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A Study of Output,

Employment and Productivity

by Harold Barger

and Hans H. Landsberg

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Director's Note

THIS report is one of several dealing with the trends of production and productivity in American industry since the opening of the twentieth century. Other volumes already published are *The Output of Manufacturing Industries, 1899-1937* by Solomon Fabricant (1940); and *Employment in Manufacturing, 1899-1939: An Analysis of Its Relation to the Volume of Production*, by the same author (1942).

The study upon which this volume is based was made possible by funds granted by The Maurice and Laura Falk Foundation of Pittsburgh. The Falk Foundation is not, however, the author, publisher, or proprietor of this publication, and is not to be understood as approving or disapproving by virtue of its grant any of the statements made or views expressed herein.

William J. Carson
Executive Director

National Bureau of Economic Research, Inc.
December 1942

Preface

As its subtitle indicates, this book deals with certain aspects only, albeit important aspects, of agricultural development since the end of the last century. The limitations upon its scope are deliberate and require brief explanation.

Farming is much more than just another industrial segment; it has indeed been called a way of life. It is one of the oldest, and still one of the most important, ways of getting a living. Throughout the ages it has been the subject of an extensive literature: writers have treated it from every point of view. It has a sociological interest which is barely touched on in this volume. Changes in the farmer's standard of living, or in his cultural attainments, his reactions to governmental incentives, the changing fortunes of different farming areas, problems of migration and the farm-city interchange—all these lie outside the scope of a volume such as the present and will be mentioned only incidentally. Questions of a more strictly commercial nature, such as the marketing methods pursued by the farmer, and the processes of price formation in the case of farm products, also remain undiscussed. These restrictions are necessary limitations, for without them it would be impossible, within the compass of a single volume, to accord adequate treatment to our chosen topics—output, employment and productivity.

The structure of the book is briefly as follows. Part One, consisting of Chapter 1, describes some peculiarities of agricultural enterprise and furnishes a definition of agricultural output. Chapters 2 to 4, in Part Two, provide an extended discussion of the size and composition of farm output. The factors which have influenced this size and composition from

one period to another are treated in considerable detail. Thus, in Chapter 2 the general reader will find the new index of output and a summary of changes in its composition. Chapter 3, which is concerned with the output behavior of each individual product in turn, will be of interest chiefly to specialists. Chapter 4 regards agriculture as the source of the nation's food supply, and examines the bearing of nutritional standards upon farm output in general. In particular, new estimates are offered for the per capita consumption of calories, vitamins and other food elements.

Part Three, which deals with employment and productivity, comprises three chapters. Of these, Chapter 5 reviews the history of technological changes in agriculture, and considers the extent to which well-known innovations have actually been adopted in different farming areas. Chapter 6 offers estimates of agricultural employment. In the first section of Chapter 7 the trend in output per worker is examined; in succeeding sections direct labor requirements and yield per acre for different crops are analyzed and reconciled with estimates already given for employment and output per worker.

In Part Four, Chapter 8 sets forth our conclusions and discusses their bearing upon the outlook for agriculture as a segment of the nation's economy.

Harold Barger
Hans H. Landsberg

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H. B.

H. H. L.

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