s, and availability are no

view is truly instructive ther economists, histori- has perfected a better- e for predicting events of economic decisions. e is, Jewkes tells us that sty require serious econ- nderstanding with this the world *is*. There will table change to which be made. Acknowledg- n help devise measures and accurately inform anges. They can dili- n recommend, institu- dividuals and societies s easily and painlessly capable vicissitudes of

ucial but limited role ife. Faulty analysis of not to say blind, guesses ish and direct costly nment. For example, d high technology en- Both are high risk ven- mber successes in sci- (in England, nuclear e RB-211 jet engine, ly regarded by private it not beyond the abil- r to raise capital, as it in oil exploration). chnology engage and of large numbers of of whom are likely ing alone or in auton- production of other ntions are foregone. vo collaborators, for epresentative inven- this century turned each of whom, as Ein- vas a horse for single rge organization on y the intriguing dis- sians contributed to television, and heli- contribution to any sia after that date.

Joseph A. Schumpeter's thesis that innovation has become a routine activity of large enterprises, and that the twentieth century differs significantly from the nineteenth in this respect, is also contradicted by Jewkes's evidence.

Jewkes is one of the articulate swimmers against the stream who dauntlessly continues upstream, although apparently swept backwards. Why should his work, and others like it, as yet not prevail? Gilbert and Sullivan's character, Dick Deadeye played a similar role and received a worse reception. He kept telling it as it is, not as one wishes it were, or hopes it can soon become. Few like such news. It takes some courage to perform the duty confronting economists because they know about past failures of well-meant policies based on cloudy visions of the future and the unpleasant consequences imposed by unexpected side effects. They know that to offer principles, a "technique for thinking," rather than a program is frustrating to those who must make decisions based on incomplete information. But Jewkes admonishes us not to pretend to do what no one can do.

This book will give pleasure to some, but belongs on the required list of many who will find it irritating. It is a pity that its price is so high.

DEAN A. WORCESTER, JR.
University of Washington
Seattle

Journal of Economic Literature
Dec. 1978 Vol. XVI pp. 1436-8

020 GENERAL ECONOMIC THEORY

Studies in pricing. By P. W. S. ANDREWS and ELIZABETH BRUNNER. London and New York: Macmillan Press, 1975. Pp. xi, 176. £10.
JEL 78-0319

When the history of the post-Keynesian alternative to the orthodox theory comes to be written, it should be noted that the English roots of its microeconomics are to be found at Oxford, even more so than at Cambridge. This is a reference, not to Sir Roy Harrod or even to Michal Kalecki (who spent the war years, an especially productive period in his life, at the Oxford Institute of Statistics), but rather to the Oxford Economic Research Group and its series of empirical investigations carried out during the late 1930's [13, Wilson and Andrews, 1951]. The 1939 article by Robert L. Hall and Charles Hitch [8] reporting that businessmen set their prices by adding a certain margin to their unit costs, is perhaps the best known work of this group, since it is the earliest published reference to the markup model now generally used in econometric studies of pricing. However, it is the theoretical writings of P. W. S. Andrews [1, 1949; 2, 1964] that, even more clearly, anticipate what has come to be recognized as the micro foundations of post-Keynesian theory [6, Eichner and Kregel, 1975; 9, Kenyon, 1978].

This statement may come as a surprise to some, who remember Andrews as a critic both of Joan Robinson and of Kalecki—not for their macro theories but rather for their micro analysis. But Joan Robinson has long conceded Andrews's point that she inadvertently led the field astray with *The Economics of Imperfect Competition* (see her preface to the revised edition) [10, 1969]. And Andrews's objection to Kalecki's explaining the margin above costs in terms of "the degree of monopoly" was more to the term's pejorative connotation than to what it actually denoted. Indeed, if Kalecki had labeled the same set of factors "the degree of competition," it is doubtful that Andrews would have objected [7, Feiwel, 1975, pp. 471–72]. Anyone reading through all of Andrews's work and then comparing it with the post-Keynesian microeconomic literature would be hard pressed to find differences—except in terminology, emphasis, and the relative importance of various ideas. They are of a single piece in critiquing the orthodox microeconomics and in offering the same alternative pricing model in its stead. Andrews's work falls short only in failing to bring out the links to macroeconomic analysis.

The book under review represents a last effort to present Andrews's views in print to the audience of economists he sought, during his lifetime, to influence. Its co-author is Elizabeth Brunner, who was Andrews's collaborator over many years and who was one of the first, along with Kalecki, to point out that the orthodox pricing model applies only to world commodity markets, not to manufacturing industries within national borders [4, 1952]. It is she who, upon Andrews's death in 1971, has now seen this collection of essays through to publication.

The first essay, a revised version of a lecture given at the University of Paris and at Harvard University during the mid 1960's, was written by Andrews and offers his critique of orthodox theory. While it is difficult to believe that this critique will prove any more persuasive to those who still must be convinced than any of the numerous other, no-less-valid critiques available in the literature, it does serve to highlight where Andrews's own positive analysis takes its point of departure from the orthodox treatment. Andrews would, first of all, deny that the behavior of microeconomic units, whether firms or households, can be intelligently analyzed on the assumption that they are either in a short-run equilibrium position or approaching such a position. In thus suggesting the need for a disequilibrium type of analysis, Andrews indicates his affinity, not only to post-Keynesian writers but also, just as clearly, to the American institutionalist, John M. Clark [5, 1961]. Second, Andrews would deny that an individual demand curve exists for the great majority of firms that operate in the real world under less than perfectly competitive conditions. On these grounds, much of what passes in the textbooks for price theory would disappear. Third, Andrews would deny that competition is limited to the manipulation of price, or even that it represents a condition that can be deduced from the structure of an industry. Thus, he would view competition as a dynamic process, restoring the concept to the same role it played in economic analysis before the marginalist revolution. Finally, Andrews would deny that a production economy can be studied with the use of what he terms "conflated" models. These are models which, by treating the business sector as a single firm selling only to final consumers, ignores all the trading relationships among firms. Here, as in his criticism of individual-firm demand curves and in his emphasis on the dynamic aspects of competition, Andrews comes close to Sraffa [11, 1960] in his critique of orthodox theory.

The second essay was written by Professor Brunner, and it is an attempt to summarize briefly the model underlying Andrews's two major works, *Manufacturing Business* [1, 1949] and *On Competition in Economic Theory* [2, 1964]. Whatever Professor Brunner's précis lacks in explication, it more than makes up for in conciseness; and it should serve its intended purpose of inducing economists to turn to the works upon which it is based. As the author states in summary, "I have tried to outline a model which shows decreasing costs to the individual firm, firms not in marginalist equilibrium, differentiation of products—but no use of short-run demand curves; and, at the same time, rational cost-plus pricing. It is a model of competition, but it is not within the strait jacket of perfect competition, where we have to assume an infinitely large number of firms, all producing an identical product" (p. 34). The other assumptions upon which the model is based—for example, that industry curves are inelastic, that oligopoly is the prevalent market structure, that firms produce multiple products—further distinguish it from the improbable models that presently give microeconomics such a bad reputation among the uninitiated. As Professor Brunner concludes, "We think we now have a model of competition which applies to the relationships found in the real world" (p. 34). Post-Keynesian economists will recognize it as a markup model, with the major emphasis, insofar as the markup itself is concerned, on the entry factors analyzed in the work of Joe S. Bain [3, 1956] and Paolo Sylos-Labini [12, 1962].

The third essay was originally set to be a joint effort, but had to be written by Professor Brunner alone. It covers some of the industrial organization elements of microeconomic analysis and is intended to serve as a transition to the two industry studies that close out the book—one involving a price-fixing agreement by a boilermakers group, which Andrews defended in court, and the other covering the building industry. The essay also serves to bring out some of the differences between Andrews and Brunner on the one hand and other industrial organization specialists on the other—particularly Andrews's and Brunner's broader concept of potential competition from new entry. More important than this particular type of product differentiation, however, is the insistence that microeconomic theory be informed by, and thus be based on, a knowledge of industrial organization. Indeed, the essay and the two industry studies that follow can be regarded as a response to meet Andrews's complaint that what is most sorely missing from microeconomic theory as it is presently taught in universities is a knowledge of industrial organization.

ALFRED S. EICHNER
State University of New York at Purchase and Conservation of Human Resources Project, Columbia University

REFERENCES

1. ANDREWS, P. W. S. *Manufacturing business.* London: Macmillan, 1949.
2. ———. *On competition in economic theory.* London: Macmillan, 1964.
3. BAIN, JOE S. *Barriers to new competition.* Cambridge, Mass.: Harvard University Press, 1956.
4. BRUNNER, ELIZABETH. "Competition and the Theory of the Firm, Part I" and "Part II," *Econ. Inte.* Aug. 1952 and Nov. 1952, *5*, pp. 509–22, 727–44.
5. CLARK, JOHN M. *Competition as a dynamic process.* Washington: Brookings Institution, 1961.
6. EICHNER, ALFRED S. AND KREGEL, J. A. "An Essay on Post-Keynesian Theory: A New Paradigm in Economics," *J. Econ. Lit.*, Dec. 1975, *13*(4), pp. 1293–1314.
7. FEIWEL, GEORGE R. *The intellectual capital of Michal Kalecki.* Knoxville: University of Tennessee Press, 1975.
8. HALL, ROBERT L. AND HITCH, CHARLES J. "Price Theory and Business Behavior," *Oxford Econ. Pap.*, May 1939, *2*, pp. 12–45; reprinted in [13, 1951], pp. 107–38.
9. Kenyon, PETER. "Pricing in Post-Keynesian Economics," *Challenge*, July 1978, *21*, pp. 43–48.
10. ROBINSON, JOAN. *The economics of imperfect competition.* Revised edition. London: Macmillan, [1933] 1969.
11. SRAFFA, PIERO. *Production of commodities by means of commodities.* Cambridge: Cambridge University Press, 1960.
12. SYLOS-LABINI, PAOLO. *Oligopoly and technical progress.* Translated by ELIZABETH HENDERSON. Cambridge, Mass.: Harvard University Press, 1962.
13. WILSON, THOMAS AND ANDREWS, P. W. S., eds. *Oxford studies in the price mechanism.* Oxford: Clarendon Press, 1951.

d makes hierarchy a more
antage that parties are less
it can be more effectively
ally, that it is more able to
the parties to a transaction.
liamson builds a great deal
rm (unitary) and M-form
n popularised by General
lliamson presses the advan-
hapters six and seven it is
n as the firm grows in size,
h occur within a large firm,
, and the distortion of pro-
tic subgoals. In addition,
st because of institutional
a unfettered *caveat emptor*
t reluctance, that large
chnical progress.
antitrust. Williamson is
integration increases the
try; and he is sceptical of
lly assume an M-form of
scarce investment funds,
hich may function better,
ilable to the conglomerate
ontrast he believes that
of market failure which
of enterpreneurial talent,
ir bounded rationality.
d to break up dominant
placed on organisational
lt. Oligopoly is no real
a lack of appreciation,
gopoly, when it is com-
telisation), and breaking

book. (At the same time,
all but the first and last
ficult to see the overall
bastly mangled jargon-
have reservations about
deas advanced, are not
the same apparatus one
in relation to conglo-
viously distort informa-
s about the allocation

of capital *between* conglomerates. But Williamson has raised genuine problems which any economist who has encountered a real firm (which must, I suppose, exclude the vast majority of the profession) will recognise. Despite reservations which, over details of the argument, are serious, the book is an interesting contribution to the competition policy literature.

D. P. O'BRIEN

University of Durham

Vol. 86

Studies in Pricing. By P. W. S. ANDREWS and ELIZABETH BRUNNER. (London: Macmillan, 1975. Pp. xi + 176. £10.)

The publication in an accessible form of further material by the late P. W. S. Andrews and by Elizabeth Brunner is worthy of note, and many readers are likely to find something of interest in this volume. There are just five chapters. The first three deal with theoretical issues concerning the theory of the firm and industry. The last two, much longer, chapters are case study analyses of two industries - water/tube boilers and building - in which tendering constitutes a particular form of pricing activity. With the exception of chapter 3, written recently by Professor Brunner, the material originated a decade or more ago. While circumstances do change and economic analysis hopefully develops, obsolescence does not generally appear to be a major problem with this material.

The first three chapters are firmly in the tradition of the authors' earlier contributions, with an attack being made on static marginalist equilibrium models, and an insistence placed on the need to recognise the existence of falling average cost curves and horizontal demand curves at the level of the individual firm, while allowing for the equilibrium of the industry. Many other familiar features of their earlier analyses are restated here, though sometimes with revised emphases: the description of price formation based on direct costs plus a gross profit margin; the emphasis on competitive constraints especially from the threat of cross-entry by existing firms; the emphasis on labour overheads as analytically distinct from capital overhead costs; the sophistication and rationality of buyer behaviour; the ability of a firm to supply a range of outputs at a given price, etc.

No check D. C.

Perhaps it is indicative of the development of the subject and of the influence of the authors of the material in this book that many of their basic analytical points will evoke sympathy and agreement from others, especially those working in the area of industrial organisation. But there will still be divergences in the interpretation of the evidence. The confident belief in the inherent competitiveness of the market and the tendency for prices in the long (but not too long) run to be identical, after allowing for differences in specifications, will not meet with general agreement. It has become popular of late to pay rather less attention to questions of price formation than to other aspects of firm and market behaviour. This book helps to redress the balance and emphasises that pricing is ultimately a top management decision which involves a considerable degree of finesse. But competition is not only about price, and in paying so little attention to other aspects of the competitive interdependence of firms in a market it is doubtful whether, between them, Andrews and Brunner have succeeded in producing a sufficiently general model of the behaviour of oligopolies.

The two case studies offer points of interest, that on building particularly so. Chapter 4 consists largely of Andrews's proof of evidence in the Water Tube Boilermakers Association case in the Restrictive Practices Court. It was the first agreement to be approved by the Court, and was upheld under the export "gateway". The proof gives Andrews's view as expert economist witness for the Association of the advantages of the agreement and the likely consequences of its abolition. It is an interesting document, analytically sophisticated but without jargon, firmly supporting the agreement with a good grasp of the industry's business but without appearing to be unduly partisan. There is insufficient in the proof to make it an important industry study in its own right, especially at this distance of time, but it is a good example of the way in which an economist viewed and successfully defended a particular industrial restrictive practice. However, from the relative attention paid in the proof to the argument under each of the three gateways pleaded by the Association, one might infer that Andrews must have been somewhat surprised to find that the judgement had gone in the Association's favour only on the export "gateway", to which he had directly devoted only two paragraphs of argument in his proof.

Chapter 5 is a fascinating study of the building industry and of the implications of the selective tendering arrangements adopted there. This arose from a seminar set up by the Building Research Station during 1963–5, which was attended by academics and personnel associated with the Building Research Station. Representatives of a small number of different businesses in the building industry were interviewed at some of the meetings of the seminar. The result is an essay which is extremely penetrating in its analysis of the industry and its pricing procedures. The discussion of short-run pricing is especially stimulating, despite the author's disclaimer that the economist is less well able to handle short-run phenomena than long-run trends. If anything, it is a pity that the analytical implications of individual tender decisions in the light of short-run capacity utilisation and other considerations were not developed further.

Parts of this book need to be read extremely carefully if the full analytical import is to be understood. In one or two places this is not helped by a less than clear exposition. In figure 6 the cost curves might have been labelled as such, and the treatment of average paying-out costs in figure 7 and the accompanying text on page 32 might have been clarified. In figure 7 the average paying-out costs curve seems to include overhead paying-out costs *plus* direct costs, whereas the text refers only to overhead paying-out costs. Readers who do not know the legal background to the use of a judicial procedure to handle restrictive practices issues may find it helpful to note that on page 48, line 24, "justifiable" should in fact read "justiciable".

J. F. PICKERING

University of Manchester
Institute of Science and Technology