

of the tax-benefit relationship provided to different groups under the system would be arbitrary. More meaningful is the implied rate of return for each group—the rate which equalizes the value of the tax and benefit streams. These are given in table 5 and may be compared with alternative yields on investment which have been available in the past, such as those illustrated earlier in chart 1.³⁶ If past experience is a plausible guide, social security participants in these categories will fare much better than they would if offered the option of a private savings program. On the other hand these relatively attractive rates of return fall considerably short of the long-run yield on equity capital in recent decades.

TABLE 5.—ESTIMATED REAL RATES OF RETURN ON CONTRIBUTIONS FOR RECIPIENTS OF AVERAGE EARNINGS, VARIOUS ASSUMPTIONS, PERCENT

Type of projection, starting age, family composition	r=2 percent	r=3 percent
Low cost, 18, male ¹	2.92	3.83
Low cost, 18, female ²	3.43	4.35
Low cost, 18, couple ³	4.52	5.51
Low cost, 22, male ¹	3.53	4.58
Low cost, 22, female ²	4.06	5.11
Low cost, 22, couple ³	5.23	6.28
High cost, 18, male ¹	2.78	3.68
High cost, 18, female ²	3.28	4.21
High cost, 18, couple ³	4.38	5.32
High cost, 22, male ¹	3.42	4.46
High cost, 22, female ²	3.92	4.98
High cost, 22, couple ³	5.12	6.16

¹ Single male or married male with wife who worked.

² Single female or married female with nondependent husband.

³ Couple eligible for wife's benefit.

The yields projected for these average earners under various assumptions range from 2.78 percent to 6.28 percent. This spread indicates substantial income redistribution among categories of participants. However, even the least-favored group (single male, starting work at 18, facing a high-cost system and a slow-earnings growth rate) would fare much better over the long run than private savers have in the past. Clearly the key assumption of the present analysis is that benefits keep pace with earnings. Insofar as the assumption holds, the social security participant, like an investor in equities, generally has a considerable advantage over an investor in fixed dollar obligations subject to inflationary erosion.

D. THE EFFECT OF INDIVIDUAL EARNING LEVEL ON THE RATE OF RETURN ON CONTRIBUTIONS

Until now the ceiling on taxable earnings and the relationship of benefits and past earnings have not been considered. In terms of trans-

³⁶ The estimated yields here and later were obtained by semilogarithmic interpolation. Inspection showed a close linear relationship between $\log T/B$ and the four specified rates of return i . The estimates are linear interpolation for the value of i yielding $\log T/B=0$.