost-benefit ratios relatively low. They also assume the person started work at age 20 rather than at age 22—tending to make their cost-benefit ratios slightly higher.

(e) Should an adjustment be made for the tax-free nature of social security benefits?

The estimates of cost-benefit ratios in this study have not taken into consideration the tax-free status of social security benefits. To persons in high income brackets, social security benefits are worth more than their face value. For example, if a retired person is in the 19 percent bracket, additional tax-free income of \$2,400 is worth over \$3,000. If a person is in the 50 percent bracket, it is worth \$4,800. The cost-benefit ratios of retired persons in high income brackets, taking account of this factor, would decline as their income increases.

(f) Should a tax-free build up of contributions be assumed?

The estimates of the value of the taxes contributed in tables 2, 3, and 4 assume that the accumulated interest earned is not taxed as