

FOLDES, Lucien Paul

**Born** 1930, Vienna, Austria

**Current Post** Prof. Econ., LSE, London, England, 1979-96. Emeritus 1996-.

**Past Posts** Ass. Lect., Lect., Reader Econ., LSE, 1951-55, 1955-61, 1961-79; British Army, 1952-4; Rockefeller Travelling Fellow, USA, 1962.

**Degrees** BCom, Diploma Bus. Admin., MSc LSE, 1950, 1951, 1952.

**Principal Fields of Interest** D9 Intertemporal Choice and Growth; D8 Information and Uncertainty. G Financial Economics.

**Publications** *Articles*: 1. 'Imperfect capital markets and the theory of investment', *REStud*, 18(3), June 1961; 2. 'Income redistribution in money and in kind', *Ec*, N.S., 34, Feb., May 1967 & 35, May 1968; 3. 'Expected utility and continuity', *REStud*, 39(4), Oct. 1972; 4. 'Optimal saving and risk in continuous time', *REStud*, 45(1), Feb. 1978; 5. 'Martingale conditions for optimal saving: discrete time', *J Math E*, 5(1), March 1978; 6. 'Quarterly returns to UK equities 1919-1970' (with P. M. Watson), *Ec*, 49, May 1982; 7. 'Conditions for optimality in the infinite-horizon portfolio-cum-saving problem with semimartingale investments', *Stochastics*, 29, 1990; 8. 'Certainty equivalence in the continuous-time portfolio-cum-saving model', in *Applied Stochastic Analysis*, M. H. A. Davis and R. J. Elliott (eds.), Gordon & Breach, 1991; 9. 'Optimal sure portfolio plans', *Mathematical Finance*, I, April 1991; 10. 'Existence and uniqueness of an optimum in the infinite-horizon portfolio-cum-saving model with semimartingale investments', *Stochastics* 41, 1992. 11. 'The Optimal Consumption Function in a Brownian Model of Accumulation' Parts A & B, LSE/STICERD Theoretical Economics 297 & 310, 1996.

**Principal Contributions** My work falls broadly into two periods, say before and after 1970. During the earlier period I was mainly interested in theoretical and applied micro-economics. Papers 1-2 above are from this period, and further details appear in the second edition of this Dictionary. At the same time I studied mathematics, particularly analysis and probability, gradually shifting the emphasis of my work in this direction.

My first publication on mathematical decision theory was No.3 on expected utility, which sorts out systematically the relationships between (a) assumptions about continuity of preferences with respect to alternative topologies on a space of lotteries and (b) analytic properties of the corresponding cardinal utility function. Since completing this paper I have specialised increasingly on problems of risk in investment decisions. On the applied side, I worked on the use of probabilities in project evaluation and on the history of returns to UK quoted securities, see No.6. My main interest was, and remains, in stochastic process models of capital accumulation. My first publication in this field was No.4, which considers a continuous-time, stochastic model of optimal saving, proving the existence of an optimal plan and characterising this plan by means of martingale properties of the shadow prices. A related discrete-time model was considered in No.5. These were among the first papers to make substantial use of martingale methods in financial theory. The work was extended into continuous-time portfolio-cum-savings models, leading to papers 7-10. No.7 was among the first papers to consider general semimartingales as models of price processes, while Nos.9 and 10 were among the first to make use of random measures in models of this type. Other related work, still in progress, deals with the properties of optimal consumption functions in continuous time stochastic growth models, involving the study of certain two-point boundary value problems for second order ordinary differential equations, see No.11.