

## **Choice of Technique in the Robinson-Solow-Srinivasan Model**

*M. Ali Khan, Johns Hopkins University*

We report results on the optimal "choice of technique" in a model originally formulated by Robinson, Solow and Srinivasan (henceforth, the RSS model) and further discussed by Okishio and Stiglitz. By viewing this vintage-capital model without discounting as a specific instance of the general theory of intertemporal resource allocation associated with Brock, Gale and McKenzie, we resolve long-standing conjectures in the form of theorems on the existence and price support of optimal paths, and of conditions sufficient for the optimality of a policy first identified by Stiglitz. We dispose of the necessity of these conditions in surprisingly simple examples of economies in which (i) an optimal path is periodic, (ii) a path following Stiglitz' policy is bad, and (iii) there is optimal investment in different vintages at different times.