

The annual compound yield between any 2 years can be derived from the slope of the line on this logarithmic chart. Some of these yields are given for selected intervals in table 1. Except for a few very short intervals like 1929–32 the yield on equity greatly exceeded that on savings. Even an investment in this collection of stocks on the eve of the 1929 crash would have greatly outperformed the savings series in the long run, even though the stock series would not have caught up until 1946. Also, during the postwar rise in interest rates since 1951, savings yielded only 1.5 percent compared to 13 percent for the common stock series.

The four specified rates of return were chosen on two considerations. First, in terms of projections it was appropriate to admit the diverse options with respect to the long-run rate of return which past experience suggests are likely to be available. Secondly, it was essential that the assumed range be wide enough to cover the yields provided individuals under the social security program in various circumstances. This was required for accurate interpolation of these implied rates of return on contributions.

TABLE 1.—ILLUSTRATIVE ESTIMATES OF THE REAL ANNUAL RATE OF RETURN ON ALTERNATIVE INVESTMENTS
SELECTED INTERVALS, PERCENT

Interval	Savings accounts	Industrial common stock
1919–65.....	1.5	9.2
1929–32.....	12.0	–27.7
1929–65.....	0.9	7.0
1932–37.....	1.7	25.1
1937–42.....	–0.6	–6.9
1942–46.....	–2.5	17.4
1946–65.....	0.1	11.2
1951–65.....	1.5	1.30

Source: See chart 1.

RESULTS FOR THE RECIPIENT OF AVERAGE EARNINGS

As indicated above the assumptions of the model permit the lifetime average tax accumulations to be expressed as real magnitudes and as multiples of the average benefit in 1966. The nature of the dependence of these on our assumptions (including only the two intermediate rates of return) is indicated in table 2.³⁰ These results show the expected relationships. The estimated lifetime tax plus imputed return is greater for high growth rates, high cost projections and the early starting age. The total accumulation is greater the higher the assumed rate of return.³¹

³⁰ The postulated rates of return of 1.5 and 8 percent are omitted here for brevity. However, the relationships in this range are included in later estimates of an individual's effective rate of return under the retirement program.

³¹ No distinction has been made here between the tax rates on the self-employed and others. Since the tax on the self-employed is 25 percent below the combined employer-employee rate, the lifetime tax on employed workers must be somewhat higher than shown in the table and the tax on self-employed 25 percent below that of the employed. The differential is scheduled to become even greater in the future. However, if self-employed income were corrected for imputed profits, their tax rate on earnings might be about the same.