It is a pity that this monograph does not contain a discussion on the concept of randomness, since this must influence the properties that pseudo-random numbers should exhibit.

Apart from this the treatment is very comprehensive, and the book concludes with an extensive bibliography.

I. W. HARRISON

Economics and Information Theory.

HENRI THEIL.

North-Holland, Amsterdam, 1967. xxii+488 *pp.* £6.

This book is Volume 7 in the series, *Studies in Mathematical and Managerial Economics.* The series, which is edited by the author of this volume, has the object of providing a quantitative approach to problems in the behavioural sciences, and is aimed at university students and post-graduate research workers in business and government subjects.

The title of the book suggests there is perhaps some esoteric or mystical relationship between economic and information theory. A more informative, but less elegant title would be: "The Application of the Concepts of Information Theory to the Elucidation and Quantification of Various Economic Problems". Information theory is a branch of the theory of probability developed by communication engineers; what the author has done is to show how the concepts of information theory, like those of statistics, can be used to describe, in probabilistic terms, the structure and evaluation of a wide variety of economic problems.

The standard of mathematics required is amply covered by the syllabus of a B.Sc. General Degree; in fact, "A" level mathematics plus some elementary statistics and an introduction to matrix algebra would be sufficient. The book is non-rigorous, with considerable emphasis on intuitive and axiomatic approaches, freeing the reading and understanding of philosophical entanglements and making the book readily usable.

The first two chapters deal with basic concepts used throughout the book; the following nine chapters cover the application of these concepts to such topics as measurement of income inequality, price and quantity comparisons, allocation problems, input and output analysis and the analysis of international trade. The book ends with a comprehensive bibliography and four useful tables, including logarithms to the base 2 and natural logarithms of integers from 1 to 10,000 and reciprocal probabilities and logits to the base 2 and e.

W. E. SILVER