



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

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.*

Determinants of Farm Size and Structure

Proceedings of the program sponsored by the NC-181 Committee on Determinants of Farm Size and Structure in North Central Areas of the United States, held January 7, 8, 9, and 10, 1989, in Tucson, Arizona.

Rasmussen/Agricultural Structure and the Well Being of Society Revisited

Stanton/Changes in Farm Size and Structure in American Agriculture in the Twentieth Century

Hallam/Empirical Studies of Size and Structure in Agricultural

Helmers, El-Osta and Azzam/Economies of Size in Multi-Output Farms: A Mixed Integer Programming Approach

Sonka and Khoju/Empirical Studies of Firm Viability, Profitability, and Growth

Johnson/Firm Level Agricultural Data Collected and Managed by the Federal Government

Casler/Use of State Farm Record Data for Studying Determinants of Farm Size

Batte and Schnitkey/Emerging Technologies and Their Impact on American Agriculture: Information Technologies

Meyers and Westhoff/Commodity Program Reform and the Structure of U.S. Agriculture

Janssen and Johnson/Farmland Leasing and Land Tenure in South Dakota and Nebraska - Empirical Findings Emphasizing Current Situation and Changes between 1951-1986

Johnson and Grabanski/Technology Adoption and Farm Size

Casler/Managerial Factors that Affect New York Dairy Farm Profitability

Fox and Dickson/Farm Growth in the Ontario Dairy Industry: A Skeptical Look at Gibrat's Law

Robison/Distinctiveness in the Design and Choice of Durable Assets under Risk

Iowa State University
Ames, Iowa 50011
December 1989

**DETERMINANTS OF FARM
SIZE AND STRUCTURE**

Edited By

Arne Hallam

**Department of Economics
Iowa State University**

Proceedings of the program sponsored by the NC-181
Committee on Determinants of Farm Size and Structure
in North Central Areas of the United States, held
January 7, 8, 9, and 10, 1989, in Tucson, Arizona.

December 1989

DETERMINANTS OF FARM SIZE AND STRUCTURE

Table of Contents

<u>Titles and Authors</u>	<u>Page</u>
Preface	ii
Agricultural Structure and the Well Being of Society Revisited/ Wayne D. Rasmussen	1
Changes in Farm Size and Structure in American Agriculture in the Twentieth Century/B. F. Stanton	11
Empirical Studies of Size and Structure in Agricultural/ Arne Hallam	47
Economies of Size in Multi-Output Farms: A Mixed Integer Programming Approach/Glenn A. Helmers, Hisham El-Osta, and Azzeddine Azzam	73
Empirical Studies of Firm Viability, Profitability, and Growth/ Steven T. Sonka and Madhab R. Khoju	97
Firm Level Agricultural Data Collected and Managed by the Federal Government/James D. Johnson	113
Use of State Farm Record Data for Studying Determinants of Farm Size/George L. Casler	135
Emerging Technologies and Their Impact on American Agriculture: Information Technologies/Marvin T. Batte and Gary D. Schnitkey	145
Commodity Program Reform and the Structure of U.S. Agriculture/ William H. Meyers and Patrick C. Westhoff	163
Farmland Leasing and Land Tenure in South Dakota and Nebraska - Empirical Findings Emphasizing Current Situation and Changes between 1951-1986/Larry Janssen and Bruce Johnson	179
Technology Adoption and Farm Size/Roger G. Johnson and Raymond L. Grabanski	191
Managerial Factors that Affect New York Dairy Farm Profitability/ George L. Casler	205
Farm Growth in the Ontario Dairy Industry: A Skeptical Look at Gibrat's Law/Glenn Fox and Ed Dickson	213
Distinctiveness in the Design and Choice of Durable Assets under Risk/Lindon J. Robison	231

PREFACE

This publication contains papers presented at the 1989 meeting of the North Central Regional Research Project NC-181. This is the second set of proceedings papers arising from the NC-181 project. It is expected that proceedings papers will be produced for the meetings held in the future. A brief introduction is contained in last year's report.

Cooperating agencies in the NC-181 project are the Agricultural Experiment Stations of Arkansas, Cornell, Illinois, Iowa State, Kansas State, Kentucky, Michigan State, Minnesota, Missouri, Nebraska, North Dakota, Ohio State, South Dakota, and Wisconsin, and the Economic Research Service of the U.S. Department of Agriculture. The project's administrative advisor is Robert Jolly, Iowa State University. James Nielson serves as the CSRS representative to the committee. The program committee for the 1989 meeting consisted of Arne Hallam, Chairman, Robert Hornbaker, and Lindon Robison.

Special thanks are due to the Farm Foundation under the direction of R. J. Hildreth and Walter J. Armbruster for providing financial support for one of the papers presented by an invited guest. We also thank Donna Otto at Iowa State University for her technical assistance in pulling it all together.

Arne Hallam