more apparent as systems analysis develops and the language employed by analysts becomes more specialised. Clearly such developments if taken too far would be detrimental and tend to accentuate the problems of communication discussed earlier.

No review could do justice to the wealth of knowledge contained in this excellent book. It is hoped that this brief summary of each chapter has whetted the readers appetite. The systems analyst will find it illuminating and invaluable; for these reasons it is highly recommended.

C. D. BEAUMONT

Forecasting in Business and Economics

C. W. J. GRANGER

Academic Press, New York, U.S.A. 1980. x + 226 pp. £12.40

ISBN 0 122 95180 8

Clive Granger's new book has a nice opening scenario providing a fistful of forecasts, from the likely to the highly improbable, which are then discussed. These "forecasts" include both fact and fantasy and set the scene for the chapters that follow. Thus we have rudimentary treatments of Prediction from Time Series Analysis, Econometric Modelling and Sample Surveys; Population and Technological Forecasting; modern World Models and the mediaeval Mother Shipton.

The level is elementary, being aimed at less mathematically sophisticated management students, but the text will probably do more good at motivating the most numerate readers, as the book is very much an introduction to the subject and the limited coverage can only whet appetites. The volume is attractively and well produced, the writing clear and readable, the misprints and errors apparently few—although the author mentioned on pages 77 and 223 should be O.D. Anderson! The index did not appear very helpful for the target audience of beginners; as an example, Exponential Smoothing did not feature there. However, the exercises should prove useful for class discussion. On the whole a good read.

OLIVER D. ANDERSON

Studies in Political Economy of Development

IGNACY SACHS

Pergamon Press, Oxford, U.K., 1980. 316 pp. \$39.00

ISBN 0 080 22495 4

A volume dedicated to the memory of Michal Kalecki should be a moving event for O.R. as he was a forerunner of O.R. applications on public matters. This is one of the rare books that has first been published in translation (1977), boldly reproducing, in its original form, a mosaic of Sachs' intellectual activity towards the end of the sixties. Sachs' affinity to repeated circulation—most documents have been published at least twice—is strong evidence for openness to dialogue at the risk of outdatedness. There are few collations of documents of the sixties on the topic of Development and Planning that can still be flattering to the authors and beneficial to the readers, but Sachs' is such an exception. Anyone familiar only with his more recent eco-pamphleteering will be taken by surprise at the depth of his earlier analytical work on planning and development.

The collection consists of 13 pieces most of them prepared originally as working papers within the UN system. The unifying element through the collection is the antipaternalistic attitude that devlopment is not a privilege of the few but that the Third World is entitled to it in a self-reliant way. In one phrase it can be characterised as an exercise in analytical arguments and implementation suggestions for redistribution of resources and public benefit maximisation. Across the texts some unexpected and intuitive large scale O.R. falls into place. As operational constraints/objectives, labour-

