

IV. PROJECTIONS OF PENSION FUNDS

The explosive growth of pension funds, particularly that of corporate noninsured funds, has long since attracted much attention, and has given rise to various projections of growth to 1975 or 1980. Perhaps the most widely quoted are those of Daniel Holland, published by the National Bureau of Economic Research.¹⁸ These estimates suggest a rise of private pension funds from about \$52 billion in 1960 to around \$200 billion in 1981, or from \$72 billion in 1960 to \$325 billion in 1981, if State and local government funds, treated separately by Holland, are added in.¹⁹

In the light of experience since the estimates were prepared, and on theoretical grounds as well, these estimates may well be too low, perhaps considerably too low.²⁰ In my view, which is not nearly so carefully supported as is Holland's, it appears that \$450-\$470 billion is a more likely estimate; the derivation of this estimate is given below.

Holland's group of estimates begins with four projected series of covered employment, and further projections of numbers of retired beneficiaries. Contributions per covered employee, and mean benefit per retired beneficiary, are also estimated. These, with assumed fund earnings, are used to build up a year-by-year set of estimates for inflows, outflows, and fund balances from 1962 to 1981. Numerous combinations of assumptions are used, but the sets which Holland regards as most likely produce the results cited above.

Most of the sets produce a pattern of rising fund balances, though with absolute amounts of annual increments declining in the later years. This implies, of course, growth at declining rates; in fact, some of the sets produce fund decumulation. The most likely results are heavily influenced by the use of a constant annual contribution per employee throughout the 20-year period, while benefits per retired beneficiary are permitted to rise. The assumption of a constant contribution per worker is based on the 1950-61 experience, supported by an analysis of likely developments in coverage, fund earnings, and benefit levels.²¹

Holland also prepares several alternative estimates, in one of which contributions and benefits rise at 4 percent per year (the average rise in money wages, 1950-61). This, of course, leads to higher projections (about 15-20 percent higher in 1981).²² This is the highest of all his estimates, but appears still to be biased downward in that fund earnings are estimated to rise only 4 percent per year whereas fund totals in the earlier years are rising much more than 4 percent. One would suppose that earnings would be related to fund totals.

All of Holland's estimates implicitly assume a decline in the aggregate funding percentage; that is, the extent to which accumulated liabilities are covered by segregated pension fund assets.²³ This may

¹⁸ Daniel M. Holland, *Private Pension Funds: Projected Growth*, Occasional Paper 97, National Bureau of Economic Research (New York, 1966). Holland includes State and local government funds in his study.

¹⁹ *Ibid.*, p. 143.

²⁰ As a result of time elapsed between the preparation of the estimates and publication, Holland was able to compare actual with predicted results for 1962-65. (*Ibid.*, p. 87.) After adjusting for an upward revision of \$2.5 billion in 1961 (Holland's base year), his estimates fall short of realized amounts by an increasing sum. Annual increments for 1964 and 1965 are underestimated considerably.

²¹ *Ibid.*, pp. 57-58.

²² *Ibid.*, p. 118.

²³ Holland has taken the position that he is implicitly assuming that past funding practices will continue, *Ibid.*, p. 146. I believe that he has, perhaps unawares, implicitly assumed a declining funding percentage. My argument follows in the text.