

eter or will require that certain relations hold among the values of several parameters. Results of this form, while mysterious and unsatisfactory to the layman who wants simple answers, can have tremendous power in simplifying the problem of parameter specification.

We have provided in this paper a limited but hopefully instructive example of the use of general mathematical models of social and economic mechanisms to specify parameters in a planning model. It will be recalled that the model of section III, while quite simple and abstract, did, nevertheless, yield useful restrictions on the form of the equity constraint and on the value of α in the linear programming model. The continuous model was also useful in clarifying the issues involved in specifying a limit on the terminal obligation, $O(T)$, in the linear programming model. Thus we would stress the essential complementarity of the models developed in sections III and IV. The linear programming model provides a means of planning and an explicitly systematic means of applying general theories to the planning process. The continuous model is a means of deducing restrictions on the parameters and structure of the linear programming planning model.

At present, parameter specification would, in practice, have to be accomplished under the dominant influence of informed, intelligent, subjective judgment. With time, the accumulation of experience and reliable theory should narrow the range of subjective discretion and decrease the expected impact of subjective error. We would emphasize that the existence and use of a planning procedure that invites the application of theory is critical to the evolutionary development of a symbiosis of theory and practice.

General and abstract models, framed to elucidate essential characteristics of a social security system, or one of the systems that interact closely with the social security system, are thus seen to be doubly useful: they further general understanding and they can serve specific purposes in social security planning. The model of section III, while of some use in both respects, is neither comprehensive nor essentially novel. A fuller understanding of the social security problem requires relaxation of the assumptions we have made to isolate a simple, tractable, initial problem. Two more general problems are certainly germane. The first problem involves optimal schedules of tax rates and benefits. Here it should be noted that the deduction of necessary and/or sufficient characteristics of optimal schedules could be very useful in constraining a planning model. The second problem arises from considering feedbacks of the social security system on the work force, the working span and on output. It is plausible that definitive work on these problems, and others related to the use of the social security mechanism, would be stimulated by a social security planning operation that used mathematical programming methods.