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## Appendix B

which is the ratio of the present values at the initial age of earnings discounted at the market rate to earnings discounted at a zero rate. This ratio is obviously positively related to the market rate, approaching zero for an infinite, and unity for a zero, rate.

"Permanent" earnings are defined either as

$$E_p(j) = E(j) - D(j), \quad (30)$$

or as

$$E_p(j) = rW(j). \quad (31)$$

so

$$E(j) = D(j) + rW(j), \quad (32)$$

and, therefore, equation (29) can be written as

$$d = \frac{\bar{D}}{\bar{E}} = \frac{\frac{1}{m} W(0)}{r\bar{W} + \frac{1}{m} W(0)}. \quad (33)$$

Hence  $d$  would be smaller the smaller the ratio of initial to average wealth. Section 2 of Chapter VII implies that the latter, in turn, would be smaller the faster the rate of increase in earnings because the rate of increase in wealth is positively related to the rate of increase in earnings.

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