# Book Reviews

*Economics for Agriculture.* Selected Writings of John D. Black. Edited by James Pierce Cavin, with Introductory Essays. Harvard University Press, Cambridge. 719 pages. 1959. $12.

JOHN D. BLACK's impress is indelibly stamped upon agricultural economics. The reason becomes clear in *Economics for Agriculture*, in which one may become well acquainted with the man, his work, and the subject generally.

A biographical portrait by John Kenneth Galbraith in part I is a thoroughly adequate and faithful painting by a true artist. The prose is shaped seriously and purposefully. As has been pointed out, Galbraith is typically more adept at caricature than portraiture. In this instance, however, the unspectacular yet striking features of Professor Black—the Scotch-tinged, patient teacher, dreadful lecturer, sympathetic counselor, and tireless worker—are impressively and respectfully recorded.

Dr. Black as researcher, social scientist, Governmental advisor, and prolific author is brought out in 12 succeeding parts, plus a bibliography of his writings. Each part is introduced by a significant, informative statement that provides the reader with perspective in the phase of agricultural economics under consideration. From one to three relevant excerpts are drawn from Black's publications to illustrate his contributions to the subject. In some parts, Black's influence on the development of the subject matter and related aspects is specifically discussed as further preamble to the excerpts.

From these parts one may obtain, with the aid of authentic Black students and authoritative essayists, a reasonable working knowledge of the topics accurately indicated in the headings: Development of Production Economics in Agriculture (Sherman E. Johnson and Kenneth L. Bachman); Economics of Land Use (Marion Clawson); the Economics of Forestry (William A. Duerr); Labor, Tenure, and Credit (M. R. Benedict); Marketing and Cooperation (Ray C. Bressler, Jr. and Theodore Norman); Prices and Price Analysis (James P. Cavin); Consumption, Food, and Nutrition (Willard W. Cochrane); Population, Food Supply, and Resources (David L. McFarlane); Agriculture in the Economy (Bennett S. White, Jr.); Agricultural Policy (Walter W. Wilcox); Political Science, Economics, and the Public Interest (Charles M. Hardin); and Research Method (Oris V. Wells).

Credit is due the editor for assembling a good sample of the lifetime work of a great generalist into meaningful, distinctive parts with remarkably little overlap. Involved, surely, was a labor of love calling for much patience and tact vis-a-vis the contributing "students."

Cogent remarks punctuate the essays, giving them radiance without humor: cf., when Galbraith observes Black's "superb sense of what isn't known" and "his genius for . . . 'opening up the field';" when Cochrane states, "John D. Black pushed into a field that had been preempted . . . ;" or when Johnson and Bachman say, "He has extended and clarified pertinent theory;" or Bressler says, "Although not ordinarily listed as a marketing publication . . . [*Introduction to Production Economics*] must be viewed as one of the substantial landmarks in [marketing];" or Duerr, in an exceptionally lucid exposition of forestry economics, remarks, "From the vantage point of the area, Black looks inward at the firms and their neighborhoods, and outward at the public program to be directed to them."

As Black emerges in one role after another, one is reminded of James Thurber and the varied lives of Walter Mitty. Suffice it to cite his courageous admonishment of cooperative leadership in 1929; his critical incursion into methods of price analysis (despite admitted lack of expertise); his preeminence in agricultural policy, and his behind-the-scenes manipulations to implement policy through programs; his knowledgeable distinctions between policies and programs; his sparkling disagreement with natural scientists dispensing dismal prospects and dramatic nostrums; his temperate, embracive, but sometimes abrasive, approaches to national and world problems; his optimism for providing a nutritious diet to growing populations; his sense of public welfare and social responsibility; his persistently repeated but not repetitious annual reviews of economic situations; his insemination of a young profession with methodology as well as subject matter.

In keeping with the manner of Black, the book will strike responsive chords and evoke reactions. One occurs to this reviewer, who arrived at Minnesota shortly after Dr. Black's departure when his imprint was still fresh in the minds of the faculty. It is unfortunate that another opportunity was missed to bring out the brilliant contributions of the late George M. Peterson to Black's pioneering and monumental books in production economics.

The book appeared shortly before Dr. Black's death. Though devoid of exaggeration and adulation, it nevertheless adds to the imposing stature of "John D." Since he appreciated realistic art, it doubtless gave him joy and satisfaction—hard-earned, well-deserved. It will lead present and future generations to a heritage soundly wrought, well assayed.

*Harry C. Trelogan*

*Problems and Policies of American Agriculture.* Essays assembled and published by Iowa State University Center for Agricultural Adjustment. Iowa State University Press, Ames. 460 pages. 1959. $3.95.

COLLATION WITHOUT CRITIQUE is a service of uncertain worth. The unedited back-to-back assembly of essays on farm policy contained in this book, one of the first major products of the (now renamed) Center for Agricultural and Economic Adjustment at Iowa State University, can be regarded as sumptuous smorgasbord, or as a 25-course banquet. The essays, competently prepared by acknowledged authorities, are individually outstanding. But collectively they far exceed the requirements for an adequate intellectual diet.

The book as published is too long, contains too much repetition, shifts the train of thought too often and too abruptly, and is too vulnerable, by virtue of uncontrolled repetitiveness, to magnification of contemporary biases. Exercise of selectivity, with prudent telescoping and paraphrasing of original text, would have contributed a great deal to the usefulness of this project. Alternatively, an editor's introduction to each essay, providing reorientation and transition, might have been employed. Most helpful of all would have been an interpretive summary.

It is true that each reader is obliged to do some digging that might have been made unnecessary through editing—and this is a serious defect in this book, although the only one. The authors and their subjects are well chosen, and the essays are of uncommonly good quality. The book deserves a wide audience and doubtless will receive one.

If frequency of appearance be the test, the nearest to a consensus among the essayists is the view that excess labor on farms is the essential problem of U.S. agriculture. The excess arises out of technological replacement of labor by capital. Among prescriptions offered, greasing the way for departure of farmers or potential farmers to other employment is most popular.

Confidence in efficacy of labor transfer as a corrective device stands high. Karl Fox even suggests that industrial labor's practice of taking quick recourse in unemployment insurance during any adversity helps to open the door wider for farm-emigrant labor. Only Varden Fuller dissents, and he but mildly. He cautions that speeded-up transfer of labor off farms is more easily advocated than achieved.

Noteworthy is the fact that the 25 essays contain few if any proposals for complete abandonment of agriculture to unmitigated economic forces. At the other extreme, few if any authors ask absolute, syndicalistic control. Most programs fall in middle ground. But this is the only possible generalization relative to production programs. Within it, diversity prevails.

Included in the book are good versions of the usual commentaries on resource allocation, demand development, and similar topics. Unique features also are present. The sociologists have their say, and these, such as Paul Miller and others, say it well. This reviewer was struck by a number of scattered comments, well hidden but worth finding, among them the following:

1. The Baker and Halcrow notes on farm credit, a subject not currently in vogue but vitally related to both vertical integration and rural development.

2. Timmons' reservation that if the Federal Government is going to take agriculture under its wing it may as well avail itself of more powers relative to land institutions than have been used to date.

3. Schultz's comments, as original and unprosaic as any in the book, such as that technology is not manna from heaven but a product of resources employed. He suggests by inference that it is proper for society to decide consciously how many resources are to be devoted to research on technology. This stand impresses this reviewer as more mature than the cliches appearing elsewhere, jealously protective of research, which declare any consideration of the matter to be out of bounds. Also timely is Schultz's remark that increase in value of farm assets in recent years due to inflation, "as distinct from the value productivity otherwise inherent," has been of major importance. (Twenty years of capital gains, it may be observed, make for as much disparity between individuals within agriculture as exists between agriculture and nonagriculture, and reminds of George Warren's wisdom that the era when a farmer starts farming in large measure shapes his chance of financial success.)

4. Heady's indignation that agriculture should be singled out for so much incisive judgment-passing on its productivity and its contribution to welfare. "If all other industries were put under the same degree of empirical scrutiny . . ., equal or larger maladjustments [in them] would be found." Further, "who can prove that squeezing some more middle-aged families out of agriculture, to produce zippers for cigarette packages or bigger fins for autos, will increase national welfare?"

5. In the same vein, Clodius declares his impatience with the oft-recurring fatalism that improved returns to agriculture would do little good because they would only be capitalized into higher land values. He is skeptical that such capitalization is inevitable or necessarily bad, observing that "no particular disasters [have resulted] in the non-agricultural economy where the quasi rents and profits of imperfect competition have presumably been capitalized."

6. Not the least among citations is the refreshing advice to scholars to beware their limitations. Says Charles E. Kellogg, "The 19th-century assumptions that research and education would somehow equip society to find the solutions to its problems did not stand the test."

Classed possibly as merely entertaining, and certainly not objectionable, is a dispute in a setting never before seen by this reviewer, namely, that between co-authors within the confines of their article (Beal and Ogg).

A volume so comprehensive cannot be without a minimum quota of imperfections. One may wonder if John D. Black was engaging in a trick of rhetoric in declaring that "technological change in agriculture" must be accepted without a "surplus situation" and without "control of output." Are the exclusions reconcilable? Far more faulty, though doubtless equally inadvertent, is D. Gale Johnson's misadventure in using interregional comparisons to reach, ostensibly, a generalized national conclusion. He compares 27-year changes by regions in farm income per worker and in farm employment. Since trends in demand and price during those 27 years did not differ much by regions (regrettably, no account was taken of this consideration), changes in income per worker tended to vary inversely with changes in number of workers. Naturally so; each share of any kitty is inversely proportional to the number of sharers. But that is no ground for the proffered conclusion that, nationally, "These results are consistent with the view that factors affecting the supply of labor were probably more important than factors affecting demand in determining changes in the average level of farm income per worker during the period." This reviewer feels that the entire CAA report would have profited by editing, and this section should have been edited out.

*Harold F. Breimyer*

*The Southern States Story: The First 35 years.* By W. G. Wysor. Southern States Cooperative, Inc. 231 pages. 1959. Available to agricultural economists and other professional agricultural workers upon request.

IN THIS DAY of big business, big farmer cooperatives are essential. Little farmer cooperatives are an anachronism in dealing with other large economic enterprises.

This volume tells how one of our major farm supply cooperatives has come into being, and describes some of the problems that it has met and conquered during the last 35 years. It is an interesting study in adaptation of an organization to its environment. The Southern States Cooperative was tailormade to meet the social as well as the economic needs of its farmer members.

The story is told by the man who was the leader in the development of this great cooperative enterprise. He literally planted the seed and nourished it with character and capacity until it became a fine growing plant. His close relationship with his subject does not intrude into the telling of the story, which is presented modestly and objectively.

In view of the great confusion that exists with regard to cooperatives today, it is hoped that many who should be better informed will read this story, for it can dispel many fallacies and prejudices.

The author blends history with a description of current operations. He does not give us a detailed year-by-year chronological record of growth. Instead, he presents broad general developments and then indicates how the parts of the organization have grown.

The author also gives us a description of the operations of the Southern States Cooperative as they are carried on today. He lays before us the organization in being and action, and shows its relationships to other enterprises.

The book is a testament by one who believes in the cooperative form of enterprise—one who has demonstrated to himself that it will work. It is filled with the spirit of democracy. It espouses a philosophy of cooperation that does credit to the democratic philosophy of another great Virginian, Thomas Jefferson.

There are many quotable passages. For example, the book ends with this sentence: "The ability of Southern States and other cooperatives to adjust methods, operations, services and policies to meet changing needs and conditions may very well determine whether or not the business of farming will remain free, profitable and under the control of farmers themselves."

The general reader will be particularly interested in the discussion of the tax treatment of farmer cooperatives. This is one of the most lucid explanations of the subject that is available. The problem is not as simple as it appears to those who have not taken the time to give it the study it deserves.

Throughout his study, the author makes it clear that Southern States Cooperative, Inc., and its members have no quarrel with the capitalistic free enterprise system which has achieved for Americans the highest standard of living known in the world. His concern is to show how the cooperative system can make this system work better for the farmer. He maintains, "In a free society such as we have in America, farmers' cooperatives, purchasing farm supplies and marketing farm products, are economic and social instruments which (1) promote and protect the opportunities of the individual, and (2) safeguard our cherished free enterprise system."

The author also deals effectively with the subject of vertical integration in agriculture. Here he maintians that cooperatives are the logical means to organize agricultural production and marketing so as to enable farmers to keep control of their own industry. He writes: "Farmers acting together through Southern States are well on the road to a 'do it ourselves' system of integration controlled by farmers, owned by farmers and operated in their own interest to channel the profits from all segments of the production, processing and marketing where it rightly belongs—to the producers."

***Joseph G. Knapp***

*Business Cycles and Economic Growth.* By James S. Duesenberry. McGraw-Hill Book Company. 325 pages. $6.50. 1958.

"ECONOMIC GROWTH," generally measured by increases in real Gross National Product, is the current fad of economics, following the "underdeveloped country" fad of a few years ago, and to be succeeded by who knows what? Why the fields of interest of economic theorists should show this marked cyclical behavior is a problem to which economists have not yet turned in any systematic way. Schumpeter's innovator theory may be the best theoretical explanation, but the changing national environment is almost certainly the underlying factor. Be that as it may, with Duesenberry's book, plus several others of nearly equal merit (notably Fellner, *Trends and Cycles in Economic Activity*), and with the long hearing just completed by the Joint Economic Committee, this boom has probably reached its peak, and the downturn is due soon.

Duesenberry has done a remarkable job in his book. He presents an extremely clear and lucid survey of the models of economic growth based on the dynamic interaction of the accelerator and multiplier, these models flowing from Harrod's pioneering work in *Towards a Dynamic Economics*, published in 1948.

The models attempt to explain the processes that account for secular growth of real demand, potential output, and fluctuation in demand by one unified theory. The values of the multiplier and accelerator can lie in any of four ranges, with results following an injection of autonomous investment into the system, ranging from dampened cycles returning to the income level determined by the simple multiplier to a sustained geometric rate of growth in real income. However, the lowest sustainable growth rate turns out to be very high, on the order of 13 percent per year. As the natural factors of growth (that is, population and productivity increase) will not permit the economy to reach this sustainable rate, upon reaching a ceiling set by these factors, income turns downward violently. The downward movement continues until reversed by autonomous investment, and the cycle repeats itself.

A variant of this approach is that of Alvin Hansen, who believes that the values of the accelerator and multiplier are such that no sustained growth occurs and that the observed cycles are caused by waves of autonomous investment. Duesenberry, while recognizing the essential truth contained in these theories, that is, that there is a dynamic relationship between income and investment, rejects the theories as not covering adequately the general features of the capital-income adjustment process. The instability of these models results from the use of a rigid accelerator coefficient and a consumption function that ignores returns on investment.

The author develops his own "income-generation model," building upon extended discussions of the marginal efficiency of investment (chapter 4), sources of funds and costs of capital (chapter 5), oligopoly and investment (chapter 6), investment in housing (chapter 7), and personal saving and consumption (chapter 8). In its simplest form:

$$Y_t = (A+a)Y_{t-1} + (B+b)K_{t-1} \quad \text{and}$$

$$K_t = AY_{t-1} + [B + (1-k)]K_{t-1}$$

where

$Y$=Gross National Product
$K$=Capital stock
$a$=Marginal propensity to consume out of GNP
$b$=Coefficient giving changes in consumption from changes in capital stock (through profits on dividends and dividends on consumption)
$A$=Coefficient representing changes in investment related to income
$B$=Coefficient representing changes in investment related to capital stock
$k$=Depreciation rate of capital stock.

Under this simplest of systems, capital stock grows whenever gross investment exceeds depreciation, and income grows whenever investment exceeds Robertsonian savings.[1] To have sustained growth, the rate of growth in $Y$ and $K$ must be the same. The two rates of growth are determined by

[1] Duesenberry gives contradictory definitions of Robertsonian savings. On page 179, he says that it is "the difference between last period's income and this period's consumption." On page 208, he defines it as "the difference between consumption in period t-l and income in period t." The first is correct; see *Essays in Monetary Theory*, by D. H. Robertson, Staples Press, 1940, p. 65 ff.

the ratio of capital stock to income; they will remain constant if that ratio remains constant. So, "income *can* grow steadily if there is a real, positive ratio of capital to income at which the rate of growth of income equals the rate of growth in capital" (p. 204).

The relationship of the rate of growth in $Y$ to the ratio $\frac{K}{Y}$ is linear—that of $K$ is hyperbolic. There will then be two points at which the above equilibrium condition for sustained growth will be met—one stable with respect to shocks to the system, and one unstable. On figure 1, point A is stable, as a shock which changes the ratio $\frac{K}{Y}$ will tend to be self-correcting, and point B unstable. It is on the basis of an elaborated model of this nature that Duesenberry builds his stimulating analysis of cycles and growth. An example of his generalizations is that until the 1920's, the United States economy fluctuated about point A, since then, about point B. Thus, the great depression of the 1930's differed in kind from previous depressions, and no longer does the economy automatically tend toward a stable equilibrium rate of growth. Instead, it is quite sensitive to shocks.

At best, this review can give only a very small sample of the wisdom and truth contained in Duesenberry's work. The book is must reading

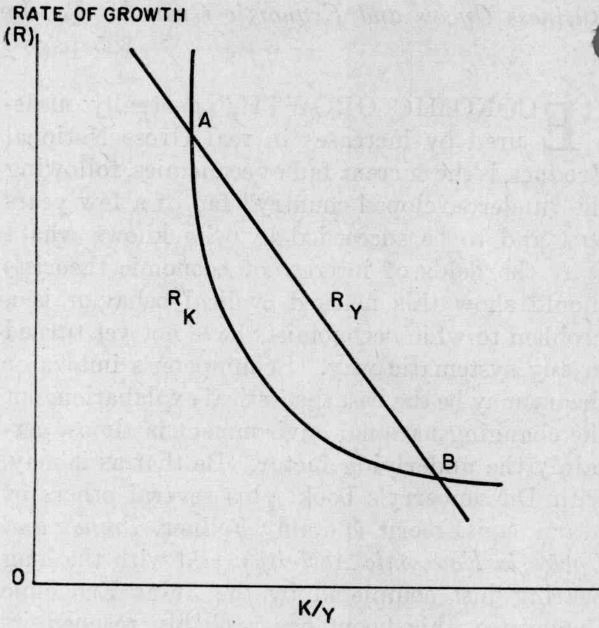


Figure 1.

for anyone thinking about economic growth and stands as a major work culminating the fad of concentration on economic growth. It is unfortunate that other fads have not been marked by such a monument.

*William A. Vogely*

*Economics of Transportation.* By Marvin L. Fair and Ernest W. Williams, Jr. Harper & Brothers, New York. 684 pages. Revised edition, 1959. $8.00.

AMONG THE FEW really good textbooks in the field of transportation economics, Fair and Williams give us one of the best. Most such books are essentially treatises on regulation. Fair and Williams use the functional approach that they introduced in the first edition 10 years ago, and in this revision they bring it up to date.

It is understandable that in earlier decades of this century, when carriage of goods was dominated by regulatory agencies of States and the Federal government, emphasis should be placed upon the history and development of regulatory policy. But in recent years the tremendous growth in private and exempt transportation has exerted the greater influence upon the distribution of resources. Regulation and regulatory policy have not been neglected by Fair and Williams, but they have been relegated to an appropriate position in the economic framework of transportation utility of today.

As an initiation into the intricate maze of facilities, services, and price, which necessarily comprise the greater part of the text, the student will find the opening chapters on transportation as an economic function, its social significance, and its influence upon the national economy, to be most helpful.

Part II lays stress upon the economics of transportation. Here we find exceptionally good chapters on the demand for transportation service and on carrier management and organization. Another chapter relates to cost relationships in carrier service. In particular, the interrelationships between costs by different modes of transort are well handled in this chapter, a difficult matter, considering the divergence between carrier facilities, character of operations, and the financial requirements of different types of carriers.

The book ends with a discussion of national transportation policy and current problems. Mostly these problems concern the difficulties of the railroads, handicapped by the inflexibility of their facilities, operating rules for the protection of labor that were outmoded a generation ago, and rate-making precedents that have outlived their usefulness. The authors point out the ". . . criteria have been employed in promotion and regulation that do not jibe with the expressed objective of an integrated system based on economic fitness. Local policies rather than national economic interest have been all too important in federal-aid policy. In regulative legislation and administration such uneconomic criteria as the following have been employed: (1) Preserving plants of existing carriers, (2) keeping every carrier in operation, (3) preserving existing routes of traffic, (4) preserving existing railroad rate structures, and (5) preserving the jobs of railroad labor. To serve the national interest a policy directive to the Interstate Commerce Commission and other transport agencies requires avoidance of criteria which militate against change and adjustment."

It might be wished that the authors of such a comprehensive study, on the basis of their extensive experience, had pointed out more definitely the direction in which current trends in transportation were leading, or at least that they had indulged in some speculation (which they must have been tempted to do) regarding these trends, and the transportation problems that may need to be faced later on. This would have been helpful to students of transportation as an indication of the challenges to future transportation economists.

*J. C. Winter*

*The Analysis of Variance.* By Henry Scheffe. John Wiley and Sons, New York. 477 pages. 1959. $15.

ONE PASSAGE in the preface of this scholarly work gives the prospective reader a good idea of what to expect—"It is well known that one unifying and insightful way of regarding the analysis of variance is from the geometrical viewpoint: it may be viewed as a method of resolving the vector of observations into vectors lying in certain specified spaces corresponding to different sources of variation in the observations, and to each of which a meaningful interpretation can be given. For understanding the geometry of such resolutions and the geometrical interpretations of the statistics used to test whether the magnitudes of some of the component vectors associated with different sources are significant, the concept of orthogonality of vectors and spaces is indispensable. The easiest way of defining, applying, and manipulating this geometric concept is, I believe, through the use of matrix notation."

While a more elementary algebraic treatment would have been possible, the sophisticated approach used here should not frighten the serious student. Once the hurdle of translating matrix notation into elementary algebraic expressions is overcome, the mathematics is not too formidable. There is a wealth of material here that is not available elsewhere in one place. It is perhaps debatable whether a student's first exposure to the subject should be of this kind or whether his indoctrination in fundamental theory should be deferred until he has gained a working knowledge of numerical computations by the cookbook route. This reviewer is inclined to lean toward the latter viewpoint, because many formal proofs and algebraic derivations in the theory become almost self-evident in making computations on experimental data. But regardless of the sequence, the concepts in this book need to be acquired sometime by everyone who really wants to comprehend the subject.

Part I covers the theory of analysis of variance with fixed effects and independent observations of equal variance. The first two chapters are devoted to an excellent résumé of the theory of point estimation and the theory of testing hypotheses as introductory material. The succeeding chapters cover covariance and the various analyses associated with the usual well-known elementary experimental designs. Part II covers analysis of variance with random-effects models, mixed models, randomization models, and effects of departures from underlying assumptions such as nonnormality of data, inequality of variances, and correlations between observations.

This reviewer recommends the book to any practitioner of analysis of variance to whom one or more of these topics sound unfamiliar. Problems to be worked by the student appear at the end of each chapter. A detailed appendix gives an exposition of vector and matrix algebra, and other mathematical material required to understand the text. Tables included are those of F, Studentized Range, and the charts for the power of the F test by Pearson and Hartley and by Fox.

*Walter A. Hendricks*

*Agricultural Economics Research in Asia and the Far East.* Study prepared by ECAFE/FAO Agriculture Division. Economic Commission for Asia and the Far East. United Nations and the Food and Agriculture Organization of the United Nations. Columbia University Press. 100 pages. 1959. 75 cents.

ABOUT A THIRD of the report is devoted to an examination of (1) the role of government economic organizations in the collection and analysis of data with a view to facilitating the formulation of agricultural economic policies, and (2) the role of existing organizations in research. The remaining two-thirds of the report gives the status of current agricultural economics research in Burma, China (Taiwan), Federation of Malaya, India, Indonesia, Japan, Southern Korea, Pakistan, Philippines, and Thailand.

*The International Age in Agriculture.* The Graduate School, United States Department of Agriculture, Washington 25, D.C. 96 pages. $1.75. 1960.

The five lectures given in the Graduate School series on the International Age in Agriculture, together with a summary of seminar discussion that followed the last four lectures, are presented. Topics and speakers are: "Food for Peace," by Don Paarlberg, Special Assistant to the President; "Technical Assistance Programs in Agriculture, International and Regional," by Norman C. Wright, Deputy Director-General, FAO; "World Agricultural Market Opportunities and Limitations," by Max Myers, Administrator, Foreign Agricultural Service, USDA; "Agricultural and Assistance Programs of Other Countries, Including Sino-Soviet Block Countries," by Thomas C. Mann, Assistant Secretary, Department of State; "Helping Other Countries Improve Their Agriculture," D. A. Fitzgerald, Deputy Director for Operations, International Cooperation Administration.