the types of leading indicators or diffusion indexes discussed in Part I. Although these essays are lengthy, detailed, and varied, a brief summary of Victor Zarnowitz’s piece on “The Timing of Manufacturers’ Orders During Business Cycles” may serve to give the reader some idea of the contents of this section.

After formulating a typical sequence of events in the response of an industry to cycles in ordering, Zarnowitz analyzes a number of new orders series for their correspondence with peaks or troughs in the vicinity of a business upturn or downturn. He concludes that manufacturers’ new orders, especially those for durable goods, have merit as leading indicators of revivals and recessions in general business. Substantial shortcomings arise, however, because leads are far from uniform in length and often rather short. In addition, data on new orders frequently exhibit irregular movements which can be misleading for forecasting or identifying turns in the business cycle. Zarnowitz examines the properties of various devices, such as cumulation, weighted graduation, and averaging the duration of movements in the series used for diffusion measurements, for reducing irregularities with a minimum loss in timeliness.

The concluding section of Volume I describes the role of the electronic computer in constructing the analytical measures treated in this volume. The electronic computer made feasible the many burdensome operations necessary to fashion the indicators approach into a useful, current analytic measure. The elimination of seasonal movement, trend calculation, and measurement of cyclical amplitudes, rates of change, recovery and recession patterns, and diffusion measures are extremely time-consuming. Because of their laboriousness, the expedient approach often entails ignoring seasonal variation and cyclical factors and making same-month-year-ago comparisons. The limitations of this approach and the aid to the current use of indicators provided by electronic computers are thoroughly treated in two essays by Julius Shiskin. In addition, Moore covers methods suitable for adjusting the amplitudes and summarizing the behavior of a collection of indicators.

Volume II of Business Cycle Indicators presents the basic data upon which the contributions of Volume I rest, as well as the seasonally adjusted figures. It provides sources and brief descriptions of the historical data; these enable interested readers to update the series beyond 1958, the terminal date for the series published in the volume.

Martin J. Gerra, Jr.

Oligopoly and Technical Progress

The theory of oligopoly is in a fluid, not to say chaotic, state, according to Sylos-Labini in his readable discussion of micro-theory, macro-behavior, and public policy. His contention that there is no marginalist solution for the oligopoly problem will be refreshing to those who doubt the universal applicability of the myopic optimality conditions of static, micro-theory.

Sylos-Labini feels the overthrow of marginal theory follows from (1) abandoning the law of diminishing returns, (2) working with discrete rather than continuous variables, (3) focusing entrepreneurial attention on the behavior of other oligopolists rather than on consumer behavior, and (4) maximizing long-run rather than short-run profits. He evidently fails to notice that the overthrow follows directly from his steadfast [and justifiable] refusal to assume perfect knowledge on the part of oligopolistic entrepreneurs.

The chapters on firm theory develop a reasonable and practical approach to price fixing and concentrate on conditions of entry. The equilibrium firm organization, he finds, depends on initial firm and industry organization as well as on which entrepreneur reacts first. While several attainable equilibria may exist for a firm or an industry out of adjustment with its environment, each, when reached, can be stable. A reversal in environmental conditions need not induce a corresponding reversal in firm response.

The discussion of the distribution of income between agriculture and industry will be especially interesting to readers of this journal, as will the exposition of how the fruits of technical progress may lead to stable prices, higher wages and profits, unemployment and stagnation in a world of concentrated oligopolies. Growth and full employment in a developed economy are shown to depend on an effective demand maintained by government spending, principally for military purposes.

This enlightening discussion is not a basic text in oligopoly theory, but rather a valuable source of insights into the workings of modern market structures. The book is highly readable with a
few simple equations and numerical examples but with no graphs. It belongs on the reading list of economists interested in the consequences of industrial concentration as well as of those who still believe that competition rules the markets.

Clark Edwards

An Introduction to Econometrics

THIS BOOK IS INTENDED to be a preface to the author's Textbook of Econometrics. The book is just what has been needed in econometrics. It is non-technical and tells the reader what econometrics is all about without getting into the highly mathematical and statistical problems of estimation and computation.

The book, however, is not devoid of mathematics or statistics. A knowledge of elementary algebra and a first course in statistics will provide the reader with sufficient background to master the technical aspects.

The topics of statistical demand analysis, statistical production and cost analysis, distribution of income and wealth, and statistical models of economic growth and trade cycles are covered.

Numerous examples are presented throughout the book. The large number and variety of examples give to those who do not have a working knowledge of econometrics an appreciation of the role that mathematics and statistics play in the measurement of economic relationships and some of the problems involved in these measurements.

The author could have improved his presentation through a greater use of graphic analysis. In this way, the mathematical notation employed in the text would be a complement to the graphics. For example, a graphical presentation of cobweb models would have more clearly illustrated the dynamic nature of the models and the inherent stability (instability) characteristics of the model than just an algebraic presentation of the demand and supply equations and demand-supply identity. Since most students learn their economic theory through geometric presentations, a greater use of graphics would have made the exposition more familiar to readers of this book than the use of algebraic representation of economic relationships and models.

The objective of this book, in the author's words, is to give "... people an appreciation of modern econometrics without going into the technical details of how to go about doing professional research in the field." The author is successful in achieving this objective.

Martin E. Abel

The Cattle Kings

CATTLE RAISING, particularly on the open range, has been more studied, and at the same time, more romanticized, than any other aspect of agricultural history. Beginning in 1930 with Everett E. Dale's The Range Cattle Industry, sponsored by the Bureau of Agricultural Economics, a number of notable studies have traced the development, financing, and decline of the Western range cattle industry, and have delineated the place of the cowboy, both in reality and in folklore. Now, Lewis Atherton, distinguished historian at the University of Missouri, has written the history of the cattlemen. This fascinating, scholarly study of the rugged individuals who dominated the industry will take its place with other basic studies of the range cattle industry and of the West.

The economist will find this book of importance in assessing the land, labor, and capital which went into the range cattle industry. A combination of factors, which Professor Atherton traces, gave the Great Plains region a competitive advantage in beef production after the Civil War. These included cheap land for grazing when the public domain was opened, better marketing facilities through railroads and the invention of the refrigerator car, and a flow of capital into Western ranching when British corporation laws were modified in the direction of investment trusts.

The opportunity to make a fortune with this favorable combination of circumstances was seized by a number of enterprising, self-reliant young men—most of them between 25 and 35 years of age. The individual cattleman had to be a good businessman with a flair for taking a chance. Generally, individuals were more successful than were the large companies. This was particularly notable after the hard winter of 1886-1887, which marked the trend away from large herds ranged with little care over the public domain to smaller, controlled herds ranged on owned or leased lands.