

# United States Census of Agriculture: 1954

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## Volume III

### SPECIAL REPORTS

#### Part 5

## Farm-Mortgage Debt (a Cooperative Report)

Prepared under the supervision of

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Chief, Agriculture Division

**NUMBER OF MORTGAGED FARMS • AMOUNT OF DEBT •  
PRINCIPAL LENDING AGENCIES**



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## PREFACE

Volume III, Special Reports, comprises one of the volumes presenting final summaries and results for the 1954 Census of Agriculture. Part 5, Farm-Mortgage Debt, presents data on farm-mortgage indebtedness as of January 1, 1956, with comparative data for Census years, mostly from 1930 and later. The data include the amount of mortgage indebtedness, the debt held by principal lending agencies and interest charges, with some related information on number of farms, land in farms, and value of farms. Data are presented for the United States, for geographic divisions, and for States. The data are estimates based on a special mail survey of owners of farm lands as reported in the 1954 Census of Agriculture, supplemented by data on mortgage status of owner-operators as reported in that Census and by mortgage debt information collected and compiled by the Agricultural Research Service of the United States Department of Agriculture.

This report was prepared cooperatively by the Bureau of the Census, United States Department of Commerce, and the Agricultural Research Service, United States Department of Agriculture. It continues a series of cooperative reports covering farm-mortgage indebtedness which have been issued in conjunction with the more recent Censuses of Agriculture.

Plans for this cooperative report were made by Ray Hurley, Chief of the Agriculture Division, Bureau of the Census, and Norman J. Wall, Head, Agricultural Finance Section, Production Economics Research Branch, Agricultural Research Service. Principal responsibility for the project was carried by Harold N. Cox, Clive E. Johnson, Orville M. Slye, Haven D. Umstott, and Clinton F. Wells, Jr., of the Agriculture Division of the Bureau of the Census, and Russell W. Bierman and James A. Munger of the Agricultural Research Service. Earl E. Houseman of the Agricultural Marketing Service assisted in outlining the sampling procedure.

December 1956

# UNITED STATES CENSUS OF AGRICULTURE: 1954

## REPORTS

**Volume I.—Counties and State Economic Areas.** Statistics for counties include number of farms, acreage, value, and farm operators; farms by color and tenure of operator; facilities and equipment; use of commercial fertilizer; farm labor; farm expenditures; livestock and livestock products; specified crops harvested; farms classified by type of farm and by economic class; and value of products sold by source.

Data for State economic areas include farms and farm characteristics by tenure of operator, by type of farm, and by economic class.

Volume I is published in 33 parts as follows:

Part	State or States	Part	State or States	Part	State or States
1	New England States: Maine. New Hampshire. Vermont. Massachusetts. Rhode Island. Connecticut.	8	West North Central: Minnesota.	21	East South Central—Continued Alabama.
		9	Iowa.	22	Mississippi.
		10	Missouri.		West South Central: Arkansas.
		11	North Dakota and South Dakota.	23	Louisiana.
		12	Nebraska.	24	Oklahoma.
2	Middle Atlantic States: New York. New Jersey. Pennsylvania.	13	Kansas.	25	Texas.
			South Atlantic: Delaware and Maryland. Virginia and West Virginia.	26	Mountain: Montana.
		14		27	Idaho.
		15	North Carolina and South Carolina.	28	Wyoming and Colorado.
		16	Georgia.	29	New Mexico and Arizona.
3	East North Central: Ohio.	17	Florida.	30	Utah and Nevada.
4	Indiana.	18	East South Central: Kentucky.	31	Pacific: Washington and Oregon.
5	Illinois.	19	Tennessee.	32	California.
6	Michigan.	20		33	
7	Wisconsin.				

**Volume II.—General Report.** Statistics by Subjects, United States Census of Agriculture, 1954. Summary data and analyses of the data for States, for Geographic Divisions, and for the United States by subjects as illustrated by the chapter titles listed below:

Chapter	Title	Chapter	Title
I	Farms and Land in Farms.	VII	Field Crops and Vegetables.
II	Age, Residence, Years on Farm, Work Off Farm.	VIII	Fruits and Nuts, Horticultural Specialties, Forest Products.
III	Farm Facilities, Farm Equipment.	IX	Value of Farm Products.
IV	Farm Labor, Use of Fertilizer, Farm Expenditures, and Cash Rent.	X	Color, Race, and Tenure of Farm Operator.
V	Size of Farm.	XI	Economic Class of Farm.
VI	Livestock and Livestock Products.	XII	Type of Farm.

### Volume III.—Special Reports

**Part 1.—Multiple-unit Operations.** This report will be similar to Part 2 of Volume V of the reports for the 1950 Census of Agriculture. It will present statistics for approximately 900 counties and State economic areas in 12 Southern States and Missouri for the number and characteristics of multiple-unit operations and farms in multiple units.

**Part 2.—Ranking Agricultural Counties.** This special report will present statistics for selected items of inventory and agricultural production for the leading counties in the United States.

**Part 3.—Alaska, Hawaii, Puerto Rico, District of Columbia, and U. S. Possessions.** These areas were not included in the 1954 Census of Agriculture. The available current data from various Government sources will be compiled and published in this report.

**Part 4.—Agriculture, 1954, a Graphic Summary.** This report will present graphically some of the significant facts regarding agriculture and agricultural production as revealed by the 1954 Census of Agriculture.

**Part 5.—Farm-mortgage Debt.** This will be a cooperative study by the Agricultural Research Service of the U. S. Department of Agriculture and the Bureau of the Census. It will present, by States, data based on the 1954 Census of Agriculture and a special mail survey to be conducted in January 1956, on the number of mortgaged farms, the amount of mortgage debt, and the amount of debt held by principal lending agencies.

**Part 6.—Irrigation in Humid Areas.** This cooperative report by the Agricultural Research Service of the U. S. Department of Agriculture and the Bureau of the Census will present data obtained by a mail survey of operators of irrigated farms in 28 States on the source of water, method of applying water, number of pumps used, acres of crops irrigated in 1954 and 1955, the number of times each crop was irrigated, and the cost of irrigation equipment and the irrigation system.

**Part 7.—Popular Report of the 1954 Census of Agriculture.** This report is planned to be a general, easy-to-read publication for the general public on the status and broad characteristics of United States agriculture. It will seek to delineate such aspects of agriculture as the geographic distribution and differences by size of farm for such items as farm acreage, principal crops, and important kinds of livestock, farm facilities, farm equipment, use of fertilizer, soil conservation practices, farm tenure, and farm income.

**Part 8.—Size of Operation by Type of Farm.** This will be a cooperative special report to be prepared in cooperation with the Agricultural Research Service of the U. S. Department of Agriculture. This report will contain data for 119 economic subregions, (essentially general type-of-farming areas) showing the general characteristics for each type of farm by economic class. It will provide data for a current analysis of the differences that exist among groups of farms of the same type. It will furnish statistical basis for a realistic examination of production of such commodities as wheat, cotton, and dairy products in connection with actual or proposed governmental policies and programs.

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# FARM-MORTGAGE DEBT

**Introduction.**—This special report presents statistics on the amount of farm-mortgage indebtedness as of January 1, 1956, for the United States and for the various States. The data are presented for owner-operated land and for a combination of rented and manager-operated lands. Related information, when available, is given for the number of farms, land in farms, farmland values, age of operator, and economic class of farm by mortgage status; amount of farm real estate loans held by the principal lenders; and interest charges and rates paid on farm-mortgage indebtedness. Some comparative data are presented for several earlier years. For example, the total amount of farm-mortgage indebtedness and the amounts held by the principal lenders are shown for all Census years, beginning with 1910 and continuing through 1950. Additional data are presented for 1930, 1940, 1945, and 1950. However, most of the comparative statistics presented herein are for 1950 and 1956.

Among the subjects with a long history in Census taking is the one relating to farm mortgages. Beginning with 1890, and continuing without a break in the series, the Census Bureau has furnished a varying amount of basic data in respect to the indebtedness for which farm real estate had been pledged as security.

During an enumerator's canvass of his district he must call at each farm-operator household. At a tenant-operator household, the enumerator probably would not be able to learn whether the landlord for that farm had a mortgage against his land. Even if the tenant was aware of the existence of a mortgage on his landlord's land, he would be even less likely to know the amount of the indebtedness. Thus, of necessity, most of the mortgage information which has been obtained by a personal visit to farms, in a Census enumeration, has related to the land of owner-operators. But the need for farm-mortgage statistics has been for the total amount of indebtedness, as well as for the amount owed by operating owners.

For the last several Censuses, the total farm-mortgage indebtedness and the mortgage status of farm lands and other complementary facts have been based, in part, on supplementary reports secured from the owners of leased lands by some procedure other than by direct enumeration. This has been accomplished through the use of questionnaires mailed to a sample of owners of rented farm lands. To improve the reliability of the estimated totals and to furnish additional information in regard to debt of owner-operators, questionnaires have been mailed also to operating owners. (See "The sample used for the survey on farm-mortgage debt" for a more complete description of the sampling plan and other techniques used for the 1956 and 1950 data.)

The United States Department of Agriculture, for many years, has had the responsibility of preparing annual estimates of the amount of farm-mortgage indebtedness, interest rates, and other current information on the farm-mortgage debt situation. These data are used in many ways and are of general interest to legislators, students, lenders, and borrowers. Data on farm-mortgage indebtedness are used in preparing the annual Balance Sheet of Agriculture, a United States Department of Agriculture publication which summarizes the assets and liabilities of agriculture. The Agricultural Adjustment Act of 1938, as amended, provides that "interest payments per acre on farm indebtedness secured by

real estate" shall be a component of the Parity Index used by the Department of Agriculture in computing parity prices for agricultural commodities. Support prices for agricultural commodities are based, in part, on parity prices. Because the periodic Census data are used as benchmarks to improve these annual series of farm-mortgage data, the United States Department of Agriculture has cooperated with the Census Bureau in formulating and mailing the supplementary questionnaires and in preparing the estimated totals given in this report.

While this report deals only with indebtedness chargeable against farm real estate, there is considerable interest in other types of indebtedness, much of which is a liability of operating farmers. Farmers have been increasing their output through improved technology, mechanization, and the greater use of capital, generally. Presently, the interest in all phases of credit available to and used by farmers is augmented by the fact that prices received by farmers, in most instances, have moved downward while prices paid by farmers for goods and services have been maintained at a high level or have increased. Further, these price changes have affected lending operations by increasing the amount of credit needed by farmers for both capital outlays and production expenses. Another factor, increasing the need for credit, has been the upward trend in the per-acre value of farmland. One of the reasons for the strong demand for farmland comes from farmers wishing to enlarge their farm holdings in order to lower unit-production costs. Thus, the amount of borrowings by farmers has increased for both long-term and short-term needs.

The United States Department of Agriculture has prepared annual estimates of nonreal estate debt for all years since 1940. That organization has felt keenly the need of benchmark information in this field, also. A cooperative survey of farm-operator expenditures was made for the year 1955. This survey, of an interview type for sample households drawn from the 1954 Census of Agriculture, obtained information on the amount of loans and credit outstanding January 1, 1956, and interest rates thereon, for borrowings other than those secured by real estate. The report on this survey, *Farmers' Expenditures* in 1955, Part 11 of Volume III of the 1954 Census of Agriculture, shows interest charges for non-real estate debt incurred by farm operators for farm and family living expenditures. Interest and financing costs of installment purchases are included in total expenditures for the items to which they apply, and are excluded from interest expenditures.

**Sources of data.**—The 1956 farm-mortgage estimates presented in this report were prepared jointly by the Bureau of the Census, United States Department of Commerce, and the Agricultural Research Service, United States Department of Agriculture. The basic information for the 1956 estimates was obtained, in part, in the 1954 Census of Agriculture and, in part, through a 1956 mail survey of a sample of owners of farmland. Additional sources for these mortgage data were the official reports of the principal lending agencies—Federal land banks, the Farmers' Home Administration, life insurance companies, and all commercial and savings banks.

For earlier years, the data were obtained in much the same manner as for 1956.

## FARM-MORTGAGE DEBT

For each Census beginning with 1930, mortgage information for rented and manager-operated land has been obtained through mail-survey questionnaires. In 1930, the mail survey was undertaken by the Bureau of Agricultural Economics of the United States Department of Agriculture. In 1935, 1940, and 1945, the mail survey was conducted jointly by the Bureau of the Census and the Bureau of Agricultural Economics. In 1950 and 1956, the mail survey was made by the Bureau of the Census. The Bureau of Agricultural Economics in 1950 and the Agricultural Research Service in 1956 cooperated in designing the questionnaire and in preparing the estimates.

The mortgage data, for all Censuses, presented in this chapter represent estimates for all farm real estate prepared jointly by the two agencies. The data shown for earlier years in this report and previous cooperative reports will not agree with the mortgage data for full owners and part owners as shown in the Census reports for earlier years. These earlier Census data, shown in the Census reports, include no estimates for farms for which mortgage information was not reported.

**Basic information from the Censuses of Agriculture.**—The 1954 Census of Agriculture Questionnaire carried the following inquiry to be asked of a sample of approximately 20 percent of all farm operators:

Is there any MORTGAGE DEBT on land and buildings owned by you?-----  No  
 Yes  
 No land owned

The 1954 enumeration was made in October and November. The answers to the above inquiry were compiled for operating owners of farmland (both full owners and part owners) and related to all land owned by the operator and not to the portion retained by him if part of his land was rented to others. The mortgage status of the land, as obtained by this inquiry, and the related farm area and farm value, obtained by other questionnaire inquiries for the same land, were used as a basis for preparing the 1956 estimates.

The instructions, prepared for the guidance of Census enumerators, specified that farm mortgages included deeds of trust, deeds to secure debt, purchase money mortgages, vendors liens (deed with vendor), land purchase contracts, and bonds for deed. Certain items were excluded such as crop liens, mechanics' liens, judgments, mortgages on livestock or machinery, or other personal property liens (chattel mortgages), promissory notes, or delinquent taxes.

The amount of the indebtedness was not secured in the Census enumeration in 1954, whereas such basic information was obtained in the 1950 enumeration. The inquiry for 1950, which applied to a sample of owner-operators only, was as follows:

Is there any MORTGAGE DEBT on the land and buildings owned by you?-----  No  
 Yes. How much? \$ \_\_\_\_\_ /00  
(Dollars only)

Here, again, the inquiry related to all the land owned by the operator and not to the portion retained for his own operation.

Census mortgage data, obtained in the 1950 Census, were not published separately. These data were consolidated with those obtained in the later mail inquiry and appear as Part 8 of Volume V of the reports of the 1950 Census of Agriculture. Most of these data are given for comparative purposes in this report.

The tabulation of mortgage data from the 1945 Census of Agriculture was restricted, except in 12 States, to a sample of one-twelfth to one-half of the enumeration districts. In that Census, two inquiries, similar to those used in 1950, were to be asked of all

operating owners for all counties. The questions related to the land retained for operation by the owners. An analysis of the 1945 Census of Agriculture returns indicated that, for some enumeration districts, the mortgage information was incomplete or inaccurately reported. Therefore, substantial upward revisions were necessary in the information for mortgaged full-owner and part-owner farms, as reported by Census enumerators. The published data concerning the 1945 farm-mortgage debt represent a consolidation of data obtained in the Census and in a special mail survey. Most of these data for 1945 appear for comparative purposes in this report.

For the 1940 Census, three inquiries in respect to farm-mortgage indebtedness were asked of all operating owners. The first of these related to the presence or absence of indebtedness on the land owned and operated. The second ascertained the total amount of outstanding mortgage debt on such land and buildings. The third inquiry obtained the annual rate (contract rate) of interest on the *first* mortgage debt. The data obtained as a result of these inquiries were published in Volume III of the 1940 Census of Agriculture Reports. Consolidated data for that year, a combination of the Census information and that obtained through the cooperative mail survey, were presented in two joint (Bureau of the Census and Bureau of Agricultural Economics) releases published in 1943 and in 1944. Most of the data from these releases appear for comparative purposes in this report.

In the 1935 Census, all owner-operators were to be asked about the existence of a mortgage and the amount of mortgage debt on land and buildings owned and operated, provided they owned no additional land. These data were not published separately. They were consolidated with additional data gathered in the joint survey and were published in 1937 in a joint release by the Bureau of the Census and the United States Department of Agriculture. These consolidated data were published on pages 310 and 311 of Volume III of the Reports for the 1940 Census of Agriculture. Most of these also appear in the tables of this report.

For 1930, three inquiries were asked of all owner-operators, similar to those for 1940 with the exception that the operator was asked as to the amount charged in 1929 on his mortgage debt for interest, commissions, bonuses, and premiums instead of the annual rate of interest. The data gathered in the Census of 1930 are shown in Volume IV of the reports for that year. Estimates based on these Census data and on the results of the mail survey were first published by the Bureau of Agricultural Economics of the United States Department of Agriculture. Revised data were shown in the release published cooperatively by the Bureau of the Census and the Bureau of Agricultural Economics in 1937. Most of the estimates for 1930 are given in this report.

In the several Census enumerations, no information on farm-mortgage debt has been obtained for land rented from others by farm operators or for land managed for others by farm operators. The information for rented and manager-operated land has been obtained in subsequent surveys through the use of questionnaires mailed to the owners of lands rented to others or managed for others.

**The questionnaire for the 1956 Survey of Farm-Mortgage Debt.**—In January 1956, the first mailing of the farm-mortgage debt questionnaire was made to a sample of all landowners (see "The sample used for the survey on farm-mortgage debt" for a description of the sample). A facsimile of the questionnaire follows on p. 3.

A letter from the Director of the Bureau of the Census to the landowners appeared on the face of the questionnaire. A facsimile of this letter follows on p. 4.



Form A 17  
(12-14-55)

U.S. DEPARTMENT OF COMMERCE  
Bureau of the Census

**CONFIDENTIAL** - This inquiry is authorized by Act of Congress (Title 13, U.S.C. Section 146) which requires that a report be made. The information furnished is accorded confidential treatment subject to provision of law. This report will be used for statistical purposes only and cannot be used for purposes of taxation, investigations, or regulation.

**FARM-MORTGAGE DEBT SURVEY**

(Please fill in the questions below and return this questionnaire even though you have no mortgage debt, or own no land)

1. How many acres of farm or ranch land did you own on January 1, 1956?.....  
(Include not only cropland, but also pastureland, woodland, wasteland, etc.)  
If you owned no land on January 1, 1956, check "None" and skip to question 11.

None Acres \_\_\_\_\_

2. How much would this land and the buildings on it sell for?.....

\$ \_\_\_\_\_ OR \$ \_\_\_\_\_  
Per acre Total value

3. How many acres of this land did you rent to others during 1955, (include land worked on shares)?.....

None Acres \_\_\_\_\_

4. To how many tenants and croppers did you rent land during 1955, (include land worked on shares)?.....

None Number \_\_\_\_\_

5. Was there any mortgage debt on the land and buildings owned by you on January 1, 1956?....  
(Consider as mortgage debt - mortgages, deeds of trust, sales contracts, and other similar liens against farm real estate.)  
If you had no mortgage debt, check "No" and skip to question 10.

No  Yes

6. What was the total amount of the UNPAID PRINCIPAL of this mortgage debt on Jan. 1, 1956?

\$ \_\_\_\_\_

7. How many acres were mortgaged on January 1, 1956?.....

None Acres \_\_\_\_\_

8. How much would this mortgaged land and the buildings on it sell for?.....  
(If all your land was mortgaged, your answer to this question should be the same as that for question 2.)

\$ \_\_\_\_\_ OR \$ \_\_\_\_\_  
Per acre Total value

9. Please enter below the amount of farm-mortgage debt owed to (unpaid principal) and the interest rate for each of the following lenders on January 1, 1956  
(Account for all mortgage debt reported in question 6.)

	Amount of farm-mortgage debt (Unpaid principal) January 1, 1956	Interest rate (Percent)
a. Federal Land Bank, Land Bank Commissioner, or a combined loan from these two agencies...	\$ _____	_____ %
b. Farmers Home Administration (include only indebtedness secured by real estate).....	\$ _____	_____ %
c. A life insurance company.....	\$ _____	_____ %
d. A National or State Bank, or Trust Company (include mutual savings banks).....	\$ _____	_____ %
e. A mortgage company or land investment company.....	\$ _____	_____ %
f. An official agency of State or county.....	\$ _____	_____ %
g. A farm operator.....	\$ _____	_____ %
h. An individual (not a farm operator), administrator, executor, or guardian of an individual or the estate of an individual .....	\$ _____	_____ %
i. Other lender (give name) _____	\$ _____	_____ %
j. Total mortgage debt you owe these lenders (should be same as entry for question 6.)....	\$ _____	

10. Did you have any farm-mortgage debt as of November 1, 1954?.....

No  Yes

11. In the 1954 Census of Agriculture you were reported as owning land or renting land to others. Please answer the following questions, so that we may obtain complete mortgage information:

a. Did you sell any land during 1955?.....  
If "Yes" enter below the name, address, and acres for each buyer.

No  Yes

Name	Address	Acres
_____	_____	_____
_____	_____	_____

Name	Address	Acres
_____	_____	_____
_____	_____	_____

b. Did you rent land from others during 1955 which was sub-leased to others?.....  
If "Yes" enter below the name, address, and acres for each owner.

No  Yes

For office use only			
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____



**U. S. DEPARTMENT OF COMMERCE**  
**BUREAU OF THE CENSUS**  
**WASHINGTON 25, D. C.**

Dear Sir:

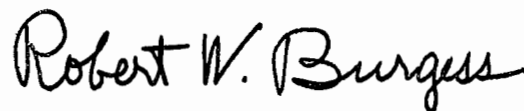
As a part of the 1954 Census of Agriculture, information is needed on the number of farms in the United States which are mortgaged, the amount of farm-mortgage indebtedness, source of credit, and interest rates. This information is necessary to indicate the changes which have occurred during the last five years. Questions to obtain information of this nature are being asked of approximately one out of twenty-five landowners.

Will you, therefore, please fill out the questionnaire on the reverse side and mail it, this week, in the enclosed envelope which does not require postage.

PLEASE FILL OUT AND MAIL THIS QUESTIONNAIRE EVEN THOUGH YOUR LAND IS NOT NOW MORTGAGED, OR IF YOU DO NOT NOW OWN ANY LAND. Your returning of this completed questionnaire promptly will be appreciated and will eliminate the need for writing you again.

Thank you for your cooperation.

Sincerely yours,



Robert W. Burgess  
Director  
Bureau of the Census

Enclosure

**The sample used for the survey on farm-mortgage debt.**—The sample for the survey was selected from the 1954 Census of Agriculture. This sample was obtained from the sample of farms for which data regarding mortgage-debt status and other items were secured in the 1954 Census of Agriculture. Data on farm-mortgage debt were obtained in the 1954 Census of Agriculture for a sample of approximately 20 percent of all owner-operated farms. For a description of this sample, see page XIX of the Introduction to Volume II of the reports of the 1954 Census of Agriculture. The sampling rate for the survey on farm-mortgage debt was varied for each State and for each tenure of operator and for two groupings of farms by economic class. Because of the importance of farms in Economic Classes I and II, a much higher proportion of these farms was included in the sample than for farms in other economic classes. (Farms in Economic Classes I and II include farms with a value of farm products sold in 1954 of \$10,000 and over; other farms for this sample selection include farms with a value of all farm products sold in 1954 of less than \$10,000. Abnormal farms regardless of the amount of gross income were included with the other group. For a more detailed description of economic class of farm, see page 10.) The sampling rates and the number of farms included in the sample for the farm-mortgage debt survey are indicated in Table A. The total number of farms selected for the sample totaled 192,545. However, 859 of these farms were eliminated from the sample because they had also been selected for the sample to be used for a survey of farm operators' expenditures. The 191,686 farms remaining in the sample comprised 284,427 landowners. This total of landowners included 10,077 which were classified as corporations (institutions, railroads, insurance companies, banks, etc.) and Federal and local government agencies and Indian reservations. During the survey, some landowners reported they had sold all or a part of the land owned by them in 1954. Also, some of the persons reported as landowners in the 1954 Census of Agriculture were found to be lessees rather than landowners. In the case of landowners reporting that all or part of their farmland had been sold and in the case of lessees reported as landowners, questionnaires were mailed to the new landowner and to the correct landlord. The corrections and additions to the mailing list because of these changes totaled approximately 13,000. Thus, questionnaires for the survey were mailed to a total of 287,000 persons who represented (1) operating owners of farmland; (2) landlords of farms operated by tenants; (3) owners of manager-operated farms; and (4) purchasers of land owned by other owners in 1954, and to actual owners when a lessee was reported as the landlord in the 1954 Census of Agriculture.

**Mailing of questionnaires.**—The first mailing of the questionnaires for the survey was made on January 11, 1956, and was completed on February 17, 1956. A follow-up notice was mailed to the owners of farms from whom a reply had not been received. This follow-up mailing was started on February 14, 1956, and completed on March 15, 1956. Then, a second questionnaire was mailed to all landowners from whom a reply had not been received. This mailing of additional questionnaires was started on March 13, 1956, and completed on April 16, 1956. From these three mailings to approximately 287,000 persons, usable questionnaires were obtained from 195,951 landowners. Questionnaires were not mailed to the 10,077 corporations, governmental agencies, etc., as it was assumed that the farm lands owned by these were mortgage-free. Thus, data were obtained or available for a total of 206,028 landowners or approximately 69 percent of all the landowners included in the sample selected for the survey. Reports for these 206,028 landowners were included in the tabulations.

**Processing the questionnaires.**—The data on each questionnaire received for the farm-mortgage debt survey were checked against the data on agriculture questionnaires for the 1954 Census of Agriculture for the farm from which the name of the landowner was selected. If the questionnaire for the farm-mortgage debt survey covered more or less farmland than the agriculture question-

naire, then adjustments of the data were made so the data on the farm-mortgage debt survey related only to the land reported on the agriculture questionnaire for the 1954 Census of Agriculture. If part of the land covered by the questionnaire for the 1954 Census of Agriculture had been sold, then a farm-mortgage debt survey questionnaire was mailed to the purchaser and the questionnaire covering the land sold was included in the tabulations.

Information from the 1954 Census of Agriculture on acres owned; value of land and buildings; tenure of operator; type of farm; and for landowners who were owner-operators, mortgage-debt status, age, and year they began to operate the farm were included on the punchcard containing the data reported in the farm-mortgage debt survey and were used in making the tabulations and estimates.

For each State, separate tabulations of data from the farm-mortgage survey subclassified by data from the 1954 Census of Agriculture were made for full owners, and for the owned portion of farms operated by part owners, by two groupings of farms by economic class, by mortgage status in 1956, by:

- (1) Age of operator.
- (2) Years on farm.
- (3) Type of lender (for mortgaged farms only).
- (4) Ratio of mortgage debt to the value of land and buildings in 1956 (for mortgaged farms only).
- (5) Type of farm (for commercial farms only).
- (6) Economic class of farm.

Likewise, for each State, separate tabulations were made for landowners of farms operated by tenants, managers, and part owners (leased portion), by mortgage status in 1956, for two groupings of farms by economic class, by type of lender.

For each group, separate tabulations were made of the data for landowners who did not report the value of land and buildings, the acres owned, or the amount of mortgage debt when the land was reported mortgaged. Estimates of the missing data for these groups were prepared on the basis of reports for similar groups of landowners for whom all data were reported. The farms for which such estimates were made comprised less than one-tenth of 1 percent of all farms.

**Preparing estimates.**—Estimates for the number of farms, acres in farms, and the value of land and buildings in 1954 and as of January 1, 1956, for farms operated by full owners and for the owned portion of farms operated by part owners, were prepared for each State, for each tenure group, and for two groupings of farms by economic class, by dividing the number of farms, for which reports as to mortgage status were obtained in the survey, into the total number of farms shown for the 1954 Census of Agriculture for the corresponding grouping of farms and then by multiplying the totals for the farms in the mortgage-debt survey by this factor. For the rented portion of part-owner farms and for farms operated by managers and tenants, the factor used for multiplying the farm-mortgage debt survey totals to obtain estimated totals for all farms was obtained by dividing the total acres of land owned, shown by the mortgage-survey reports, into the total acreage of rented land in farms of part owners, tenants, and in farms operated by managers as shown for the corresponding group by the 1954 Census of Agriculture. The totals for the 1954 Census of Agriculture and for the survey of mortgage debt were adjusted by subtracting the acreage of land in farms owned by corporations, governmental agencies, etc., before the calculations were made. The factors calculated for each tenure group are shown by States in Table B. The method outlined for obtaining estimates for all farms, from the survey of farm-mortgage debt, assumed that the farms and land of landowners from whom reports were not received were similar in regards to mortgage status, size, value of land and buildings, etc., to the farms and land of landowners from whom usable reports were obtained in the survey. At the United States level, the proportion of the farms reported as



# FARM-MORTGAGE DEBT

mortgaged in 1954 for farms for which reports were received for the mortgage-debt survey differed only 3 percent for full owners and only 11 percent for part owners (owned portion) from that for farms for which no usable reports were obtained in the survey of mortgage debt. The average size of farms for full owners with no reports for the survey of farm-mortgage debt differed by only 19 percent from that for farms of full owners for whom reports were obtained. For part owners, the difference in the average size of farm for those reporting and those not reporting in the

survey of farm-mortgage debt was 17 percent. The difference in the average value of land and buildings per acre for farms for which reports were obtained in the farm-mortgage debt survey and those farms for which a report was not obtained was 7 percent for full owners and 7 percent for part owners (owned portion). The estimates of farm-mortgage debt were made on the basis of the average ratio of debt to value of land and buildings reported for the mortgaged farm lands for each grouping of farms included in the farm-mortgage debt survey.

**TABLE B.—FARM-MORTGAGE DEBT SURVEY, 1956: ADJUSTED EXPANSION FACTORS<sup>1</sup>**

Division and State	Full owners		Part owners				Tenants and managers	
	Classes I and II	Other classes	Owned portion		Rented portion		Classes I and II	Other classes
			Classes I and II	Other classes	Classes I and II	Other classes		
<b>New England:</b>								
Maine.....	12.87	37.17	6.78	6.48	7.84	9.73	61.87	3.88
New Hampshire.....	13.91	19.18	6.52	6.42	7.39	7.63	7.53	8.56
Vermont.....	12.22	19.49	6.67	6.60	9.10	8.07	7.47	6.13
Massachusetts.....	13.12	20.45	6.10	6.38	6.87	6.82	8.74	5.50
Rhode Island.....	6.21	7.34	8.40	6.72	13.80	8.62	3.06	109.46
Connecticut.....	12.59	19.17	6.13	6.63	8.30	6.78	3.20	7.40
<b>Middle Atlantic:</b>								
New York.....	20.13	58.36	12.92	19.85	15.60	24.10	6.71	13.29
New Jersey.....	13.59	45.06	6.54	7.14	6.67	9.67	7.01	5.83
Pennsylvania.....	25.33	76.31	12.06	18.95	14.67	23.32	6.24	12.17
<b>East North Central:</b>								
Ohio.....	26.48	80.20	20.38	27.37	23.25	33.91	19.26	28.74
Indiana.....	25.46	68.47	20.95	28.12	22.20	32.24	19.52	27.56
Illinois.....	25.52	69.05	19.80	34.93	20.28	43.77	24.77	34.99
Michigan.....	24.41	62.50	19.32	25.55	22.38	31.61	5.84	12.69
Wisconsin.....	23.86	54.46	17.95	24.89	24.57	27.61	12.99	27.07
<b>West North Central:</b>								
Minnesota.....	24.88	76.87	17.91	30.80	20.46	35.09	17.61	32.30
Iowa.....	25.65	67.76	19.52	26.40	21.69	30.57	25.59	38.73
Missouri.....	25.71	95.15	20.37	33.17	23.08	41.24	24.37	35.95
North Dakota.....	11.93	24.82	19.65	24.55	26.42	29.51	6.92	12.67
South Dakota.....	13.66	27.69	20.16	22.07	28.66	21.88	6.29	25.28
Nebraska.....	12.90	53.47	19.91	25.50	22.64	29.39	21.18	30.63
Kansas.....	12.90	58.67	20.51	42.64	23.74	43.29	20.31	31.46
<b>South Atlantic:</b>								
Delaware.....	7.66	7.33	6.50	7.62	7.15	7.81	9.72	7.24
Maryland.....	13.72	14.19	7.08	7.56	7.94	8.32	6.50	6.99
Virginia.....	21.61	63.49	13.63	21.70	15.84	23.56	7.53	16.03
West Virginia.....	6.97	47.93	5.65	6.65	10.33	9.26	4.92	7.48
North Carolina.....	25.79	98.15	19.50	55.27	31.23	72.92	24.56	86.32
South Carolina.....	9.07	52.51	9.49	29.91	11.17	25.79	9.06	64.65
Georgia.....	27.87	72.75	9.13	24.94	12.68	33.13	20.58	55.00
Florida.....	24.14	40.52	8.32	8.22	17.91	15.12	16.00	15.71
<b>East South Central:</b>								
Kentucky.....	25.82	91.80	17.13	37.74	15.55	53.37	13.89	40.75
Tennessee.....	21.17	70.03	15.38	36.96	27.11	45.51	8.04	46.06
Alabama.....	24.43	67.86	16.42	32.11	30.53	39.68	5.87	54.80
Mississippi.....	22.28	69.32	17.16	32.36	18.97	34.25	20.08	73.40
<b>West South Central:</b>								
Arkansas.....	15.30	64.56	15.19	21.68	21.88	28.02	20.31	41.10
Louisiana.....	16.72	49.61	18.12	17.08	16.18	22.42	23.64	38.83
Oklahoma.....	13.04	41.04	13.24	37.73	18.33	49.64	14.01	17.57
Texas.....	20.59	82.45	22.07	55.62	33.15	60.33	19.02	48.16
<b>Mountain:</b>								
Montana.....	7.18	36.20	14.63	29.81	18.72	42.20	8.80	33.81
Idaho.....	15.41	54.34	13.81	14.42	22.57	16.06	8.10	11.86
Wyoming.....	8.19	7.32	7.59	7.45	21.95	13.05	3.52	12.12
Colorado.....	14.97	35.21	13.90	18.87	17.76	27.11	11.69	21.47
New Mexico.....	7.08	30.31	7.05	14.77	19.82	22.72	9.87	11.03
Arizona.....	7.69	7.68	8.06	7.41	13.02	39.81	2.76	2.71
Utah.....	6.80	43.31	7.02	14.59	11.65	20.94	42.88	18.38
Nevada.....	9.32	9.02	8.18	11.14	10.87	2.67	2.05	1.33
<b>Pacific:</b>								
Washington.....	25.67	55.87	14.08	13.03	13.88	21.18	8.38	4.13
Oregon.....	28.06	53.19	12.93	18.84	13.08	16.99	8.58	5.68
California.....	40.66	96.48	14.03	20.93	17.06	30.13	12.58	30.17

<sup>1</sup> Adjustments were made because of no response. Large amounts of Government and corporate lands, in some States, were responsible for a smaller expansion factor than the sampling rate called for.

**Adjustment of estimates.**—Three kinds of adjustments were made in the totals obtained from the tabulations. First, when the distribution of the farms in 1954 by mortgage status as shown by the reports for the mortgage survey differed from that shown for the 1954 Census of Agriculture, percentage adjustments were made in the number of farms, land in farms, and value of land and buildings so that the distribution of farms by 1954 mortgage status in the mortgage survey was the same as that for the 1954 Census of Agriculture. For the United States, this adjustment averaged 2.1 percent. The same percentage adjustments used for full owners and for part owners (owned portion) were made for rented land in farms of part owners and in land in farms operated by tenants and managers. Second, some additional adjustments were considered necessary in the value of land and buildings in 21 States, because the value of land and buildings for land for which reports were not obtained in the survey of mortgage debt appeared to be significantly different from the value of land and buildings for land for which reports had been obtained in the survey. These adjustments averaged 1.4 percent for the United States and exceeded 5 percent in only 5 States. Third, the estimates of the amount of mortgage debt for Federal land banks, Farmers' Home Administration, life insurance companies, and all operating banks were adjusted for each State to the known totals of those lending agencies. These adjustments averaged at the United States level, 2.1 percent (downward) for all 4 lending agencies; 7.2 percent (downward) for Federal land banks; 34.8 percent (downward) for the Farmers' Home Administration; 27.2 percent (upward) for life insurance companies; and 20.2 percent (downward) for all operating banks. No changes were made in the estimated total for the amount of mortgage debt because of the adjustment in the amount of debt for these 4 lending agencies.

The survey data were expanded to universe totals by using expansion factors, after adjustment for nonresponse. Table B shows the adjusted expansion factors for each of eight sampling strata for the individual States. Government, corporate, and institutional land was included at 100 percent response and weighted, in proportion to the number of acres, with rented land.

Reliability of the 1956 survey estimates was strengthened by the relatively high response rate for a mailed questionnaire. For example, estimates in Wisconsin were made on the basis of 83.8 percent response for full owners, Economic Classes I and II, and 91.8 percent response for all other economic classes. Estimates for part owners were based on an 83.6 percent response for Economic Classes I and II, and 80.4 percent response for other economic classes. The response rate for rented land for Economic Classes I and II was 70.0 percent, and for other economic classes, was 83.9 percent.

In preparing the 1956 estimates of acreages and values by mortgage status and the amount of indebtedness, it was assumed that the farmland owners who did not reply to the survey questionnaire were similar in mortgage characteristics to those who did reply. A study of the 1954 Census of Agriculture questionnaires for those farms for which a 1956 survey questionnaire was not received indicated that this group of farms was similar in size, value, and mortgage status to those farms for which a response was received. The estimates were made by applying ratios based on the farms for which replies were received to the totals for all farms. The overall totals shown for the number of farms and land in farms are in agreement with the totals obtained by tabulating the data for all farms in the 1954 Census of Agriculture. The totals for the value of land and buildings have been adjusted to represent those prevailing on January 1, 1956, which was the date to which the farm-mortgage debt mailed survey inquiry was related. The January 1, 1956 value of all farm real estate for the United States, as indicated by the mortgage-debt survey questionnaires, was \$106,576,916,000. This figure is an increase of 9.2

percent above the \$97,582,918,000 total shown in the 1954 Census of Agriculture which was taken in October and November of that year.

Farm-mortgage debt outstanding on January 1, 1956 was determined from the ratio of debt to value prevailing in the survey as applied to the adjusted 1956 value of land and buildings. Total debt was first allocated to lender groups on the basis of the mailed survey questionnaire. Afterwards, debt for each of 4 lenders (Federal land banks, Farmers' Home Administration, insurance companies, and banks) was adjusted to known totals for these lenders.

Average rates of interest for the Federal land banks are in agreement with known rates for this lender. Interest charges and average rates of interest on total mortgage debt for all other lender groups were based on information reported in the 1956 survey. All impossible interest rates for known lenders were adjusted before averages were computed.

**Estimates for 1956.**—The estimates for January 1, 1956, are for the farms and farm lands included in the 1954 Census of Agriculture. No estimates have been made regarding the changes in the number of farms or land in farms from the date of the 1954 Census of Agriculture (October–November 1954) to January 1, 1956. The estimates on the number of farms by mortgage status are as of January 1, 1956, and the total number coincides with the count of farms in the 1954 Census of Agriculture. Likewise, the estimates of acreage, value of land and buildings, and amount of mortgage debt represent totals as of January 1, 1956, for the farmland and buildings included in the 1954 Census of Agriculture.

## DEFINITIONS AND EXPLANATIONS

Only definitions and explanatory matter of particular significance in regard to mortgage debt are presented in this chapter. For definitions and explanations of items of general application, refer to the Introduction to Volume II of the 1954 Census of Agriculture reports. For a more detailed discussion of land in farms, refer to Chapter I, Farms and Land in Farms; for the classification of farms by tenure of the operator, refer to Chapter X, Color, Race, and Tenure of Farm Operator; and for classification of farms by economic class, see Chapter XI, Economic Class of Farm. These three chapters are parts of Volume II of the reports of the 1954 Census of Agriculture.

**A farm.**—All the land under the control of one person or partnership was included as one farm. Control may have been through ownership, or through lease, rental, or cropping arrangement.

For the 1954 Census of Agriculture, places of 3 or more acres were counted as farms if the annual value of agricultural products, exclusive of home-garden products, amounted to \$150 or more. The agricultural products could have been either for home use or for sale. Places of less than 3 acres were counted as farms only if the annual value of sales of agricultural products amounted to \$150 or more. Places for which the value of agricultural products for 1954 was less than these minima because of crop failure or other unusual conditions, and places operated at the time of the Census for the first time, were counted as farms if normally they could be expected to produce these minimum quantities of agricultural products.

If a person had croppers or other tenants, the land assigned each cropper or other tenant was considered a separate farm, even though the landlord handled the entire holding as one operating unit in respect to supervision, equipment, rotation practice, purchase of supplies, or sale of products. Land retained by the landlord and worked by him with the help of his family and/or hired labor was likewise considered a farm.

If land under the control of one person or partnership was located in 2 or more counties, the entire holding was enumerated as 1 farm and in only 1 county.

For the 1950 Census of Agriculture, the definition of a farm was the same as for 1954. For the 1945 and earlier Censuses of Agriculture, the definition of a farm was somewhat more inclusive. From 1930 to 1945, farms, for Census purposes, included places of 3 or more acres on which there were agricultural operations, and places of less than 3 acres if the agricultural products for home use or for sale were valued at \$250 or more. For places of 3 or more acres, no minimum quantity of agricultural production was required for purposes of enumeration; for places of under 3 acres all the agricultural products valued at \$250 or more may have been for home use and not for sale. The only reports excluded from the tabulations were those taken in error and those with very limited agricultural production, such as only a small home garden, a few fruit trees, a very small flock of chickens, etc. In 1945, reports for places of 3 acres or more with limited agricultural operations were retained if there were 3 or more acres of cropland and pasture, or if the value of products in 1944 amounted to \$150 or more when there were less than 3 acres of cropland and pasture.

**Land in farms.**—For 1954 and 1950, the land in each farm, that is the land under the control of each farm operator or partnership, was determined by asking the number of acres owned, the acres rented from others or worked on shares for others, and the acres rented to others or worked on shares by others. The acres in the farm were obtained by adding the acres owned and acres rented from others or worked on shares for others, and subtracting the acres rented to others or worked on shares by others. In case of a managed farm, the person in charge was asked the total acreage managed for his employer. The acreage that was rented to others or cropped by others was subtracted from the total managed acreage.

In earlier Censuses, the acreage in each farm was determined by asking directly the acreage in the farm. The enumerators and farm operators were instructed to include any land rented from others and to exclude any land rented to others.

**Value of land and buildings.**—The value to be reported was the approximate amount for which the land and the buildings on it would sell. For the 1954 and the 1950 Censuses of Agriculture, the value of land and buildings was estimated on the basis of reports for a sample of approximately 20 percent of the farms. The value of land and buildings for 1954 was estimated on the basis of the value of land and buildings reported for farmland and buildings in the survey of mortgage debt. (See adjustment of estimates, page 8 for a description of the adjustment of the value of land and buildings.) The estimated value of farmland and buildings (for farmland and buildings included in the 1954 Census of Agriculture) was \$106,576,916,000, as of January 1, 1956, an increase of 9.2 percent above the \$97,582,918,000 shown for the 1954 Census of Agriculture.

**Farm owner.**—A farm owner is a person who, or agency which, owns farmland. He may be a farm operator, he may be a landlord renting his land to others or having his land cropped by others, or he may be the employer of a manager who operates his farm.

**Farm operator.**—A farm operator is a person who operates a farm either performing the labor himself or directly supervising it. He may be an owner, a hired manager, or a tenant. If he rents land to others or has land cropped for him by others, he is considered the operator of only the acreage which he retains. The number of farm operators is considered the same as the number of farms.

In 1954, farm operators were classified according to the tenure under which they held their land on the basis of the land retained by the farm operator. In 1950, farm operators were classified according to the tenure under which they held their land on the

basis of the total land owned, the total land rented from others, and the land managed for others. For the 1945 and earlier Censuses, the determination of full owners, part owners, and tenants was made, as in 1954, on the basis of land operated.

**Owner-operated farms.**—Owner-operated farms are farms operated by persons who own farm lands. Mortgage data presented for owner-operated farms relate only to land owned by the farm operator and retained by him. Land rented to others or worked on shares by others is not included. Land owned includes all land which the operator or his wife, or both, held under title, purchase contract, homestead law, or as one of the heirs, or as a trustee, of an undivided estate. For a partnership, all the land owned by any of the partners and operated as a partnership was to be included as land owned. In the case of an Indian operator, land allotted in trust and also any reservation lands assigned him for his own use were to be considered as owner-operated.

Full owners own all the land they operate. For the 1954 Census of Agriculture, but not for 1950, an owner who also rented land from others was classed as a full owner if he subrented to others all the land he rented from others, retaining and operating only land owned by him.

Part owners own land they operate and rent from others additional land which they operate.

**Tenant- and manager-operated farms, including rented portion of part-owner farms.**—Tenants rent from others, or work on shares for others, all the land they operate. For the 1954 Census of Agriculture, but not for 1950, tenants included some farm operators who owned land but rented to others all the land owned, retaining only land rented from others. Rented land includes land worked on shares for others and land used rent-free, as well as all land rented or leased under other arrangements. Grazing land used under government permit is not included. Open range and grazing lands used under permit were not to be included as land in farms.

Manager farms are farms operated for others by persons paid a wage or salary for their services. Persons acting merely as caretakers or hired as laborers are not classified as managers. All land operated for a government agency (Federal, State, or local), a corporation, or an institution, was considered managed even though no person was specifically designated as the farm manager. Similarly, grazing lands held or controlled by cooperative groups, such as grazing associations, were considered managed. Likewise, Indian reservation lands operated for Indians and not reported by individual Indians were considered managed.

Data on acreage, value, and debt presented for tenant- and manager-operated farms include the land rented from others by part owners. Data on number of tenant and manager farms mortgaged, as shown for 1950 and prior years, relate only to tenant- and manager-operated farms and represent estimates made on the basis of the proportion of the owners of such farms who had mortgage indebtedness.

**Number of farms by mortgage status.**—For 1956, the number of farms mortgaged and the number free of mortgage encumbrance were estimated only for full-owner and part-owner (owned portion) farms. The number of manager and tenant farms which were mortgaged and the number which were free of debt were not estimated. A manager or tenant may operate land representing several different owners. Mortgage indebtedness reported by any of these owners would classify the farm as mortgaged, by definition. Mortgage status, as applied to real estate, is a function relating to owners, rather than operators of land. Since the value of such statistics is limited, estimates of the number of mortgaged manager- and tenant-operated farms were not made.



## FARM-MORTGAGE DEBT

A mortgaged farm is one having land (land and/or buildings thereon) pledged as security for debt. A farm free from debt is one which has none of the land pledged as security for debt. The mortgage status of a part-owner farm relates to the owned portion only. If an owner-operator reported mortgage indebtedness on any of the land owned, the farm was considered to be mortgaged. This procedure may have resulted in a slight overstatement of the number of owner-operated mortgaged farms. For example, an owner-operator may rent to others a portion of the land owned. He may have mortgage indebtedness on only that portion which he rents to others. Under the above procedure, his farm might have been classed as mortgaged when actually all the land he retained and operated was free of debt.

**Farm-mortgage debt.**—Farm mortgages are evidences of a pledge of farmland and buildings as security for a debt. The debt may have arisen through purchase of the real estate or through a subsequent loan. Farm mortgages include deeds of trust, deeds to secure debt, purchase money mortgages, vendors liens (deed with vendor), land purchase contracts, and bonds for deed. They do not include crop liens, mechanics liens, judgments, mortgages on livestock or machinery, or other personal property liens (chattel mortgages), promissory notes, or delinquent taxes.

In conformity with the practices followed in farm credit statistics prepared by the United States Department of Agriculture, in this and preceding farm-mortgage surveys, all Production Credit Association loans were considered non-real estate debt. The primary security for such loans is crop or chattel mortgages although in infrequent cases real estate mortgages may be taken as additional security. When identifiable, Production Credit Association loans reported on the 1956 survey questionnaire were deleted in the editing process. Similarly, all identifiable operating loans of the Farmers' Home Administration were deleted although they sometimes are secured by real estate mortgages in addition to the usual crop or chattel mortgages. In the editing process, care was taken to delete all non-real estate indebtedness which could be identified as such.

**Age of operator.**—The age of the farm operator, as ascertained in the 1954 Census of Agriculture, was copied onto transcription cards. These age figures were transferred, with other information, onto punch cards. Thus, it is possible to present herein some characteristics of mortgaged farms of full owners and of part owners, arrayed according to the age of the operator in 1954. A distribution of all full owners and of all part owners had already been made in an earlier phase of the processing of the 1954 Census of Agriculture data. Table 14 presents an array of all full owners and of all part owners, by age, and the proportion in each of these tenure groups which had a mortgage on their own land. The array, by age, for the entire group of full owners and of part owners was based on the age reported, in 1954, for the 1954 sample group of farms. (See Introduction of Volume II of the reports of the 1954 Census of Agriculture for a full description of this sample.) The array, by age (prevailing at the taking of the 1954 Census), for the mortgaged full owners and for the mortgaged part owners is based on an expansion of data representing the encumbered farms (as of January 1, 1956) for a smaller group of farms.

The proportion of farms of full owners which were under mortgage, by age groups, is given herein for 1930, 1940, and 1956 (latter adjusted to the 1954 number of farms). A similar age dis-

tribution was made for several Censuses prior to 1930. Data for these earlier years may be found in Volume III of the reports for the 1940 Census of Agriculture. That report also gives some age data distributed by mortgage status and by color of operator. No age data, for mortgaged farms, are available from the 1945 and 1950 Censuses. A distribution of part-owner farm operators, by mortgage status, by age is available only for 1940 and 1956. The average age of full owners and of part owners, by mortgage status, is available only for 1940. These averages appear in Volume III of the reports for the 1940 Census of Agriculture.

**Economic class of farm.**—For the 1954 Census of Agriculture, farms were divided into two major groups—commercial farms and other farms and each group was subdivided as follows:

**Commercial farms** were divided into six groups on the basis of the total value of all farm products sold, as follows:

<i>Class of farm</i>	<i>Value of farm products sold</i>
I.....	\$25,000 or more.
II.....	\$10,000 to \$24,999.
III.....	\$5,000 to \$9,999.
IV.....	\$2,500 to \$4,999.
V.....	\$1,200 to \$2,499.
VI.....	\$250 to \$1,199. <sup>1</sup>

<sup>1</sup> Farms were classified as Class VI only when the farm operator reported that he worked off the farm less than 100 days, and that the income the farm operator and members of his family received from nonfarm sources was less than the total value of all farm products sold.

**Other farms** have been grouped into three classes as follows:

**Part-time farms.**—Farms with a value of sales of farm products of \$250 to \$1,199 were classified as part time if the farm operator reported (a) 100 or more days of work off the farm in 1954, or (b) the other income received by him and members of his family was greater than the value of farm products sold.

**Residential farms.**—Residential farms include all farms except abnormal farms with a total value of farm products sold of less than \$250. Some of these represent farms on which the operator worked off the farm more than 100 days in 1954. Some represent farms on which the income from nonfarm sources was greater than the value of sales of agricultural products. Others represent subsistence and marginal farms of various kinds. Some farms are included here which, if the classification were based on farm production for more than 1 year, might have qualified as commercial farms.

**Abnormal farms.**—Insofar as it was possible to identify them, abnormal farms include all public and private institutional farms, community enterprises, experiment-station farms, grazing associations, etc. Abnormal farms were usually considered to be corporate-operated farms. As mentioned before, all corporate farms were considered to be free of mortgage.

**Farms by type.**—The classification of farms by type was made on the basis of the relationship of the value of sales from a particular source or sources to the total value of all farm products sold from the farm. In some cases, the type of farm was determined on the basis of the sale of an individual farm product, such as cotton, or on the basis of closely related products, such as dairy products. In other cases, the type was determined on the basis of sales of a broader group of products such as corn, sorghums, all small grains, field peas, field beans, cowpeas, and soybeans. Part-time, residential, and abnormal farms were not classified by type. In order to be classified as a particular type, sales or anticipated sales of a product or a group of products had to represent 50 percent or more of the total value of products sold.

The data given in this report by type of farm relate only to commercial farms operated by full owners.



The types of farms for which data are shown, together with the product of group of products on which the classification is based, are:

<i>Type of farm</i>	<i>Product or group of products amounting to 50 percent or more of the value of all farm products sold</i>
Cotton.....	Cotton (lint and seed).
Cash-grain.....	Corn, sorghum, small grains, field peas, field beans, cowpeas, and soybeans.
Other field-crop.....	Peanuts, Irish potatoes, sweetpotatoes, tobacco, sugarcane, sugar beets for sugar, and other miscellaneous crops.
Vegetable.....	Vegetables.
Fruit-and-nut.....	Berries and other small fruits, and tree fruits, nuts, and grapes.
Dairy.....	Milk and other dairy products. The criterion of 50 percent of the total sales was modified in the case of dairy farms. A farm for which the value of sales of dairy products represented less than 50 percent of the total value of farm products sold was classified as a dairy farm if— <ul style="list-style-type: none"> <li>(a) Milk and other dairy products accounted for 30 percent or more of the total value of products sold, and</li> <li>(b) Milk cows represented 50 percent or more of all cows, and</li> <li>(c) Sales of dairy products, together with the sales of cattle and calves, amounted to 50 percent or more of the total value of farm products sold.</li> </ul>
Poultry.....	Chickens, eggs, turkeys, and other poultry products.
Livestock farms other than dairy and poultry.	Cattle, calves, hogs, sheep, goats, wool, and mohair, provided the farm did not qualify as a dairy farm.
General.....	Farms were classified as general when the value of products from one source or group of sources did not represent as much as 50 percent of the total value of all farm products sold. Separate figures are given for three kinds of general farms: <ul style="list-style-type: none"> <li>(a) Primarily crop.</li> <li>(b) Primarily livestock.</li> <li>(c) Crop and livestock.</li> </ul> <p><i>Primarily crop farms</i> are those for which the sale of one of the following crops or groups of crops—vegetables, fruits and nuts, cotton, cash grains, or other field crops—did not amount to 50 percent or more of the value of all farm products sold, but for which the value of sales for all these groups of crops represented 70 percent or more of the value of all farm products sold.</p> <p><i>Primarily livestock farms</i> are those which could not qualify as dairy farms, poultry farms, or livestock farms other than dairy and poultry, but for which the sale of livestock and poultry and livestock and poultry products amounted to 70 percent or more of the value of all farm products sold.</p> <p><i>General crop and livestock farms</i> are those which could not be classified as either crop farms or livestock farms, but for which the sale of all crops amounted to at least 30 percent but less than 70 percent of the total value of all farm products sold.</p>
Miscellaneous.....	This group of farms includes those that had 50 percent or more of the total value of products accounted for by sale of horticultural products, or sale of horses, or sale of forest products.

FARM-MORTGAGE DEBT

Farm-mortgage debt on January 1, 1956, for the United States, is estimated at \$9,066 million, an increase of 62 percent from the amount on January 1, 1950. In this 6-year period there were significant increases, not only in the amount of outstanding farm-mortgage debt, but also in the proportion and number of owner-operated farms which were mortgaged and in the acreage and value of mortgaged farms. However, the average ratio of debt to value for mortgaged farms for 1956 was slightly below that for 1950. Interest rates on farm mortgages rose in this period, and increases in the amount of farm-mortgage debt held were shown by all important types of lenders.

**Amount of farm-mortgage debt.**—The estimate of \$9,066 million for farm-mortgage debt for January 1, 1956, compares with \$5,579 million on January 1, 1950. Although there was an increase of 62 percent during the 6-year period, the 1956 total was about 6 percent below the \$9,631 million estimated for 1930. The peak in farm-mortgage debt occurred in 1923 when the total was \$10,786 million, according to estimates of the United States Department of Agriculture. The lowest point reached following the 1923 high was in 1946 when the United States Department of Agriculture estimate of total farm-mortgage debt was \$4,760 million. Since 1946, the total has increased each year. The average annual increase in the years 1950 to 1955 was about \$581 million, or about 4½ times the average annual increase during the years 1945 to 1949.

Factors in the increase in farm-mortgage debt from 1950 to 1956 include a rise in farm real estate values which tends to increase the amount which may be borrowed on the security of farm mortgages. The average value per acre of land in mortgaged farms was estimated at \$104 per acre for January 1, 1956, which compares with \$73 per acre 6 years earlier. Second, although the rate of farm transfers according to the United States Department of Agriculture estimates, was lower during the 1950-55 period than during the 1946-49 period, the proportion of sales involving credit financing was higher in the latter period and the ratio of debt to consideration in credit-financed sales was also higher. Third, the availability of farm-mortgage credit appears to have been generally adequate during this period. The Farm Credit Administration estimates that the average annual amount of farm mortgages recorded was \$1,887 million during the years 1950-55, an increase of 38 percent from the average of \$1,363 million during the 1945-49 period.

Farm-mortgage debt on full-owner farms in 1956 was 52 percent higher than in 1950, while there was an increase of 96 percent in the debt on part-owner farms (operator-owned portion only). Debt on land rented or managed by farm operators rose 58 percent in the same 6-year period.

Increases in total farm-mortgage debt were generally higher in the South and West than in the North. On a geographic division basis, the highest rate of increase from 1950 to 1956, 90 percent, occurred in the Mountain States and the lowest increase, 34 percent, was in the New England States.

Average debt per mortgaged full-owner farm in 1956 was \$5,200 compared with an average value of \$19,400 and the owner's equity of \$14,200. For the operator-owned portions of part-owner farms the average debt, value, and equity per farm were, respectively, \$6,300, \$24,700, and \$18,400. The average ratio of debt to value for all mortgaged farms in 1956 was 25.0 percent which was not significantly below the 25.3 figure for 1950. The 1956 debt to value ratios were 27 percent for mortgaged full-owner farms, 25 percent for the operator-owned portions of part-owner farms, and 21 percent for rented and managed land. For each tenure, the ratio of debt to value in 1956 was about the same as in 1950.

## FARM-MORTGAGE DEBT

**Number of owner-operated mortgaged farms.**—The total number of owner-operated mortgaged farms in 1956 (including only the operator-owned portion of part-owner farms) is estimated as 1,278,000, an increase of 9 percent from the 1,176,000 mortgaged in 1950. The increase in the number of mortgaged owner-operated farms occurred notwithstanding a decrease of 8 percent in the total number of owner-operated farms. The proportion of owner-operated farms which were mortgaged was 35 percent in 1956 as compared with 30 percent in 1950 and 44 percent in 1940. As in previous Censuses, the proportion of part-owner farms which were mortgaged in 1956 was higher than that for full owners. In 1956, 42 percent of the part-owner farms had mortgage indebtedness as compared with 33 percent of full-owner farms.

In every geographic division the proportion of owner-operated farms mortgaged was higher in 1956 than in 1950. The lowest proportions of full-owner farms mortgaged in 1956 were in the South Atlantic and East South Central States where only 26 percent were mortgaged. The highest proportion mortgaged was 46 percent in the Pacific States; in the Mountain States, the proportion was 44 percent, and in the New England States, it averaged 42 percent. In the case of part-owner farms (operator-owned portion only), 54 percent were mortgaged in the New England States and 51 percent in the Pacific States, but in the South Atlantic and East South Central States the ratio of mortgaged part-owner farms to the total was only 37 percent.

**Acres in mortgaged farms.**—Total land in mortgaged farms on January 1, 1956, is estimated as 348,687,000 acres, about 30 percent of the total land in all farms. This represents an increase of 45,077,000 acres, or 15 percent, since 1950. Not all of the land in mortgaged farms is actually under mortgage. Data on land actually under mortgage are not available for 1956, but estimates of the United States Department of Agriculture indicated that 81 percent of all land in mortgaged farms was mortgaged in 1950. (Bierman, R. W., *United States Mortgaged Farms, 1950: Estimates by Ratio of Debt to Value*. United States Department of Agriculture, Agr. Res. Serv., ARS 43-13, 54 pp., illus. August 1955.) The ratio of land in mortgaged farms to total land in all farms varied, by tenure in 1956, from 16 percent for rented and managed land to 38 percent for full-owner farms and to 45 percent for operator-owned land in part-owner farms.

The average size of mortgaged full-owner farms in 1956 was 164 acres as compared with 151 acres in 1950. As in previous Censuses, mortgaged full-owner farms were usually larger than those free from mortgage. The average size of unmortgaged full-owner farms in 1956 was 135 acres. Similarly, part owners with a mortgage, as an average, owned and operated 318 acres while those free from debt owned and operated only 288 acres. Mortgaged full-owner farms averaged larger than those free from debt in all geographic divisions except in the Pacific Division. In the case of part owners (operator-owned portion only) the mortgaged farms averaged larger than those free from debt except in the West North Central and Mountain States.

**Value of mortgaged farms.**—The estimated average value per acre of land in mortgaged farms in 1956 was \$104 as compared to \$73 in 1950. Land free from debt had a 1956 average value of \$87 per acre while the average for all land in farms is estimated as \$92. In 1950, the average value per acre for all farms was \$64. The general pattern in this and in previous recent Censuses, for owner-operated lands, is for land in mortgaged farms to have a higher value, on the average, than land in farms free from debt. The estimated value of land actually under mortgage is not shown in this report; estimates of the United States Department of Agriculture are that, in 1950, mortgaged land accounted for 85 percent of the value of all land in mortgaged farms and that mortgaged land averaged 31 percent higher in value per acre than unmort-

gaged land in mortgaged farms. (Bierman, R. W., *United States Mortgaged Farms, 1950: Estimates by Ratio of Debt to Value*. United States Department of Agriculture, Agr. Res. Serv., ARS 43-13, 54 pp., illus. August 1955.)

The average value of mortgaged full-owner farms in 1956 was 35 percent above that for full-owner farms free from debt, and this difference was observed in each geographic division. For the United States, the average value of land and buildings in all full-owner farms was \$16,000, those which were mortgaged were valued at \$19,400, and those free from debt had an average value of \$14,400. The operator-owned portions of mortgaged part-owner farms were valued at \$24,700 on the average while the average value for those free from debt was \$19,800 in 1956.

The proportion of the total value for all farms represented by the value of land and buildings for mortgaged farms rose, for each tenure group, from 1950 to 1956. In 1956, 40 percent of the total value of full-owner farms was in mortgaged farms, and the proportions were 48 percent for the operator-owned portions of part-owner farms and 22 percent for rented and managed land. Differences in these proportions, between tenures, are, in general, similar to those for previous Censuses.

**Interest charges and rates.**—The average interest rate on total outstanding farm-mortgage debt on January 1, 1956, was 4.7 percent which compares with 4.5 percent in 1950 and 1945, 4.6 percent in 1940, and 6.0 percent in 1930. The average rate was 4.8 percent for full owners, 4.7 percent for part owners, and 4.6 percent for farm-mortgage debt secured by rented and managed land. A higher rate for full owners than for other tenures was reported in 1950 when the rate for full owners was 4.5 percent and that for part owners and for tenant- and manager-operated farms was 4.4 percent.

In 1956, by geographic divisions, the highest average interest rates were in the South Atlantic States where the average was 5.1 percent. The lowest rates were in the West North Central States where they averaged 4.4 percent. The regional pattern of farm-mortgage interest rates is similar to that reported for the 1950 and previous Censuses of Agriculture.

Interest rates vary considerably between types of lender. In general, rates of individual and miscellaneous lenders and operating banks were highest followed in order by life insurance companies, the Federal land banks, and the Farmers' Home Administration. Loans of the Farmers' Home Administration reported in the 1956 survey carried an average rate of 3.9 percent. The Farm Credit Administration reports an average rate of 4.1 percent on Federal land bank loans on January 1, 1956. At that time, 9 of the 12 Federal land banks had a rate of 4.0 percent. The Federal land banks of Springfield, Mass. and Baltimore, Md., charged 4.5 percent, and the Federal Land Bank of Columbia, S. C., had a rate of 5.0 percent. Life insurance companies are the most important institutional lenders, and their borrowers reported an average rate of 4.6 percent. All operating banks (commercial, savings, and private) averaged 4.9 percent. Farm-mortgage interest rates for indebtedness held by individuals averaged 4.7 percent and for miscellaneous lenders averaged 5.0 percent. In general, the average rates by lenders display similar regional patterns and tend to be higher in the South and in New England and lowest in the North Central States.

Miscellaneous lenders in the West South Central Division show a relatively low average rate of interest. This is partly the result of various States in this division authorizing veteran's loans at low interest rates. Interest rates in the miscellaneous lender group are also affected by an increased volume of low interest drought relief loans, particularly in Oklahoma and Texas.

In general, interest rates on mortgages held by individuals were lower than those of either banks or miscellaneous lenders. This may be explained, in part, by the practice of many farm operators to sell their farms to members of their own families or for individuals to make loans to relatives at a low rate of interest. Many individuals who sell farm real estate, and receive a mortgage as part of the consideration, are willing to accept a lower rate of interest than lending institutions which rely solely on investment income.

The most common interest rates charged on farm mortgages outstanding January 1, 1956, were 4 percent, 5 percent, and 6 percent. In the case of full owners with mortgaged farms, 37 percent reported an interest rate between 4.00 and 4.99 percent, 23 percent a rate between 5.00 and 5.99 percent, and 29 percent a rate between 6.00 and 6.99 percent. Only 5 percent of all full-owners reported an interest rate of 7.0 percent or more and only 6 percent reported less than 4.0 percent. The distribution of mortgaged farms of part owners by interest rates was similar to that of full owners. The proportions of farms reporting higher interest rates tended to be larger in the Southern and Western States and smaller in the North Central States than in other areas.

A comparison of the proportions of full owners with mortgaged farms reporting specified rates of interest on farm mortgages from 1920 to 1956 shows a decline in the proportions in the higher-rate groups and an increase in the proportions in the middle- and lower-rate groups. These data appear in Table C. The most noticeable decrease is in mortgages with rates of 7.00 percent or more; 29 percent of mortgaged full-owner farms were in this group in 1920 but by 1956 only 5 percent had this rate. Similarly, only 3 percent paid less than 5.00 percent interest in 1920, but the proportion was 46 percent in 1951 and 43 percent in 1956.

TABLE C.—PERCENTAGE DISTRIBUTION OF MORTGAGED FULL-OWNER FARMS, BY RATE OF INTEREST, FOR THE UNITED STATES: 1956, 1951, 1940, AND 1920

Interest rate	1956	1951 <sup>1</sup>	1940	1920
	Percent	Percent	Percent	Percent
All mortgaged full-owner farms.....	100	100	100	100
Under 4.00 percent.....	6	7	8	(2)
4.00 to 4.99 percent.....	37	39	21	3
5.00 to 5.99 percent.....	23	24	30	23
6.00 to 6.99 percent.....	29	25	31	45
7.00 percent and over.....	5	5	10	29

<sup>1</sup> Estimates of the United States Department of Agriculture.  
<sup>2</sup> Less than 0.5 percent.

**Debt held by principal lenders.**—While total farm-mortgage debt increased 62 percent from 1950 to 1956, the rate of increase varied considerably by type of lender. The highest rate of increase was the 94 percent shown by insurance companies. Other increases by type of lender were: All operating banks, 44 percent; Farmers' Home Administration, 47 percent; Federal land banks, 53 percent; and the residual group of individual and miscellaneous lenders, 59 percent. Of the increase of \$3,487 million in total farm-mortgage debt from 1950 to 1956, 39 percent or \$1,374 million is accounted for by increased holdings of individual and miscellaneous lenders. Holdings of life insurance companies increased \$1,099 million and made up 32 percent of the total increase, and the increase of \$515 million for Federal land banks was 15 percent of the total increase.

Farm-mortgage holdings of the Federal land banks (including loans of the Federal Farm Mortgage Corporation transferred to the land banks in 1955) increased in nearly every State during

the 1950-56 period. The largest relative increase was 71 percent in the Mountain Division and the smallest was 19 percent in New England. In 1956, Federal land bank loans were most important in the West North Central and West South Central divisions; there they made up 20 percent of the total.

Life insurance company farm mortgage holdings were most important in the West South Central, West North Central, and Mountain Divisions accounting for 40, 33, and 31 percent, respectively, of all farm mortgage debt in these divisions. The greatest increase in insurance company mortgages, 217 percent, occurred in the South Atlantic Division. In 5 of the 9 geographic divisions, the increase in farm mortgages held by insurance companies was more than 100 percent from 1950 to 1956.

Farm mortgage loans of all operating banks, as a percentage of total mortgage debt, was highest in New England with 27 percent. The West South Central Division showed the largest percentage increase in bank loans, 68 percent over 1950.

The all other lender group (including individuals and miscellaneous lenders) was the largest holder of farm-mortgage debt in all divisions except the West South Central. These lenders held 81 percent of all farm-mortgage debt in New England, 78 percent in the Middle Atlantic Division, and 72 percent in the Pacific Division. Since 1950, the greatest increase in debt held by this group of lenders, 81 percent, occurred in the South Atlantic Division.

**Ratio of debt to value.**—The largest number of mortgaged farms (full owners and part owners combined) in every geographic division fell into the ratio of debt-to-value groups of 10-19 percent and 20-29 percent. This was also true for full-owner and part-owner farms individually with the exception of the South Atlantic Division where the number of full-owner farms was highest in the under-10 percent and the 10-19 percent ratio of debt-to-value groups. The number of mortgaged farms with ratio of debt to value of 30 percent or higher generally declined as the ratios increased so that only 5 percent of all mortgaged farms had ratios of 80 percent or above.

Land in mortgaged farms was distributed among the ratio of debt-to-value groups in nearly the same proportions as number of farms. The 10-19 percent group and the 20-29 percent group contained the largest number of acres in most divisions. There appeared to be a negative relationship between average number of acres per mortgaged farm and ratio of debt to value. Farms with low ratios of debt to value tended to be larger than farms with high debt-to-value ratios.

Value of land and buildings on mortgaged farms was highest in the under-10 percent and the 10-19 percent ratio of debt-to-value groups. Average values per farm and per acre tended to decline as the ratio of debt to value increased.

The debt-to-value comparisons would indicate that high debt ratios occur most frequently among farms having relatively small acreages and low total values.

**Mortgage debt by age of operator.**—The available data indicate that farm operators, whose farms are mortgaged, are somewhat younger than those whose farms are free from mortgage indebtedness. The median age of all full-owners in 1954 was 54.0 years as compared with 47.8 years for those reporting mortgage indebtedness in 1956. The age group under 35 shows a higher proportion of mortgaged farms than any other group. As the age of the operator increases, the percentage of the mortgaged farms decreases. For full-owners, 56.8 percent of those under 35 years of age were operating mortgaged farms as compared with 15.6 percent of those 65 years or older.

## FARM-MORTGAGE DEBT

The distribution, by age, for mortgaged farms operated by part-owners is similar to that for full-owners. The median age of 44.5 for part-owners reporting mortgage indebtedness compares with the median age of 47.7 for all part owners.

The increased proportion of mortgaged farms in the under-35 age group, in 1956 as compared with 1940, reflects, in part, the increasing requirements and opportunities for use of capital by beginning farm-operators and also their willingness and ability to incur a mortgage for the purchase or expansion of their farm enterprise. It may also indicate a more rapid movement of young farmers from tenant to owner-operator status.

The concentration of the amount of mortgage debt among younger operators is further shown in Tables 15 and 16. Average mortgage debt per farm and per acre was highest in the under-35-years-of-age group. Ratio of debt to value and average debt declined as age of operator increased. Average size and average value of mortgaged farms in each age group generally increased with age of operator.

Mortgage debt by economic class of farm.—Table D shows the proportion of mortgaged full-owner farms and part-owner farms in each economic class. Since gross income is the chief determinant of economic class, the data in that table reveal a high positive correlation between gross income per farm and the occurrence of mortgage debt. These data and those in Table 17 indicate that, for full-owners, commercial farms represent 58 percent of all farms

TABLE D.—NUMBER OF FULL-OWNER AND PART-OWNER FARMS AND PROPORTION MORTGAGED, BY ECONOMIC CLASS OF FARM, FOR THE UNITED STATES: 1956

Economic class of farm	Full-owner farms			Part-owner farms		
	Total number	Number mortgaged	Percent mortgaged	Total number	Number mortgaged	Percent mortgaged
All farms.....	2,744,708	909,239	33.1	868,180	368,269	42.4
Commercial farms.....	1,594,192	602,756	37.8	766,233	337,537	44.6
Class I.....	47,195	22,383	47.4	51,206	25,709	50.2
Class II.....	158,191	73,803	46.7	149,427	72,903	48.8
Class III.....	296,721	137,351	46.3	190,043	98,138	49.3
Class IV.....	391,879	168,612	43.0	177,593	79,570	44.8
Class V.....	406,222	148,861	36.6	125,886	46,541	37.0
Class VI.....	293,984	61,746	21.0	53,078	14,676	27.6
Other farms.....	1,150,516	306,483	26.6	111,947	30,732	27.5
Part-time.....	419,726	139,352	33.2	66,635	20,985	31.5
Residential.....	730,606	167,131	22.9	45,272	9,747	21.5
Abnormal.....	184			40		

but account for 66 percent of all mortgaged farms. Likewise, from Table D and Table 18, it is shown that commercial farms account for 87 percent of all part-owner farms and 92 percent of mortgaged farms.

The average size of farm, the average value of land and buildings, and the average amount of mortgage debt for mortgaged farms tended to be higher for farms with relatively high gross income. Average size, value, and debt per farm and per acre showed a rather constant decrease from Economic Class I through Economic Class VI.

A negative correlation exists, in a limited degree, between ratio of debt to value and gross income per farm. Farms with high gross income generally had lower debt-to-value ratios than did low-income farms. The relatively large debt per farm and per acre among high-income farms was apparently more than offset by the high value of land and buildings in these economic classes. Debt loads, as measured by ratios of debt to value, were usually highest among relatively low-income farms.

Mortgage debt by type of farm.—Tables E and 19 contain data for 1956 for mortgaged full-owner commercial farms by type of farm. There are no comparable data for earlier years. Without these, observations on trends cannot be made. It is apparent that certain types of farms are located predominantly in one region and are thus influenced by characteristics of that region.

Table E shows the proportion of full-owner commercial farms mortgaged by type of farm. The data in that table indicate as much of a variation in proportion of farms mortgaged for a given type among regions as between types in the same region. The highest proportion of mortgaged farms for each type, with one exception, is in the West. The South had the lowest proportion of mortgaged farms with the exception of one type.

Variations in average size of farm, average value of land and buildings, and average mortgage debt by type of farm, as shown in Table 19, reflect differences in the characteristics of various types of mortgaged farms in each geographic division. For the United States, two types, field-crop farms other than vegetable and fruit-and-nut and livestock farms other than dairy and poultry, account for more than one-half of all land, value, and debt in mortgaged full-owner commercial farms.

Ratio of debt to value, for the United States as a whole, shows less variation than average size, value, and debt by type of farm. Dairy farms have the highest ratio of debt to value, 31.8 percent, while vegetable farms have the lowest with a 22.0 percent ratio.

TABLE E.—NUMBER OF FULL-OWNER COMMERCIAL FARMS WITH PROPORTION MORTGAGED BY TYPE OF FARM, FOR THE UNITED STATES AND REGIONS: 1956

Type of farm	The United States			The North			The South			The West		
	Total number of full-owner farms	Number mortgaged	Percent mortgaged	Total number of full-owner farms	Number mortgaged	Percent mortgaged	Total number of full-owner farms	Number mortgaged	Percent mortgaged	Total number of full-owner farms	Number mortgaged	Percent mortgaged
Full-owner farms.....	2,744,708	909,239	33.1	1,189,462	444,482	37.4	1,275,226	339,219	26.6	280,020	125,538	44.8
Commercial farms, total.....	1,594,192	602,756	37.8	837,219	330,061	39.4	586,958	190,195	32.4	170,015	82,600	48.5
Field-crop farms other than vegetable and fruit-and-nut.....	460,535	168,065	36.6	162,821	64,573	39.7	272,062	90,957	33.4	25,652	13,135	51.2
Cash-grain.....	191,244	75,380	39.4	150,065	59,719	39.8	25,222	9,307	36.9	15,957	6,354	39.8
Cotton.....	127,761	49,768	39.0	2,159	975	45.2	120,443	44,808	37.2	6,159	3,985	77.2
Other field-crop.....	141,530	43,517	30.7	10,597	3,879	36.6	126,397	36,842	29.1	4,536	2,796	61.6
Vegetable farms.....	16,937	6,915	40.8	8,228	3,516	42.7	5,715	1,830	32.0	2,994	1,569	52.4
Fruit-and-nut farms.....	67,085	24,574	36.6	13,229	4,813	36.4	16,983	4,926	29.0	36,873	14,835	40.2
Dairy farms.....	338,042	143,290	42.4	254,604	107,085	42.1	55,163	21,039	38.1	28,285	15,166	53.6
Poultry farms.....	128,002	50,424	39.4	62,831	24,449	38.9	46,428	15,778	34.0	18,743	10,197	54.4
Livestock farms other than dairy and poultry.....	383,908	133,044	34.7	226,768	83,991	37.0	121,919	34,165	28.0	35,231	14,888	42.3
General farms.....	169,831	66,130	38.9	95,789	37,110	38.7	56,817	18,093	31.8	17,225	10,927	63.4
Primarily crop.....	39,324	17,265	43.9	13,024	4,814	37.0	17,794	7,308	41.1	8,506	5,143	60.5
Primarily livestock.....	37,259	13,480	36.2	29,528	11,432	38.7	6,101	1,235	20.2	1,630	813	49.9
Crop and livestock.....	93,248	35,385	37.9	53,237	20,864	39.2	32,922	9,550	29.0	7,089	4,971	70.1
Miscellaneous farms.....	29,852	9,714	32.5	12,959	4,524	34.9	11,881	3,407	28.7	5,012	1,783	35.6
Other farms, total.....	1,150,516	306,483	26.6	352,243	114,421	32.5	688,268	149,024	21.7	110,005	43,038	39.1