

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search http://ageconsearch.umn.edu aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

Book Reviews

and Sons, New York. 1958. 357 pages. \$6.50.

O THE 1950 U.S. CENSUS monograph program goes the credit for initiating the clearest and most readable account yet presented of the growth and changing characteristics of the American people. The book, which could not have been entrusted to more competent hands than this husband and wife team, has an admirable brevity. It is one of the few in which I would join Oliver Twist in asking for more. It is safe to predict that it will prove to be the most popular and most quoted of all the present monographs. Students, laymen, and professors will find this the place to begin searching out our continuing population trends. Only the professional demographer, however, will fully appreciate the clarity and the finesse with which the authors have woven together the strands of their exposition.

Compared with the two Rossiter monographs (1909, 1922) and the Trends Report by Thompson and Whelpton (1934) this study is, as the authors say, "more modest than its predecessors." Previous monographs featured unpublished and retabulated census data, along with new applications in method. The Taeubers, on the other hand, "present broad outlines rather than exhaustive analyses," make excellent use of charts and graphs (75) and clear-cut tabulations (over 100). In addition, there is widespread cross-reference to other studies including the present monograph series. Obviously, the authors have chosen wisely for the overall view.

The need that the authors sense for full treatment of topics and their interrelations in social demography place a real burden on the book's length and its organization. Space limitations do not permit citation of findings, but the topics especially well treated include age and rate of marriage, household and marital status, education, income and migration, both to and within this country. Rural-urban shift and the growth of metropolitan areas also stand out. Early developments are more quickly summarized while special attention is given to changes from 1940 to 1950. Shifts in demographic categories-the at-

The Changing Population of the United States. By Conrad Taeuber and Irene Taeuber. John Wiley

tempt in the Census to maintain continuity while doing justice to new conditions-are given bland treatment-not critically presented.

The highest level of interpretation in the book is reached in the conclusion-a stimulating chapter on interrelations in development which brings the multivariate analyses home to fertility, mortality, and population growth. The last chapter on prospects relates recent trends and projections to the future changes that face the American population.

Sometime, somewhere, demographers will have to subject the almost limitless descriptive data of national monographs to manageable generalizations. This is the role of theory, good theory; and it is difficult to do. We shall do this not just for theory's sake; but for comprehension and meaning. Without attempting to dictate to the authors a goal that was no part of their purpose, I would suggest two places in which this might be attempted. First, we may ask whether the complex of declining mortality, declining fertility, and declining immigration can be presented against the framework of the Demographic Transition in the United States? Obviously, this gives a certain fit, but it would tend to highlight the baby boom as initiating a new cycle in American population growth. This involves risk, but is the risk any greater than that involved in what we once regarded as purely technical analysis of population projections?

Second, trends in changing population characteristics appear to be almost unmanageable until they are tested against a hypothesis of the convergence in American life of differentials-social and economic. One need not assume closure in such a theory, but it does highlight the one area of divergence-the increasing difference in length of life that women hold over American men. Here the Taeubers score admirably. Convergence is listed in the index and is treated at length. But until someone sets up an acceptable statement of convergence in population characteristics, none of us can criticize an official monograph for due scientific caution.



In conclusion, this reviewer may be permitted a little scientific patriotism. The excellence of this volume pays tribute to (1) an organization which with changes dates back to 1790, to (2) continuing official reports extending a century and a half, and (3) to a most able corps of scientists in the public bureaucracy. If this be demographic chauvinism, let us make the most of for the Taeubers represent a goodly heritage.

Rupert B. Vance

The Agricultural Register (New Series): Changes in the Economic Pattern 1956-57. Agricultural Economics Research Institute, University of Oxford. The Sidney Press Limited, Bedford, England. 234 pages. 21s.

STUDENTS OF BRITISH AGRICULfirst postwar issue of the *Agricutural Register*. Like its prewar predecessors, it represents a remarkable job of compiling and compressing into one handy reference volume a mass of widely scattered material bearing on current British agricultural and trade policies. No attempt is made at appraisal. As the preface points out, the object is to set out the facts for the use of those concerned with either the field of action or the field of education.

The facts set out relate generally to the years 1954–57. By the middle of 1954, the Government had returned to private hands the trade in most farm products and had shifted from a fixed-price system to deficiency payments, or some other type of direct subsidy system, to implement most of the price guarantees given agriculture under the Agriculture Act, 1947. In line with Government aims, farm output had been greatly expanded—from 128 percent of prewar in 1947–48 to 155 percent in 1953–54, according to official estimates.

A brief summary of the Agriculture Act, 1947, and the price review procedure that precedes the annual determination of the agricultural guarantees (prices and production grants) would have helped the reader to follow the opening chapter on the development of agriculture and Government policy. This chapter is in fact almost wholly confined to developments in 1956-57. It deals with the so-called long-term assurances, embodied in the Agriculture Act, 1957, which in essence limits the Government's authority to reduce agricultural guarantees and establishes a new program of farm-improvement grants. It discusses also the 1957 price review, when the Government, having abandoned the conception of a specific production goal the previous year. stressed again the need for a high level of net output and economic production, but revised price guarantees in an effort to promote desired production adjustments—more beef, lamb, and livestock feed, but no more pork or wheat, and less milk and eggs.

The next two chapters, which account for more than half the book, take up one by one the priceguaranteed products. They are a storehouse of information, not only on the often intricate methods devised to meet price guarantees since decontrol, but also on supplies and prices, subsidies, marketing arrangements, and other matters affecting milk, fatstock and meat, poultry and eggs (poultry meat is not subsidized), wool, grains, potatoes, sugar beets, and sugar.

Fruits and vegetables, which do not benefit from price guarantees but are protected by tariffs and quantitative import controls, receive attention in the chapter following. Tariffs and trade controls including some trade agreements are treated als in the chapter on imports, as are antidumping measures and the European Common Market and proposed Free Trade Area.

Topics in the remaining part of the book come under the headings of labor, land and capital, and inputs. Here may be found information on employment, minimum wages, and safety regulations; land prices and rents, Government-owned or managed land, and surveys of "problem" areas; farm credit and production grants or subsidies not elsewhere described; fertilizers, measures to facilitate the use of homegrown feeding barley, farm machinery, and electricity on farms.

Also included, rather surprisingly, in the section on production grants, is a summary table showing item by item the Exchequer cost of all subsidies arising under all guarantees, both prices and production grants. Although the book does not so state, it can be gathered from the array of facts given that this cost covers most of the cost of agricultural support in Britain, in contrast to other countries where consumers rather than taxpayers bear the main burden. While tariffs, import controls, monopoly marketing powers, and the like influence wholesale prices of certain products, the British system of price support as a whole involves relatively little interference with market prices. The details of such a system in operation should be of wide case history interest, making the interest in this book correspondingly wide. It is to be hoped that there will be succeeding issues of the *Agricultural Register* to carry the story forward.

Lois Bacon

American Cooperation 1958. The American Institute of Cooperation, Washington, D.C. 755 pages. 1958. A collection of papers presented at the 30th annual session of the A.I.C. in August 1958 at Pennsylvania State University.

THE CONTENTS of this volume are of interest to everyone concerned with the role of cooperatives in dealing with the farm problem.

"... No business group started out with any more definite and high-level philosophy than the cooperatives did 25 to 30 years ago. However, many cooperatives seem to have adopted the day-by-day operational vocabulary to the point of where they are not very vocal about their viewpoints and their philosophies today. This seems to be occurring in cooperatives at the very time when private profit businesses are becoming more vocal in regard to their philosophic, ethical and social viewpoints."

The above statement by Thomas H. Nelson reflects a concern over "viewpoint" which is treated in a variety of ways throughout the volume—all the way from the extreme idealism of youthful contestants in 4–H Club contests to the more mature judgments of such cooperative leaders as Ezra Taft Benson and Gale C. Anderson.

Secretary Benson's concern with viewpoint involves the relation of farm cooperatives to government when he says:

"I have little patience with those who complain because Congress has at times given special recognition to farmer cooperatives—who contend that farmer cooperatives are socialistic or who argue that cooperatives do not pay their fair share of taxes. In this country every citizen is free to select the form of business organization of his choice. He can be an individual proprietor; he can be a partner; he can form a conventional business corporation; or he can organize a cooperative association."

Mr. Anderson's concern over viewpoint reveals a fear of too much government action when he says:

". . . we can lose our freedoms and our liberties,

our democratic institutions and our democratic economics of Capitalism, if we are not alert to what is going on in this country and stop this trend of turning to the government to solve all of our problems."

Concern over viewpoint extends to such excellent success stories as the one by A. J. Jessee describing his experience with the Shen-Valley Meat Packers, but here it is a concern lest people be led to expect too much. He says:

"... the association for the past two years has been able to return to producers from earnings a Patronage Allocation of approximately onehalf cent per pound of livestock that they marketed through the cooperative."

These four samples among many that might be cited are sufficient to suggest that an adequate viewpoint regarding the role of cooperatives in dealing with the farm problem is something much more profound than the notion that through cooperation farmers are enabled to buy and sell more advantageously. Such a general conception could include political cooperation; and if so, could as easily result in either more or less use of the power of government.

Current developments in vertical and horizontal integration attracted a great deal of attention of those attending this meeting. Can cooperatives, in the face of these developments do as Secretary Benson suggests they can, "maintain control for farming?" Has D. W. Brooks pointed up the current issue when he says cooperatives are "going to join the quick or the dead?" Does Mueller's exposition of what is happening to dairy cooperatives mean that control of farming will gradually slip further into the hands of corporations?

And what do cooperative leaders really mean when they say farmers should have more bargaining power? Do they mean that the only additional bargaining power farmers should have is that which comes from banding together voluntarily in sufficiently large groups to enable them to buy at wholesale rather than retail, and to obtain the savings of efficient merchandising? This is clearly one conception of the proper role of cooperatives, and it includes little or no control over supply to provide "market power." Is it a proper function of government to supplement the persuasive power of cooperative leaders with the governmental power of marketing orders? Is the only test of the applicability of such power to a specialty product rather than a "basic" crop the question of whether it can be made to "work"? These are some of the questions the reading of this volume raises in the mind of this reviewer. They are in my opinion some of the key unresolved issues in the public mind and in the mindsof cooperative leaders.

It is a hallmark of our culture that issues such as these are being discussed by such a broadly based and democratic group as that assembled by the A.I.C. However difficult our problems may be, the prospect for dealing with them in the general interest is heightened by this exchange of ideas between operating managers, professional research workers, Extension workers, and Government administrators of programs vitally affecting cooperatives.

Busbrod W. Allin

Studies in the Mathematical Theory of Inventory and Production. By Kenneth J. Arrow, Samuel Karlin, and Herbert Scarf. Stanford University Press. Stanford, Calif. 340 pages. 1958. \$8.75.

I NVENTORY PROBLEMS lie all around us; some are recognized as such, others are not. In remarking on the ubiquity of inventory problems, Arrow, Karlin, and Scarf write:

"An inventory problem might, for example, involve deciding how much typing paper to stock each month for an office, or how many spare parts to keep on hand for a given machine. When production is involved, the inventory problem might require determining how much wheat to plant per year or how much gasoline of a certain variety to have blended. How much water to release from a dam for electricity and irrigation purposes is an inventory problem; how many workers to hire for a given labor force is another. Inventory problems may involve scheduling, production, determining efficient distribution of commodities in certain markets, finding proper replacement policies for old equipment, determining proper prices for goods produced, or combinations of these elements."

To this list the agricultural economist might add the problem of optimal carryover levels for grains, a subject on which the U.S. Department of Agriculture has recently published a technical bulletin.¹ He might also point out that many problems in the livestock-dairy area are in fact inventory problems, although little has yet been made of this fact.

Much of what is known about inventory theory is of recent vintage. The field of operations research, developed largely since World War II, has as its purpose the solution of concrete problems that arise in business, government, and military activities. As many of these problems are connected with inventories, it is not surprising that the theory has been developed by people in the operations research field, and in a way that is particularly applicable to business problems. *Studies in the Mathematical Theory of Inventory and Production* is directed primarily to the operations research worker, but the agricultural and the general economist can read much of it with profit.

The book consists of a series of interrelated papers that treat the mathematical and conceptual problems involved in business decisions about inventory holdings and production. It is not intended to be a systematic treatise. Despite this, I venture the guess that the first two chapters will be widely read as an introduction to the growing literature on inventories and production. In these chapters, the authors discuss the relation of current developments to earlier work by economists on inventories and present a unified and detailed picture of the structure of inventory problems. Common

¹Gustafson, Robert L. CARRYOVER LEVELS FOR GRAINS. U.S. Dept. Agr., Agr. Mktg. Serv. Tech. Bull. 1178. 1958.

elements in problems of a seemingly diverse nature are uncovered, and the stage is set for the more echnical papers to follow.

In chapters 4 to 7, the authors are concerned with production over time, both with and without storage. Given the costs of producing any output, of storing output, and of changing the level of output, the firm's problem is assumed to be the minimization of costs, in some relevant sense, over a period of time. The demand for the firm's product is treated as a known function of time, and it is assumed that the firm must meet all demands exactly. This special assumption is of greater relevance to the industrial than to the agricultural sector, but the tools that the authors forge are of a wide range of applicability and could be adapted to the purposes of those of us who are interested in agriculture.

Chapters 8 to 13 deal with optimal inventory policies when future demands are uncertain. Here more complex models are considered than have been analyzed by previous workers. They are largely extensions of the Arrow-Harris-Marschak inventory model, which is the root of most current work on inventories, including that of Gustafson on optimal grain storage policy. In two of these chapters, the authors are concerned with applications of inventory theory to problems involved in hydroelectric operations and in stocking machine-repair parts.

Chapters 14 to 17 deal primarily with the development of new mathematical tools for handling the kinds of problems that arise when inventories are discussed. Several contributions to the theory of stochastic processes are made. Many inventory problems are so complex that solutions to them that can actually be computed are difficult to obtain. The material in these chapters lends itself particularly to comparison of alternative inventory policies as opposed to the computation of a single optimal policy. This is extremely useful from a practical standpoint, as, in actual situations, we are frequently restricted to a limited number of policies for institutional reasons.

Farm management experts and those interested in commodity storage policies will, of course, find much that is useful in *Studies in the Mathematical Theory of Inventory and Production;* also economists who are interested in the supply of agricultural commodities will derive indirect benefit. Many cyclic phenomena in agriculture, such as the so-called cattle cycle, have never been explained satisfactorily. Inventory decisions by producers lie at the heart of many of these phenomena, and it may be that more sophisticated inventory models will provide better explanations than we have had so far. This book provides a basis for developing such models.

Though the volume does not provide an index, it contains a chapter that summarizes all the other papers in detail. It is a challenging but difficult book. Mathematical sophistication and background of a high order are required to read it through, but the rewards are great.

Marc Nerlove

Selected Recent Research Publications in Agricultural Economics Issued by the United States Department of Agriculture and Cooperatively by the State Colleges ¹

ANDERSON, K. E. MILK CONSUMPTION IN THE NA-TION'S SCHOOLS. U.S. DEPT. AGR. MKTG. RES. RPT. 284, 29 PP. Nov. 1958.

This study discloses the extent of milk services in the public schools. Daily consumption of milk per pupil averaged 0.7 half-pint in schools participating in the Special Milk Program during the survey period, 40 percent more than the average of 0.5 half-pint in other schools serving milk. During the month of the survey, children in public elementary and secondary schools purchased 409 million half-pints of milk. This report shows the consumption of milk in schools by type of lunch service, regions, population density, size of school in terms of enrollment, and by grade level.

BIERMAN, R. W., AND CASE, B.A. FARM-MORTGAGE LOANS OF THE FEDERAL LAND BANKS. U.S. AGR. RES. SERV. ARS-43-86, 78 PP. DEC. 1958.

This is a description of Federal Land Bank lending from 1950 to 1957, inclusive. At the beginning of 1958, the Federal Land Banks held 18 percent of all farmmortgage debt outstanding. Interest rates on loans outstanding averaged 4.2 percent, compared with an average rate of 4.8 percent for all farm-mortgage lenders. In 1957, the average size of all farm mortgages recorded by the land banks was \$9,050. The major purpose of land bank loans in recent years has been the refinancing of indebtedness, including the refinancing of existing land bank loans.

¹ State publications may be obtained from the issuing agencies of the respective States.