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D. M. H.

Foreword

This is the second report to come from the National Bureau's research project on the economic aspects of pensions.¹

The development of the present structure of public and private pension programs in the United States forms a dynamic chapter of recent economic history. Only during the past two decades have the various programs emerged as important factors in the distribution of income and in the saving and investment process. The record of the past, then, provides inadequate perspective for the study of economic aspects of pensions. Long-term influences on the economy could hardly be identified with accuracy from the formative years of the 1930's and 1940's or even the explosive-growth years of the 1950's.

As a major part of the National Bureau's research on the economics of pensions, therefore, it was essential that consideration be given to the size and shape of fund flows in the 1960's and 1970's. Will the pattern of the past describe the trends of the future? Despite the elements of continuity and stability in the structure of arrangements designed to effect long-term transfers of income, will not the evolution of such a structure change its impact on the economy over a decade or two? These are among the major questions considered by Daniel M. Holland in this paper.

Various programs of the federal government (the Old-Age and Survivors Insurance, Railroad Retirement, and Civil Service Retirement systems, for example) are not considered in these projections, even though they have some reserves accumulated, except as their operations may affect the pension programs for employees of private organizations and state or local governments. The reason is simply that the federal programs are not important factors in the accumulation of funds for investment in corporate securities and mortgages. Since one of the major objectives of the research project is to appraise the impact of

¹ The first report is Phillip Cagan's *The Effect of Pension Plans on Aggregate Saving: Evidence from a Sample Survey*, Occasional Paper 95, New York, National Bureau of Economic Research, 1965.

the pension structure on the capital markets, our concern is primarily with private industrial and state and local government pension programs. Their funds are major participants in the capital markets. The federal programs, in contrast, have their primary economic impact through the redistribution of income: the transfer payments which roughly match current benefit payments with payroll taxes and other forms of contribution.

The effects of transfer payments as well as fund accumulations are analyzed in my forthcoming summary volume on the economic aspects of pensions, but the concern in this study is primarily with the rates and amounts of fund accumulations: both the flow of funds into the capital markets and the portfolios created by these flows.

Given all of the uncertainties which attach to estimates of future levels of economic activity and income, projections such as these are not likely to prove to be highly accurate forecasts of actual fund flows. The value of the projections, indeed, is not to be measured by their accuracy in probing the future; rather, it is in their demonstration of the probable effects of the range of influences which are already at work or may soon be set in motion. Daniel Holland has, therefore, developed a range of projections in order to illustrate the effects of different assumptions as to coverage, contribution rates, benefits, and fund earnings.

The emphasis in Holland's work is on fund flows and portfolios of assets as they may *reasonably* be expected to develop over the years ahead. Reasonableness is not a precise quality. In this case, it reflects the judgment of a social scientist, who takes into account the behavior of the people involved, institutional factors, and the evolutionary development of economic processes. Furthermore, the reasonable projection is not necessarily that which ought to be correct in an actuarial sense or which might provide some desired level of adequacy for benefits.

Logic and mathematics suggest that certain precise relations exist between current contributions to a pension plan and future benefit payments. However, these relations assume the intention to meet the full cost of the plan in equal increments over the working life of the covered employee. This would be analogous to the purchase of an annuity from a life insurance company by an individual for his own benefit; in such a case, the terms are fixed and the premium calculated

accordingly. For a group of employees, however, the benefits may be changed and the extent to which they are funded or insured may vary between employees and between different periods of time. Furthermore, those plans which specify the contributions but not the benefits may produce a still different pattern of fund flows.

Holland's concern, therefore, is with identification of the range of magnitudes within which the operations of pension programs are likely to be found a decade or two hence. The assumptions regarded by him as most reasonable are clearly explained in his text, and the effects on the projections of changing those assumptions are illustrated in his tables.

Certain of his conclusions have very important implications for the economy. For example, by 1980 the number of men receiving a private industrial pension, including those under age 65, will be equal to about half the number of men 65 and over. This compares with a fraction of less than one-quarter in 1965. For women, the comparable increase in pensioners by 1980 is likely to be from 6 to almost 18 per cent of those who have attained age 65. Total benefits would rise from a \$2.8 billion annual rate in 1965 to almost \$10 billion in 1980. In addition to the transfers of income through the OASI system, therefore, we can foresee this substantial addition to the incomes of older people as a stabilizing influence on consumer spending and as a basis for the expansion of markets in which they are important factors.

This growth in benefits, reflecting the evolution of the private pension structure, produces an important change in the pattern of receipts and disbursements. In 1965, benefits were covered by earnings on the accumulated assets, and amounts contributed represented a net addition to assets. By 1980, this will almost be reversed, with contributions about equal to benefit payments and the growth being only slightly in excess of portfolio earnings. Despite further increases in the net addition to assets each year, the rate of growth during this transition period slows materially. Nevertheless, accumulations in 1981 of \$200 billion, with a net increase in assets for that year of \$7.4 billion, would suggest that private pension funds will be major suppliers of funds and that their portfolio shifts could have important influences on the capital markets.

An even more striking result of the study is the distinct possibility that state and local government retirement systems may grow even

more rapidly. Accumulations could reach almost \$120 billion by 1981, with a net increase in assets of \$9.3 billion for that year. Thus, in another fifteen years, it is quite possible that these funds will be participating in the capital markets on a larger scale than private industrial pension funds.

These projections, which are summarized in Chapter 8, should aid our understanding of the consequences of new institutional arrangements. Tracing the pattern of future fund flows is essential to our comprehension of the future consequences of present actions. To repeat, the pattern sketched by Holland in these pages is a likely one, not the inevitable one. The process which he describes evidences the dynamic forces at work in our society. But thoughtful exploration of the economic effects of new arrangements must rest on these kinds of projections if it is to look forward to the emerging questions about the saving and investment process, instead of blandly chronicling past events.

ROGER F. MURRAY

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