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NATIONAL BUREAU OF ECONOMIC RESEARCH FINANCIAL RESEARCH PROGRAM

Studies in Agricultural Finance

- 1. Mortgage Lending Experience in Agriculture, by Lawrence A. Jones and David Durand
- 2. Patterns of Farm Financial Structure: A Cross-Section View of Economic and Physical Determinants, by Donald C. Horton

PATTERNS OF FARM FINANCIAL STRUCTURE

A Cross-Section View of Economic

and Physical Determinants

BY DONALD C. HORTON



A STUDY BY THE

NATIONAL BUREAU OF ECONOMIC RESEARCH, NEW YORK

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1957

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FOREWORD

DR. HORTON'S study of the financial structure of farm enterprises is one of a series of related investigations made under the National Bureau's Agricultural Finance Project. His principal objectives have been to determine how the economic and physical characteristics of agriculture affect its financing and to describe the roles of credit and equity funds in the financing of agricultural production. Other parts of the Agricultural Finance Project are the following: Costs and Returns on Farm Mortgage Lending by Life Insurance Companies, 1945-1947, by R. J. Saulnier (published in 1949); Mortgage Lending Experience in Agriculture, by Lawrence A. Jones and David Durand (published in 1954); and Agricultural Equipment Financing, by Howard G. Diesslin (published in 1955).

The present study was undertaken and carried forward under a cooperative agreement between the National Bureau of Economic Research and what was then organized as the Bureau of Agricultural Economics of the Department of Agriculture. Through this mutually agreeable arrangement the author had full access to the extensive materials on farm finance available at the Bureau of Agricultural Economics and was able to integrate his work closely with related studies being conducted concurrently at the National Bureau. Resources for the conduct of the National Bureau's part in the study were made available through generous grants of funds from the Association of Reserve City Bankers, the Life Insurance Investment Research Committee acting for the American Life Convention and the Life Insurance Association of America, and the Rockefeller Foundation.

> R. J. SAULNIER Director (on leave), Financial Research Program

NORMAN J. WALL Agricultural Research Service United States Department of Agriculture

January 1956

AUTHOR'S ACKNOWLEDGMENTS

IT was with the keenest anticipation that I accepted the invitation, offered in 1945, to undertake this study of the system of agricultural finance. The fact that it was to be made jointly by the National Bureau of Economic Research and the Bureau of Agricultural Economics of the Department of Agriculture promised much in the way of facilities for work and opportunity to pursue uninterruptedly a complex problem of primary public interest. From my viewpoint the arrangement has been an eminently satisfactory one, and I wish to express my sincere thanks to both organizations. Particularly, I am grateful to Ralph A. Young and E. C. Johnson, then members of the National Bureau staff, who, with Norman J. Wall-at that time head of the Division of Agricultural Finance of the Bureau of Agricultural Economics, and now head of the Agricultural Finance Section of the Production Economics Research Branch of the Agricultural Research Service of the Department of Agriculture-organized the work in 1945.

As the study has progressed I have been aided by the advice and encouragement of R. J. Saulnier, director of the Financial Research Program of the National Bureau, and F. F. Hill of Cornell University, who has been in charge of the National Bureau's Agricultural Finance Project. In addition to these, many others have contributed generously with ideas, technical advice, and editorial assistance; special acknowledgment is due E. Lloyd Barber of the Bureau of Agricultural Economics and David Durand, Thor Hultgren, and Alvin S. Tostlebe from the National Bureau. The last three named served on the National Bureau's staff reading committee for the manuscript.

My debt to other research workers is a heavy one, though it cannot be indicated by specific reference. A substantial part of the estimates on which the study is based depend on unpublished data and research studies developed over a considerable period of time by my former colleagues in the Bureau of Agricultural Economics and by research workers in the state agricultural experiment stations. I wish, however, to make specific acknowledgment of the use of unpublished county estimates of farm mortgage debt for 1940 prepared by Sarah L. Yarnall, formerly

AUTHOR'S ACKNOWLEDGMENTS

of the Bureau of Agricultural Economics. The identity of much of these materials is lost in the specific estimates used in the study, and, while I am pleased to acknowledge the contribution of Miss Yarnall and of others in the development of this factual basis, I must, of course, accept full responsibility for the estimates and for the analyses based upon them.

Among those who assisted in the assembling and evaluation of data for this study and in the presentation of the materials special acknowledgment is made of the assistance received from Joan Janow Brody and Olive K. Britt of the Bureau of Agricultural Economics, Catherine Martin of the National Bureau, and members of the Bureau's editorial staff.

DONALD C. HORTON

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