Government. This view is at variance with proposals to encourage production on small holdings. Forestry also can be encouraged by actions to increase the marginal efficiency of capital in forestry through public assistance in management, disease control, reduction of risk, and more favorable taxation. Hopkins notes that “by subsidizing forest production to a relatively small extent, society has the opportunity to desubsidize agriculture substantially.”

Carroll Bottum notes that all of the seriously considered adjustment programs would take land out of production. This result would transpire even with free market prices. Negotiable quotas and low prices would require the least retirement, perhaps 40 million acres. Retirement of marginal land would require the most diversion—perhaps 80 million acres. Income support programs will continue to be needed to supplement land retirement.

John Schnittker contrasts the effects of land development and land adjustment programs. He considers research and extension to have the greatest effects on increasing output. Development programs are a contradiction in a period of surplus but they can be rationalized and it is only realistic to assume that they will be continued.

Numerous specific land adjustment programs are analyzed. Philip Raup and Elmer Learn contrast alternative means of controlling supplies and the consequences for land withdrawal. They regard transferable allotments as involving a new legal concept that shifts the right to produce from real property to personal property. Chryst and Timmons emphasize the importance of land institutions to agricultural problems and their solution. They outline a program that would “divert the program-created income stream now flowing through land titles toward a longrun adjustment in the earning opportunities of farm people.” Their scheme would involve production rights that would be temporary and would be acquired by individuals on the basis of bids. Howard Ottoson explores the impact of land retirement on communities and suggests means of lessening the effects.

_Dynamics of Land Use_ will be a useful reference for formulators of policy, for farm leaders, and program administrators. It deals competently and in depth with the whole scope of the land adjustment problem.

_The Southern Appalachian Region: A Survey._

_IN GENERAL, the economic and social problems of the Southern Appalachian region are well known. Public policies and programs in the past have not been sufficient to enable this important region to share fully in the economic growth of the Nation, so as to relieve the chronic poverty that prevails among a large proportion of its people._

The study of the problem of too great a population pressure on too few resources was the concern of the relatively limited regional survey of economic and social conditions of this underdeveloped area almost 30 years ago. At that time the investigation was mainly concerned with the causes for the area’s problems. Since then, many fragmentary economic and social studies of the Appalachian area have been conducted to develop a better understanding of localized problems. In total, these studies have been insufficient to develop comprehensive policies and programs for the economic development of the region.

The urgent need for a comprehensive study of the region’s resources, the important changes that have occurred during the last three decades, and potentials for economic and social development were recognized to be basic to the development of programs designed to increase this region’s living standards to the national level. This concern for the region was the basis of a conference which resulted in the planning of a series of studies which would analyze all aspects of economic and social activity in the Southern Appalachian region. The Southern Appalachian studies were financed largely by the Ford Foundation, assisted by area colleges and universities and public agencies; they were administered by Berea College.

Extensive regional surveys were conducted to measure social and economic changes in order to gain some insight into the relationships between those changes and the values, beliefs, and attitudes of the people affected by them. Most of the people in the region now have the major goals and standards typical of American society. An important guideline for policy determination is that the old stereotypes that have so long guided social action in the region no longer apply to the great majority of the residents.
This report consists of 19 chapters developed by an interdisciplinary group of research specialists who have done an excellent job in presenting the region with respect to its human, physical, and economic resources, cultures, obstacles, and potentials for economic development. The subjects of each chapter were well selected and developed so as to present the reader with a comprehensive understanding of the progress made by the people in the region, as well as the region's many problems. The human resource of the region and the investments needed to properly develop this important national resource received adequate recognition. The chapter on agriculture could have been more helpful, if the authors had incorporated the 1959 agricultural census data in their analyses. Important changes in the structure of agriculture occurred during the period 1954–1959.

The Southern Appalachian Studies group made a timely and important contribution by providing those interested in furthering the development of this important region with an objective analytical perspective of all aspects governing economic and social activity. In addition, early recognition is given to the overriding influences of our national and international policies and programs. Future development of the Southern Appalachian is a challenge to our Nation. It is the hope of those concerned that this comprehensive regional study will be translated into sound, progressive, and practical program activities for the purpose of ameliorating the intolerable conditions of poverty that prevail throughout the region.

E. L. Baum

Mathematics for Economists: An Elementary Survey.


This book is, as the title indicates, an elementary survey of mathematics for economists. It is one of the most complete treatments of mathematics commonly used in economics that has yet appeared. Students with a course in algebra will find little difficulty in understanding the material presented.

The main topics covered in the book are sets, functions and limits, differentiation, integration, maxima and minima of functions (both unconstrained and constrained), series, differential equations, difference equations, vectors and matrices, probability and distributions, statistical concepts and hypotheses testing, game theory, and regression and correlation analysis. The chapter on set theory is brief and set notation is not used in the rest of the book, with the exception of the chapter on probability. The treatment of the other sections of the book are thorough and done with great clarity. The sections on maxima and minima and on vectors and matrices are particularly good. Also, the mathematical treatment of regression and correlation analyses, together with the coverage of matrix algebra and statistical concepts, provide students with a basis for an introduction to econometrics.

The topics are treated in a heuristic manner and proofs and derivations are not provided. However, this is not a serious shortcoming since the book is a survey of mathematics.

Economic problems and concepts are presented throughout the book and exercises and references are given at the end of each chapter. It is unfortunate that the author did not include more economic problems at the end of the chapters. This would have given students a better appreciation of the role of mathematics in economics.

This book provides an excellent text for a full year course in mathematics for economists. Some of the subject matter will have to be supplemented with other references; in particular, the sections on set and game theory. However, the need for supplemental material is minimal.

Martin E. Abel

Vertical Integration in Theory.


Since vertical integration problems caught the interest of the profession 6 or 7 years ago, enough has been written to conclude that (1) changing vertical interfirm market relationships raise some problems, (2) alleviate others, and (3) the historical novelty of such changes has been exaggerated. A review of the material also shows that the conceptual apparatus which has been used to approach the subject is piecemeal and particularistic. Blaich's report deserves attention as an attempt to overcome this difficulty.