

differences in length of life are characteristic of different races or income groups or areas. Costs and benefits undoubtedly would not be as closely related as is likely under private insurance.

There is precedent for detailed cost-benefit analysis for tax purposes in the Federal highway program.¹⁸ The problems involved in relating benefits to contributions for social insurance are probably less complicated than for highway programs. The very fact that cash payments and receipts are involved, rather than benefits that must be estimated, simplifies the problems. Social insurance is analogous to private group insurance rather than to individual life insurance, and the problems of dealing with particular age groups as a whole, rather than with individual risks, are simpler to handle.

Moreover, the proposal that individual contributions be actuarially related to benefits is not a new one. It has been explored by the Social Security Administration and by various study commissions and individual experts in the past.¹⁹ Other countries have relied in varying degrees on a contributory, wage-related, insurance program.

WELFARE VERSUS INSURANCE COSTS

How much would a social insurance system cost if welfare elements were largely eliminated? The answer would depend in part on the extent of risks covered as well as on the definition of such elements.

One way of estimating the redistributive element by income level would be to examine OASDI benefit levels in relation to "actuarially justified" pensions. Such estimates have been made by Henry Aaron, but he did not carry them to the extent of estimating an aggregate amount of redistribution involved.²⁰ Nevertheless, his estimates show a benefit-contribution ratio at low-wage levels of two to three times the ratio at maximum taxable income levels.

Another way of estimating the order of magnitude of the redistributive element in social security is to assume that the aged at low-income levels are the major beneficiaries of the redistributive elements in the system. Recent estimates indicate that about one-third of OASDI beneficiaries would have income above "poverty levels" (\$1,500 for single persons and \$1,900 for a couple) without OASDI benefits. About 41 percent of beneficiaries are kept above "poverty levels" by OASDI payments.²¹

¹⁸ Under the Highway Revenue Act of 1956, the Bureau of Public Roads was directed: "to make available to the Congress information on the basis of which it may determine what taxes should be imposed by the United States, and in what amounts, in order to assure, insofar as practicable, an equitable distribution of the tax burden among the various classes of persons using the Federal-aid highways or otherwise deriving benefits from such highways. In order to carry out this purpose, the Secretary of Commerce, in cooperation with other Federal officers and agencies and the State highway departments, was directed to make a study and investigation of—

(1) The effects on design, construction, and maintenance of Federal-aid highways, of the use of vehicles of different dimensions, weights, and other specifications, and the frequency of occurrences of such vehicles in the traffic stream;

(2) The proportionate share of the design, construction, and maintenance costs of the Federal-aid highways attributable to each class of persons using such highways; and

(3) Any direct and indirect benefits occurring to any class, in addition to benefits from actual use of such highways." (*Supplementary Report of the Highway Cost Allocation Study*, H. Doc. 124, 89th Cong., 1st sess., Mar. 24, 1965, p. III.)

¹⁹ Robert M. Ball, "What Contribution Rate for Old-Age and Survivors Insurance?" *Social Security Bulletin*, July 1949, pp. 2-9.

²⁰ "Income Transfers Under Social Security," in Otto Eckstein, ed., *Studies in the Economics of Income Maintenance* (Washington, D.C., the Brookings Institution, 1967), pp. 61-72.

²¹ Ida C. Merriam, "Social Security Benefits and Poverty," Research and Statistics Note No. 6, Feb. 24, 1967, table 2.