A REEXAMINATION OF THE PURE DAVID CASS, MENAHEM É. YAARI: CONSUMPTION LOANS MODEL

The discussion of retirement income arrangements has revealed certain theoretical issues; this paper is addressed to two of these. First, it demonstrates that, in an economy consisting only of households, efficient retirement income arrangements whether funded or pay as you go are current transfer plans. All output produced in a period is consumed during that period in some proportions by the economically active and the economically inactive. In order to avoid the loss of efficiency associated with the holding of unproductive stocks of goods, a funded arrangement, however, requires that there be a financial intermediary to keep account of each active household's contribution to the current income of the economically inactive and its corresponding claims on the output of active households in future periods. This is one aspect of efficiency in retirement income arrangements: Does the scheme permit an economical allocation of income

For a prodigal people, the financial intermediary feasibly may be a private institution but, for a frugal people, necessarily must be a public institution and, moreover, one whose willingness to issue debt is not constrained by conceptions of what is prudence in the affairs of an ordinary household. This result may appear to be purely a consequence of unrealism in the model, for why should not the introduction of a business sector, holding a stock of productive assets, provide an outlet for household savings? Professor Aaron points out that his conclusion rests on the assumption that the rate of eco-

nomic growth does not depend upon whether the retirement income scheme is funded or unfunded. Yet, if pension saving is devoted to expansion of the capital stock, the rate of growth will be higher with than without funding. If the addition of pension saving to total saving means that aggregate planned saving regularly exceeds planned investment, the rate of economic growth will be lower with funding, unless this excess is offset by Government deficits. This is the point which

Professor Blackburn makes.

Imagine an economy in which all investment is carried out by business firms. Suppose, further, that investment, whatever its annual rate, is never either more or less than the available supply of business retained earnings. Then, in this economy, investment equals business saving and the rate of economic growth is independent of household saving, at least to the extent that growth is uniquely a function of business investment and net household saving is always offset by Government deficits. In such an economy, the pure consumption loans model is exactly applicable and the decision to fund a retirement income program actually is a decision to debt finance a portion of Government expenditure, unless households can be persuaded to debt finance consumption to the extent of pension saving.

In our own economy, the nonfinancial business sector, in fact, is largely self-financed and a theoretical model which treats all saving as taking the form of loans for consumption (government spending being regarded as collective consumption) is an approximately exact representation of reality. We observe, for example, that in recent years