

If increases in revenues from payroll taxes based on increases in the productivity of labor are needed in the future to give young workers their money's worth, such funds will not be available to support further developments of the social security system as an antipoverty program. The historical development of the social security system has been toward the granting of more adequate benefits to persons regardless of whether or not they have paid for them. If this trend continues, substantial additional revenue will be needed to support both the insurance and the welfare objectives of the social security system. Continuous increases in the maximum wage base and either higher payroll tax rates or the development of other sources of revenue will probably be necessary.

III. SOME PROBLEMS IN MAKING COST-BENEFIT COMPARISONS

The computer programs used to calculate the total value of the taxes paid in and the benefits expected are shown in figures 1 and 2.⁵ The program in figure 1, entitled "Taxes," illustrates the method of calculating the total value of the taxes paid in by a young worker entering the system at age 22 in 1967. He is scheduled to pay \$514.80 per year in taxes for 1967 and 1968, \$580.80 per year from 1968 to 1971, and \$640.20 per year from 1972 until retirement 37 years later. A rate of interest of 4 percent is assumed. The value of the taxes he pays in is \$68.076, as shown in table 3.

The program in figure 2 entitled "Annuity" illustrates the method of calculating the value of the benefits expected by a worker retiring in 1967 who has earned the maximum benefit and has a wife who is also 65. They are entitled to a benefit of \$2,447 per year. It is assumed that they can expect to live 14 years and that the rate earned on the unused balance is 4 percent. The value of their benefits is \$26,631, as shown in table 2.

(a) *What rate of interest should be used?*

To estimate the value of taxes paid by an employee and his employer, the tax payments of persons retiring in 1967 were compounded at current rates of interest on alternative forms of saving. The following rates of interest on E bonds were used until 1963 and 4 percent, the rate on savings deposits, was used thereafter:

<i>Rates of interest on series E, U.S. savings bonds</i>	
<i>Years</i>	<i>Rate of interest (percent)</i>
1937 to mid-1952	2.9
Mid-1952 to 1956	3.0
1957 to mid-1959	3.25
Mid-1959 to 1962	3.75

For discounting future benefits and for estimating the value of taxes paid in the future, a rate of interest of 4 percent was considered to be as good a forecast as possible. For persons retiring in 1967, changes in the rate of interest used do not change significantly the resulting cost-

⁵ These programs are written in basic. See John G. Kemeny and Thomas E. Kurtz, "Basic," third edition. (Hanover, N.H., Dartmouth College Computation Center, Jan. 1, 1966).