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Iowa farmland ownership and tenure, 1982-1992: analysis and comparison

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Iowa farmland ownership and tenure, 1982 - 1992:

Analysis and comparison

by

Ann Marie Schultz

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A Thesis Submitted to the

Graduate Faculty in Partial Fulfillment of the

Requirements for the Degree of

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Department: Economics

Major: Agricultural Economics

Signatures have been redacted for privacy

**Iowa State University
Ames, Iowa**

1994

TABLE OF CONTENTS

	<u>Page</u>
LIST OF FIGURES	iv
LIST OF TABLES	v
I. INTRODUCTION	1
Farmland Ownership and Land Tenure History in the United States	3
Farmland Ownership and Land Tenure History in Iowa	6
Dimensions of the Study--Ownership and Tenure	15
Purpose of the Study	16
II. SURVEY METHODS	17
The 1992 Survey	17
Geographical Regions Used in 1992	18
The Non-Corporate Sample	20
The Corporate Sample	21
Statistical Analysis	22
III. LAND OWNERSHIP PATTERNS	25
Ownership Type	25
Tenure	28
Method of Financing Iowa Farmland	34
Size of Owned Acreages	36
Summary	38
IV. DEMOGRAPHICS OF NON-CORPORATE OWNERS	40
Age	40
Age cross-tabulated with size of owned acreages	42
Age cross-tabulated with tenure	44
Age cross-tabulated with financing methods	45
State of Residency of Iowa Farmland Owners;	
Owner Occupancy of Farmland	46
Highest Formal Education Level Completed	48
Occupation	50
Gender and Marital Status	51
Summary	53
V. LAND ACQUISITION AND TRANSFER: EFFECTS OF THE FARM DEBT CRISIS	55
Land Acquisition Methods	55
Non-corporate owners	56
Corporate owners	57

The Farm Debt Crisis of the 1980s	58
Anticipated Transfer Methods of Farmland Ownership	63
Summary	66
VI. CORPORATE LAND OWNERSHIP	68
Corporation Structure	68
Corporations and the Farm Debt Crisis of the 1980s	71
Summary	73
VII. CONSERVATION RESERVE PROGRAM	75
Summary	79
VIII. SUMMARY, COMPARISONS, RECOMMENDATIONS	80
Summary of Survey Methods	80
Non-corporate sample selection	80
Corporate sample selection	81
Comparison and Analysis: 1982 - 1992	
Implications for the future	81
Conclusions and implications: Corporate farmland ownership	83
Conclusions and implications: Less farmland operated by the farmland owner	84
Conclusions and implications: Farmland owned by older owners	84
Conclusions and implications: More farmland free of debt	86
Recommendations for Further Research	86
REFERENCES	88
ACKNOWLEDGMENTS	92
APPENDIX A. LAND OWNERSHIP QUESTIONNAIRES	
General Sample	93
Corporate Questionnaire	106
APPENDIX B. PROBABILITIES AND WEIGHTING OF THE 1992 SURVEY	121
APPENDIX C. PROBABILITIES AND WEIGHTING OF THE 1982 SURVEY	124
APPENDIX D. REGIONAL TABLES, 1982 AND 1992	126
APPENDIX E. COEFFICIENTS OF VARIATION TABLES	144

LIST OF FIGURES

Figure 1.1.	Tenants as a percentage of all farm operators in Iowa	10
Figure 2.1.	Iowa regions used in 1958, 1970, 1976, 1982, and 1992	19
Figure 5.1.	Iowa land values, 1966 through 1992	56

LIST OF TABLES

Table 1.1.	Territorial governments affecting Iowa	7
Table 1.2.	Disposal of public land in Iowa	8
Table 2.1.	Comparisons of usable response rates obtained in land ownership surveys (Iowa, 1958, 1970, 1976, 1982, and 1992)	18
Table 3.1.	Comparisons in percentage of farmland owned among land ownership types, 1982 and 1992	28
Table 3.2.	Tenure of land ownership, 1982 and 1992, as a percentage of farmland, for all owners, non-corporate owners, and corporate owners	30
Table 3.3.	Percentage of farmland managed by a professional farm manager, 1982 and 1992	32
Table 3.4.	Percentage of leased farmland owned by landlords who do not materially participate, 1992	33
Table 3.5.	Finance methods as a percentage of land owned by non-corporate, corporate, and all owners, 1982 and 1992	36
Table 3.6.	Size of owned acreage by percentage of farmland by type of owner, 1982 and 1992	37
Table 4.1.	Percentage of farmland by age of farmland owners in stages of the family-farm cycle, 1982 and 1992	41
Table 4.2.	Percentage of farmland owned by age cross-tabulated with size of owned acreages, 1982 and 1992	43
Table 4.3.	Percentage of farmland owned by age cross-tabulated with tenure, 1992	45
Table 4.4.	Percentage of farmland by age cross-tabulated with financing methods, 1992	46
Table 4.5.	Percentage of land owned by residents of states, 1982 and 1992	47

Table 4.6.	Percentage of farmland occupied by owners, 1982 and 1992	48
Table 4.7.	Percentage of farmland owned, according to highest formal educational level completed by the non-corporate owner, 1982 and 1992	49
Table 4.8.	Percentage of farmland by educational level cross-tabulated with farm-cycle stages, 1992	49
Table 4.9.	Occupation of farmland owners as a percentage of farmland owned, 1982 and 1992	50
Table 4.10.	Gender distribution of farmland ownership by percentage of farmland, 1982 and 1992	51
Table 4.11.	Gender cross-tabulated with age in percentage of farmland owned, 1982 and 1992	52
Table 4.12.	Marital status of Iowa landowners by percentage of farmland, 1982 and 1992	53
Table 5.1.	Methods of acquisition of land by non-corporate owners, 1982 and 1992	57
Table 5.2.	Methods of acquisition of land by corporations, 1982 and 1992	58
Table 5.3.	Land purchased by non-corporate owners from 1982 to 1992 attributed to financial stress in percentage, by region	59
Table 5.4.	Farmland restructured from 1982 to 1992 according to lender type, as a percentage of farmland held under mortgage or contract, 1992	61
Table 5.5.	Method of loan restructuring from 1982 to 1992, non-corporate owners, as a percentage of loans restructured	62
Table 5.6.	Anticipated transfer methods by percentage of farmland, 1982 and 1992	64
Table 5.7.	Anticipated transfer methods by owners over 65 years of age as a percentage of farmland owned by owners over 65 years of age, 1992	66
Table 6.1.	Percentage of farmland owned by type of corporation, 1992	70

Table 6.2.	Year and percentage of farmland incorporated, 1992	70
Table 6.3.	Expected life of corporation as percent of farmland, 1992	71
Table 6.4.	Lenders who restructured land from 1982 to 1992 with non-corporate owners as a percentage of farmland under mortgage or contract	72
Table 7.1.	Enrollment in the Conservation Reserve Program in Iowa	76
Table 7.2.	Comparison of percentage of all farmland and the CRP farmland by ownership type and financing methods, 1992	77
Table 7.3.	Comparison of age and gender between non-corporate landowners and CRP landowners, 1992	78
Table B.1.	Ownership type and weight, 1992 non-corporate owners	122
Table B.2.	Adjusted total acres by corporations, 1992	123
Table C.1.	Total acres owned by corporations from Secretary of State, 1982	125
Table D.1.	Percentage of farmland owned in each ownership type, 1992 regional data (Table 3.1.)	126
Table D.2.	Percentage of farmland owned by tenure, 1992 regional data (Table 3.2.)	126
Table D.3.	Percentage of farmland managed by professional farm manager, 1992 regional data (Table 3.3.)	127
Table D.4.	Percentage of farmland owned by landlords with non-material participation, 1992 regional data (Table 3.4.)	127
Table D.5.	Percentage of farmland by financing method, 1992 regional data (Table 3.5.)	128
Table D.6.	Percentage of farmland by financing method, non-corporate owners, 1982 regional data (Table 3.5.)	128
Table D.7.	Percentage of farmland by size of owned acreages, all landowners, 1992 regional data (Table 3.6.)	129

Table D.8.	Percentage of farmland by size of owned acreages, non-corporate owners, 1992 regional data (Table 3.6.)	130
Table D.9.	Percentage of farmland by size of owned acreages, corporate owners, 1992 regional data (Table 3.6.)	131
Table D.10.	Percentage of farmland by size of owned acreages, all landowners, non-corporate owners, and corporate owners, 1982 data (Table 3.6.)	132
Table D.11.	Percentage of farmland by size of owned acreages, non-corporate owners, 1982 regional data (Table 3.6.)	133
Table D.12.	Age cross-tabulated with size of acreages, as a percentage of farmland, 1982 (Table 4.2.)	134
Table D.13.	Age cross-tabulated with size of acreage, as a percentage of farmland, 1992 (Table 4.2.)	135
Table D.14.	Age cross-tabulated with tenure, as a percentage of farmland, 1992 (Table 4.3.)	135
Table D.15.	Age cross-tabulated with financing methods, as a percentage of farmland, 1992 (Table 4.4.)	136
Table D.16.	Age cross-tabulated with highest educational level obtained, as a percentage of farmland, 1992 (Table 4.8.)	136
Table D.17.	Age cross-tabulated with gender, as a percentage of farmland, 1982 and 1992 (Table 4.11.)	137
Table D.18.	Land acquisition methods, as a percentage of farmland for non-corporate owners, 1982 (Table 5.1.)	137
Table D.19.	Land acquisition methods, as a percentage of farmland for non-corporate owners, 1992 (Table 5.1.)	138
Table D.20.	Land acquisition methods, as a percentage of farmland for corporate owners, 1992 (Table 5.2.)	138
Table D.21.	Percentage of farmland purchased by non-corporate owners from 1982 to 1992 attributed to financial stress (Table 5.3.)	138

Table D.22.	Farmland restructured from 1982 to 1992 according to lender type, as a percentage of farmland held under mortgage or contract by non-corporate owners, 1992 (Table 5.4.)	139
Table D.23.	Method of loan restructuring from 1982 to 1992, non-corporate owners, as a percentage of loans restructured by region (Table 5.5.)	139
Table D.24.	Age cross-tabulated with anticipated transfer method, as a percentage of farmland, 1982 (Table 5.6.)	140
Table D.25.	Age cross-tabulated with anticipated transfer method, as a percentage of farmland, 1992 (Table 5.6.)	140
Table D.26.	Lenders who restructured land from 1982 to 1992 with corporate owners as a percentage of farmland under mortgage or contract, 1992 (Table 6.4.)	141
Table D.27.	Age cross-tabulated with CRP farmland ownership, 1992 (Table 7.3.)	141
Table E.1.	Coefficients of variation in percent for each ownership type, state-wide data, 1982 and 1992 (Table 3.1.)	142
Table E.2.	Coefficients of variation in percent for each ownership type, 1992 regional data (Table D.1.)	142
Table E.3.	Coefficients of variation in percent for tenure of land ownership, 1982 and 1992, as a percentage of farmland, for all owners, non-corporate owners, and corporate owners (Table 3.2)	143
Table E.4.	Coefficients of variation in percent for percentage of farmland owned by tenure, 1992 regional data (Table 3.2. and D.2.)	144
Table E.5.	Coefficients of variation in percent for percentage of farmland managed by a professional farm manager, 1982 and 1992 (Table 3.3.)	144
Table E.6.	Coefficients of variation in percent for percentage of farmland managed by professional farm manager, 1992 regional data (Table D.3.)	145

Table E.7.	Coefficients of variation in percent for percentage of farmland owned by landlords with non-material participation, 1992 regional data (Table 3.4 and Table D.4.)	145
Table E.8.	Coefficients of variation in percent for finance methods as a percentage of land owned by non-corporate, corporate, and all owners, 1982 and 1992 (Table 3.5.)	146
Table E.9.	Coefficients of variation in percent for percentage of farmland by financing method, 1992 regional data (Table D.5.)	147
Table E.10.	Coefficients of variation in percent for percentage of farmland by financing method, non-corporate owners, 1982 regional data (Table D.6.)	147
Table E.11.	Coefficients of variation in percent for farmland held in various sizes of owned acreage by all owners, non-corporate owners, and corporate owners, 1982 and 1992 (Table 3.6.)	148
Table E.12.	Coefficients of variation in percent for farmland by size of owned acreages, all landowners, 1992 regional data (Table D.7.)	149
Table E.13.	Coefficients of variation in percent for farmland by size of owned acreages, non-corporate owners, 1992 regional data (Table D.8.)	150
Table E.14.	Coefficients of variation in percent for farmland by size of owned acreages, corporate landowners, 1992 regional data (Table D.9.)	151
Table E.15.	Coefficients of variation in percent for farmland by size of owned acreages, all landowners, non-corporate owners, and corporate owners, 1982 data (Table D.10.)	152
Table E.16.	Coefficients of variation in percent for farmland by size of owned acreages, non-corporate owners, 1982 regional data (Table D.11.)	153
Table E.17.	Coefficients of variation in percent for age cross-tabulated with size of acreage, as a percentage of farmland, 1982 (Table D.12.)	154
Table E.18.	Coefficients of variation in percent for age cross-tabulated with size of acreage, as a percentage of farmland, 1992 (Table D.13.)	155

Table E.19.	Coefficients of variation in percent for farmland by age of farmland owners in stages of the family-farm cycle, 1982 and 1992 (Table 4.1.)	156
Table E.20.	Coefficients of variation in percent for farmland owned by age cross-tabulated with size of owned acreages, 1982 and 1992 (Table 4.2.)	157
Table E.21.	Coefficients of variation in percent for percentage of farmland owned by age cross-tabulated with tenure, 1992 (Table 4.3.)	157
Table E.22.	Coefficients of variation in percent for age cross-tabulated with tenure, as a percentage of farmland, 1992 (Table D.14.)	158
Table E.23.	Coefficients of variation in percent for percentage of farmland by age cross-tabulated with financing methods, 1992 (Table 4.4.)	159
Table E.24.	Coefficients of variation in percent for age cross-tabulated with financing methods, as a percentage of farmland, 1992 (Table D.15.)	159
Table E.25.	Coefficients of variation in percent for percentage of land owned by residents of states, 1982 and 1992 (Table 4.5.)	159
Table E.26.	Coefficients of variation in percent for farmland occupied by owners, 1982 and 1992 (Table 4.6.)	160
Table E.27.	Coefficients of variation in percent for farmland owned, according to highest formal educational level completed by the non-corporate owner, 1982 and 1992 (Table 4.7.)	160
Table E.28.	Coefficients of variation in percent for farmland by educational level cross-tabulated with farm-cycle stages, 1992 (Table 4.8.)	161
Table E.29.	Coefficients of variation in percent for age cross-tabulated with highest educational level obtained, as a percentage of farmland, 1992 (Table D.16.)	161
Table E.30.	Coefficients of variation in percent for occupation of farmland owners as a percentage of farmland owned, 1982 and 1992 (Table 4.9.)	162

Table E.31.	Coefficients of variation in percent for gender distribution of farmland ownership by percentage of farmland, 1982 and 1992 (Table 4.10.)	162
Table E.32.	Coefficients of variation in percent for gender cross-tabulated with age in percentage of farmland owned, 1982 and 1992 (Table 4.11.)	163
Table E.33.	Coefficients of variation in percent for age cross-tabulated with gender, as a percentage of farmland, 1982 and 1992 (Table D.17.)	163
Table E.34.	Coefficients of variation in percent for marital status of Iowa landowners by percentage of farmland, 1982 and 1992 (Table 4.12.)	164
Table E.35.	Coefficients of variation in percent for methods of acquisition of land by non-corporate owners, 1982 and 1992 (Table 5.1.)	164
Table E.36.	Coefficients of variation in percent for methods of acquisition of land by corporations as a percentage of farmland, 1982 and 1992 (Table 5.2.)	165
Table E.37.	Coefficients of variation in percent for land acquisition methods, as a percentage of farmland for non-corporate owners, 1982 (Table D.18.)	165
Table E.38.	Coefficients of variation in percent for land acquisition methods, as a percentage of farmland for non-corporate owners, 1992 (Table D.19.)	166
Table E.39.	Coefficients of variation in percent for land acquisition methods, as a percentage of farmland for corporate owners, 1992 (Table D.20.)	166
Table E.40.	Coefficients of variation in percent for farmland purchased by non-corporate owners from 1982 to 1992 attributed to financial stress (Table 5.3 and D.21.)	167
Table E.41.	Coefficients of variation in percent for farmland restructured from 1982 to 1992 according to lender type, as a percentage of farmland held under mortgage or contract by non-corporate owners, 1992 (Table 5.4. and Table D.22.)	167

Table E.42.	Coefficients of variation in percent for methods of loan restructuring from 1982 to 1992, non-corporate owners, as a percentage of loans restructured by region (Table 5.5. and Table D.23.)	168
Table E.43.	Coefficients of variation in percent for anticipated transfer methods by percentage of farmland, 1982 and 1992 (Table 5.6.)	168
Table E.44.	Coefficients of variation in percent for age cross-tabulated with anticipated transfer method, as a percentage of farmland, 1982 (Table D.24.)	169
Table E.45.	Coefficients of variation in percent for age cross-tabulated with anticipated transfer method, as a percentage of farmland, 1992 (Table D.24.)	170
Table E.46.	Coefficients of variation in percent for age cross-tabulated with anticipated transfer method, as a percentage of farmland, 1992 (Table 5.7.)	171
Table E.47.	Coefficients of variation in percent for percentage of farmland owned by type of corporation, 1982 and 1992 (Table 6.1.)	171
Table E.48.	Coefficients of variation in percent for year and percentage of farmland incorporated, 1992 (Table 6.2.)	172
Table E.49.	Coefficients of variation in percent for expected life of corporation as percent of farmland, 1992 (Table 6.3.)	172
Table E.50.	Coefficients of variation in percent for lenders who restructured land from 1982 to 1992 with corporate owners as a percentage of farmland under mortgage or contract, 1992 (Table 6.4. and Table D.25.)	173
Table E.51.	Coefficients of variation in percent of CRP farmland by ownership type and financing methods, 1992 (Table 7.2.)	173
Table E.52.	Coefficients of variation in percent for comparison of age and gender between non-corporate landowners and CRP landowners, 1992 (Table 7.3.)	174
Table E.53.	Coefficients of variation in percent for age cross-tabulated with CRP farmland ownership, 1992 (Table 7.3. and Table D.26.)	174

I. INTRODUCTION

Throughout the history of the United States, the federal and state governments have endeavored through legislation to instill a climate favoring land ownership by individuals who farm the land. "From the days of Jefferson to the present, the ideal of our farm lands being owned and operated by independent prosperous farm families has dominated people's thinking."¹

The Depression of the 1930s threatened the ideal of the land being owned and operated by the farm family. Foreclosures and defaults on mortgages left a significant part of the land owned by insurance companies and banking institutions; tenancy rates soared. In order to divert a farmland ownership crisis, legislation was enacted during the late 1930s to encourage farm ownership by operators.²

The 1980s brought another crisis to the farmland owner and the agricultural community. *The Farm Debt Crisis of the 1980s*³ documents the events during the 1980s that forced farmers into insolvency and bankruptcy, drove down land values by one-third nationally, and inflicted the greatest economic damage on rural communities since the Great Depression of the 1930s.⁴

Farmers and rural agricultural communities in Iowa were seriously affected by the farm debt crisis. The 1980s brought:

¹ Schickele, Rainer. "Objectives of Land Policy." *Land Problems and Policies*. Ed. John Timmons and William Murray. Ames: Iowa State College Press, 1950. p. 19.

² Schickele, Rainer. *Agricultural Policy, Farm Programs, and National Welfare*. New York: McGraw-Hill Book Company, Inc., 1954.

³ Harl, Neil E. *The Farm Debt Crisis of the 1980s*. Ames: Iowa State University Press, 1990.

⁴ Kirkendall, Richard S. in the Editor's Introduction to *The Farm Debt Crisis of the 1980s*, Ames: Iowa State University Press, 1990. p. xiv.

- a twelve and six-tenths percent decline in the number of farms in Iowa from 1980 through 1990,⁵
- a forty-one and two-tenths percent decline in the value of Iowa farmland from 1980 to 1990,⁶ and
- four hundred twenty-six Chapter 12 bankruptcy filings in Iowa in less than three years from its beginning in November 1986 through September 1989.⁷

The crisis of the 1980s was less severe than the Great Depression of the 1930s; the crisis of the 1980s did not last as long and impacted a much smaller number of farmers than the Great Depression.⁸ After the farm debt crisis of the 1980s, the Seventy-Third General Assembly of the State of Iowa became concerned about the economic health of Iowa farmers and specifically farmland owners. In order to assess farmland ownership and tenancy, the Iowa legislature passed Chapter 319, Section 71, Acts of the Seventy-Third General Assembly in 1989 and amended it in 1992 to read:

Iowa state university of science and technology shall conduct continuing agricultural research to provide information about environmental and social impacts of agricultural research on the small or family farm and information about population trends and impact of the trends on Iowa agriculture, in addition to research that may include the categories specified in section 266.39B, subsection 2. The research shall include an agricultural land tenure study conducted every five years to determine the ownership of farmland, and to analyze the ownership trends, using the categories of land ownership defined in chapter 9H. The study shall be conducted on the basis of regions established by the university. A region shall be composed

⁵ Goudy, Willis and Sandra Charva Burk. *Iowa's Counties: Selected Population Trends, Vital Statistics, and Socioeconomic Data*. Ames: Iowa State University, October 1991. p. 150.

⁶ Duffy, Michael and Daniel Koster. *Summary Data of the Iowa Land Value Survey, 1950-1991*. Ames: Iowa State University, December 1991.

⁷ Harl, *Farm Debt Crisis*, p. 277.

⁸ Kirkendall, Richard S. in the Editor's Introduction in Harl, *Farm Debt Crisis of the 1980s*, p. xiv.

of not more than twenty-three contiguous counties.⁹

While this study, *Iowa farmland ownership and tenure, 1982 - 1992: Analysis and comparison*, is the first study as mandated by the Iowa legislature, the Iowa Agriculture and Home Economics Experiment Station has conducted five previous studies concerning the nature and acquisition of farmland ownership in Iowa.¹⁰ Iowa is the only state to have conducted such studies regularly over this time period. The focus of this study will be on the 1992 data and the changes of farmland ownership and tenure since the 1982 survey.

Before analyzing current trends in farmland ownership and tenure, a brief historical review is undertaken. First, the history of farmland ownership and tenure in the United States is reviewed. Following the United States' history is Iowa's history of farmland ownership and tenure. After these brief historical reviews, the dimensions and purpose of this study are stated.

Farmland Ownership and Land Tenure History in the United States

The quest for control of land has dominated history;¹¹ control over North American land was no exception. The English claimed ownership rights to land in North America chiefly by discovery and settlement. The English dismissed the native American property rights, which were based on occupancy, because the native Americans were not

⁹ *Code of Iowa, 1993, Vol. II*. Des Moines: General Assembly of Iowa. 1992. The provision was codified in the Iowa Code § 266.39A (1993).

¹⁰ J. Timmons & R. Barlowe, *Farm Ownership in the Midwest*, *Iowa Agricultural Experiment Station Bulletin 361*. 1949; R. Strohhahn, *Ownership Structure of Iowa Farm Land*. Unpublished M.S. Thesis. Ames, Iowa Library, Iowa State University of Science and Technology. 1959; M. Berk, *Changing Structure of Iowa Farm Land Ownership*. Ph.D. dissertation, Iowa State University, 1971; B. D'Silva, *Factors Affecting Farmland Ownership in Iowa*. Ph.D. Dissertation, Iowa State University, 1978; T. Jackson, *Iowa farmland ownership and tenure*, M.S. Thesis, Iowa State University, 1989.

¹¹ Powelson, John P. *The Story of Land*. Cambridge: Lincoln Institute of Land Policy, 1988.

Christian and they did not have a Christian prince.¹²

Land ownership and tenure during the Colonial period, thus, were strongly influenced by the English land tenure situation just before the settlement of America. The English contributed a "feudal heritage, dating back at least to the Norman Conquest of England (1066)."¹³ The feudal hierarchy, from the Crown to the lowest tenant, was concerned with governmental and political affairs as well as with land. The feudal hierarchy became the political system with many of the feudal dues paid to support the government.

Many changes affected the feudal system, starting in 1215 with the Magna Carta and climaxing in 1660 with the Statute of Tenures, which converted all knight-service tenures into common leasing arrangements free of military service. However, three specific rights in land remained from the feudal system - the right to tax property, the right to condemn land for public good, and the right to regulate the use of land under the police power.¹⁴

The United States land tenure system was developed to solve the problem of western land disposal after the Revolutionary War. After signing the Declaration of Independence, six states refused to sign the Articles of Confederation until the other states holding claims to land west of the Appalachian Mountains agreed to transfer both title and sovereignty to the federal government. The Articles of Confederation were signed only after the individual states holding these territorial claims promised to cede the titles and sovereignty to the federal government.¹⁵

Three land ordinances, the Ordinance of 1785, the Ordinance of 1787, and the

¹² Harris, Marshall. *Origin of the Land Tenure System in the United States*. Ames: Iowa State College Press, 1953. p. 61.

¹³ Harris, p. 3.

¹⁴ Harris, p. 5.

¹⁵ Bowen, Catherine. *Miracle at Philadelphia*. Boston: Little, Brown and Company, 1966.

Southwest Ordinance of 1790, laid out the pattern for land occupancy, established a plan for education, and helped to emphasize the necessity of acting together for the common good of the newly formed United States.¹⁶

The Ordinance of 1785 is the foundation of the land tenure system. The main provisions included surveying of six-mile square townships, sections of approximately six-hundred forty acres at a minimum price of one dollar per acre with section sixteen reserved for educational purposes; reservation of four sections per township for future distribution; a one-third part mineral rights reserved; deeds recorded in state land offices; and land held under fee simple ownership.¹⁷ Even though it would be nearly fifty years before the settlement of what would become Iowa, the Ordinance of 1785's main provisions directly affected Iowa's land ownership pattern.

The Ordinance of 1787 emphasized the land-tenure aspects of land and indirectly addressed many of the *burdens*¹⁸ of the English feudal tenure system. The Ordinance of 1787 covered inheritance, wills, transfer of property, taxes, and reimbursement for condemned land. Daniel Webster said, "I doubt whether one single law of any lawgiver, ancient or modern, has produced effects of more distinct, marked, and lasting character than the Ordinance of 1787."¹⁹

The Southwest Ordinance of 1790 extended the same land system and plan of government to the southwest, but added nothing significant to the land tenure principles.

¹⁶ Harris, p. 385.

¹⁷ Harris, p. 391.

¹⁸ Harris, p. 24. Harris lists nine burdens or incidents tying the tenants to the king, including homage, fealty, wardship, marriage, relief, primer seisin, aids, fines for alienation, and escheat.

¹⁹ Webster, Daniel. *Works of Daniel Webster, Vol. III*. Boston: Little, Brown and Company, 1860. p. 263.

Farmland Ownership and Land Tenure History in Iowa

After 1776, the newly organized United States Congress was fully responsible for establishing boundaries, providing for land claims, and authorizing statehood for all land east of the Mississippi River.²⁰ In 1803, the United States purchased a large tract of land from France, known as the Louisiana Purchase, for about three cents an acre, ending French ownership of land on the mainland of North America. Iowa was part of the Louisiana Purchase; Iowa's journey toward statehood was beginning. Table 1.1 shows the different territorial governments affecting Iowa until statehood was reached in 1846.

In 1832-1833, the Black Hawk Purchase directed the transfer of a fifty mile strip of land bordering and west of the Mississippi River from native Americans to the United States, the first Iowa land to be ceded from the Indians. By 1851 all native American tribes had ceded their land in Iowa to the government of the United States.²¹

The rectangular land survey was started in 1836 and was almost completed by 1858. According to the Ordinance of 1785, all land purchased was to be described in the deed by legal description. In Iowa all legal descriptions included noting the range east or west of the fifth principal meridian and the township north from a base line through Little Rock, Arkansas, with both a range and township being six miles wide.²²

The early land settlers came in 1833 and were following the pre-emptive principle with expectations of prior rights for purchase. However, this principle did not become law until 1841, when a permanent federal pre-emption act was passed which not only legalized previous settlement of up to one-hundred sixty acres at one dollar twenty-five

²⁰ Bowen, p. 168.

²¹ Lettermann, Edward J. *Pioneer Farming in Iowa*. Des Moines: Living History Farms, Inc., 1972. p. 2.

²² Murray, W.G. "Struggle for Land Ownership." *A Century of Farming in Iowa 1846-1946*. Ames: The Iowa State College Press, 1946. pp. 1-17.

Table 1.1. Territorial governments affecting Iowa (from Lettermann, Edward J. *Pioneer Farming in Iowa*. Des Moines: Living History Farms, Inc., 1972. p. 1.)

Louisiana Purchase	1803
District of Louisiana	1804-1805
Territory of Louisiana	1805-1812
Territory of Missouri	1812-1821
Unorganized	1821-1834
Territory of Michigan	1834-1836
Territory of Wisconsin	1836-1838
Territory of Iowa	1838-1846
State of Iowa	1846

cents per acre but also gave settlers the right to settle on surveyed land.²³

Iowa became a state in 1846, but it wasn't until almost 1890 that settlement of all of the land took place. A federal act in 1847 providing a land warrant to those who served in the war with Mexico entitled the holder to one-hundred sixty acres of free land. In 1852 when the warrants were made transferable, the warrants were bought and sold by individuals and land companies for speculation²⁴ and, thus, military warrants became the main methods for obtaining land in Iowa. Land investors, military veterans, and corporations bought large tracts of land using military warrants and later sold smaller parcels to those willing to clear and farm the land.²⁵

Table 1.2 compares the amount of acres purchased by cash sale from the U.S. government, almost twelve million acres, to the amount of acres given away by the U.S. government, almost twenty-four million acres. Of the acres that were given away by the

²³ Lokken, Roscoe. *Iowa Public Land Disposal*. Iowa City: State Historical Society of Iowa, 1942, p. 89.

²⁴ Murray, p. 6.

²⁵ Murray, p. 6.

Table 1.2. Disposal of public land in Iowa (from Murray, W.G. "Struggle for Landownership." *A Century of Farming in Iowa: 1846-1946*, based on figures in R. Lokken, *Iowa Public Land Disposal*. State Historical Society of Iowa, Iowa City, 1952. p. 267.)

Method	Acres	Acres
Cash sales by U.S. Government		11,900,000
Gifts by U.S. Government for:		
Military Service (warrants)	14,100,000	
Education	2,100,000	
Internal improvements:		
Railroads	4,400,000	
Other	2,300,000	
Homesteads	900,000	
Miscellaneous	<u>100,000</u>	
<u>Sub-Total gifts by U.S. Government</u>		<u>23,900,000</u>
Approximate total area of Iowa		35,800,000

U.S. government, over fourteen million acres, approximately forty percent of the state, were disposed of by military warrants, while less than four percent was disposed of by the Homestead Act of 1862, which granted free land for settlers willing to live on the land.²⁶

At the beginning of the twentieth century, ninety-nine percent of Iowa's land had been transferred to private owners, either individuals or land companies.²⁷ According to the Federal Census, the number of farms in Iowa reached a peak, in 1900, at 228,622.²⁸

²⁶ U.S. Congress. House and Senate. *An Act to Secure Homesteads to Actual Settlers on the Public Domain*. 37th Congress, 2nd Session, 1862.

²⁷ D'Silva, p. 5.

²⁸ U.S. Census Bureau. *Census of Agriculture, 1920, Vol. II*, Washington, D.C.: U.S. Government Printing Office, p. 884.

The one-hundred sixty acre unit became the common size; a family could operate and manage a farm of one-hundred sixty acres.

In 1946, W. G. Murray analyzed the size of Iowa farms for the previous one-hundred years and concluded,

It is clear that the family-sized farm has won a clean-cut victory over the large-scale unit. The chief reasons for this victory were the willingness of the farm family to work if necessary for a low return, and to endure almost endless hardships to possess a farm of its own.²⁹

The size of the farm, however, does not give a complete picture of land ownership and tenure. The assumption that family sized farms were *owned* by families who farmed the land is misleading. The Federal Census of 1900 reported that almost thirty-five percent of all farm operators in Iowa were tenants. The definition of a *tenant* used in the *U.S. Census of Agriculture*, however, only included operators who leased *all* of the farmland they farmed, not including those operators who owned part of their farmland and rented other farmland.³⁰ Since the *U.S. Census of Agriculture* concentrated on operators, not owners, figures are not available as to what percentage of farmland in Iowa was being rented. However, the *U.S. Census of Agriculture* figures will help establish a trend of land tenure, even though it must be noted that these figures do not represent the percentage of land that was rented.

Using the *U.S. Census of Agriculture* figures from 1880 through 1992, the percentage of farm operators leasing all of their farmland reached a peak in 1935 (see Figure 1.1.) after the Great Depression of the 1930s. In 1880, seventy percent of the land area in the state was in farms³¹ with tenancy at almost twenty-four percent of the

²⁹ Murray, p. 11.

³⁰ U.S. Census Bureau. *Census of Agriculture, 1940. Vol. 1, Part 4: Iowa.* Washington, D.C.: U.S. Government Printing Office, 1940.

³¹ Murray, p. 12.

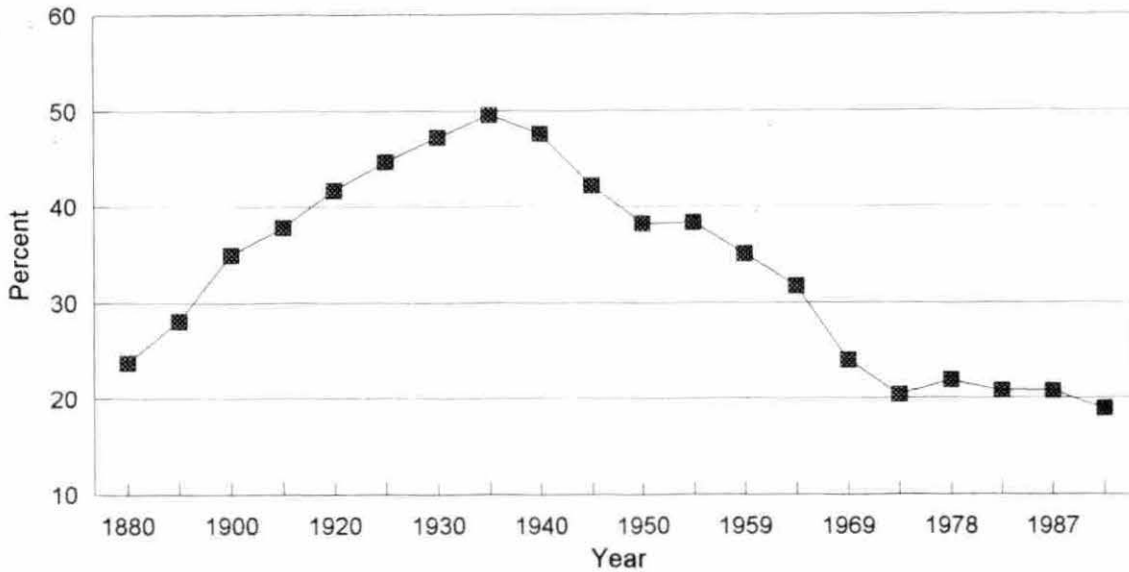


Figure 1.1. Tenants as a percentage of all farm operators in Iowa

total operators. There were many reasons that some operators were tenants. Some operators preferred to be tenants leasing improved farmland closer to civilization than to owning and operating unimproved land. Other operators had little capital and/or equipment needed for land ownership; they were tenants while accumulating capital and/or equipment. As land was purchased from the government, land improvements increased the value of farmland, thus requiring more capital to own farmland. In an effort to encourage farm ownership by operators, the Federal Farm Loan Act was passed in 1916 with the intent of aiding individuals in purchasing farmland with credit at relatively low rates of interest and under long term amortization schedules through the creation of the Federal Land Bank System.³²

Another reason for the increase of tenancy through the 1930s was the loss of land ownership through foreclosures and bankruptcies during the Great Depression. The usual sequence was the foreclosure of the mortgage by the lender with a lease back to the

³² Schickele, *Agricultural Policy*, p. 216.

previous owner, changing the tenure structure. Loan companies, insurance companies, and business and professional persons became landowners, while the owner/operator type of tenure was decreasing.³³

The federal and state governments enacted legislation during the 1930s to help increase land ownership by the operator. Three major types of policies were initiated:³⁴

1. Farm debt relief enacted by the federal government to protect the farmer's equity in land by refinancing mortgages through Federal Land Bank and Commissioner loans and foreclosure moratoria under emergency legislation at the state level.
2. U.S. government-sponsored credit under the Resettlement and Farm Security Administration programs to assist tenants and farm workers to purchase farms.
3. Strengthening tenants' positions by production loans and improving lease contracts initiated under the Federal Security Act of 1937.

These policies strengthened owner/operator tenure by helping them secure the long-term credit necessary for the purchase of farmland. The tenant's position was also strengthened, due to the belief that land ownership would become more accessible in the future. For these reasons, coupled with higher levels of income, tenancy rates declined after 1935. (See Figure 1.1.)

Other factors influencing tenancy, especially since the end of World War II, are technology adoption, increasing farm size, fluctuations of land values and farm product prices, and input costs.³⁵ The combination of these factors and the factors contributing to the farm debt crisis of the 1980s, namely high inflation for an extended period, abrupt action by the Federal Reserve Board to bring inflation under control, and massive tax cuts,³⁶ have changed the character of leasing agricultural land. Landlords are

³³ Murray, p. 13.

³⁴ Schickele, *Agricultural Policy*, p. 369.

³⁵ D'Silva, p. 6.

³⁶ Harl, *Farm Debt Crisis*, p. 17.

increasingly non-operators with little knowledge of agriculture and are leaving the farm management decisions to their tenants.³⁷ The landlord's goal is not accumulating capital to start farming, but to gain control of land resources for economic gain.

At the same time that the landlord's role was changing, there was an increased interest in farmland ownership by nonresident aliens³⁸ and corporations. Proponents of the family farm³⁹ were successful in lobbying for laws in some midwestern states to restrict the rights of aliens and corporations to own and operate farmland.⁴⁰

The right to restrict ownership of land by aliens in Iowa dates back to 1066 when the common law rule in England prevented aliens from acquiring good title to land without the king's approval, in order to guarantee loyalty.⁴¹ The Colonial lawmakers incorporated a very restrictive policy concerning aliens owning land.⁴² However, the

³⁷ Rogers, Denise. Chapter 2, "Leasing Farmland." *Land Ownership and Taxation in American Agriculture*. Ed. by Gene Wunderlich. Boulder: Westview Press, 1993. p. 23.

³⁸ According to H.F. 148, Section 9, 68th Iowa General Assembly (1979) a nonresident alien is "an individual who is not a citizen of the United States and who has not been classified as a permanent resident alien by the U.S. Immigration and Naturalization Service."

³⁹ A family farm embodies the following characteristics as stated in Ackerman, Joseph and Marshall Harris. *Family Farm Policy*. Chicago, IL: University of Chicago Press, 1947. p. 389; 1) the entrepreneurial functions are vested in the farm family, 2) the human effort required to operate the farm (except in "peak" seasons) is vested in the farm family, and 3) technology and management are available to employ the labor resources of the farm family in an efficient manner. Under this concept, the family farm is essentially an operating unit, which from an ownership viewpoint embraces owner-operators as well as operators who both own and lease land.

⁴⁰ Morse, Rolland, H. Clyde Reeves, and Neil E. Harl. "State Controls and Reporting Requirements." *Monitoring Foreign Ownership of U.S. Real Estate: Report to U.S. Congress, Vol. I*. Washington, D.C.: U.S. Government Printing Office, 1979. p. 58-116.

⁴¹ Blackstone. *Commentaries on the Laws of England*. Oxford: Clarendon Press, 1766.

⁴² Harris, p. 317.

original Iowa constitution allowed resident aliens to own land⁴³ and important statutory enactments in 1858⁴⁴ and 1868⁴⁵ sought to ease the rules to allow land ownership by non-resident aliens. In 1888, however, a three-hundred twenty acre limitation on land ownership by non-resident aliens was enacted.⁴⁶

Only after more than seventy-five years was this limitation increased to six-hundred forty acres in 1965.⁴⁷ In 1975, Iowa became the first state in the United States to impose a reporting requirement for nonresident aliens purchasing agricultural land. The reporting requirements were strengthened in 1978 to require reporting of beneficial as well as legal ownership interests in agricultural land. The Iowa General Assembly, in 1979, effective January 1, 1980, enacted a total ban on ownership of agricultural land by aliens other than 'permanent resident aliens' except for a limited right to hold up to three-hundred twenty acres of farmland for nonfarm purposes.⁴⁸

Acquisition of farmland by corporations was also restricted during the 1970s. Family farm proponents feared that farmland would come to be owned by large, publicly held corporations. In 1975, the Iowa General Assembly enacted legislation requiring

⁴³ Iowa Constitution, Art. I, Section 22, as found in *Code of Iowa, 1993*, Vol. I. Des Moines: Legislative Service Bureau, 1992.

⁴⁴ *Acts and Resolutions* passed at the regular session of the Seventh General Assembly of the State of Iowa, Chapter 65. Des Moines: J. Teesdale, State Printer, pp. 98-100.

⁴⁵ *Acts and Resolutions* passed at the regular session of the Twelfth General Assembly of the State of Iowa, Chapters 56 and 193. Des Moines: F.W. Palmer, State Printer, 1868. pp. 61-63, 277-278.

⁴⁶ *Acts and Resolutions* passed at the regular session of the Twenty-Second General Assembly of the State of Iowa, Chapter 85. Des Moines: Geo. E. Roberts, State Printer, 1888. pp. 125-126.

⁴⁷ Harl, Neil E. "Restricting Alien Ownership of Farmland: The Iowa Experience." *Monitoring Foreign Ownership of U.S. Real Estate, Vol. I.* p. 95-116.

⁴⁸ Harl, *Foreign Ownership*, p. 95.

annual reports by corporations, limited partnerships, and nonresident aliens owning or operating farmland and placed a one-year moratorium on acquisition of "additional agricultural land" by corporations other than "family farm corporations" and "authorized farm corporations."⁴⁹ The one-year moratorium was extended and then made permanent in 1979.⁵⁰

After July 1, 1987, a stockholder of any authorized farm corporation could not become a stockholder in a second authorized farm corporation, or a person who is a beneficiary of an authorized trust could not become a beneficiary of a second authorized trust.⁵¹ In 1988, an acreage restriction of one-thousand five-hundred acres was imposed for authorized farm corporations, authorized trusts, and limited partnerships, other than a family farm limited partnership.⁵² These two restrictions were trying to balance the goal of private land ownership within a free market, while not unduly limiting non-family farm corporations and non-family farm entities.

In 1982, the Iowa Farm and Rural Life Poll was started by Iowa State University Agriculture and Home Economics Experiment Station and Cooperative Extension Service to yearly survey Iowa farmland operators.⁵³ While this information was useful in the analysis of farmland operators and their families, farmland ownership was not addressed. A specific study needed to be conducted in order to correctly ascertain the difference between who operated Iowa farmland and who owned Iowa farmland.

The mandate enacted by the Seventy-fourth General Assembly in 1989 requiring "an agricultural land tenure study conducted every five years to determine the ownership

⁴⁹ Acts of 66th Iowa General Assembly, ch. 133 (1975), now Iowa Code ch. 9H (1993).

⁵⁰ House File 451, Acts of 68th Iowa General Assembly (1979).

⁵¹ *Iowa Code* (1987), Chapter 51, Section 172C.5.

⁵² *Iowa Code* (1989), Chapter 51, Section 172C.5.

⁵³ Lasley, Paul and Kevin Kettner. *Iowa Farm and Rural Life Poll, 1991 Summary Report*. Iowa State University Extension: Ames, Iowa. 1991.

of farmland"⁵⁴ was a continuation of the interest of farmland ownership. Iowa had intermittently conducted studies specifically on farmland ownership in 1949, 1958, 1970, 1976, and 1982. These studies focused on ownership and tenure.

The farm debt crisis of the 1980s highlighted the need for further research on farmland ownership and tenure to identify the changes brought about the economic forces of the 1980s.

Dimensions of the Study--Ownership and Tenure

Two basic dimensions of farmland in Iowa - ownership and tenure - are analyzed in this study. The first dimension of the study focuses on ownership of Iowa farmland and how ownership patterns have changed from 1982 to 1992. The second dimension is tenure and the changes from 1982 to 1992.

The land is held basically by two categories of owners, the non-corporate owners and corporate owners. The non-corporate category includes sole owners, owners in joint tenancy, other co-owners (tenants in common), partnerships, estates, and trusts. Non-corporate ownership is evaluated according to demographics, age, education, occupation, and involvement with the managerial decisions concerning the farmland.

The corporate category includes family farm corporations, authorized corporations, non-profit corporations, and other types of artificial entities. Corporate ownership is analyzed by percentage of land owned, length of time since incorporation, and how managerial decisions are made.

In accurately describing land, ownership must be considered in conjunction with land tenure, the second dimension of this study. Land tenure describes which rights the landowner maintains and which rights are relinquished to a tenant or another entity, such as the federal government in the Conservation Reserve Program.

"Tenure of land has been described as a "bundle of rights." The complete quota of rights covers all sorts of relations. It is a mass of claims, privileges, powers, and immunities, all of which are illustrated in the

⁵⁴ *Iowa Code (1993)*, Chapter 319, p. 977.

relation of landlord and tenant under a typical tenancy agreement."⁵⁵

A different type of tenure arrangement is one between the landowner and the federal government through the Conservation Reserve Program (CRP). This study analyzes, for Iowa farmland owners, the degree of participation, when the farmland was entered into the CRP, and the characteristics of participating owners.

Purpose of the Study

This study focuses on the changes in land ownership and tenure between 1982 and 1992. The purpose of this study will be to analyze and compare farmland ownership and tenure in the following areas:

- agricultural land holdings by type of ownership and tenure,
- non-corporate owner demographics and changes,
- farmland acquisition methods, debt restructuring, and anticipated transfer methods,
- corporate farmland ownership, and
- the Conservation Reserve Program and its impact on farmland ownership and tenure.

⁵⁵ Noyes, C. Reinold. *The Institution of Property*. New York: Longmans, Green and Co. 1936. p. 290.

II. SURVEY METHODS

This chapter outlines the methodology used in conducting the 1992 survey. The survey focused on two sample groups, the non-corporate sample group and the corporate sample group. Different sampling techniques were used for each group in randomly selecting the respondents to be interviewed. The interview procedure, however, was identical for each respondent, whether chosen from the non-corporate sample group or the corporate sample group. Also included in this chapter is a discussion of the statistical analysis used for the 1992 survey, as well as the 1982 survey.

The 1992 Survey

The 1992 survey was conducted by telephone, in a manner similar to the *1982 Iowa farmland ownership and tenure*⁵⁶ study, and was carried out by the Iowa State University Statistical Laboratory. The telephone interviews for the 1992 survey were conducted between November 1992 and March 1993. All questions were asked in reference to land that had been owned as of March 1, 1992. Survey questionnaires⁵⁷ were completed by trained telephone interviewers who edited and checked the responses for inconsistencies. The data were then coded and placed on computer tape.

Table 2.1 compares the 1958, 1970, 1975, 1982, and 1992 Iowa farmland ownership surveys, their methods of survey, the number of landowners in the sample, useable responses, and the percent of usable responses.⁵⁸ The 1949 survey was conducted for the Midwest and, therefore, not comparable to the balance of the surveys that were conducted for Iowa alone.

⁵⁶ Jackson, p. 16.

⁵⁷ For a copy of the survey questionnaires see Appendix A.

⁵⁸ The usable response rate is:
$$\frac{\text{number of completed interviews}}{\text{number of eligible respondents}}$$

Table 2.1. Comparisons of usable response rates obtained in land ownership surveys (Iowa, 1958, 1970, 1976, 1982, and 1992)(from Jackson, Tim *Iowa farmland ownership and tenure*. M.S. Thesis, Iowa State University, 1989. p. 19.)

	Method of survey	Land owners in sample (number)	Useable responses (number)	Useable responses (percent)
1958	Mail	11,022	2,576	23.40
1970	Mail	12,520	3,216	25.68
1976	Mail	4,392	1,503	34.22
1976	Telephone	1,044	743	71.16
1982	Telephone	1,065	992	93.14
1992	Telephone	1,053	940	89.27

Geographical Regions Used in 1992

Iowa was divided into seven geographical regions in the 1958, 1970, and 1976 surveys,⁵⁹ using regions identified in the *1950 U.S. Census of Agriculture*. Table 2.1 shows the regions used throughout the survey and are described as:

1. Northwest Region - ten counties including Lyon, Sioux, O'Brien, Plymouth, Cherokee, Buena Vista, Woodbury, Ida, Sac, and Carroll
2. Southwest Region - eleven counties including Monona, Crawford, Harrison, Shelby, Audubon, Pottawattamie, Cass, Mills, Montgomery, Fremont, and Page
3. Northern Region - seven counties including Osceola, Dickinson, Emmet, Kossuth, Clay, Palo Alto, and Hancock

⁵⁹ Berk, p. 13, Strohhahn, p. 8, D'Silva, p. 31.

4. Northcentral Region - thirteen counties including Pocahontas, Humboldt, Wright, Franklin, Calhoun, Webster, Hamilton, Hardin, Greene, Boone, Story, Dallas, and Polk
5. Southern Region - nineteen counties including Guthrie, Adair, Madison, Warren, Marion, Adams, Union, Clarke, Lucas, Monroe, Wapello, Jefferson, Taylor, Ringgold, Decatur, Wayne, Appanoose, Davis, and Van Buren
6. Northeast Region - sixteen counties including Winnebago, Worth, Mitchell, Howard, Winneshiek, Allamakee, Cerro Gordo, Floyd, Chickasaw, Fayette, Clayton, Butler, Bremer, Black Hawk, Buchanan, and Delaware
7. Eastern Region - twenty-three counties including Grundy, Dubuque, Marshall, Tama, Benton, Linn, Jones, Jackson, Clinton, Cedar, Jasper, Poweshiek, Iowa, Johnson, Scott, Muscatine, Mahaska, Keokuk, Washington, Louisa, Henry, Des Moines, and Lee

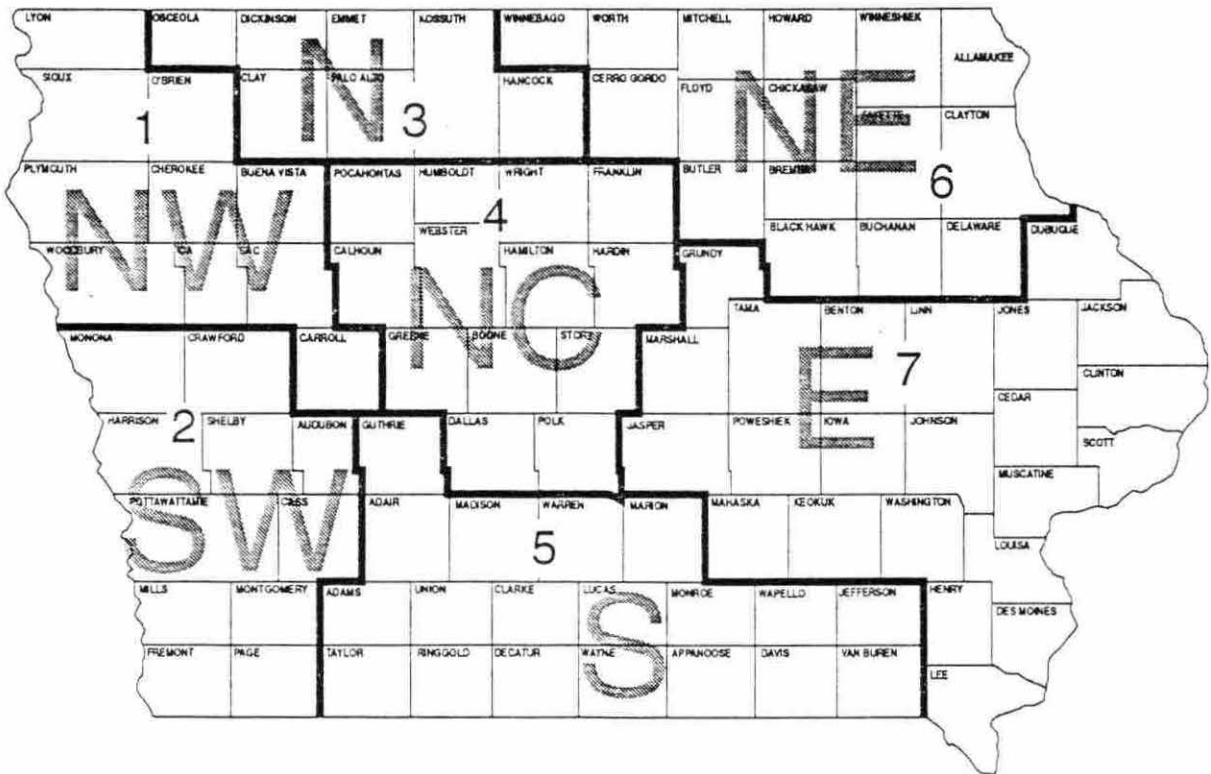


Figure 2.1. Iowa regions used in 1958, 1970, 1976, 1982, and 1992

The Non-Corporate Sample

The non-corporate sample selection process started with randomly selecting a sample unit of land. After the sample unit was selected, the persons owning land within this sample unit were identified and became the respondents for the survey.

The sample unit was a quarter of a quarter section of land as defined by the United States Geological Survey - nominally a forty-acre parcel of land. The number of sample units per county was determined by the proportional area of each county, with the largest county (Kossuth) having eighteen sample units, and the fifteen smallest counties (Montgomery, Adams, Clarke, Jefferson, Lucas, Monroe, Union, Wapello, Winnebago, Worth, Des Moines, Henry, Louisa, Muscatine, and Scott) having five samples each. The balance of the counties each had between five and eighteen samples, according to their proportional area.

Parcels, each consisting of six-hundred forty acres, were selected throughout each county in different locations in order to assure a geographical representation within each county. The forty-acre sample units were drawn randomly by computer from each of the six-hundred forty acre parcels. The legal description of each of the selected forty-acre sample units was sent to the county auditor, who identified the owner(s) of each sample unit. Where there were more than one owner per sample unit, each owner became a respondent and was interviewed if the land was currently in agricultural use. If the ownership type included a second joint owner, the joint owner's demographics, as provided by the respondent, were included in the survey. If the ownership type included more than two owners, a random sampling of the remaining joint owners was taken. If the land within the sample unit was not in agricultural use or was owned by a corporation that filed a corporate report with office of the Secretary of State, the sample was removed from the survey. If the land within the sample unit was a corporation and not on the list received from the office of the Secretary or State, then the corporation was added to the corporate group.

A total of seven-hundred five (705) forty-acre sample units was chosen. With multiple owners possible in each sample unit, nine-hundred four (904) different owners were identified; of these, fifty were corporations and one-hundred thirty-four were removed from the sample (i.e., because the land was used for acreages, gravel pits, rivers, lakes, airports, etc.) Out of the remaining eligible seven-hundred twenty owners, fifty-two respondents refused, five respondents were unable to complete the interview, seventeen had no telephone, eleven were unable to be reached, leaving six-hundred thirty-five interviews completed, for eighty-eight percent completed interviews for the non-corporate sample.

The non-corporate sample group include the following types of farmland owners:

- Sole owners
- Joint owners, husband and wife
- Other types of joint owners
- Life estates
- Unsettled estates
- Trusts
- Partnerships

The Corporate Sample

Before 1982, the surveys contained almost no information on corporate ownership. Beginning in 1982, a corporate sample was drawn in order to better understand the role that corporations play in Iowa agricultural farmland ownership. From the 6,633 domestic and foreign corporations that filed with the Secretary of State an *Iowa 1992 Annual Report* and reported owning Iowa farmland, a second sample consisting of three-hundred fifty corporations was randomly selected. The corporate officer listed became the respondent, unless that person referred to a more knowledgeable owner of the corporation. From the three-hundred fifty corporations, seventeen were removed from the survey because they no longer owned Iowa farmland, leaving three-hundred thirty-three corporations to be interviewed. Of these, sixteen refused to participate in the survey, and twelve could not be located, leaving a balance of three-hundred five

corporations completing the interviews, for a completion rate of almost ninety-two percent for the corporate sample.

Statistical Analysis

Analysis of land ownership statistics has led to controversy for over a century. When General Francis A. Walker, Superintendent of the 1880 Census, was questioned by Henry George⁶⁰ about the accuracy of the decline in the average size of farms from 153 to 134 acres between 1870 and 1880, the debate about statistical analysis of land ownership erupted. General Walker had interpreted the data on the basis of the number of farms, without regard for the size of the farms. Mr. George responded: "I never met anybody, except very little children, to whom all coins are pennies...An average does not, as General Walker says, increase or diminish according to the numerical preponderance, on one side or the other, of the items added, but according to the preponderance in number and quality (acres in this case)."⁶¹

Wunderlich compounds the controversy by adding the lack of operational definition for the term *farm*. "The definition of farm employed by the Census of Agriculture has changed nine times...The modifications over time in the Census definition of farm illustrates (sic) the problem of comparability over time."⁶²

For this survey, land ownership is measured in acres that are held in one ownership type. The types of ownership⁶³ are sole owners, owners in joint tenancy,

⁶⁰ Wunderlich, Gene. "The U.S.A.'s Land Data Legacy from the 19th Century: A Message from the Henry George-Francis A. Walker Controversy over Farm Land Distribution." *American Journal of Economics and Sociology*, Vol. 41, No. 3 (1982). p. 269.

⁶¹ Wunderlich, p. 270.

⁶² The definitional changes are documented in U.S. Bureau of Census, *1974 Census of Agriculture*, Vol. II, Part I. 1977.

⁶³ As defined in Chapter III, Table 3.1.

other co-ownership, partnerships, estates, trusts, and corporations. The amount of acres owned in a different ownership type or leased agricultural land is not considered in this study. For example, for a sole owner responding to the survey, the study only considers the amount of acres that the respondent owns solely. Even if the landowner holds other land in a different ownership type, for example in a partnership, that second ownership type acreage is not included, nor is the land that the owner might rent included in the survey. Therefore, the term *farm* has been replaced with the term *owned acreage* in order to reinforce the concept that the study is referring to only the land held in one ownership type.

Two different statistical methods were used in the past surveys by the Iowa Agriculture and Home Economics Experiment Station. One was based on the percentage of farmland owned; the second was based on the percentage of farmland owners. Within the same survey, both statistical methods were used, each for different characteristics. This led to a sometimes confusing and contradictory analysis among characteristics.

The analysis for this study was confined to a methodology based only on the percentage of farmland owned. This methodology based on the size of farmland owned gives a clearer picture of farmland ownership, i.e. the percentage of land held by corporations, the percentage of land held by owners in specific age groups, and the percentage of land that is enrolled in the Conservation Reserve Program.

Due to the fact that the two different samples, the non-corporate sample and the corporate sample, were selected by different means, two different probabilities of selection were used to analyze the sample groups. Once the probabilities were established, weightings were given so the non-corporate sample could be compared to the corporate sample. Appendix B details the probabilities of selection and the weighting formulation for the 1992 non-corporate data and corporate data.

Since the 1992 study was patterned after the 1982 study, both utilizing telephone survey methods and the 1992 questions duplicated many of the 1982 questions, the 1982

study was re-analyzed basing the survey analysis on the percentage of farmland owned.⁶⁴ Hence, comparisons between the 1982 and 1992 surveys are statistically relevant. In the 1982 survey, the non-corporate ownership can be analyzed by region because county codes were used as part of the identification and sampling structure. The county codes were necessary to divide the non-corporate ownership into regions. However, the corporate sampling did not include county identification of the corporations sampled, thereby limiting the 1982 corporate data to state-wide analysis only.

In the analysis of the data, some respondents chose not to answer some questions, or responded that they did not know the answer. Therefore, the responses, when calculated as a percentage of farmland owned, do not total one-hundred percent. The analysis were completed using the percentage of farmland and, thus, not the percentage of responses; therefore, the tables may not add up to one-hundred percent in all analyses.

The coefficient of variation, computer as $100 * (\text{standard error of estimate}) / \text{estimate}$ divided by the estimate, measures the uncertainty of the estimate as a percentage. The higher the coefficient of variation, the more uncertainty in the estimate. When the estimate was 0.0 percent, indicating that no respondents qualified in that category, the coefficient of variation could not be calculated and is denoted by *.*. Coefficients of variation have been calculated for each table and are found in Appendix E.

Another statistical tool is the use of hypothesis testing to determine if the change is significantly different from zero and at what levels. Change from 1982 to 1992 was tested at the significant levels of 5%, 10%, and 20% and is footnoted on the appropriate tables. A hypothesis test which is significant at a level of 5% indicates fairly strong evidence that the true change is not zero; alternatively, one can say with at least 95% confidence that the true change is greater than zero. (More precisely, the 95% confidence interval for the true change does not include zero.) Similarly, the significance level of 10% corresponds to a confidence level of 90%; a significance level of 20% corresponds to a confidence level of 80%.

⁶⁴ Appendix C details the statistical methods used to analyze the 1982 data including the probabilities of selection and the weightings used.

III. LAND OWNERSHIP PATTERNS

The first dimension of the 1992 Iowa Farmland Ownership Survey focuses on *ownership* of Iowa farmland. The ownership dimension includes identifying:

- ownership type,
- tenure,
- the method of financing Iowa farmland, and
- the size of owned acreages.

In this study, the characteristics of the landowner are analyzed in relation to the land owned, not in relation to farmland owners. The analysis in relation to the land owned is useful because the size of owned acreage varies greatly, especially between the non-corporate owner and the corporate owner. Therefore, the size of the owned acreage is important; the characteristics of the owners are analyzed according to the amount of land they own. By using a common denominator, the land size, more accurate comparisons can be made. The change in statistical methodology, using the percentage of land owned rather than the percent of landowners, limits the comparison of data to the 1982 study.

Ownership Type

The land is held basically by two categories of owners, non-corporate owners and corporate owners. Within each category of ownership are different types of owners. The non-corporate ownership types includes:⁶⁵

- sole owners,
- owners in joint tenancy,
- other co-ownership (tenancy in common),
- partnerships,
- estates, and
- trusts.

⁶⁵ The basis for the discussion on co-ownership is taken from Harl, Neil E., *Fundamentals of Agricultural Law*, Iowa State University, 1994.

Co-ownership types carry differing interests in the property owned. A joint tenancy in Iowa is created by the standard words, "to John Doe and Mary Doe as joint tenants, with right of survivorship, and not as tenants in common." Upon death of one joint tenant, that person's interest passes to the surviving tenant or tenants. Tenancy in common, however, differs; at the time of death, the deceased person's interest passes to heirs or is distributed according to the person's will.

Another type of co-ownership is a partnership. A partnership is an association, either written or verbal, of two or more persons to carry on business as co-owners. A general partnership has unlimited liability of the partners for obligations of the partnership.

Trusts are instruments that can be created during the lifetime of the landowner or, as with an estate, become effective at death. Trusts are instruments whereby legal title to property is placed in the hands of a trustee for the benefit of specified beneficiaries. A life estate is a freehold estate created by a landowner for an unspecified length. The life estate holder generally has rights in the income of the property. Upon death, the property passes to the remaindermen. Also included in the category of estates are unsettled estates.

This survey divided the corporate category into the following types of owners:

- family farm corporations,
- authorized corporations,
- non-profit corporations, and
- other types of corporations.

Corporations are defined in Chapter 9H of the *Code of Iowa, 1993*: "'Corporation' means a domestic or foreign corporation subject to chapter 490, a nonprofit corporation, or a cooperative." Corporations are also categorized according to the stockholders and the purpose of the corporation. Chapter 9H also defines several important categories of corporations involved in agriculture:

- "*Family farm corporation*" means a corporation founded for the purpose of farming and the ownership of agricultural land in which the majority of the voting stock is held by and the majority of the stockholders are persons related to each other as spouse, parent, grandparent, lineal ascendant of

grandparents or their spouses and other lineal descendants of the grandparents or their spouses, or persons acting in a fiduciary capacity for persons so related; ... (and) sixty percent of the gross revenues of the corporation over the last consecutive three-year period comes from farming.

- "*Authorized farm corporation*" means a corporation other than a family farm corporation founded for the purpose of farming and the ownership of agricultural land in which:
 - a. The stockholders do not exceed twenty-five in number; and
 - b. The stockholders are all natural persons or persons acting in a fiduciary capacity for the benefit of natural persons or nonprofit corporations.

Based upon the results of this study, it is estimated that in 1992, almost ninety-two and one-half percent of Iowa farmland was owned by non-corporate owners, with slightly more than seven and one-half percent of the farmland owned by corporations.⁶⁶ Compared with the 1982 survey, the percentage of land owned by corporations has decreased slightly within the ten-year period between 1982 and 1992, dropping from eight percent in 1982 to slightly over seven and one-half percent in 1992.

In 1992, the sole owners and the joint tenancy owners owned the largest share of Iowa farmland, almost thirty-eight percent for each type of ownership, totaling over seventy-five percent of the land. The remaining land is owned by other co-owners (almost seven percent), trusts (almost five percent), estates (slightly over three percent), and partnerships (two percent). Table 3.1 compares the 1982 and the 1982 survey results, as well as the percentage change from the 1982 survey.⁶⁷

Partnerships and trusts registered the only significant changes in land ownership from 1982 to 1992. The changes in the other ownership types were not significant.

⁶⁶ Chapter VI explores in more depth the types of corporations that own Iowa farmland, the history of corporations owning Iowa farmland, their shareholders, and expected lifetime of the corporations.

⁶⁷ Table D.1 gives additional analysis for 1992 ownership type by region.

Table 3.1. Comparison in percentage of farmland owned among land ownership types, 1982 and 1992

Type of Land Ownership	1982	1992	% Difference
Sole owners	41.1	37.9	- 7.9
Owners in joint tenancy	38.7	37.5	- 3.1
Other co-ownership	7.3	6.7	- 7.7
Partnerships	0.3	2.0	+ 566.7***
Estates	3.8	3.3	- 11.8
Trusts	0.8	4.9	+ 488.6**
Corporations	8.0	7.6	- 4.7

* Change from 1982 is significant at a level of 5%.

** Change from 1982 is significant at a level of 10%.

*** Change from 1982 is significant at a level of 20%.

The increased use of trusts is discussed in Chapter V (Table 5.6) concerning the anticipated use of trusts for transferring land in the future.

Tenure

Tenure refers to the manner and the period for which rights in the land are held, dating back to the feudal system of property.⁶⁸ Tenancy has been of great interest and has been a measure of the success of the goal of the owner/operator family-farm. The 1992 data and the 1982 ownership data analyzed tenancy as a percentage of land being held in various tenure classifications. The tenure classifications are divided as follows:

Owner/operators:

- the owner/operator (or corporation) who, with his/her family, provided all the labor to operate the acreage,
- the owner/operator (or corporation) who, with his/her family and hired laborers who worked under his/her direct supervision, provided all the labor to operate the acreage,

⁶⁸ Noyes, pp. 231-232.

Landlord/tenants:

- the landlord (or corporation) who rented his/her land for cash rent,
- the landlord (or corporation) who rented his/her land under a crop share agreement,
- the landlord (or corporation) who rented his/her land under other tenancy arrangements.

The corporation is only a business entity and, therefore, must operate all of its land with hired help. However, corporations often hire shareholders as employees to provide the necessary management and labor needed to operate the corporation-owned land solely, which corresponds to the non-corporate landowner who solely provides the management and labor necessary for the non-corporate land. In other cases, the shareholder who is managing the corporate-owned farmland, hires and manages non-shareholders as employees. This corresponds to the non-corporate landowner who manages hired help. Some corporations lease corporate-owned farmland to non-shareholders under a leasing agreement; the same as non-corporate landowners. Therefore, the tenure arrangements are slightly different between the non-corporate and corporate landowners, but have been analyzed in the same tenure categories for this study.

For all landowners in 1992, the study found that over forty percent of the land was being operated solely by the owner, a significant decrease from the 1982 study. Almost eight percent was being operated with hired help by the owner, which is a significant increase. Thus, the "owner/operator" controls fifty percent of Iowa farmland, the change being significant at a level of 11%.

The balance of the land is farmed under "landlord/tenant" agreements, divided into types determined by the means of payment for the renting of the land. In 1992 for all landowners, cash rented farmland accounts for almost twenty-seven percent of Iowa farmland, a significant increase from 1982. Crop share agreements accounted for almost twenty-two percent of Iowa farmland, very similar to the 1982 data. About one percent of all farmland was operated in other types of rental agreement, a significant decrease

Table 3.2. Tenure of land ownership, 1982 and 1992, as a percentage of farmland, for all owners, non-corporate owners, and corporate owners

1982	All Owners %	Non-Corporate %	Corporate %
Operate solely	54.1	54.0	55.5
<u>Operated with hired help</u>	<u>0.9</u>	<u>0.9</u>	<u>10.1</u>
Owner/Operator sub-total	55.0	54.9	65.6
Cash rent	21.1	22.1	9.3
Crop share	21.1	21.1	21.9
<u>Other renting</u>	<u>1.8</u>	<u>1.8</u>	<u>2.3</u>
Landlord/Tenant sub-total	44.0	44.9	33.5
1992	All Owners %	Non-Corporate %	Corporate %
Operate solely	42.3*	42.4*	41.0*
<u>Operated with hired help</u>	<u>7.8*</u>	<u>6.7*</u>	<u>20.6</u>
Owner/Operator sub-total	50.0***	49.0**	61.7
Cash rent	26.9**	28.0**	14.3***
Crop share	21.8	21.9	21.4
<u>Other renting</u>	<u>1.0***</u>	<u>0.9**</u>	<u>2.6</u>
Landlord/Tenant sub-total	49.8 **	50.7***	38.3

* Change from 1982 is significant at a level of 5%.

** Change from 1982 is significant at a level of 10%.

*** Change from 1982 is significant at a level of 20%.

from 1982. (Table 3.2.)

One possible explanation for the increase of cash rent from 1982 to 1992 would be the use of the Conservation Reserve Program. Those owners enrolled in the CRP recorded their tenure as *cash rent*. However, the survey did not ask whether the land enrolled in the CRP was previously in an owner/operator status or had been previously rented. More information concerning the CRP is found in Chapter VII.

The non-corporate landowners made significant changes in tenure from 1982 to 1992. There was significantly less farmland operated solely and significantly more farmland operated with hired help. The non-corporate owner significantly decreased the

amount of land that was both owned and operated by the landowner. Conversely, the amount of land that was held in the landlord/tenant agreement significantly increased. More research needs to be done concerning why these changes in tenure occurred.

In 1992, tenure arrangements were slightly different between the non-corporate owners and the corporate owners. The corporate employee-shareholders operated forty-one percent of the corporate-owned land solely without non-shareholder hired help. The corporate employee-shareholders operated over twenty percent of the corporate-owned land with hired help, totaling almost sixty-two percent of their land in the owner/operator category. Non-corporate owners operated almost the same percentage of farmland solely at forty-two percent, however, non-corporate owners operated less than seven percent with hired help, compared to corporate landowners who used hired help on almost twenty-one percent of their land. One possible explanation is that the corporate acreages are much larger than the non-corporate acreages (discussed in Table 3.6) and hire extra help in order to perform the work.

The non-corporate owners cash rented more farmland than the corporate farmland owners, over twenty-eight percent compared to fourteen percent. Table 3.2 compares the 1982 farmland tenure agreements and the 1992 tenure agreements, across all owners, non-corporate owners, and corporate owners.⁶⁹

Another indirect type of tenure is the land being managed by a professional farm manager, who in turn supervises the renting of the land to the tenant. The landowner is removed from most management decisions concerning the land, while the farm manager is paid to oversee directly the tenant. The percentage of land managed by professional farm managers more than doubled from 1982 to 1992, increasing from slightly under two percent of farmland to four and one-half percent of farmland.

The use of farm managers significantly increased by all landowners and the non-corporate owner (increased from less than two percent to over four percent). Even though the percentage of farmland owned by corporate owners and managed by a professional

⁶⁹ Table D.2 analyzes the 1992 data for tenure according to regions.

farm manager increased from five and one-half percent to nine and one-half percent, this was not a significant increase. The corporate landowner, however, uses a farm manager more than the non-corporate farmland owner. Table 3.3 shows the comparisons between the 1982 and 1992 surveys, as well as the usage of a professional farm manager between the corporate owner and the non-corporate owner.⁷⁰

Table 3.3. Percentage of farmland managed by a professional farm manager, 1982 and 1992

1982	All farms	Non-Corporate	Corporate
	1.96	1.66	5.52
1992	All farms	Non-Corporate	Corporate
	4.50**	4.09**	9.44

* Change from 1982 is significant at a level of 5%.

** Change from 1982 is significant at a level of 10%.

*** Change from 1982 is significant at a level of 20%.

In order to estimate the landlord's participation in management decisions and to determine if landlords are holding land for purely investment reasons, in the 1992 survey the landlords were questioned on their degree of participation in the share lease. This indicates whether the landlords materially participated in the farm operation, which for individuals would lead to the assessment of self-employment tax (Social Security) on income received under the lease.

Ninety-three percent of rented farmland was owned by landlords who had a non-material participation share lease, treating the leasing agreement as an investment, and subsequently not paying self-employment tax. See Table 3.4. Non-corporate owners had

⁷⁰ In Table D.3, regional data for the 1992 study concerning farm manager use are detailed.

a higher non-participation rate, over ninety-four percent, compared to corporate owners' eighty-five percent. The degree of non-material participation varied from region to region. On a regional basis, non-corporate owners non-participation rate ranged from almost ninety-nine percent to almost ninety-two percent non-material participation. The corporate non-material participation rate ranged from one hundred percent to almost sixty-four percent non-material participation, depending on the region.⁷¹ It is noted that corporate owners do not pay self-employment tax on income from a material participation lease.

Table 3.4. Percentage of leased farmland owned by landlords who do not materially participate, 1992

State-wide All Owners	Non-Corporate Owners	Corporate Owners
93.6	94.2	85.5
Regional Range All Owners	Non-Corporate Owners	Corporate Owners
97.8 - 90.2	98.8 - 91.8	100.0 - 63.7

These results would support Rogers' conclusion that landlords tend to be non-operator landlords, and are leaving the farm management decisions to their tenants.⁷² Tenure was cross-tabbed with age (Table 4.3); over sixty-percent of leased farmland was owned by landowners over sixty-five years old. One important reason for non-material

⁷¹ Table D.4 shows the data for non-material participation according to region for all owners, non-corporate owners, and corporate owners.

⁷² Rogers, p. 21.

participation could be the avoidance of payment of social security tax and loss of social security benefits in retirement, not entirely supporting Rogers' conclusion of landlords owning land for purely investment reasons. More research needs to be done concerning non-material participation by landlords.

Method of Financing Iowa Farmland

The farm debt crisis of the 1980s centered on the debtor and the lender, although every person and business in agriculture was affected. The heavily leveraged debtor was forced into insolvency and bankruptcy due to the falling land values and high interest rates.⁷³ This study analyzes the financial picture of Iowa farmland after the 1980s and the changes in the financial structure of agricultural land over the ten years between 1982 and 1992.

Farmland was classified as being in one of three financial states:

- free of debt,
- being purchased through a purchase contract, or
- being purchased by loan secured by a mortgage.

If farmland is classified as being free of debt, the land is unencumbered or without any mortgage or contract responsibilities. This does not mean that the owner has not used the farmland previously as collateral or that there are no liens against the property. Free of debt only applies to the debt against land; it does not include other debt the owner might have concerning machinery and/or livestock.

A purchase contract is an agreement through which real property (land) is transferred from a seller to a buyer with the seller financing the purchase. Most land contracts are between individuals; a downpayment is made and annual payments of interest and principal are agreed upon. After all or a substantial part of the principal is paid, the seller transfers the title by deed to the buyer. If the buyer defaults on payments under an installment contract, forfeiture or foreclosure can take place, depending on the

⁷³ Harl, *Farm Debt Crisis*, p. 281.

terms of the contract.

Another option for purchasing farmland is obtaining a loan and securing the loan with a mortgage from a third party. The mortgagee (the third party or the holder of the mortgage, such as a lender) agrees to provide money to the mortgagor (the borrower) to purchase land. The goal of the mortgagor is to pay off the obligation over time with the mortgagee releasing the land securing the obligation after full payment. Under a mortgage, title as well as possession are held by the mortgagor. If a mortgagor defaults, foreclosure can take place through sale of the property, as provided by law.

The extent to which owners possess equity in their land is a factor determining their access to capital and their stability as landowners. During the ten years between 1982 and 1992, landowners improved their financial position by paying off their contracts and mortgages and having more of their farmland free of debt. In 1992, almost seventy percent of Iowa farmland was fully paid for, more than ten percent was under purchase contract or contract for deed, and not quite twenty percent was mortgaged.

Table 3.5 compares the 1982 financial data with the 1992 financial data, also dividing the landowners by all landowners, non-corporate landowners, and corporate landowners.⁷⁴ Statewide in 1992, there was little difference between the non-corporate and corporate landowners according to financing methods. However, in 1982, there were larger differences between the non-corporate landowners and the corporate landowners.

In 1992 compared to 1982, significantly more land was free of debt, by both the non-corporate and the corporate owners. Also, there was significantly less land owned under contract in 1992, while the amount of land owned through a mortgage did not significantly change. This would seem to indicate that the landowners were in a more secure financial position in 1992, compared to 1982.

⁷⁴ Regional data concerning financing methods by region for both 1992 and 1982 are found in Table D.5 and Table D.6, respectively.

Table 3.5. Finance methods as a percentage of land owned by non-corporate, corporate, and all owners, 1982 and 1992

1982	All Owners	Non-Corp Owners	Corporate Owners
Free of Debt	61.8	62.9	50.1
Under Contract	17.8	17.3	24.0
Through Mortgage	20.2	19.8	24.6
1992	All Owners	Non-Corp Owners	Corporate Owners
Free of Debt	69.6*	69.9*	66.2*
Under Contract	10.7*	10.8*	9.4*
Through Mortgage	19.1	18.8	21.5

* Change from 1982 is significant at a level of 5%.

** Change from 1982 is significant at a level of 10%.

*** Change from 1982 is significant at a level of 20%.

One possible explanation for the significant decrease of the use of contract would be that the contract holder either re-negotiated the contract, reducing the principal or interest or both, or changed the terms due to the farm debt crisis of the 1980s. Another hypothesis is that owners who could do so, paid down on their debt, as borrowers became more risk averse as a result of the farm debt crisis of the 1980s. More analysis is done on re-negotiation in Chapter V. More analysis needs to be done, however, before any statements can be made about *why* there was a significant increase of farmland free and clear in 1992 compared to 1982 and *why* there was a significant decrease in the amount of farmland financed under a contract.⁷⁵

Size of Owned Acreage

The survey measures the size of agricultural land tracts in acres owned by ownership type. The owner may own more land in a different ownership type or

⁷⁵ In Chapter IV, age is also cross-tabulated with finance in order to analyze the financial status of landowners by age group.

rent/lease other agricultural land in order to attain efficiency in production or for other reasons. However, the amount of acres owned in a different ownership type or leased is not considered in this study. Thus, the "size of owned acreage" refers only to the acres owned in one ownership type.

The size of owned acreage differs widely between the corporate⁷⁶ and the non-corporate owners. In 1992, for the corporate-owned land, fifty percent of the land was held in acreages of six-hundred one acres or more. For the non-corporate owned land, fifty percent of the land was held in acreages of one-hundred fifty-one acres or more.

In order to better understand the structure of the sizes of owned acreages within Iowa, Table 3.6 divides the acreage sizes into four size categories and the landowners into

Table 3.6. Percentage of farmland held in various sizes of owned acreage by all owners, non-corporate owners, and corporate owners, 1982 and 1992

1982			
Size (acres)	All Owners	Non-corporate	Corporate
< 80	39.8	43.1	1.9
81-240	38.3	40.7	10.8
241-600	16.5	14.8	36.3
> 600	5.3	1.4	51.0
1992			
Size (acres)	All Owners	Non-corporate	Corporate
< 80	30.7**	33.0*	2.0
81-240	44.0**	46.6**	12.6
241-600	19.1**	17.7*	36.1
> 600	6.3	2.7*	49.3

* Change from 1982 is significant at a level of 5%.

** Change from 1982 is significant at a level of 10%.

*** Change from 1982 is significant at a level of 20%.

⁷⁶ The term *corporation* includes family farm corporations, authorized corporations, non-profit corporation, and cooperatives. Chapter VI documents that eighty-seven percent of the corporations owning Iowa farmland are, in fact, family farm corporations.

three categories--all owners, non-corporate owners, and corporate owners--and compares the 1982 data with the 1992 data. The percentages listed are the amount of farmland held in acreages of that size compared to the total acreage amount for that type of landowner.

In analyzing Table 3.6 it appears that the size of owned acreages has not significantly changed for the corporation from 1982 to 1992. Almost half of Iowa farmland owned by corporations is held in acreages of six-hundred acres, while two percent of corporation owned Iowa farmland is held in acreages less than eighty acres. The size of owned acreages for corporations has not significantly changed from 1982 to 1992.

Significant changes occurred in the size of owned acreages of farmland owned by non-corporate owners. There is significantly less farmland held in acreages less than eighty acres. This is offset by significant increases in the amount of farmland owned in the remaining larger size categories.

The difference in the size of owned acreages, between the non-corporate and corporate owners, however, should be noted. The non-corporate owners own almost eighty percent of the non-corporate farmland in acreages less than two-hundred forty acres while eighty percent of corporate farmland is owned in acreages over two-hundred forty acres.⁷⁷

Summary

In this chapter, land ownership patterns were analyzed and compared to 1982. The following conclusions may be drawn:

- Non-corporate owners own almost ninety-two and one-half percent of all Iowa farmland. Sole owners and owners in joint tenancy each own about thirty-eight percent of the farmland.

⁷⁷ In Appendix D, Table D.7, the "size of owned acreage" data are further broken down into ten different size categories and regions for 1992. The 1992 data also are further divided according to region for non-corporate owners and corporate owners in Tables D.8 and D.9. The size of owned acreages for 1982 is divided for all farmland owners, non-corporate owners, and corporate owners in Table D.10. The non-corporate data for 1982 are also broken into regions in Table D.11.

- Corporations own seven and six-tenths percent of Iowa farmland, which is less than in 1982 when corporations owned eight percent of Iowa farmland.
- The percent of farmland that is owned and operated by the same entity has decreased from 1982 to 1992, from almost fifty-five percent of the land in 1982 to less than fifty percent of the land in 1992, a significant decrease.
- Corporations, however, favor the owner/operator tenure arrangement (at almost sixty-two percent of the corporate farmland) more than non-corporate owners (at forty-nine percent of the non-corporate farmland).
- The use of professional farm managers for all farmland owners is increasing, from almost two percent in 1982 to four and one-half percent in 1992. Between 1982 and 1992, the non-corporate land owner significantly increased the amount of land managed by a professional farm manager.
- Of the fifty percent of the farmland owned in tenant/landlord arrangements, almost ninety-four percent of the land is owned by landlords who do not materially participate in the management decisions of the farmland. The non-corporate owners had a higher rate of non-participation than the corporate owners.
- Over seventy percent of Iowa farmland is free of debt, a significant increase from 1982. Almost twenty percent of the farmland is financed through mortgages and the remaining ten percent is financed under contract. Finance methods vary little between the non-corporate and corporate owners.
- Almost seventy-five percent of Iowa farmland is held in acreages less than two-hundred forty acres. However, there are large differences between the non-corporate size of owned acreage and the corporate size of owned acreages. Significant changes occurred in the size of owned acreages of non-corporate land from 1982 to 1992. There were fewer smaller acreages less than eighty acres and more larger acreages. The size of corporate owned acreages has not significantly changed from 1982.

IV. DEMOGRAPHICS OF NON-CORPORATE OWNERS

This chapter focuses on the non-corporate owners and their demographics. The demographics of farmland owners, such as age, occupation, education, and residency, are tools to evaluate current ownership patterns of Iowa farmland. The analysis is done by percentage of farmland owned; when this analysis is applied to the demographics of the owners,⁷⁸ the owners' characteristics are in relationship to the amount of land which they own. This analysis gives a clearer picture of the characteristics of Iowa farmland ownership and the changes since 1982.

In this section, the demographics analyzed include:

- the owners' age and age cross-tabulated with the size of land holdings, tenure arrangements, and financing methods of farmland,
- residency and occupancy (whether the land is owned by legal residents of Iowa and if they live on the land they own),
- highest education completed and education cross-tabulated with age,
- occupation, and
- gender and marital status.

Age

Land owners' demographics, especially age, affect resource efficiency, financial stability of the landowner, and present and future tenure changes. Resource efficiency is affected by the interrelationship between the farm-firm and the farm operator, creating a life cycle of the farm-firm.⁷⁹ Heady first introduced the theory of the life cycle of the farm-firm and analyzed the farm-firm productivity and efficiency in relationship to the

⁷⁸ All data in this section are from non-corporate owners. Corporation analysis is discussed in Chapter VI.

⁷⁹ Heady, Earl O. *Economics of Agricultural Production and Resource Use*. New Delhi: Prentice-Hall of India Pvt. Ltd. 1964. p. 431-433.

age of the farmland operator. The stages of the life cycle, based on age of the operator, have been adapted to the farmland owner in order to provide insights into resource efficiency. The early-stage of the life cycle is characterized by lack of capital, inefficiencies of management, and an abundance of labor. The mid-stage is characterized by peak efficiency resulting in significant economic benefits to the farm. The late-stage, or declining years of the farm, is characterized by inefficiencies due to an abundance of capital, a shortage of labor, and an increasingly conservative attitude in management.

Based on this family-farm cycle, the percentage of land that is owned by landowners in a specific age group may give some insights into the efficient usage of land. See Table 4.1. In 1992, only six and one-half percent of the farmland was owned by early-stage landowners, up to thirty-four years old, a significant decrease from 1982.

Table 4.1. Percentage of farmland by age of farmland owners in stages of the family-farm cycle, 1982 and 1992

	1982	1992	% Difference
Early-stage:			
< 25 years	1.3	0.6	- 55.2
<u>25 - 34</u>	<u>10.3</u>	<u>5.9</u>	- <u>42.4*</u>
Sub-total	11.6	6.5	- 43.8*
Mid-stage:			
35 - 44	14.0	10.5	- 24.6***
45 - 54	23.0	18.3	- 20.6**
<u>55 - 64</u>	<u>22.3</u>	<u>20.8</u>	- <u>6.6</u>
Sub-total	59.3	49.6	- 16.3*
Late-stage:			
65 - 74	16.8	23.2	+ 38.2**
<u>> 74</u>	<u>12.3</u>	<u>18.5</u>	+ <u>50.7*</u>
Sub-Total	29.1	41.8	+ 46.5*

* Change from 1982 is significant at a level of 5%.

** Change from 1982 is significant at a level of 10%.

*** Change from 1982 is significant at a level of 20%.

Almost fifty percent of the land was owned by landowners in the mid-stage, from thirty-five to sixty-five years old, usually the range of peak efficiency, a significant decrease from 1982. However, almost forty-two percent of the land was owned by landowners in the late-stage of the farming cycle, those owners over sixty-five years old, a significant increase from 1982.

When comparing the 1982 data with the 1992 data, it is evident that more farmland was owned in 1992 by older farmland owners. In fact, in 1982, about fifty percent of the land was owned by persons fifty-six years and older compared to 1992, when fifty percent of the land was owned by persons sixty-one years and older. The movement toward older owners could be attributed to the farm debt crisis of the 1980s affecting more severely the younger to middle-aged landowners who were buying land either under contract or mortgage and were forced to relinquish their land holdings.⁸⁰ The older owners, those who were financially secure and had a larger share of their land free of debt, could acquire more land during the last half of the 1980s when land values dropped and apparently did so.

The large percentage of land that is owned by landowners over sixty-five will likely lead to tenure changes within the next two decades. The older owners may opt to first rent or lease their land to younger farm operators, giving the younger operators an opportunity to increase their operated acreage, and thus change the tenure of Iowa farmland. Alternatively, the older owner may decide to transfer ownership by willing, selling, or giving the land to another. The transfer of ownership is discussed in Chapter V.

In order to better understand the structure of land ownership, age was cross-tabulated with size of land holdings, financing of land, tenure, and plans for land transfer.

Age cross-tabulated with size of owned acreage

Through cross-tabulating age with size of owned acreages, the size of owned

⁸⁰ Harl, *Farm Debt Crisis*, p. 21.

acres for each age group was analyzed to discover if there are any patterns of land ownership associated with age. In 1992, each age category of landowner owned the largest share of their land in acreages of one-hundred to two-hundred seventy-nine acres. Also, the least amount of land owned in all categories was in acreages greater than five-hundred twenty acres. See Table 4.2.⁸¹ However, both the mid- and late-stage landowners significantly increased their holdings in acreages over five-hundred nineteen acres.

Of the farmland held in sizes over five-hundred twenty acres in 1992, the early-stage landowners significantly decreased their holdings, the mid-stage landowners

Table 4.2. Percentage of farmland owned by age cross-tabulated with size of owned acreages, 1982 and 1992

1982 Size	Early < 34	Mid 35-64	Late > 65
0-99 acres	7.62	24.12	12.62
100-279 acres	3.16	23.74	13.14
280-519 acres	0.49	8.78	2.44
> 519 acres	0.16	1.75	0.46
1992	Early < 34	Mid 35-64	Late > 65
0-99 acres	2.47*	19.54	14.63
100-279 acres	3.28	19.54**	20.92*
280-519 acres	0.70	7.53***	4.97*
> 519 acres	0.06**	3.04*	1.23**

* Change from 1982 is significant at a level of 5%.

** Change from 1982 is significant at a level of 10%.

*** Change from 1982 is significant at a level of 20%.

⁸¹ Tables D.12 and D.13 has the complete tables for 1982 and 1992 for age cross-tabulated with size of farms. The age is broken down into the seven age categories and the size of owned acreages is broken into ten categories. These categories were used in previous studies.

significantly increased their holdings, and the late-stage landowners significantly increased their holdings. While acreages over five-hundred twenty acres almost doubled for all owners, the large size farms, over five-hundred twenty acres, only account for slightly over four percent of all farmland.

When comparing the 1992 data with the 1982 data, the late-stage landowners owned almost fifty percent more land in 1992 than in 1982. The largest acreage increase of land holdings for the late-stage owners has come in parcels one-hundred to two-hundred seventy-nine acres in size, with an increase of almost eight percent of all farmland.

The next consideration was whether the late-stage owner was an owner/operator, or whether the older owner was more likely to be in a landlord/tenant arrangement.

Age cross-tabulated with tenure

To better understand the implications for changes in tenancy in the future, age was cross-tabulated with tenure. This analysis shows the age categories divided according to owner/operator and landlord/tenant arrangements. As one would expect, the late-stage landowners rented more of their farmland to others than the early-stage landowners. The renting arrangements for the late-stage landlords were evenly divided between cash rent and crop share rent. The mid-stage landlords favored cash rent over crop share rent or other rental arrangements.

Table 4.3 shows that early-stage owners operated almost all of their land owned. The mid-stage landowners operated over sixty-four percent of their land, while the late-stage owners operated twenty-five percent of their land. For the owners who are sixty-five to seventy-four years old, the tenure agreements could continue into the twenty-first century. For the landowners who are over seventy-five, however, a change of tenancy is very possible before the year 2000.⁸²

⁸² For a complete breakdown into the seven age groups, please see table D.14.

Table 4.3. Percentage of farmland owned by age cross-tabulated with tenure, 1992

Tenure	Early < 35	Mid 35-64	Late > 65	TOTAL
Operate solely	6.2	27.2	9.5	42.0
<u>Operate w/hired help</u>	<u>0.2</u>	<u>5.2</u>	<u>1.3</u>	<u>6.6</u>
Owner/Operator	6.4	32.4	10.8	48.6
Cash Rent	0.1	12.4	15.5	27.4
Crop Share Rent	0.1	5.7	15.5	20.9
<u>Livestock/Other</u>	<u>0.0</u>	<u>0.1</u>	<u>0.8</u>	<u>0.9</u>
Tenant/Landlord	0.2	18.2	31.8	49.2

After verifying that the older farmland owner was more likely to be in a landlord/tenant arrangement, age cross-tabulated with finance method was analyzed in order to see if a pattern existed between age and finance method.

Age cross-tabulated with financing methods

As mentioned in Chapter III, the extent to which owners possess equity in their land is a factor determining their access to capital and their stability as landowners. In Table 4.4 age was cross-tabulated with financing methods in order to give a clearer understanding of the financial structure within each age group. As anticipated, each age group progressively has more land free of debt, and less land under contract and mortgage.

The early-stage landowners have only fifteen percent of their farmland completely free of debt, with the remaining eighty-five percent of their owned land divided almost evenly between contract and mortgage.

However, the late-stage landowners have ninety-one percent of the land free of debt, less than two percent under contract, and less than seven percent of the land under

Table 4.4. Percentage of farmland by age cross-tabulated with financing methods, 1992

Financing Methods	Early < 35	Mid 35-64	Late > 64	TOTAL
Free of Debt	1.0	29.8	38.8	69.6
Under Contract	2.8	7.5	0.7	11.0
<u>Through Mortgage</u>	<u>2.7</u>	<u>13.2</u>	<u>3.0</u>	<u>18.5</u>
TOTAL	6.5	50.5	42.5	99.1

mortgage. This analysis supports the hypothesis that the late-stage owner possesses more equity in the land.⁸³

In the previous pages, age has been cross-tabulated with the size of owned acreages, tenure, and financing methods. In the balance of the chapter, the non-corporate owner is analyzed according to state of residency, whether the landowner lives on the farmland owned, the highest educational level attained, the main (principal) occupation of the landowner, and gender and marital status.

State of Residency of Iowa Farmland Owners; Owner Occupancy of Farmland

Ownership of Iowa land by nonresidents of Iowa has been of concern to residents of the state since settlers first arrived in Iowa.⁸⁴ In 1979, effective January 1, 1980, the Iowa General Assembly enacted a total ban on ownership of agricultural land by aliens other than *permanent resident aliens* except for a limited right to hold land for eventual nonfarm purposes.⁸⁵

Table 4.5 shows the percentage of farmland that was owned by non-U.S. citizens and, if the owners were not U.S. citizens, what their legal state of residency was, both in

⁸³ Table D.15 cross-tabulates seven age groups with financing methods for 1992.

⁸⁴ Strohbehn, p. 40.

⁸⁵ Acts of 66th Iowa General Assembly, ch. 133 (175), now Iowa Code ch. 9H (1993).

1982 and 1992. In 1992, there was no farmland owned by non-U.S. citizens that was included in the survey, the same as in 1982. However, according to the Iowa Department of Agriculture and Land Stewardship, foreign ownership does account for one-tenth of one percent of total agricultural farmland ownership.⁸⁶

Table 4.5. Percentage of land owned by residents of states, 1982 and 1992

Residency	1982	1992	% Difference
Non US citizen	0.0	0.0	0.0
Iowa	93.6	90.6	- 3.2
Other than Iowa	6.4	8.7	+ 35.9

* Change from 1982 is significant at a level of 5%.

** Change from 1982 is significant at a level of 10%.

*** Change from 1982 is significant at a level of 20%.

In 1992 over ninety percent of the land was owned by residents of Iowa, a decrease of over three percent from 1982. However, this was not a significant decrease. Even though Iowa farmland ownership has increased by persons who are not residents of Iowa, it is not a significant change.

Many landowners, even though they are residents of Iowa, do not live either on the land being surveyed or on land that they own that is held in a different ownership type. In 1982, almost sixty-three percent of the land was occupied by the owner of the land. However, by 1992, only slightly more than fifty-four percent of the land was occupied by the owner, a decrease of over thirteen percent. See Table 4.6. This decrease in occupancy of farmland owned is not surprising in light of the analysis that six percent more land in 1992 was operated under a landlord/tenant agreement than in 1982. (See Chapter III.) As more land is being held under a landlord/tenant agreement, fewer

⁸⁶ Iowa Department of Agriculture and Land Stewardship, Bureau of Statistics, 1994.

Table 4.6. Percentage of farmland occupied by owners, 1982 and 1992

Occupancy of farmland	1982	1992	% Difference
Live on land surveyed	56.7	48.0	- 15.3*
<u>Live on other farmland owned</u>	<u>5.9</u>	<u>6.3</u>	<u>+ 6.4</u>
Sub-total	62.6	54.3	- 13.3**
Do not live on owned farmland	37.4	45.7	+22.2**

* Change from 1982 is significant at a level of 5%.

** Change from 1982 is significant at a level of 10%.

*** Change from 1982 is significant at a level of 20%.

owners are likely to be living on the farmland that they own, although some landlords, particularly retired farmers, may continue to live on the land they own. Farm residency may conceivably affect sustainable agricultural practices, as well as conservation tillage methods. More research is needed to determine if farm residency is linked with these practices.

Highest Formal Education Level Completed

The educational attainment level gives an indication of whether Iowa landowners are able to keep abreast of the technological advancements in agriculture. The educational level has increased in the ten years between 1982 and 1992, with significantly more land owned in 1992 by farmland owners who have completed some college, but did not obtain a bachelors' degree. See Table 4.7.

However, the percentage of farmland owned by those holding bachelors' degrees and receiving more education than a bachelors' degree, fell slightly from 1982 to 1992, but not a significant change. One possible explanation was that the landowner with more education left during the farm crisis of the 1980s because their education gave them an opportunity for a career change.

Table 4.7. Percentage of farmland owned, according to highest formal educational level completed by the non-corporate owner, 1982 and 1992

Education	1982	1992	% Difference
More than bachelors' degree	7.0	6.2	- 11.4
Bachelors' degree	9.8	9.0	- 8.7
Some college, no degree	17.5	23.9	+ 36.8**
High school graduate	47.8	41.9	- 12.3***
Did not complete high school	16.5	16.4	- 0.4

* Change from 1982 is significant at a level of 5%.

** Change from 1982 is significant at a level of 10%.

*** Change from 1982 is significant at a level of 20%.

Cross-tabulating age with educational level gives a comparison of educational level among the age groups.⁸⁷ In 1992, the late-stage landowners had the least education, with almost twelve and one-half percent of the land owned by owners over sixty-five years old not completing high school compared to all of the early-stage landowners completing high school.

Table 4.8. Percentage of farmland by educational level cross-tabulated with farm-cycle stages, 1992

Education	Early	Mid	Late
More than bachelors' degree	0.1	4.4	1.5
Bachelors' degree	1.5	4.9	2.6
Some college, no degree	1.9	13.1	8.7
High school graduate	3.1	22.9	15.9
Did not complete high school	0.0	4.2	12.0

⁸⁷ Table D.16 divides the age into seven categories and the educational level into seven divisions.

Occupation

In establishing demographics on land ownership, the question concerning land ownership and occupation arises. During the farm debt crisis of the 1980s, many farmers and farmwives obtained employment off the farm to help supplement the farming income. However, this study was concerned about the principal (main) occupation during the respondent's life and analyzed the principal occupation in relationship to the number of acres owned.⁸⁸ The respondents in the 1992 survey were asked the same question as in the 1982 survey; the same occupation categories were used. See Table 4.9.

Table 4.9. Occupation of farmland owners as a percentage of farmland owned, 1982 and 1992

Occupation	1982	1992	% Difference
Farmwives/housewives	31.4	33.6	+ 6.8
Farmers, farm managers, or cattle ranchers	34.9	29.6	- 15.0*
Professional or technical personnel ⁸⁹	11.9	12.0	+ 0.6
Clerical personnel	3.9	4.3	+ 8.3
Persons both farming and employed elsewhere	1.2	2.0	+ 68.5
Persons in occupations not listed above	16.7	18.6	+ 11.3

* Change from 1982 is significant at a level of 5%.

** Change from 1982 is significant at a level of 10%.

*** Change from 1982 is significant at a level of 20%.

⁸⁸ For joint ownership of land, joint owners were given a proportional share of the land. For example, with a joint tenancy including a husband and wife it was assumed that the wife owned one-half the land and the husband owned one-half the land. In computing statistics on demographics, each owner, therefore, was given a weight dependent upon the number of acres owned.

⁸⁹ Professional and technical occupations include teacher, minister, dentist, social worker, lawyer, CPA, doctor, veterinarian, computer programmer, nuclear engineer, draftsman, state wildlife biologist, newspaper editor and reporter, librarian, and urban planner-consultant.

The largest decrease of occupations cited is in the "farmer, farm managers, or cattle ranchers" category where there is a significant decrease. The largest increase is in "Persons both farming and employed elsewhere" where there is almost a sixty-seven percent increase, although this is significant only at the thirty-five percent level. The low percentage of land owned by persons claiming that their "principal (main) occupation" is both farming and employed elsewhere is surprising. One possible explanation is that those farmland owners who are employed off the farm do not consider their off-farm employment as a "main" occupation; they are optimistic that in the future farming will be their only occupation and that their off-farm employment is only temporary. Once again, this area needs more research before any conclusions can be drawn.

When analyzing the occupation, the role that gender plays in farmland ownership comes into play. The last characteristics of the non-corporate owner analyzed are gender and marital status.

Gender and Marital Status

This study found that land ownership is almost evenly divided between males and females with males owning slightly more farmland but by less of a margin than in 1982. In 1982, females owned forty-six and one-half percent of the farmland while in 1992 females owned forty-eight and one-half percent of the farmland. (See Table 4.10)

Table 4.10. Gender distribution of farmland ownership by percentage of farmland, 1982 and 1992

Gender	1982	1992	% Difference
Females	46.6	48.3	+ 1.7
Males	53.0	51.0	- 2.0

* Change from 1982 is significant at a level of 5%.

** Change from 1982 is significant at a level of 10%.

*** Change from 1982 is significant at a level of 20%.

Age was then cross-tabulated with gender to see if younger women were owning more farmland, if older women were owning more farmland, or if there was a constant distribution among the ages.⁹⁰ Table 4.11 shows that, especially in 1992, the late-stage females owned more farmland than the late-stage males. The early-stage and mid-stage

Table 4.11. Gender cross-tabulated with age in percentage of farmland owned, 1982 and 1992

1982	Early	Mid	Late
Females	5.0	26.6	14.9
Males	6.6	32.7	14.2
1992	Early	Mid	Late
Females	2.8*	21.9**	23.5*
Males	3.8*	28.5**	18.9*

* Change from 1982 is significant at a level of 5%.

** Change from 1982 is significant at a level of 10%.

*** Change from 1982 is significant at a level of 20%.

males, however, owned more farmland than the females in the early- and mid- stages.

In 1992, the females over the age of 65 owned almost twenty-four percent of Iowa farmland. One possible explanation for the older female owning such a large percentage of farmland is that she is often a widow; her spouse died leaving her the farmland owner. Marital status is the last characteristic of the non-corporate owner that is analyzed.

In 1992, three-quarters of Iowa farmland was owned by married persons, with no significant change from 1982. Seventeen percent of the land was owned by widowed persons in 1992, again not a significant change from 1982. The percentage of farmland owned by persons who have never been married decreased more than fifty percent, a

⁹⁰ Table D.17 records the complete breakdown for ages for males and females, in both 1982 and 1992.

Table 4.12. Marital status of Iowa landowners by percentage of farmland, 1982 and 1992

Marital Status	1982	1992	% Difference
Married	76.5	74.9	- 2.0
Widowed	13.9	17.1	+ 23.2
Never Married	6.7	3.3	- 51.2*
Separated/Divorced	2.3	3.4	+ 52.2
Non-respondent	0.6	1.2	+ 97.8

* Change from 1982 is significant at a level of 5%.

** Change from 1982 is significant at a level of 10%.

*** Change from 1982 is significant at a level of 20%.

significant change from 1982. Landowners who were separated or divorced increased the percent of farmland owned from over two percent to over three percent; however, this was not a significant change from 1982. (Table 4.12)

Summary

The current ownership patterns of Iowa non-corporate farmland ownership, comparing 1982 to 1992, can be summarized by the following:

- Farmland owners sixty-one years or older owned fifty percent of all Iowa farmland in 1992 compared to fifty-six years or older owning fifty percent of all Iowa farmland in 1982.
- Late-stage farmland owners owned one-third of all Iowa farmland and were in tenant/landlord arrangements on ninety-five percent of the farmland owned.
- The early-stage landowner only has fifteen percent of their land free of debt, the mid-stage landowner has almost sixty percent of their land free of debt, and the late-stage landowner has over ninety percent of their land free of debt.
- Over ninety percent of the farmland was owned by Iowa residents; however, only half of the farmland is occupied by the farmland owner, a decrease of thirteen percent from 1982.

- A farmland owner is more likely to be a high school graduate and receive some higher education than in 1982.
- There appears to be a near equal division of farmland ownership between females and males, with the largest share of land owned by either a farmwife-housewife or a farmer.

V. LAND ACQUISITION AND TRANSFER: EFFECTS OF THE FARM DEBT CRISIS

This chapter discusses the methods of farmland acquisition, how the farm debt crisis of the 1980s influenced land purchases and restructuring of contracts and mortgages, and the anticipated transfer of farmland. The section on land acquisition methods is divided between the non-corporate owners and the corporate owners. The discussion of the farm debt crisis of the 1980s is limited to non-corporate owners; however, in Chapter VI, corporate owners and their relationship to the farm debt crisis of the 1980s is analyzed. The last section is devoted to a discussion of the anticipated transfer methods of farmland by the non-corporate owner with a comparison to the anticipated transfer methods in 1982. The corporate expected lifetime is also discussed in Chapter VI.

Land Acquisition Methods

The question of acquiring farmland, especially for the owner/operator, has become a major concern for the family-farm proponents.⁹¹ The decline in land values during the 1980s contributed to a reduction in net worth for the Iowa landowner and forced many farmers into insolvency. Figure 5.1 documents the rise and fall of land values from 1966 to 1992.

With the fluctuation of land values, a question arises as to whether the acquisition of farmland is affected. The 1982 and 1992 studies surveyed Iowa farmland owners and inquired about the methods of acquiring Iowa farmland. Iowa farmland may be acquired through several methods. Since non-corporate owners may have slightly different methods of acquisition than corporate owners, the following analyzes each sample group separately.

⁹¹ "A New Farm Family in Bloomfield," *Center for Rural Affairs Newsletter*, April 1993, Walthill, NE, p. 3.

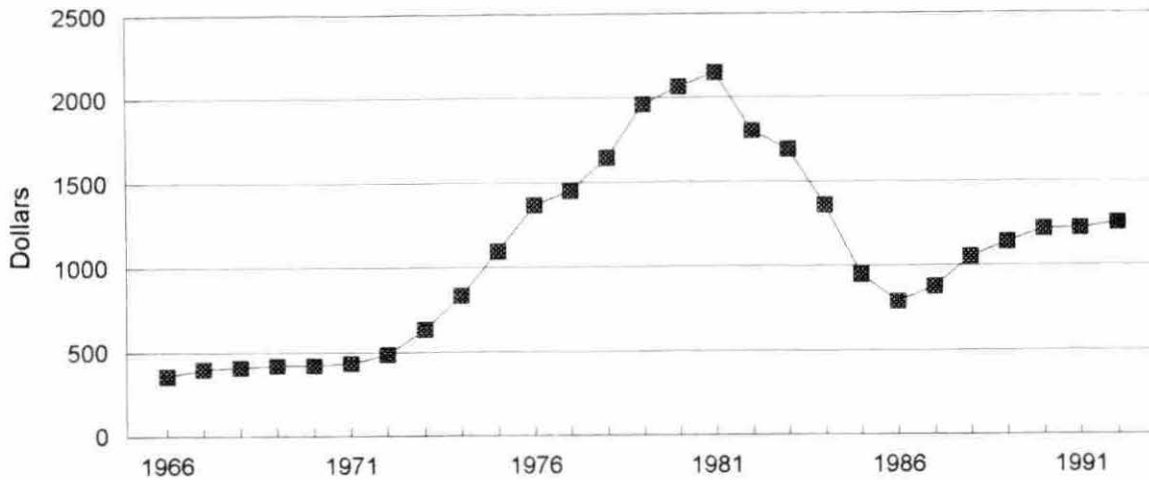


Figure 5.1. Iowa land values, 1966 through 1992⁹²

Non-corporate owners

Non-corporate owners can either purchase the land, acquire the land through inheritance, or receive the land as a gift from a person living at the time of the transfer. Non-corporate owners in 1992 reported that they had purchased seventy-three percent of the land, a significant reduction from 1982, when over seventy-seven percent of the land was purchased.

During the same time, thirty percent more land was inherited, increasing from slightly over eighteen percent in 1982 to over twenty-three and one-half percent in 1992; this was another significant change. The percentage of land received as a gift decreased, however, it was not a significant change from 1982. See Table 5.1.⁹³

⁹² Skow, Duane M. and Howard R. Holden. 1994 Iowa Agricultural Statistics, compiled by Iowa Agricultural Statistics, U. S. Department of Agriculture and Iowa State University Extension. Ames, Iowa. August 1994. p.86.

⁹³ Table D.18 and D.19 show the regional and state-wide analysis for percentage of land purchased, inherited, or received as a gift for non-corporate owners in 1982 and 1992 respectively.

Table 5.1. Methods of acquisition of land by non-corporate owners, 1982 and 1992

Acquisition method	1982	1992	% Difference from 1982
Purchased	77.4	72.8	- 5.9**
Inherited	18.1	23.6	+ 30.1**
Gift	4.5	3.8	- 15.1

* Change from 1982 is significant at a level of 5%.

** Change from 1982 is significant at a level of 10%.

*** Change from 1982 is significant at a level of 20%.

Corporate owners

Corporate owners can either purchase the land, obtain the land by transfer from its shareholders at the time of incorporation, receive the land as a gift by a non-corporate member, or inherit the land from an estate; however, the last two methods are rather unusual. The largest percentage of farmland owned by a corporation was purchased by the corporation, with transferring land from its shareholders into the corporation as the second most-used method of acquiring land. Table 5.2 compares the acquisition methods of corporate landowners in 1982 and 1992, and shows the percentage difference compared to 1982.⁹⁴

When analyzing the methods of land acquisition by percentage of change from 1982 to 1992 for corporate owners, there were no significant changes. Inheritance had the largest change with a sixty-seven percent increase, however the significance level was only fifty percent. Inheritance was also the land acquisition method with the largest positive change for non-corporate owners, however, it was at a eight percent significance level. For the corporate owner, transferring land from its shareholders at the time of incorporation also increased by eighteen percent from 1982. Once again this increase was only significant at the fifty-six poercent level. Offsetting the increased use of inheritance and transferring of land from the shareholders was the decrease in land purchases by

⁹⁴ In Table D.20, 1992 regional data for methods of acquiring farmland for corporate owner are shown.

Table 5.2. Methods of acquisition of land by corporations as a percentage of farmland, 1982 and 1992

Acquisition method	1982	1992	% Difference from 1982
Purchased	63.8	58.4	- 8.6
Transferred by corporate member	28.7	33.9	+ 18.0
Inherited	3.0	5.0	+ 66.9
Gift	2.6	2.5	- 6.5
Other	2.5	0.3	- 87.9*

* Change from 1982 is significant at a level of 5%.

** Change from 1982 is significant at a level of 10%.

*** Change from 1982 is significant at a level of 20%.

corporation from 1982 to 1992. More research needs to be done concerning the large percentage increase of the use of inheritance of land, both by the non-corporate owner and the corporate owner.

The Farm Debt Crisis of the 1980s

The rapidly rising land values of the 1970's, expanding agricultural markets, and increasing inflation led to "feelings of economic buoyance" ⁹⁵ in the late 1970s. This feeling was quickly deflated with the rapidly decreasing land values of the 1980s due to stringent fiscal measures imposed by the Federal Reserve Board in 1979. The decreasing land values contributed to a reduction in net worth for many Iowa landowners and forced many farmers into insolvency. The decreasing land values, however, gave both landowners and non-land owners an opportunity to purchase land at less than one-half its 1981 value, as shown in Figure 5.1.

In order to evaluate the impact of the dramatic swing of land values on Iowa landownership, two broad areas for assessing the impact of the farm debt crisis and landownership are addressed. The first area centers on farmland purchased between 1982

⁹⁵ Harl, *Farm Debt Crisis*, p. 270.

and 1992 that was involved in bankruptcy or foreclosure. The second area centers on renegotiations of land mortgages and contracts during the same ten-year period.

The first area, farmland purchased between 1982 and 1992 that had been involved either in bankruptcy or foreclosure, was analyzed as a percentage of all land purchased during this ten-year period. The analysis revealed that more than ten percent of land purchased within the ten-year period was directly due to the farm debt crisis. This included land that had been involved in bankruptcy proceedings, had been offered for sale by a lender as a result of someone defaulting on their loan, or had been sold on contract and repossessed by the seller because of default on the contract. These data do not include land sold voluntarily by heavily indebted landowners and purchased during the period.

Of the land purchased between 1982 and 1992:

- seven and one-half percent of the land was offered for sale by a lender as a result of someone defaulting on their loan,
- two and two-tenths percent of the land was involved in bankruptcy proceedings, and
- six-tenths percent of the land had been sold on contract and repossessed by the seller because of default on the contract.

Thus, a total of over ten percent of the land purchased was directly linked to the farm debt crisis (See Table 5.3).

There are marked differences among the regions concerning land purchased that was involved with bankruptcy, foreclosure, and other debt restructuring measures (See

Table 5.3. Land purchased by non-corporate owners from 1982 to 1992 attributed to financial stress in percentage, by region (as defined in Figure 2.1.)

	Due to Bankruptcy	Default on Mortgage	Foreclosure on Contract	Total
State-wide	2.2	7.5	0.6	10.4
Regional range	0.0 - 8.3	0.7 - 14.1	0.0 - 1.5	0.7 - 18.0

Table 5.3).⁹⁶ More research is needed to understand the reasons underlying these large deviations among the regions. The number of bankruptcies filed per region, the differing decrease in land values per region, or the type of agriculture (crops versus livestock) could be contributing variables.

The second area for assessing the impact of the farm debt crisis on farmland ownership concentrated on the restructuring of debt through the renegotiation of mortgages and land contracts between 1982 and 1992. The study revealed that almost nineteen percent of mortgaged or contracted land owned by non-corporate owners was restructured.

The importance of restructuring debt is one of the vital lessons to be learned from the farm debt crisis of the 1980s.⁹⁷ The farm debt crisis reached almost epidemic proportions before the lending institutions were willing to accept restructuring of debt in order to prevent the crisis from turning into a catastrophe. Three policy steps taken after 1985 promoted loan restructuring in order to avert a worsening of the situation included:⁹⁸

- Iowa enacted mandatory mediation to encourage the lender and the borrower to reach a rational outcome.
- Effective November 26, 1986, Chapter 12 bankruptcy enforced debt restructuring, discharging the amount of debt above collateral value if not paid during the three- to five-year period covered by the bankruptcy reorganization plan.⁹⁹

⁹⁶ Table D.21 shows the regional data for land purchased by non-corporate owners from 1982 to 1992 attributed to financial stress.

⁹⁷ Harl, *Farm Debt Crisis*, p. 274.

⁹⁸ Harl, *Farm Debt Crisis*, p. 275.

⁹⁹ *Bankruptcy Judges, United States Trustees and Family Farmer Bankruptcy Act of 1986*, Pub. L. 99-554, 100 Stat. 3088 (1986).

- The Agricultural Credit Act of 1987 outlined borrowers' rights for the clients of the Farm Credit System and the Farmers Home Administration with specific provisions for debt restructuring.

Debt restructuring was analyzed in this study according to who restructured the debt and how the debt was restructured. Iowa farmland owners typically borrow with land as collateral from four basic categories of lenders--individuals, commercial lenders (banks or insurance companies), government lenders (Farmers Home Administration or Small Business Administration), or the Farm Credit Bank System (Production Credit Association or Federal Land Bank). The debt could be restructured by an interest rate reduction or a reduction in principal or both, or a change of payment terms including a reorganization of payments. Table 5.4 compares the debt restructuring by lender type, both state-wide and by region.¹⁰⁰

Table 5.4. Farmland restructured from 1982 to 1992 according to lender type, as a percentage of farmland held under mortgage or contract, 1992

	Individuals	Commercial Banks	FLB	FmHA/SBA	Total
State-wide	1.9	8.1	5.1	3.9	19.1
Regional range	0.0 - 11.0	2.9 - 18.8	1.3 - 17.5	0.0 - 7.9	11.9 - 30.4

Eight percent of all Iowa farmland financed by mortgage or contract was restructured with commercial lenders (bank or insurance company), more than five percent of the land was restructured with the Farm Credit Bank Systems (Production Credit Association or Federal Land Bank), almost four percent of the land was restructured with a government lender (Farmers Home Administration or Small Business

¹⁰⁰ Table D.22 shows the regional data for the farmland restructured from 1982 to 1992 according to lender type, as a percentage of farmland held under mortgage or contract.

Administration), and almost two percent of the land was restructured with a private individual. Once again, there are marked differences among the regions concerning the percentage of farmland that underwent loan restructuring according to lender type. The large differences among the regions pose many questions that are not answered by this study.

The types of lenders that renegotiated the debt have been identified. Each lender, however, could restructure the debt using several methods. Of loans that were restructured, more than fifty percent restructured the interest rate, more than thirty-eight percent restructured the terms, and slightly over ten percent reduced the principal. Table 5.5 shows the state-wide analysis and the regional range of the restructuring methods.¹⁰¹

Table 5.5. Method of loan restructuring from 1982 to 1992, non-corporate owners, as a percentage of loans restructured

	Interest Reduction	Principal Reduction	Change of Terms
State-wide	50.9	10.2	38.8
Regional range	37.9 - 67.7	0.2 - 33.1	11.0 - 60.0

Earlier in the chapter, the analysis showed that the non-corporate owners had purchased more than seventy-two percent of the farmland, rather than acquiring it through gift or inheriting it. From 1982 through 1992, more than ten percent of the land owned by non-corporate owners had been involved directly in the farm debt crisis through bankruptcy, foreclosure or some type of debt restructuring.

Next, the analysis focuses on the anticipated transfer methods of the non-corporate owner.

¹⁰¹ Table D.23 shows the regional data concerning the method of loan restructuring from 1982 to 1992 for non-corporate owners, as a percentage of loans restructured.

Anticipated Transfer Methods of Farmland Ownership

Non-corporate farmland owners face the termination of the farm business upon retirement or death. In terms of estate and business planning, there are three basic groups of farmland owners:¹⁰²

1. Group 1 plans for the termination of the farm business at retirement or death of the farmland owner,
2. Group 2 plans for the continuation beyond the life-span of the farmland owner,
3. Group 3 has not addressed the question of farm business continuation.

The farmland owner has individualized objectives when anticipating the transfer of farmland. These typically include: 1) maintain security of retirement income while minimizing death taxes and estate settlement costs, 2) equitable treatment for all heirs, and 3) minimization of management responsibilities.¹⁰³

The objectives of the farmland owners are reflected in their anticipated transfer method. The proponents of the family-farm emphasize the intergenerational relationship between the farmland owner (generally the parents) and the future owner (generally the children). Because the initial investment of farmland is substantial, the transfer of farmland has become an increasingly important factor in initiating farmland ownership.¹⁰⁴ In both the 1982 and the 1992 surveys, the respondents were asked about the anticipated methods of transferring farmland.

Groups 1 and 2, those that *plan* for either termination or continuation of farmland ownership, have three basic methods of transferring farmland.

¹⁰² Harl, *Fundamentals of Agricultural Law*, p. 9-1.

¹⁰³ Harl, *Fundamentals of Agricultural Law*, p. 9-1.

¹⁰⁴ Strange, Marty. "Farmers for the Next Century," *Center For Rural Affairs Newsletter*, May, 1994. CRA-SR 2.

- Ownership can be transferred upon death of the owner under state law or as specified in the will, either to a family member or to someone outside the family.
- Inter-vivos transfers, or the transfer of farmland before the death of the owner, can be accomplished by either selling the farmland or transferring the farmland by gift either to a family member or to someone outside the family.
- A trust can be used as a means to transfer the land either before death, immediately following death or at a point sometime after death.

From the responses given to the 1992 survey, Group 3, those that have not addressed the issue of farm business continuation increased substantially from 1982 to 1992. Table 5.6 shows that the respondents who did not know the method for transferring the land increased by almost two hundred percent, affecting five percent of the farmland in 1982 and almost fifteen percent of the farmland in 1992. One hypothesis is that in 1982 Iowa farmland owners were concerned with the high land values and, therefore, were anticipating transfer methods because of the substantial amount of capital involved. However, by 1992, land values had decreased and there weren't the compelling high land values to trigger the landowners' concern about anticipating transferring the

Table 5.6. Anticipated transfer methods by percentage of farmland, 1982 and 1992

Transfer method	1982	1992	% Difference from 1982
Will to family member	47.5	48.8	+ 2.7
Will to others	0.4	0.5	+ 23.5
Give to family member	5.4	3.5	- 35.5
Give to others	0.4	0.3	- 15.0***
Sell to family member	12.3	7.3	- 40.3*
Sell to others	12.5	10.0	- 19.7
Put in trust	5.8	14.4	+ 149.1*
Other method	10.8	0.5	- 95.1*
Don't know	5.0	14.6	+ 195.0*

* Change from 1982 is significant at a level of 5%.

** Change from 1982 is significant at a level of 10%.

*** Change from 1982 is significant at a level of 20%.

farmland. More research needs to be done in this area.

Comparing the responses from 1982 to 1992, there is almost a one-hundred and fifty percent increase in the expected use of trusts, a significant increase from almost six percent of the farmland to over fourteen percent of the farmland. However, there are significant decreases in the anticipation of either giving the land to family members or others or selling the land to family members. It appears that the methods for intergenerational transfers have changed from either giving or selling the farmland to family member to the use of trusts.

When comparing the analysis that almost seventy-three percent of the farmland owned by the non-corporate owners had been purchased (Table 5.1), yet less than twenty percent of the farmland was anticipated being sold either to family or others, there are marked differences between past methods of obtaining farmland and future anticipated methods of obtaining farmland. More detailed research needs to be done in this area.

Age was cross-tabulated with anticipated transfer methods in order to isolate the owners sixty-five to seventy-four years old, and those over seventy-five.¹⁰⁵ Non-corporate landowners over sixty-five years old owned almost forty-two percent of Iowa farmland. This analysis looks specifically at the non-corporate owners sixty-five to seventy-four years old and seventy-five years old and over and the anticipated transfer methods of their choice.

Of the almost forty-two percent of Iowa farmland that is owned by landowners over sixty-five years of age, over half of the farmland is anticipated to be transferred to family members through the use of wills. Another twenty-two percent of the land is anticipated to be, or already is, in trusts. Table 5.7 isolates the land owned by those sixty-five years of age and older and analyzes the anticipated transfer methods. A large share of the owners, totaling fourteen percent, either do not know which transfer method they will use or will use a combination of the methods listed.

¹⁰⁵ Tables D.24 and D.25 show the complete age breakdown cross-tabulated with anticipated transfer methods for 1982 and 1992, respectively.

Table 5.7. Anticipated transfer methods by owners over 65 years of age as a percentage of farmland owned by owners over 65 years of age, 1992

Transfer method	65 - 74	Over 74
Will to family member	29.3	23.2
Will to others	0.0	0.1
Give to family member	0.6	1.7
Give to others	0.0	0.0
Sell to family member	2.3	0.1
Sell to others	4.6	0.6
Put in trust	8.3	13.7
<u>Combination/Don't know</u>	<u>10.4</u>	<u>4.3</u>
TOTAL	55.5	43.7

Summary

This chapter discussed the methods of farmland acquisition, the farm debt crisis, and the anticipated transfer of farmland and can be summarized by the following:

- Almost seventy-three percent of the farmland was purchased by the non-corporate owner, a significant decrease from 1982. Inheritance accounted for almost twenty-four percent, a significant increase from 1982. The amount of farmland owned as a result of gifts is four percent and not a significant change since 1982.
- The corporate owners purchased fifty-eight percent of corporate land, transferred almost thirty-four percent from corporate members, and inherited five percent of corporate-owned land. From 1982 to 1992, there were no significant changes in the manner which corporations acquire their farmland.
- Of the land purchased by non-corporate owners from 1982 to 1992, over ten percent of the land was involved in bankruptcy proceedings, default on a contract, or had been sold and repossessed by the seller.
- Almost nineteen percent of the mortgaged or contracted land by the non-corporate owner was renegotiated. Forty-two percent had been renegotiated with commercial banks, twenty-seven percent with the Farm Credit Bank System, almost twenty-one percent with a government lender, and ten percent with individuals.

- Of the land that was involved in financial renegotiations, over fifty percent experienced an interest reduction, almost forty percent a change of payment terms, and only ten percent experienced a principal reduction.
- In 1992, the non-corporate owner was anticipating putting significantly more land in a trust, with an increase from six percent of farmland owned by the non-corporate owners to fourteen percent. The most anticipated method of transfer, involving over forty-eight percent of the land, was "willing the land to a family member."

VI. CORPORATE LAND OWNERSHIP

Iowa has enacted restrictive legislation concerning acquisition of farmland by corporations. In fact, according to *Code of Iowa, 1993*, Section 9H.4--

No corporation or trust, other than a family farm corporation, authorized farm corporation, family trust, authorized trust or testamentary trust shall, either directly or indirectly, acquire or otherwise obtain or lease any agricultural land in this state. (followed by exceptions)

Section 9H.5 then restricts authorized farm corporations, authorized trusts, and limited partnerships to owning or leasing less than one-thousand five-hundred acres. Also, a stockholder of any authorized farm corporation cannot become a stockholder in a second authorized farm corporation, or a person who is a beneficiary of an authorized trust could not become a beneficiary of a second authorized trust.¹⁰⁶ Another restrictive measure requires all corporations, limited partnerships, and nonresident aliens owning or operating farmland to file an annual report with the Secretary of State and report if they own any land being used for agricultural purposes.

In the 1982 survey, *Iowa farmland ownership and tenure*,¹⁰⁷ a separate sample group consisting only of corporate owners was selected and interviewed in order to insure a large enough sample group to analyze statistically the corporate sector. The same procedure was followed in 1992.

Corporation Structure

As noted in Chapter III and defined in *Code of Iowa, 1993*, a corporation owning farmland in Iowa can either be:

- a family farm corporation,
- an authorized farm corporation,

¹⁰⁶ *Iowa Code, 1993*, Chapter 9H.

¹⁰⁷ Jackson, p. 13.

- a corporation that is not a family farm corporation or authorized farm corporation,
- a non-profit corporation,
- a cooperative,
- other types.

Corporations have owned farmland in Iowa for many years. Of the corporations sampled in 1992, the first corporation was formed in 1914. As discussed in Chapter III (Table 3.1), in 1992 less than eight percent of Iowa farmland was owned by corporations.¹⁰⁸ In 1992, family farm corporations owned almost eighty-seven percent of all corporate-owned land, an increase of twenty-four percent from 1982 which is a significant increase. Authorized farm corporations owned eight percent of corporate-owned land, a decrease of thirty-three percent from 1982 which is significant only at the thirty percent level. Non-profit corporations also owned less than one percent of corporate-owned land in 1992, an eighty-six percent decrease since 1982 which is a significant decrease.

There has been a significant decrease in the percentage of land owned by persons who don't know what type of corporation owns the land. In other words, of the corporations interviewed in 1992, more knew the type of corporation owning the farmland. One reason for this would be a better briefing of the interviewers before the survey was conducted. Another reason could be more informed corporate officers. Table 6.1 shows the percentage of farmland held by each type of corporation, as well as the percent change from 1982.¹⁰⁹

¹⁰⁸ The methods of land acquisition by corporations were discussed in Chapter V, Table 5.2.

¹⁰⁹ Note the large decrease in "Other/don't know." This could be attributed to the interviewers' better understanding of the corporation types, which would negate any conclusions one might draw from this table.

Table 6.1. Percentage of farmland owned by type of corporation, 1982 and 1992

Corporation Type	1982	1992	% Difference
Family farm	69.8	86.9	+ 24.5**
Authorized farm	11.4	7.6	- 33.6
Non-profit	3.9	0.3	- 91.4*
Cooperative	0.0	0.1	0.0
Other/don't know	14.9	5.1	- 65.5*

* Change from 1982 is significant at a level of 5%.

** Change from 1982 is significant at a level of 10%.

*** Change from 1982 is significant at a level of 20%.

Table 6.2 shows the year and the percentage of farmland owned by corporations surveyed in 1992 compared to all farmland owned by corporations surveyed in 1992. The third column has the cumulative percentage of farmland owned by corporations; almost two-thirds of farmland that was owned in 1992 had been acquired by the corporation by 1979. During the 1980s the rate of farmland being purchased by corporations responding to the 1992 survey decreased substantially. However, more in-depth research needs to be

Table 6.2. Year and percentage of farmland incorporated, 1992

Year	% of Corporate farmland in 1992	Cumulative percent
Before 1955	3.4	3.4
1955-1959	1.1	4.5
1960-1964	4.1	8.6
1965-1969	6.5	15.1
1970-1974	21.1	36.2
1975-1979	29.1	65.3
1980-1984	18.3	83.6
1985-1989	11.0	94.6
1990-1992	2.7	97.3
Nonrespondents	2.7	100.0

completed, factoring in corporations that purchased farmland during the 1970s and 1980s that no longer own Iowa farmland.

The vast majority of Iowa agricultural corporations, over ninety-five percent, were incorporated in Iowa, with one corporation being formed in each of the following states: Delaware, Kansas, South Dakota, New York, and Ohio. Three percent of the corporations did not respond to this question or did not know the state of incorporation.

The corporations were asked to respond as to the expected lifetime of the corporation. Table 6.3 shows that almost sixty percent of the land held by corporations is expected to be held by corporations indefinitely. Almost fifteen percent of the land held by corporations, however, is only expected to stay under corporate ownership for ten to twenty years. The balance of the land held by corporations is divided between less than ten years (four percent) and twenty-five to forty years (four percent). The expected lifetime of the corporations owning a large portion of corporate land, over sixteen percent, was undetermined, with the respondents not knowing or not responding.

Table 6.3. Expected life of corporation as percent of farmland, 1992

Expected life	1992
1- 9 years	4.3
10-20 years	14.8
25-40 years	3.9
Another generation	2.2
Indefinitely	58.2
Don't know	16.5

Corporations and the Farm Debt Crisis of the 1980s

Iowa agricultural corporations also were affected by the farm debt crisis of the 1980s. According to the data collected in the 1992 survey, of the land purchased between 1982 and 1992 by corporations, almost thirteen percent had been involved with

bankruptcy, default on a mortgage, or foreclosure. This compares to ten and three-tenths percent for non-corporate owners. (see Table 5.3.)

Of the land owned by corporations, as reported in the 1992 survey, that was either under mortgage, contract, or other financing arrangements, over twenty percent of this land was restructured from 1982 through 1992, compared to almost nineteen percent of the land owned by non-corporate owners (see Table 5.4). Table 6.4 shows the breakdown of the restructuring by lender types with both state-wide data and regional data. State-wide there were equal amounts of land restructured between commercial lenders (banks or insurance companies), and the Farm Credit Bank (PCA or FLB) and corporations, with individuals and government lenders (Farmers Home Administration or Small Business Administration) restructuring smaller amounts of land. Once again, as with the non-corporate owners, there is a large differences among the regions.¹¹⁰

Table 6.4. Lenders who restructured land from 1982 to 1992 with corporate owners as a percentage of farmland under mortgage or contract

Regions	Individuals	Commercial Banks	FLB	FmHA/SBA	Total
State-wide	2.3	9.1	9.1	1.6	22.1
Regional range	0.0 - 18.2	0.9 - 27.1	0.0 - 34.8	0.0 - 12.4	6.5 - 37.5

Over sixty percent of the land owned by corporations in 1992 was classified in owner/operator status because the employee-shareholders of the corporation operated the land (Table 3.2). Of these corporations who were classified as owner/operator, the survey questioned the respondents as to the methods of payment to the shareholders for operating the land. The responses were that sixty percent were paid a salary, over

¹¹⁰ Table D.26 shows the regional data concerning the lenders who restructured land debt with corporate owners as a percentage of farmland under mortgage or contract.

twenty-five percent received a share of the profits, nine percent received all/most of the CRP payments, almost two percent received rent free housing, one and one-half percent were paid dividends, and less than one percent were paid on a per acre basis, were paid a return on debentures, or were paid a director's fee.

Summary

Corporation ownership of farmland has decreased slightly since 1982. Iowa's restrictive legislation concerning ownership of farmland by authorized farm corporations, authorized trusts, and limited partnerships became even more restrictive in 1987, limiting these entities to one-thousand five-hundred acres. The rate of formation of farm corporations owning land during the 1980s decreased substantially from the 1970s. Factors other than Iowa's restrictive corporate ownership rules may have been involved, however.

The analysis and comparison of the percentage of farmland owned by corporations include the following:

- Almost eighty-seven percent of all corporations owning farmland in Iowa are family-farm corporations, a significant increase from 1982.
- Over ninety-five percent of corporations owning farmland in Iowa were incorporated in Iowa.
- Fifty percent of corporate-owned farmland was held by corporations that were incorporated during the 1970s.
- Sixty percent of the corporations expect the duration of their corporation life to be either another generation or indefinitely.
- Corporations were affected by the farm debt crisis of the 1980s. As reported in the 1992 survey, thirteen percent of the land purchased from 1982 to 1992 had been involved with bankruptcy, default on a mortgage, or foreclosure. Over twenty-two percent of land that was either under mortgage or contract was restructured during this ten year period.

- Eighty-five percent of the farmland owned and operated by corporations either pay their shareholders a salary (sixty percent) or the shareholders receive a share of the profits (twenty-five percent).

Corporate owned farmland was compared to non-corporate owned farmland in Chapter III. The comparisons include tenure, use of a professional farm manager, non-material participation of landlords, finance methods, and size of owned acreages.

VII. CONSERVATION RESERVE PROGRAM

The Food Security Act of 1985 and its "precedent-setting"¹¹¹ conservation title (Title XII) dramatically changed the way federal farm program and benefits were granted to eligible farmers. For the first time in history, receipt of most federal farm program benefits--commodity price supports, agricultural credit, and crop insurance--became legally contingent upon the application of approved land stewardship practices by farmers and landowners.¹¹² The title and its four main provisions--Conservation Reserve Program, sodbuster, swampbuster, and conservation compliance--also abruptly changed the programs and program priorities of federal soil and water conservation agencies and their cooperators at the state and local levels.¹¹³

Congress authorized this sweeping policy change of the 1985 Farm Bill, in part, because of the shared belief within much of the agricultural and environmental communities that federal farm programs should promote natural resource conservation instead of operating at cross purposes with conservation goals as the programs had in years past. A major provision in the 1985 farm bill's conservation title promoting conservation of highly erodible farmland was the Conservation Reserve Program.

The Conservation Reserve Program (CRP) gives farmers an incentive to retire highly erodible cropland and other fragile land from production for a period of ten years. Farmers who enroll eligible cropland in the CRP receive an annual rental payment, comparable to cash rental payments, for idling the land. Congress intended the CRP to be an option for farmers who might find conservation compliance unaffordable to achieve

¹¹¹ Ingersoll, Bruce. "Senate adopts \$54 billion farm bill, renewing trust of agriculture policy," *The Wall Street Journal*. July 30, 1990. p. B2.

¹¹² Batie, Sandra S. *Agricultural policy and soil conservation: implications for the 1985 farm bill* American Enterprise Institute for Public Policy Research, Washington, D.C. 1985.

¹¹³ Ingersoll, p. B2.

otherwise.¹¹⁴ The federal government, in addition to the annual rental payments, shares up to fifty percent of the costs of establishing ground cover with landowners. Farmers must then maintain the established cover at their own expense over the duration of the contract.

The first year farmers were eligible for the CRP was 1986, and thus, if the CRP is not extended, in 1996 the first land in the CRP will be back into production. According to the Iowa State Agricultural Stabilization and Conservation Service,¹¹⁵ a total of six percent of Iowa farmland was enrolled in the CRP, as of March 1, 1992, the date of this study. Table 7.1 outlines the dates of the sign-ups, the acres accepted for that sign-up period, the acres enrolled as a percentage of total CRP acres, percentage of Iowa

Table 7.1. Enrollment in the Conservation Reserve Program in Iowa

#	Date	Acres	% of CRP acres	% of Iowa in CRP	Program Year
1	3/14/86	38,406	1.8	0.11	1986
2	5/16/86	95,318	6.3	0.27	1986/1987
3	8/15/86	200,477	9.4	0.56	1986/1987
4	2/27/87	918,520	43.2	2.58	1987/1988
5	7/31/87	134,353	6.3	0.38	1987/1988
6	2/19/88	107,515	5.1	0.30	1988/1989
7	8/31/88	140,911	6.6	0.40	1988/1989
8	2/24/89	153,508	7.2	0.43	1989/1990
9	8/04/89	182,078	8.6	0.51	1989/1990
10	3/25/91	46,725	2.2	0.13	1991
11	7/19/91	110,532	5.2	0.31	1992
Total		2,128,343	100.0	5.97	

¹¹⁴ Soil and Water Conservation Society. 1989. *Implementation of the Conservation Title of the Food Security Act: A Field Oriented Assessment*. Soil and Water Conservation Society, Ankeny, Iowa. p. 13.

¹¹⁵ *Iowa Conservation Reserve Program Acreage Data*, Iowa State Agricultural Stabilization and Conservation Service Office, 1994, p. 5.

farmland in CRP, and the year(s) the acres enrolled were taken out of production and put into the CRP.

The largest sign-up period, which was in February, 1987, enrolled 918,520 acres, or over forty-three percent of all CRP acres enrolled in Iowa. These acres were enrolled for the 1987 or 1988 program years. Therefore, these acres are eligible for production in 1997 or 1998.

The 1992 farmland ownership survey had a series of questions concerning the land enrolled in the CRP in order to help reveal which farmland owners participated in the CRP. Table 7.2 compares the percent of all farmland and the CRP farmland by ownership type and financing methods as reported in the 1992 survey and a percentage change compared to all farmland.

A higher percentage of farmland owned by non-corporate owners was enrolled in

Table 7.2. Comparison of percentage of all farmland and the CRP farmland by ownership type and financing methods, 1992

Characteristic	All farmland	CRP farmland	% Difference
Non-corporate owners	92.3	94.5	+ 2.3
Corporate owners	7.6	5.5	- 26.9***
Ownership type			
Sole owners	37.9	44.1	+ 16.4
Owners in joint tenancy	37.5	37.6	+ 0.3
Other co-ownership	6.7	2.1	- 68.5*
Partnerships	2.0	3.2	+ 58.8
Estates	3.3	2.3	- 29.9
Trusts	4.9	5.1	+ 4.4
Corporations	7.6	5.5	- 26.9***
Financing methods:			
Free of debt	70.0	67.3	- 3.3
Under contract	10.7	14.9	+ 38.7
Through mortgage	19.0	16.8	- 11.6

* Change from all farmland is significant at a level of 5%.

** Change from all farmland is significant at a level of 10%.

*** Change from all farmland is significant at a level of 20%.

the CRP than the corporate owned farmland. When examining the ownership type that enrolled farmland in the CRP, the only significant difference occurred in other joint ownership types. There also was no significant difference in financing methods between all farmland owners and CRP farmland owners.

For a more specific analysis of farmland owners who enrolled land in the CRP, age and gender were cross-tabulated with CRP ownership for the non-corporate landowner. (See Table 7.3.) Significantly less farmland was owned by early-stage landowners enrolled in the CRP compared with all non-corporate landowners.¹¹⁶ Even though the late-stage farmland owner enrolled more land in the CRP, it was not significant. More land owned by women was enrolled in the CRP compared to land owned by men, but not a significant difference from the gender balance of all non-corporate farmland ownership.

Table 7.3. Comparison of age and gender between non-corporate landowners and CRP landowners, 1992

Characteristic	Non-corporate owners	CRP land owners	% Difference
Age division:			
Early-stage (< 35 yrs.)	6.5	2.6	- 60.1*
Mid-stage (35-64 yrs.)	49.6	46.9	- 5.5
Late-stage (> 64 yrs.)	41.8	49.4	+ 18.2
Nonrespondents	2.1	1.1	- 46.8
Gender:			
Female	48.3	54.7	+ 13.2
Male	51.0	45.3	- 11.1

* Change from all farmland is significant at a level of 5%.

** Change from all farmland is significant at a level of 10%.

*** Change from all farmland is significant at a level of 20%.

¹¹⁶ In Table D.27 age is broken into seven categories and cross-tabulated with CRP farmland ownership.

Summary

The farmland enrolled in the Conservation Reserve Program had the following characteristics:

- Over forty percent of Iowa farmland enrolled was enrolled in the CRP in February 1987, entering into the CRP in 1987 or 1988.
- A larger percentage of non-corporate owners enrolled their farmland in the CRP compared to enrollment by corporate owners.
- Sole owners were the most likely category of owners to enroll in the CRP.
- The land enrolled in the CRP was less likely to be free of debt when compared to Iowa farmland as a whole.
- The non-corporate owners who enrolled their farmland in the CRP were less likely to be the early-stage landowners.
- More non-corporate land owned by women enrolled their land in the CRP, compared to non-corporate land owned by men; however, it was not a significant difference.

VIII. SUMMARY, COMPARISONS, IMPLICATIONS, AND RECOMMENDATIONS

This study focused on the changes in Iowa land ownership and tenure between 1982 and 1992. The analysis included agricultural land holdings by type of ownership and tenure, non-corporate owner demographics, farmland acquisition and anticipated transfer methods, debt restructuring, corporate farmland ownership, and the Conservation Reserve Program and its impact on farmland ownership and tenure. This chapter includes:

- a summary of survey methods,
- comparison, analysis, and implications of the four major conclusions from the study, and
- recommendations for further study.

Summary of the Survey Methods

Selection of survey respondents concerning land ownership and tenure were drawn using two different sample methods: 1) a sample selection of non-corporate Iowa farmland owners, 2) a sample selection of corporate Iowa farmland owners.

Non-corporate sample selection

The sample unit for the non-corporate sample was a quarter of a quarter section of land--nominally a forty-acre tract. Seven-hundred five sample units were selected. The state was divided into seven regions ranging in size from seven counties to twenty-three counties. Because regional estimates were desired, the smaller regions were sampled at higher rates than were the larger regions. Within regions, the sample was allocated to counties roughly in proportion to their areas (excluding incorporated areas, large bodies of water, etc.) Within a county, the requisite number of sample units was selected in two stages.

At the first stage, a sample of sections was selected in a systematic manner that

assured a geographic dispersal over the county. At the second stage, a single forty-acre unit was selected at random within each sample section.

Legal descriptions of the selected forty-acre parcels were sent to the county auditors who were asked to provide information about the owners of agricultural land within the sample parcels. Any tracts shown as being owned by a corporation were checked against the list of corporations obtained from office of the Secretary of State. If the corporation was on the list, the tract was dropped from the non-corporate sample.

The owners identified by the county auditors were then the respondents if they met the following two criteria:

1. They owned land within the selected forty-acre parcel.
2. The land was used for agricultural purposes.

Corporate sample selection

An equal-probability sample of three-hundred fifty corporations was selected from a list of 6,633 corporations provided by the office of the Secretary of State. These corporations, both foreign and domestic, had filed an *Iowa 1992 Annual Report* indicating ownership of Iowa land. A similar sample had been selected in 1982. The person listed as the corporation officer was contacted and asked to provide information about the corporation or to suggest someone who would be more knowledgeable.

Comparison and Analysis: 1982 - 1992

Implications for the future

All analysis and comparisons for both the 1982 and 1992 surveys were made in relationship to the amount of farmland owned in Iowa. This methodology is different from the previous studies conducted by the Iowa Agriculture and Home Economics Experiment Station, which analyzed ownership in relation to the number of landowners, and the U.S. Census of Agriculture, which analyzed agriculture in relation to the number

of farm operators. The analysis for this study, therefore, is based on the percentage of Iowa farmland owned in different types.

Farmland ownership was analyzed in relationship to three categories:

- all Iowa farmland owned,
- Iowa farmland owned by non-corporation owners, and
- Iowa farmland owned by corporations.

Also, non-corporate landowners were classified according to the three-stage family-farm cycle.¹¹⁷ The early-stage landowners were less than thirty-five years old and, as operators, are generally characterized by lack of capital, inefficiencies of management, and an abundance of labor. The mid-stage landowners were thirty-five to sixty-four years old and, as operators, have peak efficiency resulting in a balance of capital and labor and generally good management skills. The late-stage landowner, aged sixty-five and older, typically has, as operators, an abundance of capital and a shortage of labor.

Four major findings and the implications for the future of farmland ownership and tenure in Iowa are presented.

- Corporate landowners owned only seven and one-half percent of Iowa farmland in 1992 and have slightly decreased the percentage of farmland owned between 1982 and 1992, although not significantly.
- Fifty percent of all Iowa farmland was being operated by the owner in 1992. During the ten-year period, 1982 to 1992, owner/operator tenure significantly decreased.
- In 1992, half of Iowa farmland owned by non-corporate owners was owned by persons sixty-one years and older compared to half of Iowa farmland owned by persons fifty-six years and older in 1982.
- In 1992, seventy percent of all Iowa farmland was free of debt compared to sixty-two percent in 1982, a significant increase.

¹¹⁷ Harl, *Farm Estate and Business Planning*, p. 1-2.

Conclusions and implications: Corporate farmland ownership

This study provides some, but not conclusive, evidence that the restrictive legislation¹¹⁸ concerning acquisition of farmland by corporations seems to be limiting farmland acquisition by corporations in Iowa. Corporate landowners owned only seven and one-half percent of Iowa farmland in 1992 which is a slight decrease from the percentage of farmland owned between 1982 and 1992. There was an increase of farmland owned by family farm corporations between 1982 and 1992 while there were decreases of farmland ownership by authorized farm corporations and non-profit corporations. This increase in family farm land ownership implies that the legislative acreage restriction for authorized farm corporations, family trusts, or authorized trusts or testamentary trusts may be discouraging land ownership by these entities while family farm corporations which have not been limited by this restriction have increased their holdings. The precise reasons behind the changes between 1982 and 1992, however, will require further research before firm conclusions may be drawn as the effects of this legislation.

Corporate farming is an explosive area with several state legislatures exploring legislative exemptions concerning corporate farming, especially in the area of livestock production.¹¹⁹ At this time, current Iowa legislation favors family farm corporations, restricts authorized farm corporations, family trusts, authorized trusts and testamentary trusts, and prohibits other types of corporations from acquiring Iowa farmland.

Another implication concerning corporate farmland ownership is that the restrictive legislation impedes access to the land market by corporations; thus, it may serve to hold down land values by restricting the number of buyers. Land values may not be as high with restrictive corporate farming legislation. However, the decreased land values might

¹¹⁸ See Chapter VI. for references to the restrictive legislation.

¹¹⁹ "Corporate Farming Battles Rage in State Legislatures," *Center for Rural Affairs Newsletter*, July 1994, Walthill, NE, p. 1.

benefit the owner/operator who needs to finance farmland by having lower land costs. Once again, further research needs to be conducted before any conclusions concerning land values can be reached.

Conclusions and implications: Less farmland operated by the farmland owner

Fifty percent of Iowa farmland was being operated by the owner in 1992. During the ten-year period 1982 to 1992, owner/operator tenure significantly decreased. This decrease of owner/operator tenure is closely tied with the increasing age of the Iowa farmland owner, which is discussed later. The implications concerning tenure and age are discussed in the following section.

If the state and federal governments are striving for owner/operated tenancy, then the decline in the proportion of owner-operators suggests that Iowa might want to adopt measures to facilitate the transfer of farmland to operators. One step has been taken in 1994 by the creation of the "Beginning Farmer Center" as part of the state's extension service.¹²⁰

Another possibility is that capital gain exemptions could be granted through legislation for farmland owners who sell to owner/operators in order to promote owner/operator tenancy. Following the Great Depression, legislation was enacted at the federal level in order to encourage owner/operator tenancy. Iowa is at a similar point when legislation could have an impact on the type of tenancy of future landowners.

Conclusions and implications: Farmland owned by older owners

The third major conclusion of this study was that in 1992, half of Iowa farmland was owned by persons sixty-one years and older compared to half of Iowa farmland owned by persons fifty-six years and older in 1982. Several reasons account for the

¹²⁰ Farm-On Program, Cooperative Extension Service, Iowa State University, Ames, Iowa.

increase in the amount of Iowa farmland owned by older owners.

One reason that would account for the increase in land owned by older owners is that older owners were in a stronger equity position in the 1980s and did not lose land, as many did, and were in a position to acquire more land at the lower prices prevailing after 1981. Also, the change of tax laws effective in 1987 eliminating the capital gains exclusion would have meant increased tax liability for land sold which discouraged older farmland owners from selling their farmland. In acknowledging that the farmland is owned by older land owners, there are several implications concerning the older owners owning a larger share of Iowa farmland.

The first and more important implication is that within the next two decades a substantial amount of Iowa farmland will be changing owners and will likely precipitate a change of tenure. Seventy-five percent of farmland owned by late-stage owners is held in tenant/landlord tenancy compared to less than three percent of farmland owned by early-stage owners held in tenant/landlord tenancy. Therefore, assuming that the late-stage landowner would transfer the farmland to early-stage owners, a change of tenancy might occur, with an increase of owner/operated Iowa farmland. The next two decades will be important in terms of the ownership of Iowa farmland.

Another implication of lesser importance is based on the three-stage family-farm cycle. Using this model, the late-stage operator is characterized by inefficiencies due to an abundance of capital, a shortage of labor, and increasingly conservative attitude. Since almost half of Iowa farmland was owned by persons in the late-stage of the life cycle in 1992, questions concerning efficiency arise to the extent older owners are operators. The implication is that the older landowner could be slower to accept adoption of new technologies, including biotechnology, thereby, stifling production efficiency and production increases.

Conclusions and implications: More farmland free of debt

In 1992, seventy percent of Iowa farmland was free of debt compared to sixty-two percent in 1982. At first glance, this seemed incongruous in light of the farm debt crisis of the 1980s. It would appear at first glance that the farm debt crisis would manifest itself with a higher percentage of land held under contract or mortgage, not a lower percentage.

However, upon closer examination, coupled with the conclusion of more land owned by the older land owner and the decline in numbers of younger land owners, the conclusion that more land was free of debt is understandable. The implication is that the younger landowners had more debt and when confronted with higher interest rates and declining land values were forced to liquidate their land. Therefore, because the amount of land owned by younger landowners declined during this ten-year period, and because the younger landowner generally incurred more debt on the land, the percentage of land held under contract and/or mortgage decreased, leaving more farmland free of debt.

Many speculators also may have withdrawn from the land market, due to high interest rates and falling land values, leaving pre-existing landowners the opportunity to buy farmland at reduced values. Once again, the more conservative nature of the late-stage landowner suggests that they acquired farmland that they could pay cash for and did not incur substantial debt. Another possible hypothesis is that landowners in general, and probably all farmers, became more risk adverse in the 1980s and shifted the strategy of paying down debt to the extent possible. In any event, more land was free of debt in 1992 than in 1982.

Recommendations for Further Research

The purpose of this study was to focus on the changes in land ownership and tenure between 1982 and 1992. In order to monitor farmland ownership and tenure, continuation of this study is necessary. The General Assembly's mandate that this survey be conducted every five years will help ensure that this survey will be continued.

The use of a telephone survey resulted in significantly higher usable responses compared to mail surveys and should be continued. Continuing with the same statistical methods, based on percent of farmland owned in a specific ownership type, will also strengthen the reliability of comparisons between surveys.

Specific areas for more research have been identified throughout this study. They include:

- relationship between farmland financial stability and management efficiency,
- relationship between farmland owner/occupancy and sustainable agricultural practices,
- relationship between the farmland owners and off-farm income, especially when identifying their main occupation as farmer, or farmwife/housewife,
- variations between and among regions concerning land purchased because of bankruptcy, default on mortgages, and foreclosure and the restructuring of land debt during the 1980s,
- rate of corporate-owned farmland in Iowa, factoring in corporations that purchased farmland during the 1970s and 1980s that no longer own Iowa farmland, and
- land uses for land in the Conservation Reserve Program as the program terminates.

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Far better it is to dare mighty things, to win glorious triumphs, even though checkered by failure than to take rank with those poor spirits who neither enjoy much nor suffer much, because they live in the gray twilight that knows not victory nor defeat.

Theodore Roosevelt

APPENDIX A.

1992

LAND OWNERSHIP QUESTIONNAIRE
GENERAL SAMPLE

Type of Ownership

- 1 = Sole owner
 2 = Life estate
 3 = Unsettled estate
 5 = Trust
 6 = Other joint ownership
 (tenants in common, etc.)
 7 = Joint (husband & wife)
 8 = Partnership

Respondent: _____

Respondent ID#: _____

Int ID# ____

Date: ____/____/____

Start time: ____:____:____

1. In the first part of this interview, I would like you to think of all the Iowa farmland you owned (in type of ownership with (names)) as of March 1, 1992. Do not include land owned in another manner. Please include land mortgaged, and land being purchased on contract as well as land owned free of debt. As of March 1, 1992, how many acres of Iowa farmland did you own (in type of ownership with (names))?

____ Acres

2. Of these acres...

How many are fully paid for? _____ Acres

How many are being bought under purchase contract or contract for deed? Do not include mortgaged land. _____ Acres

How many are mortgaged? _____ Acres

How many are owned under other ownership arrangements? _____ Acres

↓

What is the other type of ownership?

(Specify)

Total acres _____

[IF TOTAL DOES NOT MATCH Q.1, RECTIFY ERROR.]

3. How many acres of this land were...

purchased? _____ Acres

received as a gift from a person living
at the time of the transfer? _____ Acres

inherited? _____ Acres

obtained in some other way? _____ Acres

↓
How was it obtained?

(Specify)

Total acres _____

[IF TOTAL DOES NOT MATCH Q.1, RECTIFY ERROR.]

4. Next, we would like you to think about how long you have owned land (type of ownership). Please try to recall when you acquired the (first/next) land you owned in this manner.

a. How many acres was that?

b. In what year was that land acquired by (you/you and (names))?

[REPEAT UNTIL TOTAL ACRES ARE ACCOUNTED FOR.]

	(a) # Acquired Acres	(b) Year
1st	_____	19 ____
2nd	_____	19 ____
3rd	_____	19 ____
4th	_____	19 ____
5th	_____	19 ____

c. During the past 10 years...

- a) Did you purchase any land (type)?
- b) IF YES: How many acres?

Land Type	a)		b) IF YES: How many acres?
	Yes	No	
that had been involved in bankruptcy proceedings?	1	2	_____
that had been offered by a lender as a result of someone defaulting on their loan?	1	2	_____
that had been sold on contract and repossessed by the seller because of default on the contract?	1	2	_____

5. In the past 10 years, did you sell any of this land on contract and then it was returned to you because of a forfeiture or foreclosure on the contract?

1 = Yes → On how many acres? _____ acres
 2 = No

6a. In the past 10 years, did you renegotiate the loan on any of this land? (Include contract or mortgage.)

1 = Yes
 2 = No [GO TO Q.7.]

b. On how many acres?

_____ acres

- c. Next, we would like to know the type of lender you renegotiated with.
- a) In the past 10 years, did you renegotiate a loan on this land with (lender type)?
- b) **IF YES:** On how many acres?

Lender Type	a)		b) IF YES: How many acres?
	Yes	No	
a private individual,	1	2	_____
a commercial lender (bank or insurance company),	1	2	_____
a Farm Credit Bank (PCA or FLB),	1	2	_____
or a government lender (FmHA or SBA)?	1	2	_____

- d. Which of the following best describes the renegotiations?
- a) Was the (type)?
- b) **IF YES:** On how many acres?

Type	a)		b) IF YES: How many acres?
	Yes	No	
interest rate reduced,	1	2	_____
amount of principal reduced because the land value changed?	1	2	_____
a change in terms such as the length of the loan or number of payments,	1	2	_____
or was it something else?	1	2	_____

(Please specify)

7a. Are you a U.S. citizen?

- 1 = Yes
2 = No

b. Are you living in Iowa?

- 1 = Yes
2 = No → c. What state do you live in?

_____ / _____ / _____
State/country

d. Are you a legal resident of Iowa?

- 1 = Yes
2 = No → e. What is your legal residence?

_____ / _____ / _____
State/country

[IF SOLE OWNERSHIP, GO TO Q.10.]

8. Are all the other owners of this land U.S. citizens?

- 1 = Yes
2 = No

9a. Are all the other owners living in Iowa?

- 1 = Yes
2 = No → b. What state(s) do they live in?

_____ / _____ / _____

c. Are all the other owners legal residents of Iowa?

- 1 = Yes
2 = No → d. Where is their legal residence?
3 = Don't know

_____ / _____ / _____

10a. In 1992, was any of the land you own (type of ownership) being operated by you or your spouse (or any of the other owners)?

- 1 = Yes
- 2 = No [GO TO Q.11.]

b. How many of these acres did you, (your spouse, or any other owners) operate without using hired labor?

— (acres) — [IF ALL, GO TO Q.15.]

11a. In 1992, did you have hired laborers who worked in this operation, but were under your direct supervision?

- 1 = Yes —→ b. On how many acres? — — — —
- 2 = No

12a. In 1992, was any of the land you own (type of ownership) rented out to others either on a share basis or for cash?

- 1 = Yes
- 2 = No [GO TO Q.15.]

b. How many of these acres were rented out in 1992?

— — — — acres rented

c. How many acres were...

for cash rent? — — — — acres
 on crop share? — — — — acres
 on livestock share? — — — — acres
 under some other arrangement? — — — — acres

↓

What was that? _____

[TOTAL ACRES IN 10b + 11b + 12b SHOULD EQUAL TOTAL ACRES IN Q.1.]

13. How many of the acres you own in this manner and rented out, were handled by a professional farm management service?

— — — — acres

14. How many of these acres rented out in 1992 were under...

a material participation share lease, which means that you participated substantially in the farm operation. Under this type of arrangement you would have had to pay self-employment tax, also called Social Security tax.

___ ___ ___ acres

a nonmaterial participation share lease which means you did not participate substantially in the farm operation and the operation is treated as an investment. Therefore, you did not pay self-employment tax, also called Social Security tax.

___ ___ ___ acres

15a. Are any of the acres you own (type of ownership) enrolled in the Conservation Reserve Program (CRP)?

- 1 = Yes
2 = No [GO TO Q.16.]

b. How many acres are currently in the CRP?

___ ___ ___ acres

c. In what year did you enroll these acres?

19 ___ [GO TO Q.17.]

16a. Has any land you own in this manner ever been enrolled in the CRP?

- 1 = Yes
2 = No [GO TO Q.17.]

b. How many acres was that?

___ ___ ___ acres

c. In what year did you enroll those acres?

19 ___

d. In what year did you terminate enrollment?

19 ___

17. Thinking of the land you own (type of ownership), as of March 1, 1992, how many of these acres were being leased for...

a. agricultural purposes, including farmsteads? ___ ___ ___ ___ acres

b. industrial or commercial purposes? ___ ___ ___ ___ acres

c. recreational purposes? ___ ___ ___ ___ acres

d. for some other purpose? ___ ___ ___ ___ acres

↓

What? _____

18a. Do you think any of the land being used for agricultural purposes will be transferred to another use within the next 5 years?

1 = Yes

2 = No → [GO TO Q.19.]

b. About how many acres will be transferred to another use?
 ___ ___ ___ ___ acres

c. To what new use will this agricultural land be transferred?

- 19a. Sometimes, people have transferred certain rights associated with their land to others. These rights are for nonagricultural uses such as mineral rights, electrical power lines, or pipelines. Transfers like this may be in the form of a deed, lease, easement, or option. Have any of the rights on this farmland been transferred to others?

1 = Yes
2 = No [GO TO Q.20.]

- b. Have (type of rights) been transferred?

	Yes	No
Mineral rights	1	2
Utility easements or options	1	2
Other rights	1	2
↓		

(explain)

20. Next, we would like you to think about who owned this land before you acquired it. How many acres were acquired from...

- a) a sole owner or the estate of a sole owner? _____ acres
 b) a trust? _____ acres
 c) a corporation? _____ acres
 d) a government like a city, state, etc.? _____ acres
 e) an institution? _____ acres
 f) co-owners? _____ acres

[IF NONE IN f, GO TO Q.21.]

- g) Was any of this co-owned land owned by a partnership?

1 = Yes → h) How many acres? _____
 2 = No

- i) Was it...

1 = a limited partnership, or
 2 = a general partnership?

[ACRES IN a) - f) SHOULD TOTAL Q.1.]

21a. Was any of this land acquired from someone who had been a farm operator?

1 = Yes → b. How many acres? _____
2 = No

22. Next, we would like you to think about how you anticipate transferring the ownership of this land. Even though we know that these plans may change in the future, we would like you to let us know how you currently expect to transfer the land.

Do you expect to...	Yes	No	IF YES: To whom? (Relationship, not name)
will any of it to a family member?	1	2	
will any of it to others?	1	2	
give any of it to a family member?	1	2	
give any of it to others?	1	2	
sell any of it to a family member?	1	2	
sell any of it others?	1	2	
put any of it in a trust?	1	2	
anything else?	1	2	

23a. On March 1, 1992, did you (or any of the other owners) live on any of the land you owned (type of ownership)?

1 = Yes
2 = No → b. Did you live on any other farmland you or your spouse own?

1 = Yes
2 = No

In this final portion of the interview, we would like some general information about you.

24. **CODE SEX OF RESPONDENT.**

- 1 = Male
- 2 = Female

25. Are you now...

- 1 = married,
- 2 = separated,
- 3 = divorced,
- 4 = widowed, or
- 5 = have you never been married?

26. What is your birth date?

____/____/____
Mo. Day Yr.

27a. What has been your principal (main) occupation most of your adult life?

_____ [PROBE FOR SPECIFIC DUTIES.]

[IF FEMALE RESPONDENT, ASK:]

b. Have you ever been involved with the farming operation by doing chores, helping with planting or harvesting, keeping books, or any other activities?

- 1 = Yes
- 2 = No

28. Are you currently...

- 1 = employed, including operating a farm,
- 2 = unemployed,
- 3 = retired (include semi-retired),
- 4 = disabled, or
- 5 = a homemaker?

29. What is the highest grade of regular school you have completed? Include any college, vocational or technical training.

___ ___ years

- 12 = High school
 16 = B.S., B.A., etc.
 18 = M.S., M.A.
 20 = Ph.D., M.D., etc.

[IF SPOUSE DOES NOT SHARE OWNERSHIP, GO TO Q.34.]

SPOUSE QUESTIONS

30. What is your spouse's birth date?

___/___/___
 Mo. Day Yr.

- 31a. What has been your spouse's principal (main) occupation most of his/her adult life?

_____ [PROBE FOR SPECIFIC DUTIES.]

32. Is he/she currently...

- 1 = employed, including operating a farm,
 2 = unemployed,
 3 = retired (include semi-retired),
 4 = disabled, or
 5 = a homemaker?

33. What is the highest grade of regular school he/she completed? Include any college, vocational or technical training.

___ ___ years

- 12 = High school
 16 = B.S., B.A., etc.
 18 = M.S., M.A.
 20 = Ph.D., M.D., etc.

34. Now, we would like you to think about any land you might own in any other type of ownership arrangement. As of March 1, 1992, did you have an interest in any Iowa farmland other than the land we have been talking about?

- 1 = Yes
2 = No [GO TO CLOSING.]

35. How many acres did you have an ownership interest in?

___ ___ ___ acres

36. How many of these did you own...

- | | |
|---|-------------------|
| a) in joint tenancy or tenancy in common | ___ ___ ___ acres |
| b) in legal partnership or other undivided interest | ___ ___ ___ acres |
| c) in a life estate | ___ ___ ___ acres |
| d) in a trust | ___ ___ ___ acres |
| e) in an unsettled estate, or | ___ ___ ___ acres |
| f) in a corporation? | ___ ___ ___ acres |

CLOSING:

This complete the interview. Is there anything you would like to tell us about the ownership of farmland that may be helpful to our project?

Thank you for talking with me. Iowa State University appreciates your interest in our study.

END TIME: ___ ___ : ___ ___ a.m.
p.m.

LAND OWNERSHIP STUDY 1992
CORPORATE QUESTIONNAIRE

Corporation ID# _____ Int. ID# _____

Respondent Name: _____ Date: _____/_____/_____
Mo. Day Yr.

Starting Time: _____:_____-_____- 1 = a.m.
2 = p.m.

Hello, this is (your name) calling from the Economics Department at Iowa State University. May I please speak to (name)?

Recently, Dr. Neil Harl from Iowa State University sent you a letter for a research study we are conducting about land ownership with corporations which own Iowa farmland.

1. Did you receive this letter?

- 1 = Yes
2 = No → } [EXPLAIN PROJECT - READ LETTER IF NECESSARY.]
9 = Don't know }

As the letter stated, because you are a member of (corp. name) which owns Iowa farmland, you were selected to participate in our research study. Before I ask for any information about the corporation and the farmland it owns, I want to assure you that the information you provide will be kept strictly confidential and used only for the purposes of this research. If you feel any question is too personal, you do not have to answer it.

I will begin by asking a few general questions about the corporation itself.

1. In what year was this corporation formed?

19 _____

2. How much longer do you expect this corporation to exist?

_____ years

3. Is this corporation a...

- 1 = 20-year corporation
2 = 30-year corporation
3 = perpetual corporation, or
4 = something else? _____

(explain)

13. How many acres of this land were...
- a. purchased by the corporation _____ Acres
- b. transferred from members of the corporation to the corporation when it was formed? _____ Acres
- c. received as a gift from a non-corporate member living at the time of the transfer? _____ Acres
- d. inherited by the corporation from the estate of a deceased person? _____ Acres
- e. obtained in some other way? _____ Acres

↓
How was it obtained?

(Specify)

Total acres _____

[IF TOTAL DOES NOT MATCH Q.11, RECTIFY ERROR.]

14. Next, we would like you to think about how long the corporation has owned land. Please try to recall when the corporation acquired the (first/next) Iowa farmland.
- a. How many acres was that?
- b. In what year was that land acquired by the corporation?

[REPEAT UNTIL TOTAL ACRES ARE ACCOUNTED FOR.]

	(a) # Acquired Acres	(b) Year
1st	_____	19 ____
2nd	_____	19 ____
3rd	_____	19 ____
4th	_____	19 ____
5th	_____	19 ____

[IF NO LAND PURCHASED SINCE 1982, GO TO Q. 15.]

10. In what year did this corporation first acquire Iowa farmland?

19 ___ ___

11. In the next part of this interview, I would like you to think of all the Iowa farmland owned by the corporation as of March 1, 1992. Do not include land owned in another manner. Please include land mortgaged, and land being purchased on contract as well as land owned free of debt. As of March 1, 1992, how many acres of Iowa farmland did the corporation own?

___ ___ ___ ___ Acres

12. Of these acres...

How many are fully paid for? _____ Acres

How many are being bought under purchase contract or contract for deed? Do not include mortgaged land. _____ Acres

How many are mortgaged? _____ Acres

How many are owned under other ownership arrangements? _____ Acres

↓

What is the other type of ownership?

(Specify)

Total acres _____

[IF TOTAL DOES NOT MATCH Q.11, RECTIFY ERROR.]

c. During the past 10 years...

- a) Did the corporation purchase any land (type)?
- b) IF YES: How many acres?

Land Type	a)		b) IF YES: How many acres?
	Yes	No	
that had been involved in bankruptcy proceedings?	1	2	_____
that had been offered by a lender as a result of someone defaulting on their loan?	1	2	_____
that had been sold on contract and repossessed by the seller because of default on the contract?	1	2	_____

15. In the past 10 years, did the corporation sell any of this land on contract and then it was returned to the corporation because of a forfeiture or foreclosure on the contract?

1 = Yes → On how many acres? _____ acres
 2 = No

16a. In the past 10 years, did the corporation renegotiate the loan on any of this land? (Include contract or mortgage.)

1 = Yes
 2 = No [GO TO Q.17.]

b. On how many acres?

_____ acres

c. Next, we would like to know the type of lender you renegotiated with.

- a) In the past 10 years, did the corporation renegotiate a loan on this land with (lender type)?
- b) IF YES: On how many acres?

Lender Type	a)		b) IF YES: How many acres?
	Yes	No	
a private individual,	1	2	_____
a commercial lender (bank or insurance company),	1	2	_____
a Farm Credit Bank (PCA or FLB),	1	2	_____
or a government lender (FmHA or SBA)?	1	2	_____

17. How many shareholders are there in this corporation?

_____ shareholders

18a. How many of the shareholders are (type)?

[IF ANY IN a., ASK b.]

b. What percent of the land is owned by (type)?

Type	a) Number of Shareholders	b) % of Land Owned
U.S. citizens	_____	_____ %
living in Iowa	_____	_____ %
legal residents of Iowa	_____	_____ %
citizens of a foreign country	_____	_____ %

100% TOTAL

[IF ANY SHAREHOLDERS DO NOT LIVE IN IOWA, ASK c. AND d.]

c. What states, other than Iowa, do the shareholders live in?

[FOR EACH STATE, ASK:]

d. How many shareholders live in (state name)?

c) State	d) Number

19a. In 1992, was any of the land the corporation owns being operated by you, your spouse, or any of the other shareholders?

1 = Yes

2 = No [GO TO Q.20.]

b. How many of these acres operated by shareholders were operated without using hired labor?

— (acres) —

c. Are the corporate members who operate the land paid a salary for the work they do?

1 = Yes

2 = No → d. How are they reimbursed for operating the land?

[IF ALL ACRES ARE INCLUDED HERE, GO TO Q.24.]

20a. In 1992, did you have hired laborers who worked in this operation, but were under the direct supervision of a corporation member?

1 = Yes —→ b. On how many acres? ___ ___ ___
 2 = No

21a. In 1992, was any of the land owned by the corporation rented out on a share basis or for cash to a noncorporation member?

1 = Yes
 2 = No [GO TO Q.24.]

b. In 1992, how many of these acres were rented out to noncorporation members?

___ ___ ___ acres rented

c. How many acres were...

for cash rent?	___ ___ ___ ___	acres
on crop share?	___ ___ ___ ___	acres
on livestock share?	___ ___ ___ ___	acres
under some other arrangement?	___ ___ ___ ___	acres

↓

What was that? _____

[TOTAL ACRES IN 19b + 20b + 21b SHOULD EQUAL TOTAL ACRES IN Q.11.]

22. How many of the acres you own in this manner and rented out, were handled by a professional farm management service?

___ ___ ___ acres

23. How many of these acres rented out in 1992 were under...

a material participation share lease, which means that you participated substantially in the farm operation. Under this type of arrangement you would have had to pay self-employment tax, also called Social Security tax.

___ ___ ___ ___ acres

a nonmaterial participation share lease which means you did not participate substantially in the farm operation and the operation is treated as an investment. Therefore, you did not pay self-employment tax, also called Social Security tax.

___ ___ ___ ___ acres

24a. Are any of the acres owned by the corporation enrolled in the Conservation Reserve Program (CRP)? This is the 10 year program. Do not include set aside acres.

1 = Yes
2 = No [GO TO Q.25.]

b. How many acres are currently in the CRP?

___ ___ ___ ___ acres

c. In what year did you enroll these acres?

19 ___ ___ [GO TO Q.26.]

25a. Has any land you own in this manner ever been enrolled in the CRP?

1 = Yes
2 = No [GO TO Q.26.]

b. How many acres was that?

___ ___ ___ ___ acres

c. In what year did you enroll those acres?

19 ___ ___

d. In what year did you terminate enrollment?

___ ___

26. Thinking of the Iowa land owned by the corporation, as of March 1, 1992, how many of these acres were being leased for...

a. agricultural purposes, including farmsteads? ___ ___ ___ ___ acres

b. industrial or commercial purposes? ___ ___ ___ ___ acres

c. recreational purposes? ___ ___ ___ ___ acres

d. for some other purpose? ___ ___ ___ ___ acres

↓

What? _____

27a. Do you think any of the corporation's Iowa farmland which is being used for agricultural purposes will be transferred to another use within the next 5 years?

1 = Yes

2 = No → [GO TO Q.28.]

b. About how many acres will be transferred to another use?
 ___ ___ ___ ___ acres

c. To what new use will this agricultural land be transferred?

28a. Some corporations owning land in Iowa have transferred certain rights associated with their land to others. These rights are for nonagricultural uses such as mineral rights, electrical power lines, or pipelines. Transfers like this may be in the form of a deed, lease, easement, or option. Have any of the rights on this farmland been transferred to others?

1 = Yes

2 = No [GO TO Q.29.]

b. Have (type of rights) been transferred?

	Yes	No
Mineral rights	1	2
Utility easements or options	1	2
Other rights	1	2
↓		
(explain)		

29. Next, we would like you to think about who owned this land before the corporation acquired it. How many acres were acquired from...

- a) a sole owner or the estate of a sole owner? ___ ___ ___ acres
- b) a trust? ___ ___ ___ acres
- c) a corporation? ___ ___ ___ acres
- d) a government like a city, state, etc.? ___ ___ ___ acres
- e) an institution? ___ ___ ___ acres
- f) co-owners? ___ ___ ___ acres

[IF NONE IN f, GO TO Q.30.]

g) Was any of this co-owned land owned by a partnership?

1 = Yes → h) How many acres? ___ ___ ___

2 = No

i) Was it...

1 = a limited partnership, or
2 = a general partnership?

[ACRES IN a) - f) SHOULD TOTAL Q.11.]

30a. Was any of this land acquired from someone who had been a farm operator?

1 = Yes → b. How many acres? ___ ___ ___

2 = No

31. Next, we would like you to think about the corporation's use of its Iowa farmland during the next 20 years. Even though we know that these plans may change in the future, we would like you to let us know how the corporation currently expects to use the land.
- a. Does the corporation plan to maintain ownership of this land for the next 20 years?
- 1 = Yes [GO TO Q.32.]
2 = No
- b. Do they plan to sell any of this Iowa farmland in the next 20 years?
- 1 = Yes → c. How many acres do they plan to sell?
2 = No
- _ _ _ _ acres
- d. Does the corporation plan to transfer the land in any other way?
- 1 = Yes → In what way? _____
2 = No _____
32. On March 1, 1992, did you or any of the other shareholders live on any of the Iowa farm land owned by the corporation?
- 1 = Yes
2 = No

In this final portion of the interview, we would like some general information about you as a shareholder of the corporation.

33. **CODE SEX OF RESPONDENT.**

- 1 = Male
2 = Female

34. Are you now...

- 1 = married,
2 = separated,
3 = divorced,
4 = widowed, or
5 = have you never been married?

35. What is your birth date?

____/____/____
Mo. Day Yr.

36a. What has been your principal (main) occupation most of your adult life?

_____ [PROBE FOR SPECIFIC DUTIES.]

[IF FEMALE RESPONDENT, ASK b otherwise Go to Q. 37]

b. Have you ever been involved with the farming operation by doing chores, helping with planting or harvesting, keeping books, or any other activities?

- 1 = Yes
2 = No

37. Are you currently...

- 1 = employed, including operating a farm,
2 = unemployed,
3 = retired (include semi-retired),
4 = disabled, or
5 = a homemaker?

38. What is the highest grade of regular school you have completed? Include any college, vocational or technical training.

___ ___ years

- 12 = High school
16 = B.S., B.A., etc.
18 = M.S., M.A.
20 = Ph.D., M.D., etc.

39. Last of all, we would like you to think about any land you might own in any other type of ownership arrangement. So think of any Iowa farmland you might own that is not in the corporation. As of March 1, 1992, did you have an interest in any Iowa farmland other than the land we have been talking about?

1 = Yes
2 = No [GO TO CLOSING.]

40. How many acres did you have an ownership interest in?

___ ___ ___ acres

41. How many of these did you own...

- | | |
|---|-------------------|
| a) as a sole owner | ___ ___ ___ acres |
| b) in joint tenancy or tenancy in common | ___ ___ ___ acres |
| c) in legal partnership or other undivided interest | ___ ___ ___ acres |
| d) in a life estate | ___ ___ ___ acres |
| e) in a trust | ___ ___ ___ acres |
| f) in an unsettled estate, or | ___ ___ ___ acres |
| g) in any other corporation? | ___ ___ ___ acres |

[IF OTHER CORPORATION, ASK:]

- h) What is the name of that corporation?

- i) Are you the largest shareholder of that corporation?

1 = Yes
2 = No

- j) How many shareholders are there who own 10% or more of the stock in that corporation?

___ ___ ___ shareholders

APPENDIX B.

PROBABILITIES AND WEIGHTING OF THE 1992 SURVEY

Non-Corporate Sample

The non-corporate sample selection for the 1992 survey was based on property owners having *farmland*¹²⁰ that fell within one of the seven-hundred five selected forty-acre units of land, as described in Chapter II. The probability of selection for each parcel was determined and that probability was used in determining the weight given for each parcel. The probability of selection depended on whether the entire parcel was less than, greater than, or equal to forty acres. To determine the probability of selection:

A) If the entire parcel was less than forty acres then:

i) If the entire parcel, p_{ij} , was completely contained within the forty-acre sample unit, ij , the probability of the sample unit being selected for the survey was the number of forty-acre units in the unit (n_i) proportional to the number of forty-acre units in the region (N_i). The weight is the inverse of the selection probability.

$$w^*_{ij} = (N_i/n_i)$$

ii) If the parcel was in two forty-acre sample units, but the parcel itself was less than forty-acres, then the sample weight probability became:

$$w^*_{ij} = (1/2) (N_i/n_i)$$

because the parcel has two chances of being selected.

B) If the size of the parcel, p_{ij} , were greater than or equal to forty acres, then the weight is:

$$w^*_{ij} = \frac{N_i}{n_i} \frac{1}{1 + (p_{ij}/40)}$$

¹²⁰ *Farmland* was defined as land that was in agricultural use.

Next, the raw parcel weights were ratio-adjusted using the acres in the region and then converted to a unit-free weight. When calculating the weights for the general sample, the acres in a region used to adjust the non-corporate weights are the total acres in the region, (A_i), minus the estimated acres held by corporations (C^*_i), and then adjusted for the number of acres in each parcel (P_{ij}). This weight then is unit free and consistent with the corporate weighting:

$$w_{ij} = \frac{(A_i - C^*_i) \frac{w^*_{ij}}{\sum w^*_{ij}}}{P_{ij}}$$

The final step involves splitting the weights to account for the number of owners. The ownership type determines the split factor, depending on the number of owners (o_{ij}):

Table B.1. Ownership type and weight, 1992 non-corporate owners

Ownership Type	Weight
Sole owner	$w_{ij} \bullet 1$
Joint Tenancy:	
Husband	$w_{ij} \bullet 1/2$
Wife	$w_{ij} \bullet 1/2$
Other Joint Ownership:	
Primary owner	$w_{ij} \bullet \frac{1}{o_{ij}}$
Other owner surveyed (call-backs)	$w_{ij} \bullet \frac{o_{ij} - 1}{o_{ij}}$

The final weights were rounded using a cumulate-and-round procedure to get integer weights.

Corporate Sample

There were four corporations selected in the area sample that were not listed in the Secretary of State's list of corporations owning Iowa farmland. These four corporations were combined with the other selected corporations in the corporate sample. Initially all corporations were given equal weights.

$$\text{Weight for corporation } j \text{ of region } i = \frac{\hat{c}_i}{A_i \cdot P_{ij}}$$

where A_i is the sum of the unweighted corporate acres for corporations in the sample for region i , c_i = adjusted total acres owned by corporations.

Table B.2. Adjusted total acres owned by corporations, 1992

i	C_i	Unlisted corporation		\hat{c}_i
1	250,532	6,722.64	=	257,254.64
2	176,733	-	=	176,733
3	201,260	-	=	201,260
4	570,934	4,683.79	=	571,617.79
5	316,266	-	=	316,266
6	348,956	134,242.80	=	483,198.8
7	672,656	51,327.02	=	723,983.02

Cumulate and round the initial weights to get the final weights as in the non-corporate step above.

The following equation was used as a final check:

$$\sum (\text{final weight})(\text{acres in parcel } j) = (\text{total corporate acres for region } i)$$

APPENDIX C.

PROBABILITIES AND WEIGHTING OF THE 1982 SURVEY

Non-Corporate Sample

Two different probabilities of selection were estimated. The first probability was the probability that the landowner was selected to participate in the survey. The second probability was the probability that the sample unit was selected for the survey.

I. The probability that a landowner was selected to participate in the 1992 survey was estimated using the number of acres the respondent owned and the total acres of farmland in the region (A_i). The survey asked the respondent for the number of acres owned in Iowa, regardless of ownership type (a_i), and, therefore, the probability of selection of the landowner is estimated as:

$$\text{Owner probability} = a_i / A_i$$

For joint ownership consisting of two persons, equal probability was given for each person. However, if the sample unit was owned by more than two persons, the second person's probability for selection was:

$$\text{Second owner probability} = [a_i / (\text{number of persons} - 1)] / A_i$$

In analyzing the data, the weight was the inverse of the probability of the selection of that respondent. Then, for any characteristic relating to the landowner, y_j , estimates of totals are:

$$\hat{y} = \Sigma w_j y_j$$

and estimates of means or proportions are:

$$\bar{y} = \Sigma w_j y_j / \Sigma w_j .$$

II. The second probability is that of the sample unit being selected for the survey. The sample unit probability is estimated using the number of forty-acre units in the sample (n_i) divided by the number of forty-acre units in the region (N_i), multiplied by the

number of acres owned by the respondent (a_i) divided by the number of acres in the sample unit (a_k):

$$\text{Sample unit probability} = (n_i/N_i) (a_i/a_k)$$

In analyzing the data, the weight was the inverse of the probability of the selection of that sample unit. Then, for any characteristic relating to the sample unit, y_j , estimates of totals were obtained by

$$Y = \Sigma w_j y_j$$

and estimates of means or proportions by

$$\bar{y} = \Sigma w_j y_j / \Sigma w_j .$$

Corporate Sample

In determining the weighting for the corporations in the 1982 survey, the county identification was not on the computer tape. Therefore, the weights were determined state-wide. All corporations were given the same weight. Fourteen corporations from the general sample that were not included in the listing from the Secretary of States office were added to the corporate sample and given equal weight.

The weights were:

$$\text{(Initial weight for corporation } j) = \frac{\hat{c}_i}{\Sigma P_{ij}} \quad \text{where } P_{ij} = \text{areas owned by corporation}$$

Table C.1. Total acres owned by corporations from Secretary of State, 1982

i	\hat{c}_i
1	233,603
2	303,749
3	201,057
4	425,663
5	340,212
6	387,906
7	705,501

Weights were then cumulated and rounded to get integer weights.

Table D.1. Percentage of farmland owned in each ownership type, 1992 regional data (Table 3.1.)

Ownership type	STATE	NW	SW	N	NC	S	NE	E
Sole owners	37.9	35.4	47.3	47.8	44.9	45.0	38.3	22.1
Joint tenancy	37.5	36.5	30.0	17.7	28.5	40.4	41.2	48.0
Other co-owners	6.7	6.6	4.4	7.4	7.4	3.8	7.2	9.2
Partnerships	2.0	0.1	3.3	2.1	0.0	1.2	1.6	4.2
Estates	3.3	8.7	2.6	9.9	0.3	1.9	0.0	4.2
Trusts	4.9	6.4	8.2	6.9	6.9	2.5	3.2	3.8
Corporations	7.6	5.7	4.2	8.2	12.1	5.2	8.5	8.6

Table D.2. Percentage of farmland owned all farmland owners by tenure, 1992 regional data (Table 3.2.)

Tenure	STATE	NW	SW	N	NC	S	NE	E
Operate solely	42.3	47.2	42.4	28.9	26.7	61.0	43.3	38.4
<u>Operate w/hired help</u>	<u>7.8</u>	<u>6.8</u>	<u>7.1</u>	<u>5.5</u>	<u>9.5</u>	<u>11.8</u>	<u>7.4</u>	<u>5.6</u>
Owner/Operator	50.0	54.0	49.5	34.4	36.3	72.7	50.7	43.9
Cash rent	26.9	29.4	16.8	37.0	25.2	10.4	30.2	38.5
Crop share	21.8	16.7	30.3	28.6	38.3	15.2	16.7	17.0
<u>Other renting</u>	<u>1.0</u>	<u>0.0</u>	<u>1.4</u>	<u>0.0</u>	<u>0.2</u>	<u>1.8</u>	<u>2.4</u>	<u>0.6</u>
Landlord/Tenant	49.8	46.0	48.5	65.6	63.7	27.4	49.3	56.1

Table D.3. Percentage of farmland managed by professional farm manager, 1992 regional data (Table 3.3.)

Owners	NW	SW	N	NC	S	NE	E
All owners	3.43	0.85	7.82	9.66	1.97	3.92	5.17
Non-corporate owners	3.04	0.70	7.78	8.27	1.86	3.97	4.78
Corporate owners	9.17	4.31	8.28	19.78	3.86	3.37	9.37

Table D.4. Percentage of farmland owned by landlords with non-material participation, 1992 regional data (Table 3.4.)

Owners	STATE	NW	SW	N	NC	S	NE	E
All owners	93.6	94.0	96.2	97.8	90.2	95.5	91.6	93.8
Non-corporate owners	94.2	93.7	96.1	98.8	93.1	95.1	91.8	93.6
Corporate owners	85.5	100.0	100.0	80.5	63.7	100.0	87.1	96.6

Table D.5. Percentage of farmland by financing method, 1992 regional data (Table 3.5.)

Free and clear	STATE	NW	SW	N	NC	S	NE	E
All owners	69.6	72.6	73.8	70.5	77.5	51.5	77.5	68.9
Non-corporate owners	69.9	72.5	74.7	70.6	78.6	50.6	78.1	69.8
Corporate owners	66.2	74.6	51.5	68.5	69.3	67.4	71.0	59.7
Under contract	STATE	NW	SW	N	NC	S	NE	E
All owners	10.7	10.0	8.4	5.5	8.4	15.3	12.5	10.6
Non-corporate owners	10.8	10.0	8.4	5.7	8.7	15.9	12.5	10.2
Corporate owners	9.4	10.0	7.6	3.1	6.2	3.3	12.3	14.7
Through mortgage	STATE	NW	SW	N	NC	S	NE	E
All owners	19.1	16.4	14.5	24.1	13.4	33.2	10.1	20.2
Non-corporate owners	18.8	16.4	14.7	23.7	11.9	33.4	9.4	20.0
Corporate owners	21.5	15.4	8.7	28.4	24.0	29.3	16.7	22.7

128

Table D.6. Percentage of farmland by financing method, non-corporate owners, 1982 regional data (Table 3.5.)

Financing method	STATE	NW	SW	N	NC	S	NE	E
Free and clear	62.9	63.1	60.0	71.7	69.2	59.1	49.1	70.0
Under contract	17.3	30.1	17.7	5.4	11.4	13.4	23.5	16.1
Through mortgage	19.8	6.9	23.6	22.9	19.5	26.9	27.4	13.6

Table D.7. Percentage of farmland by size of owned acreages, all landowners, 1992 regional data (Table 3.6.)

Size of acreage	STATE	NW	SW	N	NC	S	NE	E
< 40 acres	12.0	12.8	7.7	3.6	17.3	22.3	9.5	7.7
41 - 80 acres	18.6	26.5	7.7	23.7	22.3	12.4	18.2	21.5
Subtotal: < 81	30.7	39.2	15.4	27.3	39.6	34.7	27.7	29.2
81 - 160 acres	31.7	35.8	36.5	33.2	29.0	24.2	30.5	34.6
161 - 240 acres	12.3	8.6	19.0	15.2	9.4	9.9	12.2	13.3
Subtotal: 81 - 240	44.0	44.4	55.6	48.4	38.5	34.1	42.7	47.8
241 - 320 acres	8.5	5.5	8.6	9.3	8.0	7.7	9.9	9.6
321 - 400 acres	5.0	3.3	6.6	4.6	2.1	7.4	4.6	5.2
401 - 600 acres	5.6	2.7	6.7	6.5	4.7	7.9	8.1	3.5
Subtotal: 241 - 600	19.1	14.5	21.9	20.3	14.8	23.0	22.5	18.4
601 - 800 acres	2.5	3.0	4.0	1.9	2.2	1.9	2.7	1.9
801 - 1000 acres	1.3	0.9	1.0	0.7	1.9	2.0	1.4	1.0
> 1001 acres	2.5	1.0	2.1	1.4	3.1	4.4	2.9	1.7
Subtotal: > 600	6.3	4.9	7.1	4.0	7.2	8.3	7.1	4.6

Table D.8. Percentage of farmland by size of owned acreages, non-corporate owners, 1992 regional data (Table 3.6.)

Size of acreage	STATE	NW	SW	N	NC	S	NE	E
< 40 acres	13.0	13.6	8.0	3.9	19.5	23.5	10.3	8.3
41 - 80 acres	20.1	28.1	8.0	25.7	25.1	13.0	19.8	23.4
Subtotal: < 81	33.0	41.7	16.0	29.6	44.7	36.5	30.1	31.7
81 - 160 acres	33.9	37.5	38.0	35.9	32.5	25.3	32.9	37.2
161 - 240 acres	12.7	8.9	19.5	16.3	9.7	10.3	12.5	13.5
Subtotal: 81 - 240	46.6	46.4	57.4	52.1	42.2	35.6	45.4	50.7
241 - 320 acres	8.4	4.9	8.4	9.2	7.8	7.6	10.3	9.7
321 - 400 acres	4.7	3.3	6.7	5.0	1.7	7.7	4.4	4.1
401 - 600 acres	4.5	1.7	6.7	3.6	2.1	7.5	7.2	2.3
Subtotal: 241 - 600	17.7	9.9	21.8	17.8	11.7	22.8	21.9	16.0
601 - 800 acres	1.5	1.2	3.0	0.0	1.0	1.8	1.2	1.5
801 - 1000 acres	0.6	0.4	1.1	0.0	0.3	1.4	1.1	0.0
> 1001 acres	0.6	0.4	0.8	0.5	0.2	1.9	0.3	0.1
Subtotal: > 600	2.7	2.0	4.8	0.5	1.5	5.0	2.6	1.6

Table D.9. Percentage of farmland by size of owned acreages, corporate owners, 1992 regional data
(Table 3.6.)

Size of acreage	STATE	NW	SW	N	NC	S	NE	E
< 40 acres	0.6	0.5	0.5	0.7	1.1	0.5	0.7	0.4
41 - 80 acres	1.4	2.6	1.3	1.6	1.7	0.0	0.7	1.7
Subtotal: < 81	2.0	3.1	1.8	2.2	2.8	0.5	1.4	2.0
81 - 160 acres	5.4	10.7	4.2	3.3	4.1	3.1	4.7	6.9
161 - 240 acres	7.2	3.5	9.5	2.5	7.1	1.4	9.2	10.6
Subtotal: 81 - 240	12.6	14.2	13.7	5.8	11.2	4.5	13.9	17.5
241 - 320 acres	9.4	14.6	13.9	9.8	9.5	9.8	5.3	8.8
321 - 400 acres	7.6	3.1	5.0	0.0	4.4	2.5	6.9	17.3
401 - 600 acres	19.1	16.8	6.2	38.6	23.4	14.6	17.8	17.1
Subtotal: 241 - 600	36.1	34.5	25.1	48.4	37.3	26.8	30.0	43.2
601 - 800 acres	14.1	29.6	27.2	23.3	10.9	4.1	18.5	6.5
801 - 1000 acres	9.7	8.5	0.0	8.8	14.1	12.8	4.9	11.2
> 1001 acres	25.5	10.0	32.2	11.5	23.7	51.4	31.2	19.5
Subtotal: > 600	49.3	48.2	59.4	43.5	48.7	68.3	54.7	37.3

Table D.10. Percentage of farmland by size of owned acreages, all landowners, non-corporate landowners and corporate owners, 1982 data (Table 3.6.)

Size of acreage	ALL OWNERS	NON-CORPORATE	CORPORATE
< 40 acres	23.3	25.3	0.7
41 - 80 acres	16.5	17.8	1.2
Subtotal: < 81	39.8	43.1	1.9
81 - 160 acres	26.2	28.1	4.4
161 - 240 acres	12.1	12.6	6.4
Subtotal: 81 - 240	38.3	40.7	10.8
241 - 320 acres	7.0	6.9	8.3
321 - 400 acres	4.5	4.2	7.0
401 - 600 acres	5.0	3.6	21.0
Subtotal: 241 - 600	16.5	14.8	36.3
601 - 800 acres	2.0	0.9	14.4
801 - 1000 acres	1.1	0.3	10.8
> 1001 acres	2.2	0.2	25.7
Subtotal: > 600	5.3	1.4	51.0

Table D.11. Percentage of farmland by size of owned acreages, non-corporate owners, 1982 regional data (Table 3.6.)

Size of acreage	STATE	NW	SW	N	NC	S	NE	E
< 40 acres	25.3	24.3	25.1	11.0	26.8	23.8	42.7	18.5
41 - 80 acres	17.8	26.8	15.0	5.5	22.3	15.8	12.2	21.1
Subtotal: < 81	43.1	51.1	40.1	16.5	49.1	39.6	54.8	39.6
81 - 160 acres	28.1	28.0	30.9	45.9	24.9	24.4	23.6	28.8
161 - 240 acres	12.6	13.1	12.5	19.8	11.8	11.2	9.2	13.8
Subtotal: 81 - 240	40.7	41.2	43.4	65.7	36.7	35.6	32.9	42.6
241 - 320 acres	6.9	3.9	8.0	9.8	5.9	6.9	4.8	9.1
321 - 400 acres	4.2	2.5	3.8	3.6	3.3	8.0	2.9	4.5
401 - 600 acres	3.6	0.7	4.2	1.8	4.2	7.3	3.4	2.7
Subtotal: 241 - 600	14.8	7.1	15.9	15.2	13.4	22.2	11.1	16.3
601 - 800 acres	0.9	0.6	0.0	2.0	0.8	1.6	0.7	1.0
801 - 1000 acres	0.3	0.0	0.2	0.5	0.0	0.7	0.1	0.3
> 1001 acres	0.2	0.0	0.3	0.0	0.0	0.4	0.4	0.1
Subtotal: > 600	1.4	0.6	0.6	2.5	0.8	2.6	1.2	1.4

Table D.12. Age cross-tabulated with size of acreage, as a percentage of farmland, 1982 (Table 4.2.)

Size of acreage	<25	25-34	35-44	45-54	55-64	65-74	>75
1-29 acres	0.6	4.0	2.2	5.4	0.9	1.9	0.8
30-69 acres	0.3	1.4	2.6	3.5	1.8	2.5	1.5
70-99 acres	0.2	1.1	1.8	1.6	4.3	3.5	2.5
100-139 acres	0.2	1.4	0.7	2.3	3.5	2.4	1.7
140-199 acres	0.0	0.8	2.6	4.0	4.1	3.3	2.9
200-279 acres	0.0	0.8	1.4	1.8	3.3	1.3	1.6
280-359 acres	0.0	0.1	1.3	1.9	2.0	0.9	0.5
360-519 acres	0.0	0.4	0.7	1.3	1.6	0.6	0.4
520-699 acres	0.0	0.1	0.3	0.5	0.3	0.2	0.2
> 699 acres	0.0	0.1	0.2	0.3	0.1	0.1	0.1

Table D.13. Age cross-tabulated with size of acreage, as a percentage of farmland, 1992 (Table 4.2.)

Size of acreage	<25	25-34	35-44	45-54	55-64	65-74	>75
1-29 acres	0.0	1.0	0.4	1.4	0.6	1.2	0.0
30-69 acres	0.0	1.1	2.1	3.2	3.1	3.1	1.0
70-99 acres	0.5	0.0	2.1	2.6	4.2	4.6	4.8
100-139 acres	0.0	1.6	1.5	2.9	2.0	2.7	2.7
140-199 acres	0.0	0.8	1.5	2.8	3.9	5.6	5.4
200-279 acres	0.1	0.8	1.2	1.9	1.7	2.5	2.0
280-359 acres	0.0	0.4	0.5	1.3	1.9	1.7	1.6
360-519 acres	0.0	0.3	0.5	1.2	2.1	1.2	0.5
520-699 acres	0.0	0.1	0.4	0.3	1.0	0.5	0.2
> 699 acres	0.0	0.1	0.3	0.7	0.3	0.3	0.2

Table D.14. Age cross-tabulated with tenure, as a percentage of farmland, 1992 (Table 4.3.)

Tenure	<25	25-34	35-44	45-54	55-64	65-74	>75
Operate solely	0.5	5.7	6.4	10.0	10.8	7.5	2.0
<u>Operate w/hired help</u>	<u>0.1</u>	<u>0.1</u>	<u>1.4</u>	<u>2.4</u>	<u>1.4</u>	<u>0.6</u>	<u>0.7</u>
Owner/Operator	0.6	5.8	7.8	12.4	12.2	8.1	2.7
Cash rent	0.0	0.1	1.4	4.0	6.9	7.7	7.8
Crop share	0.0	0.1	1.4	2.1	2.2	7.7	7.8
<u>Other renting</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.1</u>	<u>0.0</u>	<u>0.1</u>	<u>0.7</u>
Landlord/Tenant	0.0	0.2	2.8	6.2	9.1	15.6	16.2

Table D.15. Age cross-tabulated with financing methods, as a percentage of farmland, 1992 (Table 4.4.)

Financing methods	<25	25-34	35-44	45-54	55-64	65-74	>75
Free and clear	0.0	1.0	4.2	9.1	1.7	20.7	18.1
Under contract	0.5	2.4	1.9	3.9	1.7	0.3	0.4
<u>Through mortgage</u>	<u>0.1</u>	<u>2.6</u>	<u>4.6</u>	<u>5.7</u>	<u>2.9</u>	<u>2.7</u>	<u>0.3</u>
TOTAL	0.6	5.9	10.7	18.7	21.1	23.6	18.9

Table D.16. Age cross-tabulated with highest educational level obtained, as a percentage of farmland, 1992
(Table 4.8.)

Educational level	<25	25-34	35-44	45-54	55-64	65-74	>75
Over bachelors	0.0	0.1	0.8	2.2	1.4	1.0	0.4
Bachelors degree	0.5	1.0	1.6	1.6	1.7	1.2	1.3
3-4 yrs college	0.0	0.1	0.6	0.7	0.2	0.7	0.6
2 yrs college	0.1	0.7	1.6	2.7	1.6	1.0	1.4
1 yr college	0.0	0.9	2.7	1.5	1.5	3.1	1.8
High school graduate	0.0	3.1	3.3	8.3	11.4	10.4	5.6
Did not complete H.S.	0.0	0.0	0.0	1.4	2.9	5.5	6.5

Table D.17. Age cross-tabulated with gender, as a percentage of farmland, 1982 and 1992 (Table 4.11.)

1982 Gender	<25	25-34	35-44	45-54	55-64	65-74	>75
Female	0.8	4.2	5.7	9.9	10.9	8.7	6.2
Male	0.6	6.1	8.3	13.1	11.4	8.1	6.1
1992 Gender	<25	25-34	35-44	45-54	55-64	65-74	>75
Female	0.0	2.8	4.8	7.7	9.4	12.7	10.8
Male	0.6	3.2	5.9	10.8	11.8	10.8	8.0

Table D.18. Land acquisition methods, as a percentage of farmland for non-corporate owners, 1982 (Table 5.1.)

Acquisition method	STATE	NW	SW	N	NC	S	NE	E
Purchased	77.4	70.7	79.4	63.0	74.8	80.3	84.5	78.9
Inherited	18.1	17.1	14.4	33.0	23.4	15.3	11.1	19.8
Gift	4.5	12.2	6.2	4.0	1.9	4.4	4.4	1.3

Table D.19. Land acquisition methods, as a percentage of farmland for non-corporate owners, 1992 (Table 5.1.)

Acquisition method	STATE	NW	SW	N	NC	S	NE	E
Purchased	72.8	65.9	62.1	65.8	58.1	87.5	81.9	74.8
Inherited	23.6	32.1	29.1	33.0	33.5	13.6	17.0	20.3
Gift	3.8	2.0	8.7	1.2	8.4	0.1	1.1	4.9

Table D.20. Land acquisition methods, as a percentage of farmland for corporate owners, 1992 (Table 5.2.)

Acquisition method	STATE	NW	SW	N	NC	S	NE	E
Purchased	58.4	76.4	36.1	61.1	59.9	46.6	51.9	64.4
Transferred/members	33.9	11.9	63.9	38.9	25.7	53.4	35.6	32.3
Inherited	5.0	11.6	0.0	0.0	12.1	0.0	3.2	1.4
Gifts/non-members	2.6	0.0	0.0	0.0	2.4	0.0	9.3	0.8

Table D.21. Percentage of farmland purchased by non-corporate owners from 1982 to 1992 attributed to financial stress (Table 5.3.)

Financial stress	STATE	NW	SW	N	NC	S	NE	E
Due to bankruptcy	2.2	8.3	3.6	0.0	1.1	1.4	0.5	0.4
Default/mortgage	7.5	2.3	14.1	0.7	5.8	8.4	1.4	12.3
Foreclosure/contract	0.6	0.9	0.3	0.0	0.3	0.7	1.5	0.4
Total	10.3	11.5	18.0	0.7	7.2	10.5	3.3	13.2

Table D.22. Farmland restructured from 1982 to 1992 according to lender type, as a percentage of farmland held under mortgage or contract by non-corporate owners, 1992 (Table 5.4.)

Lender type	STATE	NW	SW	N	NC	S	NE	E
Individuals	1.9	11.0	2.1	0.0	2.9	0.8	0.4	0.0
Commercial banks	8.1	10.5	2.9	9.1	18.8	5.4	6.7	8.8
FLB	5.1	3.7	4.4	17.5	2.8	1.3	7.4	7.0
FmHA/SBA	4.0	5.1	7.9	0.0	3.0	4.4	3.2	3.1
Total	19.1	30.4	17.3	26.6	27.5	11.9	17.7	19.0

Table D.23. Method of loan restructuring from 1982 to 1992, non-corporate owners, as a percentage of loans restructured by region (Table 5.5.)

Restructuring method	STATE	NW	SW	N	NC	S	NE	E
Interest reduction	50.9	56.7	67.7	55.9	39.8	53.6	60.6	37.9
Principal reduction	10.2	11.5	4.8	33.1	0.2	10.6	7.8	7.2
Change of terms	38.8	31.7	27.5	11.0	60.0	35.8	31.6	54.9

Table D.24. Age cross-tabulated with anticipated transfer method, as a percentage of farmland, 1982 (Table 5.6.) 141

Transfer method	<25	25-34	35-44	45-54	55-64	65-74	>75
Will to family	0.2	4.7	7.7	12.5	10.5	10.3	6.5
Will to other	0.0	0.0	0.0	0.1	0.0	0.1	0.1
Give to family	0.0	1.0	1.1	1.1	1.1	0.3	0.0
Give to other	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sell to family	0.0	2.0	1.3	2.6	3.1	0.8	0.6
Sell to other	0.5	1.8	2.5	3.0	2.1	1.7	0.8
Trust	0.0	0.3	0.8	1.6	1.2	0.5	0.4
Other/don't know	0.6	0.4	0.6	2.2	4.3	3.1	3.9

Table D.25. Age cross-tabulated with anticipated transfer method, as a percentage of farmland, 1992 (Table 5.6.)

Transfer method	<25	25-34	35-44	45-54	55-64	65-74	>75
Will to family	0.0	42.9	5.3	7.9	10.3	12.5	9.9
Will to other	0.0	0.0	0.3	0.1	0.3	0.0	0.1
Give to family	0.0	0.3	0.5	1.6	0.1	0.3	0.7
Give to other	0.0	0.0	0.0	0.1	0.3	0.0	0.0
Sell to family	0.0	0.5	1.2	2.0	2.3	1.0	0.4
Sell to other	0.0	0.7	0.9	2.8	3.0	2.0	0.3
Trust	0.0	0.0	0.5	2.2	2.0	3.6	5.8
Other/don't know	0.6	1.6	2.2	2.1	3.2	4.4	1.8

Table D.26. Lenders who restructured land from 1982 to 1992 with corporate owners as a percentage of farmland under mortgage or contract, 1992 (Table 6.4.)

Lender types	STATE	NW	SW	N	NC	S	NE	E
Individuals	2.3	0.0	18.2	0.0	3.0	0.0	1.7	2.4
Commercial banks	9.1	27.1	3.0	2.6	2.0	4.1	0.9	17.5
FLB	9.1	0.0	0.0	34.8	1.5	12.6	8.3	10.3
FmHA/SBA	1.6	0.0	12.4	0.0	0.0	10.0	0.0	0.0
Total	22.1	27.1	33.6	37.5	6.5	26.7	10.9	30.2

Table D.27. Age cross-tabulated with CRP farmland ownership, 1992 (Table 7.3.)

	<25	25-34	35-44	45-54	55-64	65-74	>74
All ownership	0.6	5.9	10.5	18.3	20.8	23.2	18.5
CRP ownership	0.0	2.6	5.8	21.1	20.0	40.5	8.8

Table E.1. Coefficients of variation in percent for each ownership type, state-wide data, 1982 and 1992 (Table 3.1.)

Ownership type	STATE - 1982	STATE - 1992
Sole owners	7.3	7.8
Owners in joint tenancy	7.5	7.3
Other co-owners	18.4	13.9
Partnerships	45.3	25.7
Estates	20.3	23.7
Trusts	46.8	19.0
Corporations	7.9	7.7

Table E.2. Coefficients of variation in percent for each ownership type, 1992 regional data (Table D.1.)

Ownership type	NW	SW	N	NC	S	NE	E
Sole owners	19.5	22.7	20.1	19.8	20.4	17.6	18.6
Owners in joint tenancy	23.3	19.6	24.8	24.7	20.6	16.0	12.3
Other co-owners	36.3	49.4	42.9	36.0	35.0	44.0	23.2
Partnerships	100.0	77.8	71.0	*.*	57.1	55.0	36.0
Estates	43.7	100.0	48.4	100.0	54.3	*.*	44.8
Trusts	48.4	42.0	42.2	46.2	48.9	58.3	53.6
Corporations	19.9	36.6	23.3	17.5	25.7	17.6	13.0

Note: When the estimate is 0.0 percent then there is not a coefficient of variation.
. denotes this characteristic.

Table E.3. Coefficients of variation in percent for tenure of land ownership, 1982 and 1992, as a percentage of farmland, for all owners, non-corporate owners, and corporate owners (Table 3.2.)

1982	All Owners %	Non-Corporate %	Corporate %
Operate solely	4.3	4.7	7.7
<u>Operated with hired help</u>	<u>38.0</u>	<u>38.0</u>	<u>42.9</u>
Owner/Operator sub-total	4.3	4.6	5.6
Cash rent	9.2	9.5	18.6
Crop share	8.9	9.6	14.6
<u>Other renting</u>	<u>34.9</u>	<u>38.7</u>	<u>31.9</u>
Landlord/Tenant sub-total	5.3	5.6	10.9
1992	All Owners%	Non-Corporate %	Corporate %
Operate solely	5.2	5.6	9.5
<u>Operated with hired help</u>	<u>13.1</u>	<u>15.9</u>	<u>15.5</u>
Owner/Operator sub-total	4.4	4.9	6.5
Cash rent	7.1	7.3	16.0
Crop share	8.0	8.5	17.3
<u>Other renting</u>	<u>35.1</u>	<u>42.6</u>	<u>41.1</u>
Landlord/Tenant sub-total	4.4	4.7	10.5

Table E.4. Coefficients of variation in percent for percentage of farmland owned by tenure, 1992 regional data (Table 3.2. and D.2)

Tenure	STATE	NW	SW	N	NC	S	NE	E
Operate solely	5.2	13.9	17.4	20.1	18.9	8.9	11.7	10.5
<u>Operate w/hired help</u>	<u>13.1</u>	<u>48.6</u>	<u>34.8</u>	<u>40.0</u>	<u>30.1</u>	<u>32.3</u>	<u>24.5</u>	<u>26.8</u>
Owner/Operator	4.4	12.0	14.4	17.2	14.9	6.5	9.9	9.3
Cash rent	7.1	19.4	31.3	17.5	19.5	24.0	16.2	11.1
Crop share	8.0	27.3	19.5	20.0	16.9	20.9	22.3	17.7
<u>Other renting</u>	<u>35.1</u>	<u>**</u>	<u>90.8</u>	<u>**</u>	<u>61.1</u>	<u>56.2</u>	<u>68.5</u>	<u>53.4</u>
Landlord/Tenant	4.4	14.0	14.8	9.0	8.5	17.0	10.2	7.3

Table E.5. Coefficients of variation in percent for percentage of farmland managed by a professional farm manager, 1982 and 1992 (Table 3.3.)

1982	All farms	Non-Corporate	Corporate
	24.0	28.7	38.11
1992	All farms	Non-Corporate	Corporate
	17.6	20.2	27.8

Table E.6. Coefficients of variation in percent for percentage of farmland managed by professional farm manager, 1992 regional data (Table D.3.)

Owners	NW	SW	N	NC	S	NE	E
All owners	51.5	53.8	42.1	33.6	13.9	47.7	38.6
Non-corporate owners	60.1	62.1	45.6	41.7	47.3	51.1	44.3
Corporate owners	68.6	102.2	71.4	39.7	99.8	72.7	60.1

Table E.7. Coefficients of variation in percent for percentage of farmland owned by landlords with non-material participation, 1992 regional data (Table 3.4. and Table D.4.)

Owners	STATE	NW	SW	N	NC	S	NE	E
All owners	1.6	4.5	5.7	1.4	4.7	4.5	4.1	3.2
Non-corporate owners	1.6	4.7	5.8	0.9	4.3	4.9	4.3	3.4
Corporate owners	7.7	**.	**.	21.3	27.2	**.	13.0	3.1

Table E.8. Coefficients of variation in percent for finance methods as a percentage of land owned by non-corporate, corporate, and all owners, 1982 and 1992 (Table 3.5.)

1982	All Owners	Non-Corp Owners	Corporate Owners
Free of Debt	3.7	3.9	6.7
Under Contract	10.3	11.4	13.6
Through Mortgage	8.7	9.5	9.7
1992	All Owners	Non-Corp Owners	Corporate Owners
Free of Debt	3.1	3.3	4.9
Under Contract	13.6	14.5	16.4
Through Mortgage	10.0	10.9	13.1

Table E.9. Coefficients of variation in percent for percentage of farmland by financing method, 1992 regional data (Table D.5.)

Free and clear	STATE	NW	SW	N	NC	S	NE	E
All owners	3.1	8.4	72.	8.6	6.0	12.9	5.3	58.
Non-corporate owners	3.3	8.9	7.2	9.3	6.6	13.7	5.7	6.2
Corporate owners	4.9	11.2	37.2	13.9	8.8	17.3	9.4	9.0
Under contract	STATE	NW	SW	N	NC	S	NE	E
All owners	13.6	50.5	32.1	48.3	38.2	35.5	27.2	21.2
Non-corporate owners	14.5	53.8	33.3	50.5	41.7	35.8	29.5	23.9
Corporate owners	16.4	56.9	66.8	84.2	43.4	62.0	36.9	22.8
Through mortgage	STATE	NW	SW	N	NC	S	NE	E
All owners	10.0	27.5	29.0	23.9	27.1	20.9	25.9	18.0
Non-corporate owners	10.9	29.1	29.7	26.3	33.3	21.8	29.4	19.8
Corporate owners	13.1	44.9	69.0	32.4	26.2	41.6	34.5	22.1

Table E.10. Coefficients of variation in percent for percentage of farmland by financing method, non-corporate owners, 1982 regional data (Table D.6.)

Financing method	STATE	NW	SW	N	NC	S	NE	E
All owners	3.9	12.4	11.5	10.2	8.7	10.5	13.6	6.4
Non-corporate owners	11.4	26.6	32.0	54.1	38.9	31.7	23.6	20.6
Corporate owners	9.5	34.9	22.1	29.3	25.8	19.6	21.9	25.5

Table E.11. Coefficients of variation in percent for farmland held in various sizes of owned acreage by all owners, non-corporate owners, and corporate owners, 1982 and 1992 (Table 3.6.)

Size (acres)	All Owners	Non-corporate	Corporate
< 80	9.9	9.6	13.5
81-240	5.2	4.9	9.7
241-600	4.9	5.6	7.5
> 600	11.8	14.9	14.2

Size (acres)	All Owners	Non-corporate	Corporate
< 80	13.1	11.0	14.2
81-240	5.4	5.2	9.6
241-600	5.3	5.9	8.2
> 600	9.6	11.3	13.8

Table E.12. Coefficients of variation in percent for farmland by size of owned acreages, all landowners, 1992 regional data (Table D.7.)

Size of acreage	STATE	NW	SW	N	NC	S	NE	E
< 40 acres	21.5	52.2	99.7	98.5	46.5	45.2	49.2	44.2
<u>41 - 80 acres</u>	<u>12.6</u>	<u>28.9</u>	<u>69.8</u>	<u>36.5</u>	<u>30.8</u>	<u>40.9</u>	<u>34.6</u>	<u>23.2</u>
Subtotal: < 81	13.1	25.1	60.4	33.9	26.1	32.0	27.8	20.3
81 - 160 acres	7.2	17.4	22.0	21.1	18.8	22.4	19.2	13.9
<u>161 - 240 acres</u>	<u>9.51</u>	<u>31.5</u>	<u>25.5</u>	<u>26.2</u>	<u>27.3</u>	<u>27.0</u>	<u>23.6</u>	<u>18.2</u>
Subtotal: 81 - 240	5.44	14.3	15.5	15.1	14.9	16.9	14.3	10.5
241 - 320 acres	9.7	29.9	31.8	29.2	24.8	26.1	23.2	18.8
321 - 400 acres	11.5	37.9	33.1	39.7	44.7	24.5	30.0	20.0
<u>401 - 600 acres</u>	<u>9.1</u>	<u>35.2</u>	<u>27.7</u>	<u>26.0</u>	<u>22.6</u>	<u>19.6</u>	<u>19.4</u>	<u>22.5</u>
Subtotal: 241 - 600	5.3	18.3	16.1	15.8	15.2	11.7	12.1	11.1
601 - 800 acres	13.1	32.5	29.1	57.4	37.3	36.4	35.1	29.2
801 - 1000 acres	18.6	64.2	53.0	100.0	45.2	35.3	41.8	49.8
<u>> 1001 acres</u>	<u>19.1</u>	<u>69.9</u>	<u>65.8</u>	<u>71.6</u>	<u>58.2</u>	<u>28.5</u>	<u>45.7</u>	<u>49.3</u>
Subtotal: > 600	9.6	26.2	25.5	40.0	29.2	18.1	23.8	23.8

Table E.13. Coefficients of variation in percent for farmland by size of owned acreages, non-corporate owners, 1992 regional data (Table D.8.)

Size of acreage	STATE	NW	SW	N	NC	S	NE	E
< 40 acres	21.5	52.0	100.0	100.0	46.3	45.1	49.3	44.1
<u>41 - 80 acres</u>	<u>12.5</u>	<u>28.4</u>	<u>70.3</u>	<u>36.2</u>	<u>30.2</u>	<u>40.8</u>	<u>34.4</u>	<u>22.8</u>
Subtotal: < 81	11.0	24.4	60.6	33.6	25.2	31.8	27.4	19.8
81 - 160 acres	7.0	16.6	21.6	20.3	17.6	22.2	18.8	13.3
<u>161 - 240 acres</u>	<u>9.7</u>	<u>31.8</u>	<u>25.6</u>	<u>25.8</u>	<u>29.2</u>	<u>26.9</u>	<u>24.8</u>	<u>19.0</u>
Subtotal: 81 - 240	5.2	13.3	14.9	13.8	16.5	16.6	13.9	9.7
241 - 320 acres	10.3	34.9	33.8	31.2	27.8	27.7	23.8	19.8
321 - 400 acres	12.6	39.5	33.8	39.2	57.1	24.6	33.3	26.3
<u>401 - 600 acres</u>	<u>11.3</u>	<u>49.3</u>	<u>28.3</u>	<u>39.3</u>	<u>39.9</u>	<u>21.1</u>	<u>22.1</u>	<u>32.7</u>
Subtotal: 241 - 600	5.9	21.5	16.3	18.6	20.2	12.1	12.7	13.1
601 - 800 acres	17.0	49.1	34.5	*.*	57.2	39.1	49.3	33.8
801 - 1000 acres	23.7	70.3	52.5	*.*	100.0	40.0	42.8	*.*
<u>> 1001 acres</u>	<u>20.1</u>	<u>71.2</u>	<u>51.2</u>	<u>71.1</u>	<u>60.3</u>	<u>27.4</u>	<u>74.7</u>	<u>100.0</u>
Subtotal: > 600	11.3	34.7	24.2	71.1	41.9	19.0	29.4	32.7

Table E.14. Coefficients of variation in percent for farmland by size of owned acreages, corporate landowners, 1992 regional data (Table D.9.)

Size of acreage	STATE	NW	SW	N	NC	S	NE	E
< 40 acres	19.4	55.1	100.0	65.9	33.1	71.1	43.7	46.4
<u>41 - 80 acres</u>	<u>19.5</u>	<u>47.9</u>	<u>68.9</u>	<u>69.3</u>	<u>36.6</u>	<u>.*</u>	<u>70.0</u>	<u>34.5</u>
Subtotal: < 81	14.2	40.8	55.2	50.8	24.6	71.1	40.1	29.0
81 - 160 acres	13.7	29.7	55.4	69.2	33.9	55.8	39.1	23.3
<u>161 - 240 acres</u>	<u>15.0</u>	<u>69.9</u>	<u>46.2</u>	<u>100.0</u>	<u>31.5</u>	<u>100.0</u>	<u>35.1</u>	<u>23.0</u>
Subtotal: 81 - 240	9.6	26.3	33.1	56.4	22.0	47.6	24.7	15.1
241 - 320 acres	14.9	38.1	46.2	55.2	31.6	40.9	56.6	30.2
321 - 400 acres	19.8	100.0	100.0	.*	57.0	100.0	56.4	23.9
<u>401 - 600 acres</u>	<u>14.0</u>	<u>48.2</u>	<u>100.0</u>	<u>32.8</u>	<u>26.7</u>	<u>46.8</u>	<u>38.5</u>	<u>28.6</u>
Subtotal: 241 - 600	8.2	27.1	36.7	25.9	17.7	26.6	25.5	13.7
601 - 800 acres	20.4	42.3	54.8	55.5	49.0	100.0	48.3	57.3
801 - 1000 acres	27.3	100.0	.*	100.0	49.0	69.5	100.0	49.3
<u>> 1001 acres</u>	<u>23.5</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>62.2</u>	<u>41.3</u>	<u>48.5</u>	<u>50.2</u>
Subtotal: > 600	13.8	35.7	57.5	41.5	33.8	31.6	31.4	30.8

Table E.15. Coefficients of variation in percent for farmland by size of owned acreages, all landowners, non-corporate owners, and corporate owners, 1982 data (Table D.10.)

Size of acreage	ALL OWNERS	NON-CORPORATE	CORPORATE
< 40 acres	14.8	14.7	17.7
<u>41 - 80 acres</u>	<u>14.5</u>	<u>12.4</u>	<u>19.7</u>
Subtotal: < 81	9.9	9.6	13.5
81 - 160 acres	7.1	6.9	14.2
<u>161 - 240 acres</u>	<u>8.7</u>	<u>8.8</u>	<u>14.5</u>
Subtotal: 81 - 240	5.2	4.9	9.7
241 - 320 acres	9.5	10.2	14.9
321 - 400 acres	10.7	11.8	18.9
<u>401 - 600 acres</u>	<u>8.3</u>	<u>10.9</u>	<u>12.1</u>
Subtotal: 241 - 600	4.9	5.6	7.5
601 - 800 acres	13.5	19.6	18.2
801 - 1000 acres	20.5	31.7	21.2
<u>> 1001 acres</u>	<u>24.2</u>	<u>30.7</u>	<u>25.7</u>
Subtotal: > 600	11.8	14.9	14.2

Table E.16. Coefficients of variation in percent for farmland by size of owned acreages, non-corporate owners, 1982 regional data (Table D.11.)

Size of acreage	STATE	NW	SW	N	NC	S	NE	E
< 40 acres	14.7	43.3	43.5	100.0	39.5	40.0	25.1	39.1
<u>41 - 80 acres</u>	<u>12.4</u>	<u>27.7</u>	<u>39.5</u>	<u>100.0</u>	<u>29.8</u>	<u>34.3</u>	<u>34.2</u>	<u>23.8</u>
Subtotal: < 81	9.6	23.7	30.0	73.8	24.2	26.9	20.2	20.7
81 - 160 acres	6.9	19.1	19.0	20.4	19.8	19.6	17.0	14.1
<u>161 - 240 acres</u>	<u>8.8</u>	<u>23.0</u>	<u>25.6</u>	<u>28.3</u>	<u>26.8</u>	<u>24.4</u>	<u>22.5</u>	<u>17.3</u>
Subtotal: 81 - 240	4.9	12.5	13.6	13.3	14.1	14.3	12.4	9.7
241 - 320 acres	10.2	39.3	26.8	35.1	29.9	26.4	27.4	18.0
321 - 400 acres	11.8	43.4	36.3	56.5	36.4	21.2	32.1	23.8
<u>401 - 600 acres</u>	<u>10.9</u>	<u>70.6</u>	<u>28.3</u>	<u>70.2</u>	<u>28.2</u>	<u>19.0</u>	<u>25.3</u>	<u>26.8</u>
Subtotal: 241 - 600	5.6	25.7	15.1	25.3	15.8	10.5	14.6	11.2
601 - 800 acres	19.6	70.2	**. *	56.4	57.2	37.0	49.5	37.2
801 - 1000 acres	31.7	**. *	100.0	100.0	**. *	49.5	100.0	57.4
<u>> 1001 acres</u>	<u>30.7</u>	<u>**. *</u>	<u>70.9</u>	<u>**. *</u>	<u>**. *</u>	<u>51.2</u>	<u>49.9</u>	<u>100.0</u>
Subtotal: > 600	14.9	70.2	57.7	48.7	57.2	25.7	33.2	29.9

Table E.17. Coefficients of variation in percent for age cross-tabulated with size of acreage, as a percentage of farmland, 1982 (Table D.12.)

Size of acreage	<25	25-34	35-44	45-54	55-64	65-74	>75
1-29 acres	100.0	36.4	47.4	29.8	74.6	51.2	72.5
30-69 acres	100.0	51.2	43.6	35.7	52.3	43.2	59.6
70-99 acres	100.0	47.1	37.2	39.9	25.1	26.6	32.6
100-139 acres	100.0	36.1	47.1	28.3	23.1	27.1	32.1
140-199 acres	**. *	41.6	23.7	18.5	17.6	21.1	23.2
200-279 acres	**. *	34.1	25.6	22.0	16.9	28.8	25.1
280-359 acres	**. *	73.3	22.6	19.2	18.8	27.3	38.9
360-519 acres	**. *	36.4	25.3	19.4	17.8	29.7	38.7
520-699 acres	**. *	51.4	36.9	25.7	33.4	51.5	50.0
> 699 acres	**. *	100.0	32.8	28.5	43.7	52.9	74.4

Table E.18. Coefficients of variation in percent for age cross-tabulated with size of acreage, as a percentage of farmland, 1992 (Table D.13.)

Size of acreage	<25	25-34	35-44	45-54	55-64	65-74	>75
1-29 acres	.*	74.5	100.0	51.4	73.6	72.4	.*
30-69 acres	.*	86.4	51.0	44.3	35.0	41.1	59.1
70-99 acres	100.0	.*	36.6	33.2	26.0	25.1	25.5
100-139 acres	.*	36.7	36.4	27.7	32.5	26.3	29.2
140-199 acres	.*	51.0	33.1	23.5	20.3	16.8	17.1
200-279 acres	100.0	39.8	29.6	24.6	25.8	21.3	23.9
280-359 acres	.*	40.4	38.2	26.2	20.4	22.6	24.1
360-519 acres	.*	53.7	36.7	23.9	17.3	24.0	36.7
520-699 acres	.*	100.0	38.2	37.7	22.6	31.5	48.0
> 699 acres	.*	100.0	29.3	21.9	29.4	31.1	37.9

Table E.19. Coefficients of variation in percent for farmland by age of farmland owners in stages of the family-farm cycle, 1982 and 1992 (Table 4.1.)

	1982	1992
Early-stage:		
< 25 years	55.6	80.2
<u>25 - 34</u>	<u>17.8</u>	<u>23.6</u>
Sub-total	16.9	22.6
Mid-stage:		
35 - 44	13.2	15.1
45 - 54	10.1	11.4
<u>55 - 64</u>	<u>8.6</u>	<u>9.1</u>
Sub-total	5.3	6.0
Late-stage:		
65 - 74	11.6	9.5
<u>> 74</u>	<u>13.3</u>	<u>9.9</u>
Sub-Total	8.7	6.5

Table E.20. Coefficients of variation in percent for farmland owned by age cross-tabulated with size of owned acreages, 1982 and 1992 (Table 4.2.)

1982 Size	Early < 34	Mid 35-64	Late > 65
0-99 acres	24.0	13.1	17.9
100-279 acres	21.5	6.8	10.2
280-519 acres	32.6	8.0	16.2
> 519 acres	46.9	13.5	28.4
1992	Early	Mid	Late
0-99 acres	50.4	14.2	15.8
100-279 acres	23.7	8.6	8.4
280-519 acres	32.3	9.7	12.6
> 519 acres	70.7	11.5	18.6

Table E.21. Coefficients of variation in percent for percentage of farmland owned by age cross-tabulated with tenure, 1992 (Table 4.3.)

Tenure	Early <35	Mid 35-64	Late >65
Operate solely	37.1	11.0	20.4
<u>Operate w/hired help</u>	80.0	19.7	44.8
Owner/Operator	37.4	10.5	19.8
Cash Rent	88.5	16.3	19.7
Crop Share Rent	100.7	20.1	16.7
<u>Livestock/Other</u>	*.*	83.3	50.1
Tenant/Landlord	75.6	14.8	16.5

Table E.22. Coefficients of variation in percent for age cross-tabulated with tenure, as a percentage of farmland, 1992
(Table D.14.)

Tenure	<25	25-34	35-44	45-54	55-64	65-74	>75
Operate solely	13.8	38.0	26.0	16.7	16.6	27.4	28.8
<u>Operate w/hired help</u>	127.5	77.8	35.2	32.6	31.3	49.1	66.9
Owner/Operator	18.8	38.1	22.4	16.7	16.7	27.0	26.5
Cash rent	.*	89.4	40.1	29.6	20.1	29.2	11.9
Crop share	.*	101.5	42.2	35.2	28.5	22.9	15.2
<u>Other renting</u>	.*	.*	104.9	100.3	67.1	72.1	53.8
Landlord/Tenant	.*	76.8	35.3	26.9	18.0	23.7	7.7

Table E.23. Coefficients of variation in percent for percentage of farmland by age cross-tabulated with financing methods, 1992 (Table 4.4.)

Financing Methods	Early <35	Mid 35-64	Late >64
Free of Debt	56.5	13.4	15.5
Under Contract	41.5	17.8	47.5
<u>Through Mortgage</u>	48.1	14.8	28.4
TOTAL	37.5	10.6	15.6

Table E.24. Coefficients of variation in percent for Age cross-tabulated with financing methods, as a percentage of farmland, 1992 (Table D.15.)

Financing methods	<25	25-34	35-44	45-54	55-64	65-74	>75
Free and clear	*. *	58.0	33.2	23.7	16.1	22.2	6.5
Under contract	14.0	41.1	39.3	27.3	27.0	56.5	64.1
<u>Through mortgage</u>	<u>12.8</u>	<u>49.8</u>	<u>20.5</u>	<u>25.5</u>	<u>27.0</u>	<u>35.3</u>	<u>71.1</u>
TOTAL	18.8	38.2	22.4	18.0	14.9	22.6	6.5

Table E.25. Coefficients of variation in percent for percentage of land owned by residents of states, 1982 and 1992 (Table 4.5.)

Residency	1982	1992
Iowa	3.7	3.7
Other than Iowa	23.2	15.1

Table E.26. Coefficients of variation in percent for farmland occupied by owners, 1982 and 1992 (Table 4.6.)

Occupancy of farmland	1982	1992
Live on land surveyed	5.7	6.4
<u>Live on other farmland owned</u>	<u>24.7</u>	<u>18.4</u>
Sub-total	5.5	5.8
Do not live on owned farmland	7.4	6.3

Table E.27. Coefficients of variation in percent for farmland owned, according to highest formal educational level completed by the non-corporate owner, 1982 and 1992 (Table 4.7.)

Education	1982	1992
More than bachelors' degree	19.3	15.8
Bachelors' degree	16.5	12.4
Some college, no degree	11.5	9.7
High school graduate	60.6	6.3
Did not complete high school	11.4	11.3

Table E.28. Coefficients of variation in percent for farmland by educational level cross-tabulated with farm-cycle stages, 1992 (Table 4.8.)

Education	Early	Mid	Late
More than bachelors' degree	100.0	19.2	32.6
Bachelors' degree	46.5	14.3	22.3
Some college, no degree	29.5	14.2	15.9
High school graduate	30.9	8.7	11.7
Did not complete high school	*.*	23.1	13.2

Table E.29. Coefficients of variation in percent for age cross-tabulated with highest educational level obtained, as a percentage of farmland, 1992 (Table D.16.)

Educational level	<25	25-34	35-44	45-54	55-64	65-74	>75
Over bachelors	*.*	100.0	44.9	29.8	30.0	40.0	51.5
Bachelors degree	100.0	50.6	23.1	24.5	27.6	31.1	31.1
3-4 yrs college	*.*	100.0	52.3	42.8	47.3	51.9	66.9
2 yrs college	100.0	40.6	30.4	40.6	30.9	31.5	42.1
1 yr college	*.*	39.6	42.1	28.0	29.2	30.5	29.7
High school graduate	*.*	30.9	21.7	14.7	13.2	15.4	18.1
Did not complete H.S.	*.*	*.*	*.*	44.8	26.9	19.5	18.4

Table E.30. Coefficients of variation in percent for occupation of farmland owners as a percentage of farmland owned, 1982 and 1992 (Table 4.9)

Occupation	1982	1992
Farmwives/housewives	7.0	7.1
Farmers, farm managers, or cattle ranchers	6.4	6.2
Professional or technical personnel	14.1	14.4
Clerical personnel	22.2	26.3
Persons both farming and employed elsewhere	27.0	33.2
Persons in occupations not listed above	10.1	12.7

Table E.31. Coefficients of variation in percent for gender distribution of farmland ownership by percentage of farmland, 1982 and 1992 (Table 4.10.)

Gender	1982	1992
Females	5.8	5.5
Males	4.9	4.6

Table E.32. Coefficients of variation in percent for gender cross-tabulated with age in percentage of farmland owned, 1982 and 1992 (Table 4.11.)

1982	Early	Mid	Late
Females	24.6	8.0	12.2
Males	20.2	6.7	11.7

1992	Early	Mid	Late
Females	25.8	8.6	9.5
Males	24.2	7.2	8.8

Table E.33. Coefficients of variation in percent for age cross-tabulated with gender, as a percentage of farmland, 1982 and 1992 (Table D.17.)

1982 Gender	<25	25-34	35-44	45-54	55-64	65-74	>75
Female	82.1	25.1	20.5	13.1	13.4	16.2	19.6
Male	58.1	21.5	14.9	13.0	10.7	16.0	8.1

1992 Gender	<25	25-34	35-44	45-54	55-64	65-74	>75
Female	**. *	25.8	24.9	13.7	13.0	13.8	13.9
Male	80.2	24.6	15.0	14.3	11.0	12.1	14.3

Table E.34. Coefficients of variation in percent for marital status of Iowa landowners by percentage of farmland, 1982 and 1992 (Table 4.12.)

Marital Status	1982	1992
Married	4.53	4.40
Widowed	13.36	11.63
Never Married	20.06	24.14
Separated/Divorced	42.20	25.58
Non-respondent	46.53	39.61

Table E.35. Coefficients of variation in percent for methods of acquisition of land by non-corporate owners, 1982 and 1992 (Table 5.1.)

Acquisition method	1982	1992
Purchased	2.6	2.9
Inherited	9.6	8.4
Gift	28.1	23.4

Table E.36. Coefficients of variation in percent for methods of acquisition of land by corporations as a percentage of farmland, 1982 and 1992 (Table 5.2.)

Acquisition method	1982	1992
Purchased	6.9	7.1
Transferred by corporate member	15.3	11.8
Inherited	37.4	50.0
Gift	76.8	68.2
Other	72.5	74.7

Table E.37. Coefficients of variation in percent for land acquisition methods, as a percentage of farmland for non-corporate owners, 1982 (Table D.18.)

Acquisition method	STATE	NW	SW	N	NC	S	NE	E
Purchased	2.6	10.2	7.4	13.2	7.2	5.7	5.5	5.0
Inherited	9.6	28.5	28.6	24.6	22.2	25.3	33.7	19.6
Gift	28.1	53.5	78.7	63.0	64.1	62.7	70.7	50.9

Table E.40. Coefficients of variation in percent for farmland purchased by non-corporate owners from 1982 to 1992 attributed to financial stress (Table 5.3 and D.21.)

Financial stress	STATE	NW	SW	N	NC	S	NE	E
Due to bankruptcy	53.2	93.3	69.5	*.*	96.9	88.5	68.2	100.7
Default/mortgage	25.2	60.5	54.4	102.6	74.2	44.3	76.8	44.7
Foreclosure/contract	34.9	68.0	101.3	*.*	102.0	73.6	75.0	101.2
Total	21.5	67.9	44.3	102.6	62.2	38.6	49.9	41.8

Table E.41. Coefficients of variation in percent for farmland restructured from 1982 to 1992 according to lender type, as a percentage of farmland held under mortgage or contract by non-corporate owners, 1992 (Table 5.4. and Table D.22.)

Lender type	STATE	NW	SW	N	NC	S	NE	E
Individuals	39.1	58.9	71.6	*.*	100.7	62.6	73.2	*.*
Commercial banks	24.1	91.5	100.1	91.2	48.1	44.3	54.4	47.8
FLB	36.3	78.2	82.3	69.3	96.1	95.7	59.4	82.4
FmHA/SBA	31.9	99.3	94.1	*.*	100.1	56.6	82.8	43.0
Total	16.4	40.5	48.9	49.9	36.7	34.3	35.6	38.7

Table E.44. Coefficients of variation in percent for age cross-tabulated with anticipated transfer method, as a percentage of farmland, 1982 (Table D.24.)

Transfer method	<25	25-34	35-44	45-54	55-64	65-74	>75
Will to family	100.0	24.6	19.4	14.0	12.4	15.8	18.6
Will to other	**.	**.	**.	100.0	**.	100.0	100.0
Give to family	**.	43.8	44.0	56.3	39.6	65.0	**.
Give to other	**.	**.	**.	**.	**.	**.	**.
Sell to family	**.	51.4	31.3	26.6	25.5	50.2	68.7
Sell to other	72.1	47.2	34.5	38.0	26.1	41.9	51.1
Trust	**.	60.9	47.8	32.7	54.3	67.4	59.2
Other/don't know	100.0	65.8	36.7	33.1	23.3	24.5	24.9

Table E.45. Coefficients of variation in percent for age cross-tabulated with anticipated transfer method, as a percentage of farmland, 1992 (Table D.25.)

Transfer method	<25	25-34	35-44	45-54	55-64	65-74	>75
Will to family	**.*	41.3	21.0	18.1	12.7	13.3	14.1
Will to other	**.*	**.*	100.0	79.4	100.0	**.*	100.0
Give to family	**.*	86.5	58.8	62.0	67.5	62.4	71.8
Give to other	**.*	**.*	**.*	100.0	79.0	**.*	**.*
Sell to family	**.*	60.1	32.3	33.4	29.8	36.1	61.9
Sell to other	**.*	62.4	42.7	26.6	31.1	32.4	55.3
Trust	**.*	**.*	47.9	33.3	24.0	24.5	19.0
Other/don't know	80.2	32.2	45.8	28.4	29.0	28.1	30.7

Table E.46. Coefficients of variation in percent for anticipated transfer methods by owners over 65 years of age as a percentage of farmland owned by owners over 65 years of age, 1992 (Table 5.7.)

Transfer method	65-74	> 75
Will to family	12.5	13.4
Will to other	*.*	100.0
Give to family	62.3	71.7
Give to other	*.*	*.*
Sell to family	35.8	61.8
Sell to other	32.1	55.2
Trust	24.1	18.5
Other/don't know	27.8	30.4

Table E.47. Coefficients of variation in percent for percentage of farmland owned by type of corporation, 1982 and 1992 (Table 6.1.)

Corporation Type	1982	1992
Family farm	7.8	6.8
Authorized farm	36.6	28.0
Non-profit	41.8	99.3
Cooperative	*.*	63.0
Other/don't know	18.5	41.8

Table E.48. Coefficients of variation in percent for year and percentage of farmland incorporated, 1992
(Table 6.2.)

Year	% of Corporate farmland in 1992
Before 1955	55.2
1955-1959	80.2
1960-1964	48.7
1965-1969	29.5
1970-1979	21.6
1975-1979	12.2
1980-1984	14.1
1985-1989	25.3
1990-1992	29.3
Nonrespondents	64.4

Table E.49. Coefficients of variation in percent for expected life of corporation as percent of farmland, 1992
(Table 6.3.)

Expected life	1992
1- 9 years	33.4
10-20 years	21.9
25-40 years	36.4
Another generation	59.4
Indefinitely	8.8
Don't know	22.2

Table E.50. Coefficients of variation in percent for lenders who restructured land from 1982 to 1992 with corporate owners as a percentage of farmland under mortgage or contract, 1992 (Table 6.4. and Table D.25.)

Lender types	STATE	NW	SW	N	NC	S	NE	E
Individuals	46.8	.*	88.1	.*	101.7	.*	97.5	70.1
Commercial banks	37.8	72.3	107.0	104.4	98.3	107.0	94.4	47.5
FLB	34.1	.*	.*	53.7	104.6	98.7	100.3	45.0
FmHA/SBA	78.5	.*	97.7	.*	.*	101.3	.*	.*
Total	23.3	72.3	55.3	49.5	61.5	63.0	78.0	36.9

Table E.51. Coefficients of variation in percent of CRP farmland by ownership type and financing methods, 1992 (Table 7.2.)

Characteristic	All farmland	CRP farmland
Non-corporate owners	3.9	18.5
Corporate owners	7.7	26.9
Ownership type		
Sole owners	7.8	35.1
Owners in joint tenancy	7.3	22.3
Other co-ownership	13.9	44.4
Partnerships	25.7	52.4
Estates	23.7	48.3
Trusts	19.0	87.1
Corporations	7.7	26.9
Financing methods:		
Free of debt	3.1	7.8
Under contract	13.6	33.0
Through mortgage	10.0	19.6

Table E.52. Coefficients of variation in percent for comparison of age and gender between non-corporate landowners and CRP landowners, 1992 (Table 7.3.)

Characteristic	Non-corporate owners	CRP land owners
Age division:		
Early-stage (<35 yrs.)	22.6	46.9
Mid-stage (35-64 yrs.)	6.0	16.5
Late-stage (>64 yrs.)	6.5	34.4
Nonrespondents	28.3	97.0
Gender:		
Female	5.5	29.1
Male	4.6	16.1

177

Table E.53. Coefficients of variation in percent for age cross-tabulated with CRP farmland ownership, 1992 (Table 7.3. and D.26.)

	<25	25-34	35-44	45-54	55-64	65-74	>75
All ownership	80.2	23.6	15.1	11.4	9.1	9.5	9.9
CRP ownership	0.0	46.9	41.6	28.6	24.7	41.5	35.3