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Book Reviews

Introduction to Economics for Agriculture. By JOHN DONALD BLACK. The Macmillan Company, New York. 1953. 727 pages. \$6.00.

DR. BLACK never hesitates to state his viewpoints with boldness and self-assurance. A man who had less experience and fewer accomplishments than this author would hardly venture so bold a claim for a work as Dr. Black does for his *Introduction to Economics for Agriculture*. In his preface, referring to elementary instruction in economics now offered in agricultural colleges, he states that "...with this book available, many colleges will no longer consider necessary or desirable such a preparatory course in general principles. This book gives all the general principles, and all the background in the general economy, that the usual agricultural college student needs, and does it with much better integration than is likely with separate courses."

Inasmuch as Dr. Black established his own goal I immediately tried to learn whether he reached it. My studied reaction is that he will at least find this is still a matter of lively controversy among some of his colleagues. In a characteristic fashion he constructed his problem, gave it vitality, and created interest in it. But I doubt sincerely whether this one text alone will achieve his real objective: "To give an agricultural college student, or educated farmer or his equivalent, exactly that understanding of economics which he or she needs in order to function effectively and live happily in the world of today."

Despite his failure to achieve the impossible goal he set for himself, I would recommend the book as the basic text for an undergraduate class in agricultural economics. I can conceive of an excellent undergraduate course being developed with Dr. Black's text as a starting point. To do this the instructor would need to use a well-chosen supplementary reading list and to expand and illustrate thoroughly many of the vital points raised by the author.

The informality and ease with which Dr. Black goes through the section on orientation

is refreshing. He reminds me of an old master standing before his students as he draws on his reservoir of knowledge to paint with broad strokes a word picture of the past to arrive quickly at the subject nearest his heart. But in following such a procedure he leaves out much that is essential in a student's orientation to economics. What he does really is to construct a ladder—a ladder to a platform from which a student can observe and react intelligently to a panorama of economic facts which, when integrated, will offer him a rational explanation of economic actions.

Few men can draw on the wealth of experience in teaching, research, and government regulation of business and agriculture that Dr. Black uses to develop his ideas on production, consumption, and marketing. On occasions the author's rapier-like thrusts at some distasteful governmental policy may leave his reader aghast. But this is momentary, because Dr. Black is soon on to a new subject, without even a slight pause.

The range of subjects covered in the text is wide indeed. Organization of subject matter is excellent. Dr. Black does extremely well in his chapters on production, consumption, and commodity distribution. He is stimulating and provocative in his chapters on public economics. In fact, he raises several very pertinent questions regarding the role of government in agriculture that should be answered by those who believe that agriculture is incapable of standing on its own feet.

While I cannot agree that Dr. Black altogether reached the goal he set for himself, yet there always has been a need for a readable, teachable, and informative text in agricultural economics. On this basis he has succeeded. The problem of including only one course in economics in all the curricula in a college of agriculture must be solved as a separate issue.

D. B. DeLoach

Law and the Farmer. By JACOB H. BEUSCHER. 1953. 406 pages. \$4.95.

FOR SEVERAL YEARS Professor Beuscher has conducted a course in farm law for future farmers, county agents, agricultural specialists, and vocational agriculture teachers in the College of Agriculture at the University of Wisconsin. At the same time he has taught in the University Law School and conducted "law-in-action" studies aimed at discovering how certain laws actually operate at the farm level.

His quest for better teaching techniques for persons not trained in the law has resulted in the new approach that is used in this book. It centers discussion of legal rules and principles around several hundred farm legal problem situations that are familiar to most farmers. The method reduces to a minimum the use of technical law-book phraseology and language familiar to the layman is substituted.

The book opens with a discussion of the role of law in preventing disputes, as contrasted with its more dramatic role in settling them. Readers are then familiarized with different kinds of laws and how they are made. Among these laws are statutes passed by Congress and by State legislatures; ordinances by counties, towns, and cities; case law by Federal and State courts; and a growing body of administrative rules and regulations, having the force of law, issued by Federal and State administrative agencies. Attention is called to such traditional divisions of the law as public versus private, civil versus criminal, and substantive versus procedural; and to law-school classification by subject matter, such as contracts, torts, real property, agency and criminal law. "Farm law," it is pointed out, is not a separate division of jurisprudence; it is a term used merely to focus attention on some laws that most concern farmers.

The reader's introduction to numerous rules and regulations that affect farmers begins with an examination of the many legal problems involved in buying and selling a farm. Here, a brief but excellent treatment of basic principles of contract and real property law opens the door to an understanding of legal problems discussed in later chapters.

Springer Publishing Company, Inc., New York.

A section that deals with transfer of the family farm from one generation to the next establishes a new benchmark for future research and writing in this field. In six chapters that blend into one another, the author gathers together the law pertaining to father-son operating agreements, transfer arrangements between the living, transfer on death by will and where there is no will, probate procedures, and gift and death taxes.

Other legal problems that are treated in the book include Federal, State, and local regulations that pertain to the farming business; taxation of farm property and of farm income; and legal rules that relate to secured and unsecured farm debts, to fences and boundaries, to rights in water and streams, and to the farmer's liability for careless acts.

This is Professor Beuscher's second book on farm law. His first, *Farm Law in Wisconsin*, published in 1951, was prepared for Wisconsin farmers. In his present work, which was written for a national audience, the diverse legal rules of the 48 States are grouped into logical patterns or presented in tables, thereby avoiding a morass of detail. Space limitations preclude discussion of all the farm legal problems that might arise, or of all the law that is applicable. Only the more important problems are treated. But enough law is presented to achieve the primary aim of the book, that is, to enable the lay reader to detect legal pitfalls and thereby avoid costly mistakes. Readers who wish to pursue a subject further will find useful sources cited in footnotes; and helpful questions for students follow each chapter.

This volume is a welcome presentation of farm law. It is written in language that can be understood by farmers, students, and others not trained in the law. Educators will find it a readable and useful book in their classes. It should not be overlooked by agricultural economists who at times fail to perceive the profound influence of the law as a social institution affecting, and in turn affected by, economics.

Erling D. Solberg

Demand Analysis. By HERMAN WOLD, in association with LARS JUREEN. John Wiley & Sons, Inc., New York. 1953. 358 pages. \$7.00.

STATISTICAL DEMAND ANALYSIS is a synthesis of several disciplines—economic theory, probability theory, and mathematical statistics—applied to concrete data. Each application requires special knowledge of the commodities involved and the adequacy of the statistical series which purport to measure their prices and quantities. This last type of knowledge comes slowly, and is most likely to be acquired by economists who are specializing along commodity lines. Few commodity economists have the time or the predilection to master in their entirety the theoretical disciplines upon which demand analysis also rests.

These disciplines themselves are generally taught in such a way as to discourage anyone from becoming a “theoretical demand analyst,” whose training would prepare him to cooperate effectively with commodity specialists. Most graduate curricula tend to make him *either* an economic theorist (verbal or mathematical), *or* a probability theorist, *or* a mathematical statistician (specializing in variance analysis, sampling theory, or experimental design). No one of these specialties prepares him to give well-founded advice to commodity experts concerning the statistical measurement of economic relationships. The verbal economist is too verbal; the mathematical economist too mathematical; and the statistician too disdainful of nonexperimental data. In ignorance or desperation the commodity economist turns to empiricism, and it is too empirical.

The remedy for this lies in the fact that demand analysis draws heavily only on special portions of the disciplines mentioned. Henry Schultz recognized this, and his monumental *Theory and Measurement of Demand* (1938) came close to exhausting the then available knowledge relevant to demand analysis. Wold also has tried to bring the relevant topics together under a single cover. The result should be stimulating to anyone who has a serious interest in demand analysis.

Wold's objectives in writing *Demand Analysis* are set forth quite explicitly in his preface: “The volume sets out to give a systematic account of demand analysis methods, employing

for illustrative material the empirical studies of the authors into the structure of consumer demand in Sweden . . . The (theoretical) subjects of main relevance are on the one hand the theory of consumer demand, on the other the theory of regression analysis and certain topics in the theory of random processes.”

Parts II-IV of the book deal with these theoretical subjects. Rather advanced arguments are involved at some stages, and many of them are stated and proved in the form of mathematical theorems. None of these parts will be accessible to nonmathematical readers without help. However, a striking and desirable feature is that even the most abstract developments are related to problems of practical concern in demand analysis. It is this awareness of problems encountered in empirical studies that distinguishes Wold's writing from that of most econometricians—the level of mathematical difficulty is the same.

Fortunately, the leading conclusions of parts II-IV are summarized in part I (pages 1-79). This section is written in nontechnical form and deserves to be widely read. It should be of interest to research economists generally, and will be useful supplementary reading for upper division courses in economic statistics or in agricultural price analysis. The book as a whole could be used as a principal text only at the graduate level and with students who have had upper division courses in both economic theory and statistics.

To many readers Wold's reaffirmation of the usefulness of least-squares regression methods in the analysis of demand will be the most interesting and challenging feature of the book. Wold objects to the formalism of much modern econometric theory and forthrightly embraces the concept of cause and effect as a basis for selecting dependent variables in regression equations. He feels that the qualifications raised by the simultaneous equations approach are generally of secondary importance for statistical demand analysis.

He argues further that many structures which appear to involve simultaneous equations can be resolved into a succession or hierarchy of

cause and effect relations, each of which can be fitted by the method of least squares. In summary, he says, "the final conclusion must be . . . that the regression analysis as traditionally applied is essentially sound. In demand analysis at least it can still be safely recommended."

While this reviewer agrees that traditional methods are applicable in demand analysis for many farm products, he is by no means sure that they, or Wold's "recursive" extension of them, will fit all possible commodity situations. It should also be observed that some of Wold's practical conclusions are inadequately supported. A notable example is the lame discussion of trend removal and its relation to short- and long-term elasticities (pages 240-242). Another is his implication (pages 12-14) that

an equation showing (aggregate) consumption as a function of retail price expresses a "unilateral causal dependence." For an individual consumer, yes; for a national aggregate of all consumers, no, or maybe!

After the rigorous theoretical developments in parts II-IV, the empirical results in part V are anticlimactic. The family-budget analyses are straightforward, and interesting for their own sake; the time-series analyses suffer from inadequate consumption data. The methods used to extort elasticities from the weaker series are ingenious but not convincing. Despite the importance of Wold's achievement, his book still reflects the dichotomy which plagues this field—the theory, too mathematical; the practice, too empirical!

Karl A. Fox

Studies in the Structure of the American Economy. By WASSILY LEONTIEF AND OTHERS. Oxford University Press, New York. 1953. 561 pages. \$11.

AN IMAGINATIVE agricultural economist will get many intriguing ideas from this book. Most important, he will see possible ways of measuring interrelations between agriculture, labor, and business. Also, he will be especially interested in the chapters on interregional economics by Leontief and Isard, the chapter on the structure of the cotton textile industry by Anne P. Grosse, and the chapter on demand by James S. Duesenberry and Helen Kistin.

With the help of nine other economists and statisticians, Leontief presents a clear, readable account of the theory and application of "inter-industry studies" or "input-output studies." In an excellent introduction to Part I, Leontief emphasizes the need for quantitative statistical work in economics. Here most agricultural economists will recognize a kindred spirit. Without doubt, empirical measurement is the strongest point of our profession. We can learn from Leontief something worthwhile about that subject. If we are willing to work on it, we can learn even more about economic theory.

A fairly simple but excellent presentation of

the theory of inter-industry economics is to be found in Part I. It includes not only the usual static theory, but also discussions of structural changes and of the problems of dynamic analysis. Dynamic analysis at best is difficult. And, like the reviewer, many readers may have trouble with the mathematics of a dynamic matrix. But it would pay agricultural economists to read carefully all of Part I, including the part on dynamics. After all, we are mainly interested in prediction. We want to know how today's situation will affect farm production, prices, and incomes next month or next year. We can't escape dynamics.

Leontief also has a chapter on interregional theory. This and the following chapter by Isard, with empirical results of a regional input-output analysis, suggest important areas for research in agricultural marketing. Too little practical work has been done to measure the effects of various factors that influence the geographical distribution of a commodity. Still less has been done to learn what kind of geographical distribution would be desirable from

the standpoint of dietary needs or of increasing farm income. These two chapters should suggest ways of analyzing such matters.

The chapter on the cotton industry describes certain technical relationships which are said to be "sufficient to determine required inputs of direct processing machinery, power, labor, and fiber for the production of a specified type of cotton cloth with equipment of recent vintage." This is a production function in terms of "technical experts' opinions of best practice currently feasible."

In the final chapter, Duesenberry and Kistin present an analysis of the demands for food, clothing, and housing. Their study is based upon inter-temporal comparisons of budget studies. They estimate the price-elasticity for

food to be 0.8. This is much higher than most statistical estimates based upon studies of national aggregate consumption and prices. Perhaps this may be partly owing to differences in concept. For example, this study uses deflated food expenditure as a measure of consumption. Most other studies use an index of the quantity of food consumed. It would be theoretically possible to derive elasticities and cross elasticities from an analysis of the complete inter-industry matrix. But it has not yet been done.

The techniques developed by Leontief and his group may enable economists to digest the enormous quantity of statistical data now available, and thus help us to understand how the economy works.

Frederick V. Waugh

Productivity and Economic Progress. By FREDERICK C. MILLS. National Bureau of Economic Research, New York. 1952. 36 pages. \$0.75.

Economic Change. By SIMON KUZNETS. W. W. Norton & Co., Inc., New York. 1953. 333 pages. \$4.50.

HERE ARE TWO CONTRIBUTIONS by highly skilled craftsmen in economic measurement and economic analyses. Both relate to trends in economic growth. In addition, the reviewer may be pardoned for treating them in a single review because the professional careers of the authors have paralleled. Both have been closely associated with the National Bureau of Economic Research for more than a quarter of a century; both are past presidents of the American Statistical Association; and both are professors of economics and statistics (Mills at Columbia and Kuznets at the University of Pennsylvania).

Mills' brief pamphlet is concerned with measuring the role of productivity in the economy over the last half century. During that period, Mills points out, "The real national product of the United States increased $2\frac{1}{2}$ times. . . . Over the same period, the total volume of human effort going into production (measured by man-hours of labor output) increased by 80 percent. The great gain in total output was won with an increase in labor input well below the increase in population." These measurements are based

on decade averages developed by Mills. With these changes as a starting point, he outlines the uses to which the expanding productive power has been put.

During the first half of this century, there was an unbroken advance in productivity (average physical output per man-hour of work). Over the 50 years, gains in productivity have been responsible for 60 percent of the total gain in output. Even in the depression-ridden decade of the 1930's, productivity continued to rise. The period following World War I is of special interest in that the build-up of capital goods and of production techniques brought a sharp advance in the rate of productivity. Striking gains in productivity are again being realized in the post-World War II period.

Mills then turns to the measurement of the uses of the gains in productivity and output. In analyzing decade-to-decade changes and making allowances for maintaining capital stock and consumption levels per person, and the uses of output in war and defense, he finds that about 70 percent of the increase in output over the last five decades has gone toward increasing

levels of consumption, and the remainder for increasing the capital stock of the economy. The increase in per capita standards of consumption has been tremendous in the decade of the forties as compared with any previous decade. As Mills points out, "Gains in consumption levels are persistent and once realized are defended with tenacity." This has real implications for maintaining an encouraging view of economic stability in the future, particularly so because of the large liquid assets that have been accumulated by individuals in the last decade.

While Mills' work is concerned with a specific problem and specific measurements, Kuznets' volume is concerned more with thoughts and questions about a broad range of problems. The subtitle of his book is "Selected Essays in Business Cycles, National Income, and Economic Growth." In a sense, these essays, most of which have appeared in professional journals in the last 20 years, add up to a comprehensive inventory of major problems in these fields. The problems of business-cycle analysis which take up the first 4 essays of a total of 11, bring out the inadequacies of equilibrium economic theory as a tool in business-cycle analysis. He takes exception to the "closed character of the static system." He finds it essential to assume not only that the absolute economic quantities change but also that their relations change. "Just as it would be unwise to accept a rigidly defined norm of human behavior when seeking changes in the pattern of economic behavior caused by changing environment, so also would it be unwise to accept the cardinal assumption of rigid interdependence among social phenomena in a study attempting to establish changes in this dependence."

The essay this reviewer enjoyed most was Kuznets' review of Schumpeter's "Business Cycles," which was an attempt to integrate equi-

librium theory with business-cycle theory. In Schumpeter's theory, technical innovations are the strategic element in the evolution of the economy. Here the economic analyst in Kuznets gains the upper hand over the theorist. Kuznets tries to test Schumpeter's theories quantitatively and fails to find enough to validate the Schumpeter thesis. Perhaps it is too much to expect that Kuznets will believe what he cannot measure.

In three essays concerning national income, Kuznets explores the problems of concepts and measurement of national income for countries with varying degrees of industrial development; the problem of measuring economic welfare; and finally the limitations of analyses of international differences in income levels. In the latter essay, his reflections on the causes of international differences in income levels will be of special interest to those concerned with foreign investment or the Point IV program. In the final three essays, he directs his attention to the main elements of growth in the economy. An essay, "Retardation of Industrial Growth," published in 1929, summarizes the factors that tend to make for a decreasing rate of growth in industry within a nation, and provides a background from which probably were developed many of the "mature economy" ideas which flourished in the 1930's. Another essay in this group, "Economic Tendencies, Past and Present," published just before Pearl Harbor, goes further in forecasting the impact of the war on our economic structure than anything else seen by this reviewer.

The broad learning and experience of Kuznets is apparent on almost every page. Most of these essays, and certainly the more stimulating ones, have appeared in professional journals, but it is well to have them in one place.

Nathan M. Koffsky

Crete. A Case Study of an Underdeveloped Area. By LELAND G. ALLBAUGH. Princeton University Press, Princeton, N. J. 1953. 572 pages. \$7.50.

THE UNITED NATIONS and its specialized agencies, as well as many individual governments and private organizations, are giving a great deal of attention these days to the problems of underdeveloped areas. Programs of technical aid have been inaugurated on both a multilateral and a bilateral basis to assist these countries with their problems. One of the crucial questions, common to all such efforts, is what approach to use—in what ways and by what means can the knowledge and skills of the industrialized countries best be utilized to assist the peoples of the underdeveloped areas to improve their economic and social well-being.

In 1948 the Rockefeller Foundation at the invitation of the government of Greece undertook a survey of the Island of Crete in an effort to discover what kinds of assistance can be usefully given to an underdeveloped area and in what ways it can be most effectively used. The book under review is a report of that survey, which was under the direct supervision of Leland G. Allbaugh. Dr. Allbaugh, one of our better known agricultural economic specialists, was assisted by a very competent staff, included among whom were Ray Jessen and Norman Strand of the Iowa Statistical Laboratory, who were directly responsible for developing the survey methodology that was used and for directing the survey itself.

The Crete study was conceived by the Foundation primarily as an experiment in fact finding. They sought answers to two questions, What should be known about an underdeveloped country before steps are taken toward instituting changes in it? and How much of such necessary information can be obtained, and by what means? Several approaches obviously can be used to get information about a country. The approach selected in this study was to make a cross-section survey of representative com-

munities, households, and farms of Crete. They sought by this means to obtain a realistic cross section of the life of the people whose level of living was the primary concern of the inquiry.

The sample consisted of 740 households in 40 communities and 4 municipalities—600 of these households were in the rural zones and 140 in the municipalities. The sample was so selected as to comprise 1/150th of all households on the Island. Detailed information was obtained on a wide variety of subjects including agriculture and other resources, industry and commerce, the Cretan family, food and nutrition, health, community facilities and living levels, Government organization, and related subjects. The findings with respect to each of these headings are summarized in a series of chapters in part II of the book. There is also an excellent summary of the whole study in part I and a detailed series of appendices in part III, including a number of supplementary statistical tables.

The Crete study demonstrates how it is possible to obtain a clear understanding of the essential elements of an underdeveloped economy, the problems it faces, and the actions required to meet them through use of scientific sampling survey techniques of the kind used in this inquiry. The approach developed undoubtedly could be repeated in other underdeveloped areas with equal success, provided funds and equally competent personnel were available. There is some question, however, whether many governments would see the need, or would make the necessary outlay, for such a careful appraisal before taking action. If this is true, it is unfortunate, as their efforts undoubtedly would be more fruitful and would be subject to less uncertainty and risk if they followed an approach similar to that set forth in this book.

F. F. Elliott

7-16-53
United Nations Statistical Yearbook 1952. Prepared by the STATISTICAL OFFICE OF THE UNITED NATIONS. Columbia University Press, New York. 1952. 554 pages. Clothbound \$7.50 paperbound \$6.00.

THIS IS THE FOURTH ISSUE of the Statistical Yearbook. Previous issues were published in 1948, 1950, and 1952. The current issue contains 177 tables, an appendix, and separate alphabetical subject and country indexes. The territorial coverage of the tables is as worldwide as available information permitted. Many tables give world totals. The statistical series for the various countries is presented on as comparable a basis as possible. To that end index numbers were converted to a common base (1948 = 100). Most tables cover 1932-51 (1932/33-1951/52); several cover 1929-51; and

some are brought up to the early part of 1952. Corresponding data for 1928-31 can generally be found in the preceding issues of the Yearbook. The principal information is given under these chapter headings: Agriculture, Balance of Payments, Communications, Construction, Consumption, Education and Culture, Electricity and Gas, External Trade, Finance, Fishing, Forestry, Industrial Production, Internal Trade, Manpower, Manufacturing, Mining and Quarrying, National Income, Population, Public Finance, Social Statistics, Transport, Wages and Prices, Appendix, and Indexes.

Selected Recent Research Publications in Agricultural Economics Issued by the Bureau of Agricultural Economics and Cooperatively by the State Colleges ¹

BADGER, HENRY T. MARKETING CHARGES FOR CARROTS SOLD IN PITTSBURGH, PA., DEC. 1949-JUNE 1950 AND IN CLEVELAND, OHIO, FEB.-JUNE, 1950. U. S. Dept. Agr. Marketing Research Rept. 31, 36 pp., illus. (RMA)

From February through June, retail margins for size 72 Western carrots sold in sample stores in Pittsburgh averaged \$1.52 per crate and 23.6 percent of the consumer's dollar during the period; in Cleveland \$1.65 a crate, or 24.6 percent. The figures differed somewhat for Texas carrots. The wholesale margin averaged about 10 percent of the consumer's dollar for Western and Texas carrots in both cities during the respective periods studied.

BONNEN, C. A., MCARTHUR, W. C., MAGEE, A. C., and HUGHES, W. F. USE OF IRRIGATION WATER ON THE HIGH PLAINS. Tex. Agr. Expt. Sta. Bul. 756, 43 pp. December 1952. (BAE cooperating.)

Irrigation from wells has greatly increased the stability of agriculture on the High Plains of Texas. Since 1934, the number of wells has increased from 300 to more than 16,000 and the acreage irrigated from 35,000 to more than 2 million.

CHURCH, DONALD E., and SNITZLER, JAMES R. TRUCKS HAUL INCREASED SHARE OF FRUIT AND VEGETABLE TRAFFIC. 24 pp. Bur. Agr. Econ. April 1953. (RMA) (Processed.)

¹ Processed reports are indicated as such. All others are printed. State publications may be obtained from the issuing agencies of the respective States.

From 1948 to 1951, the diversion of rail traffic to trucks, as judged by unloads of 8 selected fresh fruits and vegetables at 10 large markets, equaled 12,000 carloads, or 5 percent of the total 1951 unloads. Of this total, somewhat more than half was represented by potatoes and tomatoes.

FOSSUM, M. TRUMAN. TRADE IN HORTICULTURAL SPECIALTIES. A STATISTICAL COMPENDIUM. U. S. Dept. Agr. Marketing Research Rept. 33, 116 pp., illus. April 1953. (RMA)

This report presents historical and up-to-date information concerning the production and distribution of floricultural and ornamental horticultural crops. In 1950, horticultural-specialty farms numbered 45,000.

GAINES, J. P., and DAVIS, JOE F. ELECTRICITY ON FARMS IN THE CLAY HILLS AREA OF MISSISSIPPI. Miss. Agr. Expt. Sta. Bul. 493, 42 pp., illus. August 1952. (RMA)

Discusses the consumption of electric energy on farms and the place of electricity in the whole scheme of farm mechanization.

GARLOCK, FRED L., WALLACE, MALCOLM E., BIEMAN, RUSSELL W., and LOVE, HARRY M. FINANCIAL STRUCTURE OF VIRGINIA AGRICULTURE. U. S. Dept. Agr. Agr. Inform. Bul. 97, 59 pp., illus. February 1953. (Federal Reserve Bank of Richmond and Virginia Polytechnic Inst. cooperating.)

Chief weakness in the financial structure of Virginia agriculture is the large number of commercial farmers