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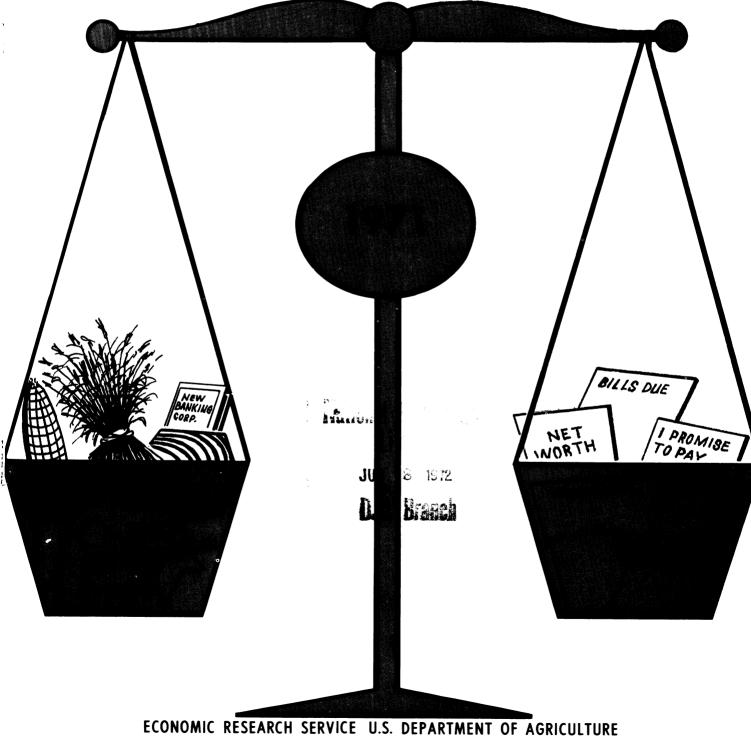
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# THE BALANCE SHEET of the FARMING SECTOR



AGRICULTURE INFORMATION BULLETIN NO. 356

### Abstract

, Farm proprietors' assets totaled \$318.9 billion on January 1, 1971, while farm debt outstanding totaled \$61.1 billion, leaving equities of \$257.8 billion. The ratio of farm debt to value of assets was 19.2 percent, up from 18.8 percent a year earlier. Advances in the values of farm real estate made up over half of 1970's \$9.3 billion gain in farm asset value; higher value of machinery and motor vehicles largely accounted for remaining growth. Farm non-real estate debt grew \$2.7 billion during 1970, compared with \$1.1 billion for farm real estate debt. Farmers were reluctant to take long-term real estate loans at the prevailing high interest rates. Realized net farm income dropped to \$15.6 billion-down 6.5 percent from 1969.

Key Words: Balance sheet, farm assets, debt, credit, credit sources, equity.

### Foreword

The Balance Sheet of the Farming Sector brings together major asset and liability accounts in one statement. This is the 27th issue in this series; comparable annual estimates are available beginning with 1940.

The name of the publication was changed in 1969 from the Balance Sheet of Agriculture because "agriculture" in recent years has come to denote more than farm interests of operators and landlords. Now the term "agriculture" is also frequently meant to include farm-related interests of many companies and manufacturers who supply production inputs or process farm products. The balance sheet depicts only farming assets, debts, and equities of farm operators and landlords.

The first section of this publication presents farm assets and liability data. The second analyzes subjects which strongly influence year-to-year changes in balance sheet values: the economic situation, farm income, and farm production assets. Historical balance sheets for 1940 and 1945-71 are at the end of the section. The third section discusses farm mortgage loans by type of farming area.

Data are aggregates for the contiguous 48 States. There is no class separation of debts by owner-operator, tenant, and landlord, and values of commercial farms are not separated from those of noncommercial units. Farms with debt are not distinguished from those which are debt-free.

Data on farmland and building values result from annual March 1 surveys. However, since the March 1 farm real estate value has been consistently used here as the January 1 value, the trend is not affected.

Except for outstanding farm loans reported by the institutional lenders and the Commodity Credit Corporation, items in the balance sheet required varying degrees of estimating. Some relatively minor items were excluded because of inadequate data.

Data on livestock inventories were prepared under the direction of Emmett B. Hannawald, Agricultural Estimates Division, Statistical Reporting Service. Charles E. Burkhead of that Division directed the preparation of crop inventory data. Mardy Myers, William C. Paddock, and Clinton F. Wells of the Economic and Statistical Analysis Division, Economic Research Service, were responsible for the data on farm income and value of farm machinery. Data on household equipment and furnishings were prepared by Lucile F. Mork under the direction of Jean L. Pennock, Consumer and Food Economics Research Division, Agricultural Research Service.

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#### THE BALANCE SHEET OF THE FARMING SECTOR, 1971

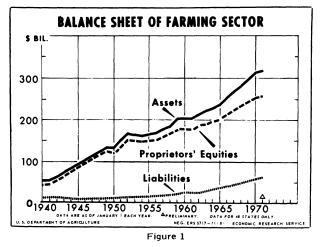
By Carson D. Evans, Forest G. Warren, Philip T. Allen, Allen G. Smith, and Robert D. Reinsel

#### THE 1971 BALANCE SHEET IN GENERAL

Farm proprietors owned equity of \$257.8 billion in their farm assets on January 1, 1971 (table 1 and fig. 1). Equity rose \$6.3 billion from a year earlier, the smallest gain since 1964.

Farm asset value increased 3 percent during 1970 to reach \$318.9 billion. Assets had risen 3.7 percent in 1969. In terms of constant dollars, (1947-49) the 1970 gain of \$9.3 billion was equivalent to only \$1.5 billion.

Farm debt including Commodity Credit Corporation (CCC) loans climbed to \$61.1 billion by January 1, 1971. The gain of \$3.0 billion during 1970 was \$0.5 billion less than in 1969.



Farm real estate value increased \$5.8 billion in 1970, reaching \$214.0 billion at the beginning of 1971. The 2.8—percent gain was slightly more than in 1969 but was far below gains of the mid-1960's. The slower rise in 1970 partly reflected farmers' reluctance to bid up the price of farmland in the face of high interest rates. Land usually paid for by income from farming activities, from the Corn Belt west', gained less in value than land in the East and South, which was more influenced by values for nonfarm uses.

Livestock and poultry value on farms January 1, 1971, was \$23.7 billion, only \$0.2 billion more than at

the beginning of 1970, much less than the \$3.3 billion gain during 1969. Cattle and hog prices increased sharply in 1969, but in 1970, cattle values increased little while values of other reported species declined. Hog values showed the greatest drop, offsetting most of the gain in cattle values. Fluctuations in inventories and prices make trends in both total livestock values and total crop values much less stable than for other types of assets.

The value of farm machinery and motor vehicles on farms rose to \$36.6 billion on January 1, 1971. The 7.4—percent increase in 1970 was more than double the rise in 1969. All major classes of motor vehicles and machinery increased in value in 1970.

Expenditures in 1970 for purchases of farm machinery and motor vehicles increased 9 percent, after a slight increase the year before. Spending on all major items increased, but machinery other than tractors accounted for most of the gain.

Crop inventories owned by farmers on January 1, 1971, were valued at \$10.7 billion, slightly less than the record \$10.9 billion on hand a year earlier.

The value of corn and soybeans on hand held the total value at a high level. Higher prices more than offset substantially smaller inventories of both crops. The volume of farmer-owned corn, soybeans, wheat, and cotton stored off farms under CCC loan was smaller than in recent years.

The value of household equipment and furnishing at the start of 1971 totaled \$9.7 billion, 1 percent more than a year earlier. A declining number of farm households continued to be overbalanced by increased value per household.

Liquid assets owned by farmer totaled an estimated \$16.1 billion, including bank demand and time deposits, currency, and U.S. savings bonds. Most of a \$0.5 billion gain in 1970 accrued to time deposits. Holdings of other liquid assets changed only slightly.

Net worth of farmer cooperatives amounted to \$8.1 billion on January 1, 1971. The increase of 4.8 percent from a year earlier was similiar to most years in the 1960's. Nearly half of the net worth was in marketing and purchasing cooperatives. Rural electric and farmer-owned credit cooperatives accounted for another two-fifths.

Farm debt outstanding January 1, 1971, amounted to 61.1 billion. The 5.3- percent rise in 1970 was the smallest increase in the last decade. The slower pace in debt rise reflected a second year of relative inactivity in new farm mortgage lending.

<sup>&</sup>lt;sup>1</sup>The Corn Belt and other farm production regions referred to in this report consist of the following States:

Northeast: Maine, N.H., Vt., Mass., R. I., Conn., N. Y., N. J., Pa., Del., and Md., Lake States: Mich., Wis., and Minn., Corn Belt: Ohio, Ill., Ind., Iowa, and Mo., Northern Plains: N.D., S.D., Nebr., and Kan., Appalachian: Va., W. Va., N.C., Ky., and Tenn., Southeast: S.C., Ga., Fla., and Ala., Delta States: Miss., Ark., and La., Southern Plains: Okla., and Tex., Mountain: Mont., Wyo., Idaho, Colo., N. Mex., Ariz., Utah, and Nev., Pacific: Wash., Ore., and Calif.

							Net	change
Item	1940	1950	1960	1965	1970 <sup>2</sup>	1971 <sup>3</sup>	1970 to 1971	1970 to 1971 <sup>4</sup>
ASSETS	Bil.	Bil.	Bil.	Bil.	Bil.	Bil.	Bil.	
	dol.	dol.	dol.	dol.	dol.	dol.	dol.	Pct
Physical assets:								
Real estate	33.6	75.3	130.2	160.9	208.2	214.0	5.8	2.8
Non-real estate:								
Livestock and poultry	5.1	12.9	15.2	14.5	23.5	23.7	.2	1.1
Machinery and motor vehicles	3.1	12.2	22.2	25.5	34.1	36.6	2.5	7.4
Crops stored on and off farms <sup>5</sup>	2.7	7.6	7.7	9.2	10.9	10.7	2	9
Household equipment and furnishings	4.2	8.6	9.6	8.6	9.6	9.7	.1	.9
Financial assets:								
Deposits and currency	3.2	9.1	9.2	9.6	11.9	12.4	.5	4.6
U.S. savings bonds	.2	4.7	4.7	4.2	3.7	3.7	.0	.0
Investments in cooperatives	.8	2.1	4.3	6.0	7.7	8.1	.4	4.8
Total	52.9	132.5	203.1	238.5	309.6	318.9	9.3	3.0
CLAIMS								
Liabilities:								
Real estate debt	6.6	5.6	12.1	18.9	28.4	29.5	1.1	3.9
Excluding Commodity Credit Corporation	3.0	5.1	11.5	17.1	27.0	29.7	2.7	10.0
Commodity Credit Corporation <sup>6</sup>	.4	1.7	1.2	1.5	2.7	1.9	8	-29.9
Total liabilities	10.0	12.4	24.8	37.5	58.1	61.1	3.0	5.3
Proprietors' equities	42.9	120.1	178.3	201.0	251.5	257.8	6.3	2.5
Total	52.9	132.5	203.1	238.5	309.6	318.9	9.3	3.0

<sup>1</sup> For 48 States. For other years after 1940, see table on page 29. <sup>2</sup> Revised. <sup>3</sup> Preliminary. <sup>4</sup> Computed from unrounded data. <sup>5</sup> All crops held on farms including crops under loan to Commodity Credit Corporation, and crops held off farms as security for CCC loans. On Jan. 1, 1971, the latter totaled \$722 million. <sup>6</sup> Nonrecourse CCC loans secured by crops owned by farmers and included as assets in this balance sheet.

Farm real estate debt outstanding on January 1, 1971, was \$29.5 billion. Sluggishness in new farm mortgage lending in 1970 accounted for the unusually low 3.9-percent increase in debt.

Several factors slowed the gain in long-term farm loans. Farmland available for purchase was relatively scarce and high priced. Also, interest rates on new farm real estate loans were unusually high. Interest rates on new loans made by life insurance companies, for example, reached a peak of 9.4 percent in the fourth quarter.

Federal land banks held \$7.1 billion in farm loans (48 States) at the beginning of 1971, up 7 percent from a year before. Life insurance companies' holdings of farm mortgage loans were \$5.6 billion, about \$0.1 billion less than at the beginning of 1970. Operating banks held \$4.4 billion in long-term farm loans, up 8 percent. Individuals and other miscellaneous lenders increased their holdings of farm mortgage loans to \$12.0 billion and held about 41 percent of all farm mortgage loans outstanding.

Short-and intermediate-term farm loans (excluding \$1.9 billion in CCC loans) outstanding at the beginning of 1971 totaled \$29.7 billion, up 10 percent or \$2.7 billion, the largest increase on record. This type of debt has been accelerating since 1967.

Higher farm operating costs, including greater use of purchased inputs, brisk activity in purchasing feeder cattle, and substitution of short- and intermediate-term credit for long-term loans contributed to the extensive use of non-real estate farm credit in 1970.

Interest rates during the first half of 1970 were at historic highs in many areas. Rates dropped a little late in the year but not enough in most instances to influence borrowings appreciably.

Equity owned by farm proprietors in farm assets grew 2.5 percent in 1970 to \$257.8 billion. Growth was the slowest since 1960, when no gain occurred. The sudden slowdown in rate of equity accumulation resulted from an unusually small increase in asset value.

Item	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955
ASSETS								Billion	dollars							
Physical assets:																
Real estate	70.3	70.6	70.9	71.2	71.6	71.9	71.7	72.4	73.2	74.1	74.8	75.5	76.1	76.9	77.5	78.0
Livestock <sup>2</sup>	12.9	13.1	13.9	15.0	15.8	14.7	14.3	13.7	13.0	12.9	13.1	13.6	14.3	14.5	14.3	14.6
Machinery and motor vehicles	5.5	5.6	6.4	5.9	5.4	5.2	5.5	6.0	7.4	9.1	11.0	12.5	13.7	14.0	15.0	15.1
Crops stored on and off farms <sup>3</sup>	7.6	8.7	8.5	9.7	8.4	9.0	8.2	8.1	7.0	9.6	9.3	8.5	8.2	8.9	9.9	10.3
Household equipment and furnishings .	8.3	8.4	8.5	7.9	7.5	7.4	7.6	8.1	8.4	8.9	9.0	9.4	9.5	9.2	9.2	9.6
Financial assets:																
Deposits and currency	6.5	6.8	7.2	8.4	9.1	10.3	11.9	11.3	9.4	9.2	8.9	8.1	7.9	8.1	8.3	8.3
U.S. savings bonds	.5	.7	.9	1.7	3.0	4.4	5.3	4.7	4.1	4.4	4.6	4.2	3.9	4.0	4.2	4.4
Investments in cooperatives	1.6	1.7	1.6	1.6	1.6	1.6	1.7	1.7	1.6	1.8	2.0	2.0	2.1	2.3	2.5	2.8
Total <sup>4</sup>	113.2	115.6	117.9	121.4	122.4	124.5	126.2	126.0	124.1	130.0	132.7	133.8	135.7	137.9	140.9	143.1
	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	197
							- Billion	ı dollars								
hysical assets:																
Real estate	78.4	78.8	79.2	79.4	79.7	80.0	80.3	80.6	80.9	81.2	81.5	81.8	82.0	82.2	82.3	82.
Livestock <sup>2</sup>	14.7	14.2	13.9	14.5	14.6	14.6	14.9	15.4	15.7	15.6	15.5	15.6	15.8	16.0	16.2	16.9
Machinery and motor vehicles	15.2	14.9	14.5	14.7	14.6	14.2	14.3	14.1	14.8	15.2	15.8	16.6	17.1	17.3	17.3	17.3
Crops stored on and off farms <sup>3</sup>	10.2	9.7	10.4	12.3	10.6	11.3	11.4	11.8	11.9	10.4	11.8	11.1	12.3	13.8	13.8	14.9
Household equipment and furnishings .	10.0	9.6	9.5	9.4	9.2	8.7	9.0	8.9	8.9	8.6	8.6	8.3	8.6	8.8	8.6	8.4
inancial assets:																
Deposits and currency	8.5	8.1	8.1	8.2	7.5	7.0	7.0	7.1	7.1	7.3	7.5	7.6	7.9	7.9	7.9	7.9
U.S. savings bonds	4.7	4.4	4.4	4.3	3.8	3.7	3.6	3.4	3.3	3.2	3.1	3.0	2.8	2.6	2.5	2.4
Investments in cooperatives	3.0	3.1	3.2	3.3	3.6	3.8	4.0	4.1	4.4	4.6	4.8	4.9	5.1	5.0	5.1	5.
Total <sup>4</sup>	144.7	142.8	143.2	146 1	143.6	143 3	144.5	145.4	147.0	146.1	148.6	148.9	1516	1536	1537	155 /

<sup>1</sup>Data for 48 States only.
 <sup>2</sup>Beginning with 1961, horses and mules are excluded.
 <sup>3</sup>Includes all crops held on farms and crops held off farms by farmers as security for CCC loans.
 <sup>4</sup>Totals of rounded data.

Farm debt also rose at a slower rate than in the past several years, but faster than farm asset value.

The ratio of farm proprietors' equity to value of assets was 80.8 percent, only a slight drop from a year earlier. On January 1, 1965, the equity-asset ratio was 84.3 percent and on January 1, 1960, it was 87.8 percent.

The first half of 1971 saw continued growth in farmer-owned assets, debts, and equity. The value of farm real estate climbed at about the same rate as in the last half of 1970. Reports indicated fewer farm equipment purchases were made in 1971 but units were larger and total value increased. Livestock value per head for most species held close to a year earlier. The index of crop production rose an estimated 11 percent in 1971.

Cash receipts from farm marketings for January June 1971, \$21.7 billion, were barely above the first half of 1970. A downturn in livestock receipts was offset by an increase in crop receipts.

Farm debt continued to climb and farm real estate lending activity increased. In the first half of 1971, Federal land banks made new loans of \$63 million, 34 percent above the same period in 1970. Life insurance companies evidenced renewed farm lending activity by increasing the volume of new farm mortgage loans by 48 percent over the first half of 1970. Production credit associations made 15 percent more loans in the first half of 1971 than the first half of 1970 and on June 30, 1971, held 17 percent more loans than a year earlier. Banks also experienced continuing strong demand for farm loans in 1971. Interest rates on farm loans were lower by mid-1971 than 6 months earlier. Federal land banks charged 7.5-8.0 percent on new loans in June, compared with 8.0-8.5 percent in December 1970. Life insurance companies averaged 8.4 percent interest on new loans in second quarter 1971 compared with 9.4 percent in fourth quarter 1970.

Most banks and Production Credit Associations (PCA's) were charging 7-8 percent in June 1971, down 1 percentage point from December 1970. On July 1, 1971, the Farmers Home Administration (FHA) dropped the interest rate on farm operating loans to 6.38 percent from the 7.88 percent in effect since July 1, 1970. The new rate was even lower than the 6.63-percent rate in effect in June 1970. However, there were indications in many areas that interest rates on farm loans may have bottomed out in the summer of 1971.

Although money for farm loans could not be called plentiful, farm operating and real estate loans were generally available at prevailing rates during the first half of 1971 to borrowers with reasonable management ability and repayment capacity.

Most of the increase in farm asset value during 1970 was due to price inflation. Assets rose \$9.4 billion in current dollars but only \$1.5 billion in constant dollars (1947-49 prices) (table 3).

All of this real gain in farm asset values attributed to physical assets other than farm real estate (fig. 2).

Item	1947 <b>-</b> 49	1970	1971	Net inc	crease	Percentage distri- bution of net increase		
	average			1947 <b>-</b> 49 to 1971	1970 to 1971	1947-49 to 1971	1970 to 1971	
	Billion <u>dollars</u>	Billion dollars	Billion dollars	Billion <u>dollars</u>	Billion dollars	Percent	Percent	
Total value of assets, current prices Total assets, valued at	126.7	309.6	318.9	192.2	9.3	100	100	
1947 <b>-</b> 49 prices	126.7	153.7	155.2	28.5	1.5	15	16	
Increase in value of assets due to higher prices	0	155.9	163.7	163.7	7.8	85	84	

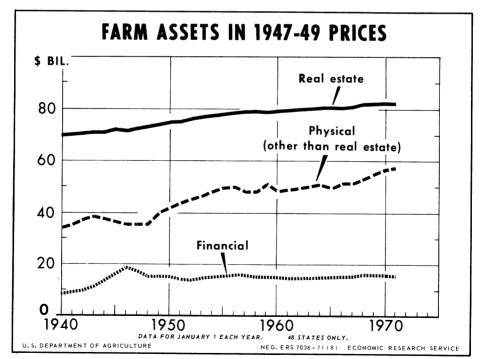


Table 3.-Estimated sources of major changes in the total value of agricultural assets, 1947-49, 1970, and 1971

Figure 2

#### PHYSICAL ASSETS

#### FARM REAL ESTATE

The value of farm real estate on March 1, 1971, was \$214 billion—\$5.8 billion higher than a year earlier. The value of buildings on farms remained at 19 percent of the total value of farmland and buildings. With further gains in average farm size and increasing farmland prices, the average value of land and buildings per farm reached \$82,300—up \$3,300 from March 1970. Average value per acre increased 86 to \$199.

Average value per acre of farm real estate increased in all regions except the Northern Plains and Pacific. Among individual States, changes in value ranged from increases of 12 percent in Delaware and Alabama to decreases of 3 percent in Arizona and Kansas (fig. 3).

Among other factors, national monetary policy and its impact on major lenders affected farm real estate markets throughout the country in the year ended March 1, 1971. In the first 8 months of the period, the demand for farmland was somewhat soft because of monetary restraints adopted in 1969. However, expansion of the money supply beginning in 1970 resulted in increased funds being made available to commercial lenders for farm loans. The increased supply of funds brought lower interest rates on farm real estate loans by the last quarter of 1970 in most areas and stimulated an upturn in demand for farmland. According to respondents in an Economic Research Service survey, the rate of transfers per thousand farms averaged 42.8 in the year ended March 1, 1971-5 percent higher than the record low of 40.9 in the previous survey.

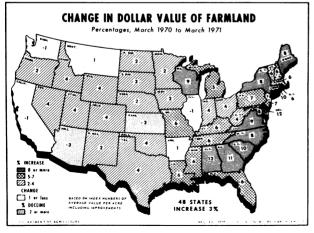


Figure 3

Change in the financing of transfers was an important development in the farm real estate market. Although credit was tight throughout much of the year, the percentage of sales reported as credit sales increased from 78 percent in the year ended March 1, 1970, to 88 percent for the year ended March 1, 1971.

The ratio of debt to purchase price of credit sales fell from 74 percent in March 1970 to 65 percent in March 1971. A drop in the ratio is normal for a period of tight credit since lenders tend to ration available funds by requiring a larger downpayment on the property. The requirement of a proportionately higher downpayment, along with prevailing higher than usual rates of interest, caused many buyers to drop out of the farmland market in early 1970.

Commercial banks and Federal land banks reportedly increased their proportion of credit extended for farm real estate purchases by 10 and 8 percentage points respectively, over a year earlier (table 4). The dollar volume of farm real estate loans made by insurance companies during the last quarter of 1970 was larger than in the last quarter of the previous year. However, the total volume of credit extended by insurance companies between March 1, 1970, and March 1, 1971, declined from the previous 12 months. Commercial banks were most active in the Northeast and Appalachian States. In contrast, Federal land banks increased their activity most in the Pacific States and Northern Plains.

Of approximately \$2.4 billion debt incurred in all voluntary and estate sales in the 1970/71 period, 43 percent was seller financed. This compares with 61 percent seller financed in the year that ended March 1, 1970. The sharpest reductions in seller financing occurred in the Northeast, Corn Belt, and Northern Plains—drops of 21 percent in each region.

After a year of sharp expansion, farmland transfers using land contracts declined to 37 percent of all credit transfers from 47 percent in the previous year.

The relationship of the farm real estate value index and the consumer price index (CPI) has shifted in recent years. Consumer prices have been rising at a more rapid pace than farmland values since 1968. For example, for March 1970—March 1971, the CPI increased 4.7 percent while the farmland value index gained 3 percent. Hence, owners of farmland generally sustained a paper loss in current purchasing power of their real estate assets, although the money value increased.

In areas where farmland values were down, owners of farm real estate suffered both a loss in current dollars and a decrease in the real value of their assets. The relationship between movements of the CPI and farm real estate values is not expected to prevail for an extended period of time. However, should the inflationary trend in the economy persist along with a slower rise in farmland and prices, some farmland owners will find that the real value to be gained from sale of their assets will continue to decline. Farm real estate then will no longer be as good a hedge against inflation as it has been for the last 2 decades.

#### Livestock and Poultry

Livestock and poultry on farms January 1, 1971, were valued at \$23.7 billion (table 5). This was only 1 percent above a year earlier, contrasting sharply to the 16—percent increase in 1969. Offsetting shifts in numbers and value per head of several species accounted for smaller than usual change in 1970.

An increase in cattle numbers and value per head raised cattle value to \$21.1 billion at the beginning of 1971 from \$20.1 billion a year earlier. Turkeys was the only other species showing a higher value than in 1970.

Sheep and chickens, excluding commercial broilers, both declined in total value. Both had lower values per head than in 1970. Sheep numbers dropped slightly, while chicken numbers did not increase enough to offset the decline in value per head.

Hogs and pigs accounted for most of the offsetting movement in value of livestock and poultry on farms. Numbers increased about one-fifth, but a drop in average value per head from \$39.00 on December 1, 1969, to \$23.40 a year later caused value to decline nearly 30 percent.

Although there was a sharp drop in the value per head of hogs and pigs on farms December 1, 1970, from a year earlier, cash receipts from hogs during 1970 were a little higher than in 1969. An unusually sharp rise in hog prices in 1969 drew particular attention to the severe drop in 1970.

There was considerable change during 1970 in prices received by farmers for hogs and pigs. A severe drop in hog prices in 1970, coming after an unusually sharp rise in 1969, drew particular attention:

Prices received for hogs and pigs

Manth	Price pe	er 100 lb.	Month	Price per 100 lb.			
Month	1969	1970	WOITEN	1969	1970		
January February March April May June	\$18.70 19.60 20.00 19.70 23.30 24.00	\$26.40 27.50 25.60 23.80 23.00 23.20	July August September October November December	\$24.90 25.90 24.90 24.80 25.00 25.70	\$23.80 21.60 19.70 17.90 15.40 15.10		

The value of livestock and poultry on farms January 1, 1971, made up about 30 percent of the value of physical farm assets other than real estate. The proportion was similar in other recent years.

#### Motor Vehicles and Machinery on Farms

The value of farm motor vehicles and machinery increased 8 percent during 1970 to \$36.6 billion (table 6). This contrasts with a 3-percent increase in 1969. Expenditures for purchases of machinery and motor vehicles increased 9 percent over 1969 to \$6.4 billion. Expenditures for tractors increased slightly in 1970 to \$1.04 billion. Although the number of tractors on farms continued to decline during 1970, total value increased 3 percent (table 7). These trends reflect a continuing move towards larger, more expensive tractors.

Farmers' purchases of automobiles during 1970 increased to \$1.7 billion from \$1.6 billion in 1969 and \$1.5 billion in 1968. Total value of automobiles on farms was up 10 percent for 1970, and value of farm motor trucks increased about 11 percent.

Expenditures for other farm machinery during 1970 amounted to \$2.7 billion, up from \$2.4 billion in 1969 and \$2.3 billion in 1968. The number of grain combines, cornpickers, and picker-shellers continued a slight decline in 1970. Pickup balers and field forage harvesters showed only slight increases in numbers.

#### **Crop Inventories Owned by Farmers**

Inventories of farmer-owned crops were valued at \$10.7 billion on January 1, 1971 (table 8), almost equal to the record January 1970 value of \$10.9 billion. Feed grains made up 43 percent of the total value, hay and forage were 27 percent, and food grains and oil crops each represented about 10 percent.

Although the total value of farmer-owned crops changed little, significant changes occurred for individual commodities. Corn, which in recent years has represented about one-third of the total, increased to 35 percent of the value of all crops in storage. Soybeans also showed an increase, but wheat and cotton values decreased significantly.

Changes in physical inventories and prices of specific commodities affected the changes in crop value. The volume of corn owned by farmers decreased 18 percent, while the price rose 27 cents per bushel, and net change in corn value went up over 2 percent. A higher wheat price, up 11 cents per bushel, was not enough to offset a 25-percent drop in quantity stored; total wheat value declined 19 percent. The 6-percent increase in value of farmer-owned soybeans resulted from a sharp rise of 47 cents per bushel that outweighed an 11-percent drop in inventories.

Year-end prices received by farmers for major storable crops were higher than a year earlier except for potatoes:

Selected farm prices

		Price on De	ec. 15
	Unit	1969	1970
		Do	llars
Wheat	bu.	1.30	1.41
Oats	bu.	.58	.65
Soybeans	bu.	2.30	2.77
Hay Cotton	ton	24.00	25.00
(American upland	lb.	.20	.21
Corn	bu.	1.09	1.36
Potatoes	100 lbs.	2.01	1.94

	Credit source										<b>m</b> -	L - 1
Region	Sel]	Lers	Commen bar		-	ance anies	1	eral banks	Othe lender		Tot	Cal
	1970	1971	1970	1971	1970	1971	1970	1971	1970	1971	1970	1971
						Perc	cent					
Northeast	49	28	25	39			13	16	13	17	100	100
Lake States	77	59	8	17	1	1	4	13	10	<b>10</b>	100	100
Corn Belt	61	40	11	24	7	6	14	21	7	9	100	100
Northern Plains	64	43	8	12	4	6	11	22	13	17	100	100
Appalachian	33	24	23	34	1	2	21	20	22	20	100	100
Southeast	50	30	13	24	2	2	27	28	8	16	100	100
Delta States	40	34	7	16	26	11	15	21	12	18	100	100
Southern Plains	58	41	7	14	12	6	7	16	16	23	100	100
Mountain	64	60	3	5	15	5	9	18	9	12	100	100
Pacific	81	65	1	2	6	3	8	23	4	7	100	100
48 States	61	43	9	19	8	5	12	20	10	13	100	100

Table 4.-Credit-financed farmland transfers: Percentage of credit volume extended by specified lenders, by region, 1970-71 1/

1/Based on farm transfers reported by farm real estate dealers and others in March. Unweighted data. 2/Includes FHA and individuals other than the sellers.

œ

		1969			1970 2/			1971	
	Number	Value per head	Total value	Number	Value per head	Total value	Number	Value per head	Total value
	1,000 head	Dollars	Million dollars	1,000 head	Dollars	Million dollars	1,000 head	Dollars	Million dollars
Cattle and									
calves	109,638	15 <b>8.0</b> 0	17,354	112,048	180.00	20,127	114,310	185.000	21,099
Hogs 3/	57,140	31.80	1,819	56,597	39.00	2,206	67,481	23.40	1,575
All sheep		22.06	468	20,261	24.93	506	19,533	23.50	462
Chickens 4/		1.20	504	432,320	1.35	581	441,387	1.20	535
Turkeys	6,604	4.94	33.	6,769	5.50	37	7,462	5.30	40
Total			20,178			23,457			23,711

#### Table 5.-Livestock and poultry on U.S. farms: Number, value per head, and total value, Jan. 1, 1969, 1970, 1971 1/

1/Excludes Alaska and Hawaii.

2/Revised.

9

3/Beginning with 1970, estimates of hogs and pigs on farms January 1 were discontinued. Hogs and pigs data in 1970 and 1971 relate to December 1 of the preceding year.

4/Excludes commercial broilers.

Source: Livestock and Poultry Inventory, Statistical Reporting Service, U.S. Dept. Agri.

Year	Automobiles	Motortrucks	Tractors	Other farm machinery	Total
		Million	ı dollars		
1940	958	262	503	1,337	3,060
1945	1,144	590	1,557	3,183	6,474
1950	2,313	1,446	2,905	5,502	12,166
1955	4,310	1,898	4,270	8,117	18,595
1960	4,958	2,046	5,400	9,785	22,189
1965	6,448	2,176	5,693	11,205	25,522
1966	6,732	2,387	6,072	11,902	27,093
1967	6,713	2,613	6,683	12,908	28,917
$1968^2 \ldots \ldots \ldots \ldots$	6,933	2,927	7,160	14,346	31,366
$1969^2$	6,965	3,259	7,537	15,203	32,964
1970 <sup>2</sup>	7,144	3,406	7,558	15,965	34,052
<b>1971</b> <sup>3</sup>	7,859	3,791 Per	cent 7,769	17,192	36,611
Percentage gain:		ren			
1970-71	10	11	3	8	8

#### Table 6.-Motor vehicles and specified machines on U.S. farms: Value by class, Jan. 1, specified years, 1940-71<sup>1</sup>

<sup>1</sup>For 48 States only.

<sup>2</sup>Revised.

<sup>3</sup> Preliminary.

#### Table 7.-Motor vehicles and specified machines on U.S. farms, Jan. 1, specified years, 1940-71<sup>1</sup>

Year	Motor- trucks	Tractors <sup>2</sup>	Grain combines	Cornpickers and picker shellers	Pickup balers	Field forage harvesters
			The	ousands		
1940	<sup>3</sup> 1,047	<sup>3</sup> 1,567	190	110		
1945	<sup>3</sup> 1,490	<sup>3</sup> 2,354	<sup>3</sup> 375	168	42	20
1950	<sup>3</sup> 2,207	<sup>3</sup> 3,394	<sup>3</sup> 714	<sup>3</sup> 456	<sup>3</sup> 196	81
1955 <sup>3</sup>	2,675	4,345	980	688	448	202
1960 <sup>3</sup>	2,825	4,685	1,042	792	680	290
1965 <sup>3</sup>	3,023	4,783	910	690	751	316
1966	3,060	4,800	895	675	765	320
1967	3,100	4,815	880	655	775	322
1968 <sup>4</sup>	3,130	4,820	870	640	785	325
1969 <sup>4</sup>	3,160	4,810	860	630	790	327
1970	3,185	4,790	850	620	795	331
1971 <sup>5</sup>	3,195	4,770	845	615	797	335
Porcontago chango			Pe	rcent		
Percentage change 1970-71	(6)	(6)	-1	-1	(6)	1

<sup>1</sup>For 48 States.

<sup>2</sup>Excludes garden tractors.

<sup>3</sup>Census of Agriculture, census dates January 1, 1945; April 1, 1940 and 1950; November 1954, 1959, and 1964. <sup>4</sup>Revised. <sup>5</sup>Preliminary. <sup>6</sup>Less than 0.5 percent.

Сгор	1945	1950	1955	1960	1965	1967	1968	1969	1970	1971
				M	illion doll	lars			· · · · · -	
Corn Other feed grains <sup>3</sup>	2,191 711	2,736 740	2,889 1,082	2,884 838	3,168 776	3,723 820	3,521 764	3,564 896	3,612 885	3,705 917
Total	2,902	3,476	3,971	3,722	3,944	4,543	4,285	4,460	4,497	4,622
Wheat Other food grains <sup>4</sup>	729 25	1,063 23	1,218 71	911 55	635 67	733 96	832 106	1,089 145	1,352 134	1,091 127
Total	754	1,086	1,289	966	702	829	938	1,234	1,486	1,218
Soybeans Other oil crops <sup>5</sup>	87 84	137 134	419 100	419 51	535 110	1,159 51	1,103 49	1,439 65	1,158 70	1,232 60
Total	171	271	519	470	645	1,211	1,152	1,504	1,228	1,292
Hay and forage <sup>6</sup> Cotton       Vegetables <sup>7</sup> Tobacco	1,805 565 157 270	1,758 537 191 186	2,101 1,379 133 180	2,062 167 194 103	2,455 906 358 145	2,722 148 284 203	2,704 98 241 143	2,721 215 266 150	2,862 368 283 146	2,854 265 289 137
Miscellaneous <sup>8</sup>	58	85	74	52	49	63	56	60	50	47
Total	6,682	7,590	9,646	7,736	9,204	10,003	9,617	10,610	10,920	10,724

Table 8.-Value of U.S. crop inventories, Jan. 1, specified years, 1945-71<sup>1</sup>

<sup>1</sup>For 48 States. All crops stored on farms including crops under loan to the CCC, and farmer-owned crops in off-farm storage under CCC loan.

<sup>2</sup> Preliminary.

<sup>3</sup>Barley, grain sorghum, and oats.

<sup>4</sup> 1945-60 buckwheat, rye, and rice; 1965-71 rye and rice.

<sup>5</sup>Cottonseed, flaxseed, and peanuts.

<sup>6</sup>All hay, corn silage, corn forage, sorghum silage, and sorghum forage.

<sup>7</sup>Cabbage, onions, and potatoes.

<sup>8</sup>Broomcorn, dry edible beans, dry field peas, tung oil, (prior to 1971) and seeds for hay (prior to 1970) and pasture crops.

#### Household Equipment and Furnishings

On January 1, 1971, household equipment and furnishings on farms were valued at \$9.7 billion (table 9). This was 1 percent above a year earlier but 7 percent below the peak reached in 1956. The value of household equipment and furnishings per farm increased from \$3,300 in 1970 to \$3,390 at the beginning of 1971.

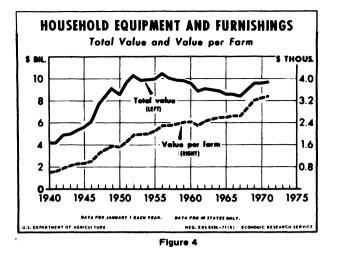
The aggregate value of household equipment and furnishings rose between 1940 and 1954 (fig. 4). Values per farm rose sharply over this period, spurred by electrification of farms, price changes, and rising farm income. During 1956-66, the aggregate value declined as the advance in value per farm slackened and the decline in the number of farms accelerated. Since 1967, these 2 factors have again reversed and the aggregate value has moved up.

Farm household equipment and furnishings account for a decreasing part of farm assets. The value dropped to 3.0 percent of total farm assets on January 1, 1971, from 3.6 percent and 4.7 percent, respectively, in 1965 and 1960. Table 9.--Household equipment and furnishings on farms: Total value and value per farm, U.S., Jan. 1, specified years, 1940-71<sup>1</sup>

Year	Total value	Value per farm
	Million	
	dollars	Dollars
1940	4,213	660
1950	8,610	1,520
1955	9,992	2,150
1956	10,452	2,320
1960	9,576	2,420
1965	8,623	2,590
1966	8,574	2,650
1967	8,413	2,660
1968	9,046	2,970
1969	9,573	3,230
1970	<sup>2</sup> 9,634	<sup>2</sup> 3,300
1971	<sup>3</sup> 9,724	<sup>3</sup> 3,390

<sup>1</sup> For 48 States. <sup>2</sup> Revised. <sup>3</sup> Preliminary.

Source: Agr. Res. Ser.



#### **FINANCIAL ASSETS**

#### Liquid Financial Assets

Farmers liquid financial assets (bank demand and time deposits, currency, and U.S. savings bonds) reached a record \$16.1 billion on January 1, 1971 (table 10). Liquid assets gained \$0.5 billion in 1970, about the same gain as the year before.

Bank time deposits represented four-fifths of the gain in liquid financial assets, and demand deposit holdings the rest. Currency and U.S. savings bonds showed no gain.

Bank demand deposits and currency are mainly used for day-to-day operating expenses, and many farmers maintain only the amount necessary to take care of current expenditures. Bank demand deposits usually change only slightly from year to year. Time deposits, on the other hand, have shown a steady gain over the last decade. These deposits represent cash savings for longer run purposes.

Trends and fluctuations in demand deposits and currency probably follow movements in operating expenses. The continued rise in farm production costs has been reflected in increased demand deposits. The rise in demand deposits in the last decade might have been greater except for changes in lending practices of many banks and production credit associations (PCA's). Instead of advancing total loan proceeds at one time, which most farm borrowers placed in bank checking accounts, many banks and PCA's now advance only as much of the total loan commitment as the borrowers request. This practice reduces the level of demand deposits outstanding at a given time.

Farmers' ownership of U.S. savings bonds remained at \$3.7 billion. These assets showed no change in the last 3 years after declining gradually since 1959.

Data on other liquid assets held by farmers are too incomplete to permit reasonable estimates to be made.

Year	Currency	Demand deposits <sup>2</sup>	Time deposits	Total currency and deposits	U.S. savings bonds	Total				
	······Billion dollars·····									
1940	0.7	1.3	1.2	3.2	0.2	3.4				
1945	2.6	3.6	1.7	7.9	3.4	11.3				
1950	2.5	4.5	2.1	9.1	4.7	13.8				
1955	2.2	4.7	2.5	9.4	5.0	14.4				
1959	2.0	4.9	3.1	10.0	5.2	15.2				
1960	1.9	4.3	2.9	9.1	4.7	13.8				
1965	1.9	4.0	3.7	9.6	4.2	13.8				
1966	1.9	4.1	4.0	10.0	4.0	14.0				
1967	1.9	4.1	4.3	10.3	3.9	14.2				
1968	1.9	4.2	4.8	10.9	3.8	14.7				
1969	2.0	4.3	5.2	11.5	3.7	15.2				
1970	2.0	4.4	5.5	11.9	3.7	15.6				
1971	2.0	4.5	5.9	12.4	3.7	16.1				

 Table 10.-Selected liquid financial assets owned by U.S. farmers,

 Jan. 1 specified years, 1940-71<sup>1</sup>

<sup>1</sup>For 48 States.

<sup>2</sup>Figures for 1940 and 1965-71 estimated by USDA. Demand deposits for other years are estimates of the Board of Governors of the Federal Reserve System.

#### **Net Worth of Farmer Cooperatives**

The net worth of farmer cooperatives rose 4.8 percent to \$8.1 billion in 1970 (table 1) following the growth trend of the last several years.

Marketing and purchasing cooperatives, the most numerous types, account for nearly half the net worth of all farmer cooperatives. Their net worth has gained about 2 percent a year since 1905.

Rural electric cooperatives gained \$124 million in net worth during 1970. This 8.2-percent growth rate continued a series of similar annual gains and boosted net worth more than 60 percent over 1965.

The Federal land bank system gained \$22 million (2.4 percent) in net worth in 1970, about half the growth in 1969 and a slower rate than in recent years, due to higher cost of loan funds during late 1969 and most of 1970. Federal land banks absorbed some of these higher costs. Also, the bulk of land bank loans outstanding were old loans carrying lower interest rates than the cost of loan funds in the last few years.

PCA's boosted their total net worth by \$115 million or 15 percent in 1970, the largest rate of gain in recent years. PCA's derive the bulk of new loan money from the sale of Federal intermediate credit bank debentures. Since most of these securities mature more quickly than Federal land bank bonds, and since PCA loans are mostly short term, PCA's could adjust their loan interest rates more quickly and better maintain net growth than Federal land banks.

Farmers' mutual fire insurance, telephone, and irrigation companies are believed to have experienced net worth advances in 1970 similar to those of the last several years.

#### CLAIMS

To balance the value of agricultural assets there are 2 general kinds of claims: liabilities, made up of non-real estate debt and real estate debt, and equities, which represent the value of the residual rights in agricultural assets belonging to the proprietors—owner-operators, tenants, and landlords. Proprietors are mainly individuals, but also include corporations and agencies of Federal, State, and local governments.

#### **Total Farm Debt**

Total outstanding farm debt of \$61.1 billion on January 1, 1971, was 5.2 percent above a year earlier (fig. 5). This was the smallest percentage increase in a decade. However, there has been a steady increase in total debt since the end of World War II.

Prior to 1971, except for 1951-53, farm real estate debt was slightly larger than non-real estate debt. On January 1, 1971, non-real estate debt, including CCC loans, totaled \$31.6 billion and real estate debt was \$29.5 billion. This reversal in the relative position of the 2 types of farm debt was mainly due to farmers' reluctance to make long-term commitments at prevailing high interest rates.

Farm real estate debt increased \$1.1 billion, the lowest yearly increase since 1962 (fig. 6). Increases since 1962 averaged \$1.7 billion.

Non-real estate debt (excluding CCC loans) increased \$2.7 billion in 1970 to \$29.7 billion, well above the \$1.5 billion average yearly increase since 1960.

On January 1, 1971, the farm debt was equal to 19.2 percent of farm assets. Although only slightly higher

Type of cooperative	1940	1950	1960	1965	1970	1971 <sup>2</sup>
			- Million dol	lars		
Marketing and purchasing associations <sup>3</sup>	330	1,148	2,402	3,212	3,620	3,700
Rural electric cooperatives <sup>4</sup>	3	92	580	1,001	1,506	1,630
Federal land bank system <sup>5</sup>	203	298	501	662	930	952
Production credit associations <sup>5</sup>	31	122	276	430	741	856
Farmers' mutual irrigation companies <sup>6</sup>	197	264	370	445	526	555
Farmers' mutual fire insurance companies <sup>7</sup>	42	108	201	255	289	300
Farmers' mutual telephone companies <sup>8</sup>	23	23	26	34	55	63
Total	829	2,055	4,356	6,039	7,667	8,056

Table 11.-Net worth of selected U.S. farmer cooperatives, Jan. 1, specified years, 1940-71<sup>1</sup>

<sup>1</sup> For 48 States except as noted in footnote 4.

<sup>2</sup> Preliminary.

<sup>3</sup>Estimated by Farmer Cooperative Service. Estimate for 1970 revised. Figures exclude intercooperative investments. Shown separately prior to 1966, net worths of marketing and purchasing associations have been combined since each type performs both activities.

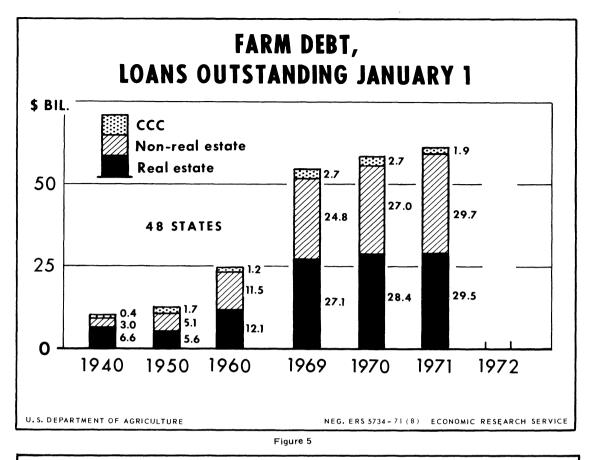
<sup>4</sup>Estimates for 1940. Beginning 1950, data reported by Rural Electrification Administration includes Alaska.

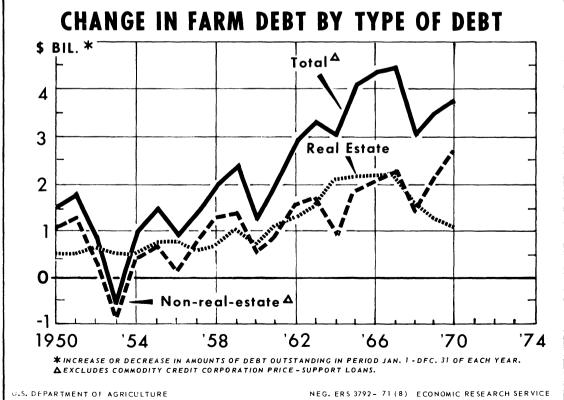
<sup>5</sup> Excludes capital and surplus paid in by Federal Government. From Farm Credit Administration.

<sup>6</sup> Data for 1940 and 1950 from U.S. Census Bureau, Irrigation of Agricultural Lands, 1940 and 1950.

<sup>7</sup> Surplus and reserves.

<sup>8</sup>Net investment for Jan. 1, 1938, as calculated from a survey of the Census Bureau in 1937, used for 1940 and 1950. Estimates for 1960 and later include Rural Electrification Administration telephone cooperatives.





than the 18.8 percent of a year earlier, and not considered excessive in terms of farmers' repayment ability, the ratio was significantly higher than the 16.2 percent of 1965.

#### Farm Real Estate Debt

Outstanding farm real estate debt on January 1, 1971, of \$29.5 billion was 3.9 percent higher than a year earlier (fig. 6 and table 12), slowing from a 4.7-percent rise during 1969. Outstanding debt was higher than a year earlier in all regions (table 13) but the percentage increase was less than a year earlier in all but the Northeast and Pacific regions. Increases ranged from 17.6 percent in the Northeast to 0.4 percent in Southerm Plains.

The slower rate of increase in farm mortgage debt during 1970 was due largely to a 3-percent decrease in volume of farm mortgages recorded. Recordings dropped 2 percent in the first half, the period of greatest activity, then increased 8 percent in the second half, compared with a year earlier. The drop in farm mortgage recordings in 1970 was due to a combination of factors—high costs of land, high interest rates, and a scarcity of available land. Interest rates on new farm mortgage loans made by life insurance companies reached a peak of 9.48 percent during the second quarter. The average interest rate charged by life insurance companies for the year was 9.33 percent compared with 8.39 percent for 1969. The Federal land bank rates reached a peak during the first quarter when the range among banks was 8.5-9.0 percent.

A variable interest rate plan for new loans was first introduced in February 1969 by the St. Paul Federal Land Bank and adopted in January 1970 by all Federal land banks. Plan features vary by bank. The basic plan provides a firm rate for a period of 1 to 5 years, which can subsequently be raised or lowered whenever justified. Some plans provide that a new rate will be maintained for a given period.

The variable plans provide increased stability to the land bank system. Interest rates on outstanding loans can be more closely aligned with the current rates in the central money markets from which funds are secured for

Year	Federal land banks <sup>2</sup>	Farmers Home Adminis- tration <sup>3</sup>	Life insurance companies <sup>4</sup>	All operating banks <sup>5</sup>	Other farm mortgage debt <sup>6</sup>	Total farm mortgage debt
			Million	dollars		
1940	2,010	32	984	534	3,026	6,586
1950	906	193	1,172	937	2,371	5,579
1955	1,267	287	2,052	1,211	3,428	8,245
1960	2,335	437	2,820	1,625	4,857	12,074
1961	2,538	482	2,975	1,686	5,131	12,812
1962	2,802	566	3,162	1,785	5,576	13,891
1963	3,023	585	3,391	2,054	6,107	15,160
1964	3,281	601	3,778	2,356	6,776	16,792
1965	3,686	615	4,285	2,662	7,632	18,880
1966	4,234	627	4,799	2,934	8,575	21,169
1967	4,908	582	5,211	3,164	9,418	23,283
1968	5,553	533	5,537	3,537	10,305	25,465
1969	6,071	490	5,761	3,851	10,945	27,118
1970	6,660	452	5,732	4,109	11,434	28,387
1971	7,128	344	5,608	4,441	11,986	29,507
Change <sup>7</sup>			Per	rcent		· · · · · · · · · · · ·
1966-71	68.4	-45.2	16.9	51.4	39.8	39.4
1970-71	7.0	-24.0	-2.2	8.1	4.8	3.9

Table 12.-Farm mortgage debt: Amount outstanding by lender Jan. 1, specified years, 1940-1971

<sup>1</sup>For 48 States.

<sup>2</sup>Includes regular mortgages, purchase-money mortgages, and sales contracts.

<sup>3</sup>Direct loans only. Data for 1940 include only tenant-purchase loans and soil and water loans to individuals. Thereafter, data include also farm-development, farm-enlargement, project-liquidation, rural-housing (excludes nonfarm), and building-improvement loans.

<sup>4</sup> Includes regular mortgages, purchase-money mortgages, and sales contracts; beginning 1965, excludes sales contracts.

<sup>5</sup>Data for 1940 insured commercial banks only.

<sup>6</sup>The amounts shown may be taken as a rough measure of the farm mortgage debt held by individuals and other nonreporting lenders. Also includes amounts outstanding for Federal Farm Mortgage Corporation as follows: 1940, \$713,290,000; 1950, \$58,650,000; and 1955, \$12,834,000.

<sup>7</sup>Computed from unrounded data.

Table 13.-Farm mortgage debt: Amount outstanding Jan. 1, specified years, 1940-1971, by region<sup>1</sup>

Year	North- east	Lake States	Corn Belt	North- ern Plains	Appala- chian	South- east	Delta States	South- ern Plains	Moun- tain	Pacific	United States
					Mi	llion doll	ars				
1940	577	907	1,829	863	386	248	228	586	357	605	6,586
1950	578	715	1,296	460	379	271	239	518	425	698	5,579
1955	742	<b>986</b>	1,798	673	598	459	382	802	733	1,072	8,245
1960	876	1,354	2,673	1,014	855	715	570	1,132	1,093	1,792	12,074
1961	904	1,423	2,836	1,075	913	761	607	1,193	1,170	1,930	12,812
1962	942	1,528	3,012	1,181	998	861	674	1,268	1,300	2,127	13,891
1963	990	1,639	3,227	1,300	1,080	977	739	1,400	1,416	2,392	15,160
1964	1,057	1,794	3,490	1,436	1,193	1,112	837	1,596	1,591	2,686	16,792
1965	1,172	1,972	3,829	1,630	1,330	1,271	964	1,848	1,815	3,049	18,880
1966	1,241	2,175	4,276	1,827	1,489	1,392	1,110	2,071	2,048	3,540	21,169
1967	1,359	2,375	4,702	2,018	1,623	1,555	1,270	2,232	2,282	3,867	23,283
1968	1,586	2,558	5,129	2,203	1,774	1,741	1,413	2,401	2,455	4,205	25,465
1969	1,656	2,696	5,482	2,355	1,881	1,904	1,566	2,549	2,580	4,449	27,118
1970	1,819	2,785	5,656	2,476	1,987	2,027	1,691	2,669	2,661	4,616	28,387
1971	2,140	2,847	5,735	2,545	2,034	2,150	1,767	2,679	2,744	4,866	29,507
Change <sup>2</sup>	[					Percent-					
1966-71	72.3	30.9	34.1	39.2	36.6	54.4	59.3	29.4	34.0	37.4	39.4
1970-71	17.6	2.2	1.4	2.8	2.3	6.1	4.5	.4	3.1	5.4	3.9

<sup>1</sup>For 48 States.

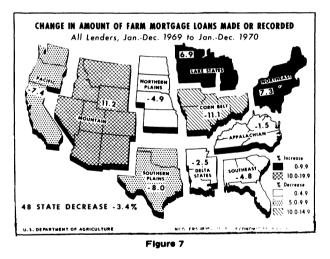
<sup>2</sup>Computed from unrounded data.

relending to farmers. The terms of loans secured by farm mortgages are longer than the terms of farm credit system bonds. Land banks found that during periods of rapidly increasing interest rates, interest rates paid out on bonds were equal to or higher than interest received on farm mortgage loans.

During the first half of 1971, farm mortgage interest rates dropped significantly. The average rate charged by life insurance companies during the first quarter, 8.75 percent, was more than half a percentage point below the preceding quarter. The average rate charged during the second quarter, 8.54 percent, was the lowest since the second quarter of 1969. At the close of the quarter, rates charged by the Federal land banks ranged from 7.5 to 8.0 percent, with 8 of the 12 banks charging 8.0 percent, compared with 8.0-9.0 percent at the close of the previous quarter.

The high level of interest rates in 1970 resulted in a decline in farm mortgage lending by the 3 main institutional lender groups—life insurance companies, Federal land banks, and commercial banks (table 14). The amount of farm mortgage recordings for these groups dropped 12 percent to \$2.4 billion. About one-half of this drop was absorbed by miscellaneous lenders such as investment companies, savings and loan associations, and production credit associations.

Farm mortgage recordings declined in 1970 in 7 of the 10 regions (fig. 7). Increases occurred only in the Mountain States, Lake States, and the Northeast. Decreased recordings ranged from less than 2 percent in the Appalachian States to 11 percent in the Corn Belt.



Farmers in the 5 Corn Belt States hold about a fifth of the total outstanding farm mortgage debt.

The most probable reason for the sharp drop in recordings in the Corn Belt was restrictions imposed by usury laws. Four Corn Belt States have usury limits of 8 percent and Iowa's limit is 9 percent. These rates were all below prevailing farm mortgage interest rates and discouraged lenders, particulary life insurance companies, from making loans. Some lenders were attracted by higher returns on urban loans, but most did not permanently withdraw from the farm mortgage business.

The general drop in farm mortgage interest rates in the first quarter of 1971 resulted in significant increases in new money loaned by life insurance companies and

Lender group	1968	1970	Change <sup>2</sup>
	Million dollars	Million dollars	Percent
Farmers Home Administration <sup>3</sup>	<sup>4</sup> 267	296	-4
Commercial and savings banks	1,134	1,064	-1
Federal land banks	1,124	1,088	-10
Individuals	913	1,094	(4)
Life insurance companies	633	200	-49
Miscellaneous <sup>5</sup>	<sup>4</sup> 976	1,343	13
Total	5,047	5,085	-3

Table 14.—Farm mortgages recorded: Amount and percentage change, 1969 and 1970<sup>2</sup>

<sup>1</sup>Data for 48 States. Includes both new and renewed loans.

<sup>2</sup>Computed from unrounded data.

<sup>3</sup>Direct and insured farm loans to individuals. Includes farm-ownership, soil and water, and rural-housing loans to individuals. Also includes farm-ownership loans made from State corporation trust funds.

<sup>4</sup> Revised.

1

<sup>5</sup>Includes mortgage and investment companies; savings and loan associations; State and local government agencies; production credit associations; when the mortgage is secured by farm real estate; and lender groups not specifically identified.

Federal land banks. For the first half of 1971, the volume of new money extended by life insurance companies, \$192 million, was 43 percent higher than a year earlier and the \$631 million loaned by Federal land banks was 34 percent higher (fig. 8).

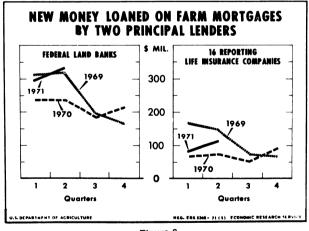
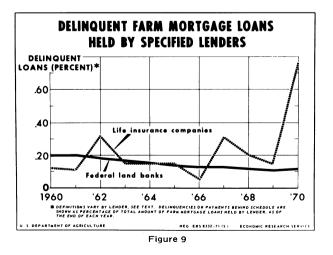


Figure 8

The condition of farm real estate debt from the standpoint of repayment by borrowers continues to be healthy. Delinquent farm mortgage loans held by life insurance companies, Federal land banks, and the FHA, the only lender groups for which detailed information is available, are insignificant relative to the total volume of loans held by these lenders. Only 0.2 percent of the number of farm loans held by life insurance companies had interest overdue more than 3 months. These loans represented less than 0.8 percent of the total value of all loans held by the life insurance companies (fig. 9). However, during 1970 there was an increase in number and amount of delinquent loans. Although the value of loans which were delinquent on January 1, 1971, was insignificant, the value of such loans was 5 times greater than a year earlier and the average principal indebteness per loan was \$120,000 compared with \$70,000 a year earlier. To a much smaller degree, these trends were noted for Federal land bank loans.<sup>1</sup>



<sup>&</sup>lt;sup>1</sup>Warren, Forest G. and Mitchem, Nan P., "Farm Mortgage Lending, July-December 1970," FML-26, Econ. Res. Ser., U.S. Dept. Agr., June 1971.

#### Non-Real Estate Debt

Non-real estate farm debt (excluding CCC loans) totaled \$29.7 billion on January 1, 1971 (table 15), after rising \$2.7 billion during 1970, a record amount and the sharpest increase (10 percent) in the last 3 years. Adding the \$1.9 billion CCC loans outstanding January 1, 1971, brought total farm non-real estate debt on that date to \$31.6 billion.

The record increase in short- and intermediate-term debt in 1970 occurred in a financial climate of high interest rates and tight money.

The tight money situation during much of 1969 carried over into 1970. For the first 3 quarters of 1970, there was little if any relief in interest rates on loans. Farm borrowers felt the effects of high interest rates along with borrowers in other economic sectors, although interest rates on farm loans in most regions did not reach the levels of nonagricultural loans. Interest rates on bank non-real estate farm loans were commonly above 8 percent. The average for PCA's was about 9 percent, although many loans were made at rates above 9.5 percent. During most of the 1960's, bank interest rates on farm loans were 6.75 percent and PCA's rates were about 6.5 percent.

The FHA raised its interest rate on farm operating loans from 6.63 percent to 7.88 percent on July 1,

1970. The rise reflected the increase in cost of loan funds to the U.S. Government on which the FHA interest rates are based. FHA farm operating loan interest rates are adjusted on July 1 of each year based on the previous years' average cost of Government borrowings for similar purposes and periods of time.

In most cases reported, interest rates on farm loans were less than those charged many nonfarm borrowers, including large corporations. Many farmers used borrowed money in 1969 and 1970 at lower rates than large city banks charged even their prime customers.

The record amount of money borrowed by farmers at the high rates generated \$2.0 billion in interest charges on non-real estate farm debt.

Except for unusual situations, farmers were adequately supplied with operating loans at the going rates of interest. Loans made by PCA's during 1970 were up 17 percent from 1969. The substantially larger amount of bank farm loans outstanding on January 1, 1971, indicates they also increased farm lending in 1971. Reports indicated that merchants, dealers, and other miscellaneous lenders were active in extending farm credit in 1970. The FHA loaned 12 percent more in 1970 than in 1969.

The unusual increase in farmers' use of short- and intermediate-term credit in 1970 can be traced to several

	Debt owe	d to report	ing instituti	ons (excludi	ng CCC)			Price support	
Year	Year All tion inter- operating credit mediate banks associ- credit	mediate	Farmers Home Adminis- tration	Total	Debts owed to non- reporting creditors <sup>3</sup>	Total excluding CCC loans	Price-support and storage loans made or guaranteed by by CCC <sup>4</sup>	Total including CCC loans	
					Mill	ion dollars			
1940	900	153	32	418	1,503	1,500	3,003	445	3,448
1950	2,049	387	51	347	2,834	2,320	5,154	1,721	6,875
1960	4,814	1,361	90	397	6,662	4,860	11,522	1,165	12,687
1965	6,975	2,277	125	642	10,019	7,110	17,129	1,543	18,672
1966	7,664	2,579	140	715	11,098	7,880	18,978	1,408	20,386
1967	8,521	3,016	157	735	12,429	8,820	21,249	1,157	22,406
1968	9,259	3,518	176	796	13,749	9,760	23,509	1,420	24,929
1969	9,709	3,826	180	819	14,534	10,320	24,854	2,671	27,525
1970	10,318	4,495	218	783	15,814	11,230	27,044	2,676	29,720
1971	11,090	5,295	220	793	17,398	12,340	29,738	1,876	31,614
Change					· 1	Percent			
1966-71	44.7	105.3	57.1	10.9	56.8	56.6	56.7	33.2	55.1
1970-71	7.5	17.8	.9	1.3	10.0	10.0	10.0	-29.9	6.4

Table 15.—Non-real estate farm debt outstanding, United States, Jan. 1, specified years, 1940-71<sup>1</sup>

<sup>1</sup>For 48 States.

<sup>2</sup>Loans to and discounts for livestock loan companies and agricultural credit corporations.

<sup>3</sup>Estimate of short- and intermediate-term farm loans outstanding from merchants, dealers, individuals, and other miscellaneous lenders. Such loans are not estimated by USDA on regional or State basis.

<sup>4</sup>Although price-support loans are nonrecourse loans, they are treated as debts. Borrowers must either pay them in cash or deliver the commodities on which they were based. causes. Livestock production was 6 percent higher than the year before and crop acreage was up. Southern corn leaf blight, which cut corn yields and total production in 1970, reduced cash receipts from corn, causing less loan repayment and more loan renewals in affected areas. Prices of inputs were higher than in 1969 and a larger quantity of inputs were used.

Short- and intermediate-term loans were widely used for purposes ordinarily calling for long-term loans. Many farmers were hesitant to enter into long-term loan contracts carrying the prevailing high interest rates. Instead, they borrowed on shorter terms, anticipating refinancing into longer term loans when interest rates dropped to more acceptable levels.

Commercial banks hold the largest share of farm non-real estate loans held by institutional lenders (fig. 10). Over three-fifths of farm loans owed such lenders on June 30, 1970, were held by banks. The \$11.1 billion outstanding was 7.5 percent larger than a year earlier. This was the largest percentage gain in bank farm loans since 1967. For the past several years the banks' annual gain had been about 6 percent.

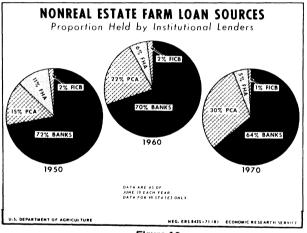


Figure 10

PCA's held \$5.3 billion at the beginning of 1971, about one-third of farm loans held by institutional lenders. This was 17.8 percent more than a year earlier and matched gains in recent years.

FHA operating and farm emergency loans have held at about the same level for the last 5 years. Such loans constitute about 5 percent of loans held by institutional lenders. FHA loans are a small but important part of total farm lending. The agency makes loans to farmers unable to obtain loans for reasonable amounts and terms from other lenders.

Merchants, dealers, and other miscellaneous lenders are important suppliers of farm credit. As a group they hold more farm debt than banks. Information about the volume and terms of credit from these noninstitutional lenders is not as complete as for the institutional group. However, special Bureau of the Census surveys and other sources supply considerable intelligence about their credit operations. It is believed the length of maturity of loan or purchase contracts from such lenders is similar to those of banks and PCA's, but interest rates tend to be higher.

CCC loans outstanding January 1, 1971, were 30 percent below a year earlier. Farmers cashed in extensively on market prices for most storable crops that were higher than CCC levels, and reduced their use of CCC crop loans. About 38 percent of CCC loans on farmer-owned stocks were on crops stored off the farm. In other recent years, about one half the CCC loans on farmer-owned crops were stored off farms.

Loan volume for most storable crops eligible for CCC loans dropped. Wheat, soybeans, grain sorghum, and cotton loans were down sharply, while corn and barley loans were only slightly reduced. Oat loans showed a slight increase.

The increase in non-real estate farm loans held by institutional lenders on January 1, 1971, over 1970 exceeded the national average in 6 of the 10 regions (table 16 and fig. 11). The Lake States showed the largest gain, 13.5 percent, and the Pacific region the smallest gain, 3.7 percent. The southeast and Lake States experienced the largest gains in 5 years.

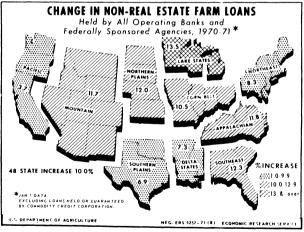


Figure 11

Year	North- east	Lake States	Corn Belt	North- ern Plains	Appala- chian	South- east	Delta States	South- ern Plains	Moun- tain	Pacific	United States
					<i>Mi</i>	llion doll	ars				
1945	101	139	310	288	88	96	91	209	176	124	1,622
1950	222	264	631	394	172	135	118	349	293	256	2,834
1955	315	377	927	523	243	179	156	480	428	358	3,986
1960	454	624	1,686	909	395	261	224	696	699	714	6,662
1965	605	914	2,184	1,472	648	459	411	1,101	1,147	1,078	10,019
1966	653	1,006	2,415	1,690	720	508	451	1,171	1,281	1,203	11,098
1967	707	1,150	2,844	1,927	815	588	499	1,250	1,366	1,283	12,429
1968	790	1,322	3,210	2,117	896	639	548	1,385	1,481	1,361	13,749
1969	822	1,410	3,288	2,236	972	705	597	1,511	1,558	1,435	14,534
1970	848	1,533	3,474	2,471	1,042	799	638	1,727	1,736	1,546	15,814
1971	918	1,740	3,840	2,767	1,164	897	685	1,846	1,939	1,602	17,398
Change						Percent -					
1966-71	40.6	73.0	59.0	63.7	61.7	76.6	51.2	57.6	51.4	33.2	56.8
1970-71	8.3	13.5	10.5	12.0	11.8	12.3	7.3	6.9	11.7	3.7	10.0

 Table 16.—Non-real estate farm debt outstanding to institutional lenders,

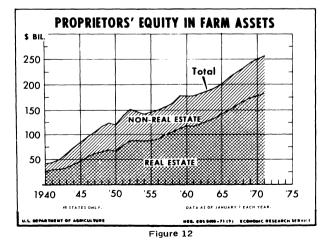
 by region, January 1, specified years, 1945-71<sup>1</sup>

<sup>1</sup>For 48 States. Includes loans held by commercial banks, production credit associations, Federal intermediate credit banks (discounts for livestock loan companies and agricultural credit corporations) FHA.

#### **Proprietors' Equity in Farm Assets**

Equity farm proprietors own in their assets is one measure of their financial condition. The relationship of farm equity to the value of assets is an important indicator of the financial health of the farming sector (fig. 1).

Proprietor-owned equity in farm assets reached a record \$257.8 billion on January 1, 1971 (fig. 12). The \$6.3 billion gained from a year earlier was a 2.5 percent increase, slowing from rates of from 3.5-4.5 percent for other recent years.



Most proprietors' equity in farm assets is in real estate. Equity in farm real estate made up about 70 percent of total equity in farm assets for much of the past decade. From 1940 to 1960, the real estate portion was nearer to 60 percent.

Farm real estate values have more than doubled since 1955 to \$214 billion in 1971. Much of the increase resulted from appreciation (table 17). In constant 1947-49 dollars, farm real estate went from a total value of \$78 billion in 1955 to \$82 billion at the beginning of 1971 (table 2).

While the value of farm real estate has risen 118 percent since 1955, proprietors' equity in farm real estate has increased 105 percent, dropping the equity-value ratio from 92 percent to 86 percent.

The farm real estate equity-value ratios in Table 17 result from comparing equity in farm real estate (total real estate value minus real estate debt) with the total value of all farm real estate. However, much farmland has no debt against it. When equity in only indebted farmland is compared with the value of indebted farmland, the equity-asset ratio changes. Although data are not available to make detailed comparisons, some indication can be obtained from similar data. Special Census farm surveys in 1960 and 1966 revealed that for indebted commercial farm operators, the ratios of equity in farmland and buildings they owned to the total value of farmland and buildings they owned was 73 percent in 1960 and 72 percent in 1966.

Proprietors' equity in non-real estate farm assets in 1960 was about one-half the value of farm real estate equity. The difference widened during the next decade, and by 1971, the equity in non-real estate farm assets was about 40 percent of the value of farm real estate equity.

		Farm real	estate			Farm non-re	al estate	
Year (Jan. 1)	Value	Debt out- standing	Equity	Equity ratio <u>2</u> /	Value	Debt out- standing	Equity	Equity ratio <u>4</u> /
	Million dollars	Million dollars	Million dollars	Percent	Million dollars	Million dollars	Million dollars	Percent
1940	33,636	6,586	27,050	80.4	19,389	3,449	15,940	82.2
1941	34,400	6,494	27,906	81.1	20,456	3,976	16,480	80.6
1942	37,547	6,376	31,373	83.0	25,428	4,092	21,336	83.9
1943	41,604	5,956	35,648	85.7	32,270	3,944	28,326	87.8
1944	48,200	5,396	42,804	88.8	36,362	3,475	32,887	90.4
1945	53,884	4,941	48,943	90.8	40,256	3,403	36,853	91.5
1946	61,046	4,760	56,186	92.2	42,437	3,145	38,292	90.2
1947	68,463	4,897	63,566	92.8	47,936	3,516	44,420	92.7
1948	73,664	5,064	68,600	93.1	54,163	4,174	49,989	92.3
1949	76,623	5,288	71,335	93.1	58,222	6,082	52,140	89.6
1950	75,256	5,579	69,677	92.6	57,113	6,875	50,238	88.0
1951	86,586	6,112	80,474	92.9	64,912	6,938	57,974	89.3
1952	95,078	6,662	88,416	93.0	71,922	7,981	63,941	88.9
1953	96,535	7,241	89,94	92.5	67,937	8,859	59,078	87.0
1954	95,038	7,740	87,298	91.9	66,259	9,194	57,065	86,1
1955	98,172	8,245	89,927	91.6	66,948	9,415	57,533	85.9
1956	102,934	9,012	93,922	91.2	66,703	9,780	56,923	85.3
1957	110,421	9,822	100,599	91.1	67,552	9,523	58,029	85.9
1958	115,934	10,382	105,552	91.0	69,880	10,029	59,851	85.6
1959	124,393	11,091	113,302	91.1	77,803	12,558	65,245	83,8
1960	130,169	12,074	118,095	90.7	72,915	12,687	60,228	82.6
1961	131,752	12,812	118,940	90.3	72,297	13,351	58,946	81.5
1962	137,956	13,891	124,065	89.9	74,901	14,769	60,132	80.3
1963	143,834	15,160	128,674	89.5	77,170	16,549	60,621	78.6
1964	152,121	16,792	135,329	89.0	77,685	18,111	59,574	76.7
1965	160,942	18,880	142,062	88.3	77,599	18,672	58,927	75.
1966	172,532	21,169	151,363	87.7	83,180	20,386	62,894	75.5
1967	182,456	23,283	159,173	87.2	87,094	22,406	64,688	74.3
1968	193,073	25,465	167,608	86.8	90,431	24,929	65,502	72.4
1969	202,637	27,118	175,519	86.6	95,837	27,525	68,312	71.3
1970	208,214	28,387	179,827	86.4	101,327	29,720	71,607	70.7
1971 <u>3</u> /	213,988	29,537	184,451	86.2	104,950	31,634	73,316	69 <b>.9</b>

# Table 17.-Proprietors' equity in farm real estate and non-real estate assets, January 1, 1940-71 $\underline{1}/$

1/48 States only. 2/Equity in farm real estate as percent of farm real estate value. 3/Includes CCC loans. 4/Equity in farm non-real estate assets as percent of farm non-real estate asset value

5/Preliminary.

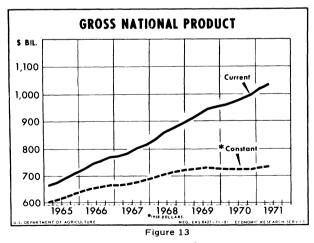
Equity in non-real estate farm assets traditionally is a smaller portion of the total value of non-real estate farm assets than is the case with real-estate equity and assets. Much non-real estate farm credit is used for operating expenses and is repaid from crops and livestock produced with the borrowed capital. Some of the credit is not secured by a lien on equipment, crops, or livestock. Also, in many instances where there is a lien, the amount of non-real estate credit may equal or exceed the value of chattels acting as security.

The ratio of equity in non-real estate farm assets to the value of those assets was 70 percent at the beginning of 1971. This ratio has declined steadily since the late 1940's, when it was 93 percent.

#### FACTORS AFFECTING THE BALANCE SHEET OF THE FARMING SECTOR The General Economic Situation

Economic activity got back on course during 1970. The growth rate was declining as the year began, but started to increase by the end of the year. This change accompanied easier monetary and fiscal policies. During 1969, these policies were made increasingly restrictive in an effort to moderate price advances and provide the basis for a more sustainable growth rate. The money supply was allowed to increase more rapidly starting in early 1970, and interest rates began to fall. The changed pace of the economy uncertainties about future trends of economic activity, wide fluctuation in interest rates and continued inflation were major influences affecting agriculture in the year. Domestic demand for foods remained strong, and exports of farm products increased to a record rate.

The Gross National Product (GNP) rose 5 percent to \$974.1 billion in 1970, slowing from an 8-percent advance in 1969 (table 18 and fig. 13). Prices in 1970 increased a little faster than GNP, so on a constant-price basis (1958 dollars), the deflated GNP was 0.5 percent less than in 1969, marking the first annual decline since 1957/58.



In the first quarter of 1971, output rebounded above the strike-depressed level of the previous quarter. While the resumption of production in autos and related industries was the major factor in the first-quarter expansion, strength also was beginning to be evident elsewhere—particularly in residential housing and in retail sales. Expanded housing starts partly reflected the increasing availability of credit. The stock market made a strong rise from the low in June 1970.

Economic expansion continued in the second quarter of 1971, and for the first half of the year, real output was 2 percent larger than a year earlier. However, prices continued to increase about as rapidly as in 1970, and the international trade balance worsened. On August 15, 1971, the President announced major new policies to stimulate the domestic economy and to improve monetary and trade arrangements with other countries.

Personal consumption expenditures continued to rise in 1970. Expenditures for durable goods declined slightly, but increases occurred for services and for nondurable goods, mainly food. Wages and incomes continued to rise. The effect on consumer incomes of 6-percent unemployment was moderated by unemployment insurance payments. The major weakness in 1970 was the reduction in gross private domestic investment, which fell 2 percent. Also, investments in buildings and equipment were smaller and inventories rose less than in 1969.

In some respects, economic developments in 1970 affected agriculture as they had in other recent years. Domestic demand for foods continued to expand, although not strongly enough to prevent price declines when production increased markedly for pork and eggs. Export markets took a large volume of farm products, with shipments rising after a slight easing in 1969. Farmers supplemented their farm earnings with greater off-farm earnings, despite the higher unemployment rate. Personal income of the farm population on a per capita basis increased again in 1970.

In other ways, economic developments were less favorable. There were greater uncertainties about the economic situation. Prices of purchased farm inputs continued to rise. Some farmers reacted by postponing their purchases, an action also influenced by developments in credit markets, where restraints on the growth of the money supply had caused interest rates, including rates on farm loans, to move sharply higher.

As described in the debt sections of this report, many farm borrowers in the first half of 1970 were paying 8.5

Item	1940	1950	1960	1965	1967	1968	1969	1970	First quarter	Second quarter 3
				<u>Billi</u>	on dollars-					
Gross national product Personal consumption expendi-	99.7	284.8	503.7	684.9	793.9	864.2	929.1	974.1	1,020.8	1,040.5
tures Durable goods Nondurable goods	70.8 (7.8) (37.0)	191.0 (30.5) (98.1)	325.2 (66.3) (151.3)	432.8 (666.3) (191.1)	492.1 (73.1) (215.0)	536.2 (84.0) (230.8)	579.6 (89.9) (247.6)	615.8 (88.6) (264.7)	644.6 (97.6) (272.0)	660.1 100.0 279.4
Services Gross private domestic	(26.0)	( 62.4)	(128.7)	(175.5)	(204.0)	(221.3)	(242.1)	(262.5)	(275.0)	280.7
investment New construction Producers' durable equipment Change in business inven-	13.1 (5.7) (5.3)	54.1 (28.6) (18.7)	74.8 (41.0) (30.3)	108.1 (52.7) (45.8)	116.6 (53.1) (55.3)	126.0 (60.4) (58.5)	137.8 (67.3) (64.1)	135.3 (67.2) (65.4)	143.8 (74.3) (66.3)	150.1 77.1 68.3
tories	(2.2)	( 6.8)	( 3.6)	( 9.6)	( 8.2)	(7.1)	(7.4)	( 2.8)	( 3.2)	4.7
services Sovernment purchases of goods	1.7	1.8	4.0	6.9	5.2	2.5	2.0	3.6	4.2	.1
and services Federal State and local	14.0 (6.0) (8.0)	37.9 (18.4) (19.5)	99.6 (53.5) (46.1)	137.0 (66.9) (70.1)	180.1 (90.7) (89.4)	199.6 (98.8) (100.8)	209.7 (99.2) (110.6)	219.4 (97.2) <b>(1</b> 22.2)	228.2 (96.7) (131.5)	230.2 96.0 134.2
ross national product in constant (1958) dollars	227.2	355.3	487.8	617.8	675.2	706.6	724.7	720.0	729.7	736.3

Table 18.-Gross national product in current and constant dollars, selected years, 1940-71 1/

1/ Totals may not add due to rounding.
 2/ Seasonally adjusted annual rates.
 3/ Preliminary.

23

percent on new farm mortgage and production loans, as much as 1 to 2 percentage points above a year earlier. Farmers sought to restrict their long-term borrowing by financing more of their purchases on a short-term basis. A slowdown in land sales and a slightly slower increase in land prices resulted. The per-acre value of farmland increased 3 percent in the year ended March 1971 compared with 4 percent in the previous year.

Starting in early 1971, interest rates responded to an increasing volume of loanable funds and sluggish demand. Large city banks reduced their prime rate (the rate charged their best customers) in several steps from the June 1969-March 1970 level of 8-1/2 percent to 5-1/4 percent in March 1971. In April and again in July, prime rates were raised. Reduction in interest rates occurred in many areas, for both short-term and real estate farm loans. However, rates on farm loans stabilized by mid-1971.

#### Farm Income

Realized gross farm income for 1970 increased 2.0 percent over 1969, but production expenses increased 5.6 percent, lowering realized net farm income 6.5 percent to \$15.6 billion (table 19). Realized net farm income also was lower than in 1969 and 1966, but otherwise was the highest since 1948. Realized net income per farm for 1970 was \$5,354. This was 5 percent under the 1969 record.

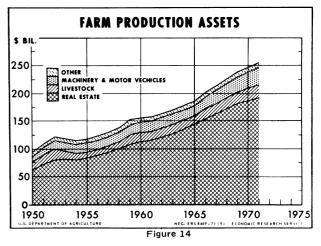
Cash receipts from farm marketings in 1970 were up 2.3 percent from 1969. Most of the increase came from marketings of livestock and livestock products, up 3.5 percent; crop receipts increased slightly.

All types of farm production expenses rose. Interest on the farm mortgage debt increased over 7 percent and taxes were up nearly 9 percent. Fertilizer and repairs both increased more than 3 percent. The increase in fertilizer costs was a reversal from a 5-percent decline the year before.

Total cash receipts from farm marketings increased for all regions except the Southeast and Pacific (table 20). The Southeast had lower receipts for both crop and livestock marketings. The Pacific Region had higher livestock marketings but lower crop marketings. The Northern Plains and Delta States also had lower cash receipts from crop marketings, but the livestock receipts were up, with total receipts showing a slight increase. Livestock marketings were up 3-4 percent in all regions except the Southeast, with a decline, and the Corn Belt, up less than 1 percent.

#### **Farm Production Assets and Earnings**

The value of assets used to produce farm commodities amounted to \$254.9 billion on January 1, 1971-\$7.4 billion above the 1970 value (table 21 and fig. 14). Higher value of land and service buildings accounted for \$5 billion of the change. Machinery and motor vehicles added \$2 billion and falling livestock prices held changes in the value of livestock to less than \$0.3 billion.



The value of production assets for farm and per farm worker has increased rapidly as the number of farms and workers has declined and the total value of such assets has increased (table 22). Since 1950, the value of production assets per farm has increased from \$17,200 to \$96,500; assets per worker have increased from \$9,400 to \$56,300 (table 23).

Regional fluctuations occurring in the value of assets mostly reflect different rates of change in real estate prices. Only small changes occurred in the regional distribution of other assets.

The distribution of production assets by type of asset varies considerably among regions. In the Pacific Region real estate accounts for 85 percent of the value of all production assets while livestock amounts to only 5 percent (table 24). At the other extreme, real estate accounts for only 64 percent of the value of production assets in the Lake States but machinery and motor vehicles claim nearly 20 percent of the total.

Differences in the combination of production assets mainly reflect differences in farm production patterns among regions. For example, cattle ranching is important in the Mountain States and Northern Plains and livestock make up a larger percentage of production assets there than in the other regions. On the other hand, the Pacific Region (California in particular) relies heavily on intensive vegetable and fruit production with much hand labor; thus, real estate accounts for most of the production assets and machinery and motor vehicles make up a small part of total.

Returns to asset equities from farm production averaged 2.6 percent on the market value in 1970—down from 4.1 percent in 1969 (table 25). However, this is not a true approximation of the returns of commercial farmers because it includes the assets of many part-time and partly-retired farmers who have low farm incomes in relation to the value of their equity in farm assets. Also, the equity value in land of low farm income producers continues to rise, partially because of rising prices paid

	1940	1950	1960	1967	1968 <sup>2</sup>	1969 <sup>2</sup>	1970 <sup>3</sup>
			Million	dollars			
REALIZED NET FARM INCOME OF FARM OPERATORS							
Realized gross farm income:							
Cash receipts from farm marketings Government payments to farm operators and land-	8,382	28,461	33,999	42,488	43,907	47,913	49,015
lords	723	283	693	3,070	3,450	3,783	3,706
Home consumption of farm products	1,210	2,063	1,248	744	731	748	773
Rental value of farm dwellings	744	1,464	1,975	2,473	2,578	2,815	2,849
Total	11,059	32,271	37,915	48,775	50,666	55,259	56,343
Production costs:							
Feed bought	998	3,283	4,911	6,458	5,881	6,465	7,054
Livestock bought, except horses and mules	517	2,004	2,500	3,390	3,675	4,199	4,289
Fertilizer and lime bought	306	975	1,305	2,111	2,117	2,010	2,083
Repairs and operation of capital items	1,038	2,975	3,957	4,484	4,818	4,956	5,110
Depreciation and other consumption of farm			4 9 9 7	5 704	( 10 -		(
capital	797	2,665	4,237	5,736	6,195	6,660	6,902
erty	451	919	1,500	2,271	2,511	2,757	2,990
•	197	518	1,300 509	678	671	702	2,990
Seed bought	1,029	2,811	2,864	2,807	2,978	3,125	3,317
Wages to hired labor (cash and perquisites) Net rent and Government payments to landlords	1,029	2,011	2,004	2,007	2,978	3,123	5,517
not living on farms <sup>3</sup>	448	1,233	1,007	1,301	1,303	1,314	1,337
Interest on farm mortgage debt	293	264	627	1,301	1,303	1,514	1,337
Miscellaneous	784		2,825		,	-	•
Miscellaneous	/04	1,763	2,825	4,062	4,445	4,758	5,182
Total	6,858	19,410	26,242	34,639	36,070	38,306	40,714
Realized net farm income of farm operators <sup>4</sup>	4,201	12,861	11,673	14,136	14,596	16,716	15,629
Realized net farm income per farm (dollars)	662	2,277	2,952	4,500	4,787	5,635	5,354
REALIZED NET FARM INCOME OF PROPRIETORS <sup>4</sup>							
Realized net farm income of farm operators Net rent and Government payments to landlords not	4,201	12,861	11,673	14,136	14,596	16,716	15,629
living on farms <sup>3</sup>	448	1,233	1,007	1,301	1,303	1,314	1,337
Realized net farm income of proprietors	4,649	1,233	12,680	15,437	1,303	1,514	16,966

<sup>1</sup>For 48 States. <sup>2</sup>Revised.

<sup>3</sup> Preliminary.

<sup>4</sup> After subtraction of taxes, mortgage interest, and other expenses by landlords.

<sup>5</sup> Realized net farm income excludes net changes in farm inventories.

for farmland by the more efficient commercial operators, who are able to earn a return substantially above average.

This increase in the money value of farm real estate assets results in an increase in realizable wealth to the asset holder as long as farm real estate prices rise faster than the prices of other goods and services. Over the 3 decades ended in 1967, this was the case. However, for the last 2 years the realizable wealth of some farmland owners has declined as farmland prices have risen more slowly than other prices. Thus, at the beginning of 1971. land owners in many areas had less realizable wealth than in 1968, even though they might have received monetary capital gains on property purchased in 1968 and sold in 1970.

		1968			1969			1970		Per-
Region	Farm mar- ketings	Govern- ment payments	Total <sup>2®</sup>	Farm mar- ketings	Govern- ment payments	Total <sup>2</sup>	Farm mar- ketings	Govern- ment payments	Total <sup>2</sup>	centage change total cash re- ceipts 1969- 70
				M	illion dollars			•••••		Percent
Northeast	3,423	65	3,488	3,686	74	3,761	3,776	66	3,842	2.2
Lake States	4,137	,252	4,389	4,408	301	4,708	4,521	269	4,790	1.7
Corn Belt	10,117	763	10,881	10,943	848	11,790	11,066	757	11,823	0.3
Northern Plains.	4,824	642	5,466	5,415	693	6,108	5,483	690	6,173	1.1
Appalachian	3,328	201	3,529	3,661	220	3,881	3,880	200	4,080	5.1
Southeast	3,270	238	3,508	3,617	244	3,861	3,596	236	3,832	-0.8
Delta States	2,459	254	2,714	2,574	268	2,843	2,634	289	2,923	2.8
Southern Plains.	3,450	574	4,024	3,988	620	4,609	4,195	661	4,856	5.4
Mountain	3,319	285	3,604	3,799	310	4,109	4,054	325	4,378	6.5
Pacific	5,579	176	5,755	5,822	204	6,027	5,811	213	6,024	0
United States .	43,907	3,450	47,358	47,913	3,783	51,696	49,015	3,706	52,722	2.0

#### Table 20.-Cash receipts from farm marketings and Government payments, by farm production region, 1968-70<sup>1</sup>

<sup>1</sup> For 48 States.

<sup>2</sup> Detail may not add to total due to rounding.

Year	Farm real estate <sup>2</sup>	Live- stock <sup>3</sup>	Machinery and motor vehicles <sup>4</sup>	Other⁵	Total
		· · · · · · I	Billion dollar:	s	
1940         1945         1950         1955         1960         1961         1962         1963         1964         1965         1966         1965         1968         1968	27.9 45.5 63.6 84.1 114.1 115.9 121.8 127.5 135.3 143.5 154.3 163.5 173.3 182.0	3.9 8.0 12.4 11.0 15.2 15.6 16.4 17.3 15.5 14.4 17.6 18.9 18.8 20.3	3.8 6.9 11.2 15.8 19.1 18.6 18.8 19.1 19.9 21.2 22.5 24.3 26.3 27.6	2.2 5.1 6.7 7.4 7.1 6.8 7.0 7.0 7.0 7.3 7.2 7.5 7.7 7.6 7.8	37.7 65.6 94.0 118.3 155.6 156.9 164.0 170.9 178.0 186.3 201.9 214.5 226.1 237.7
1970 1971 <sup>1</sup>	186.9 191.9	23.5 23.7	29.0 31.1	8.0 8.2	247.5 254.9

Table 21.-Value of farm production assets, 48 States, January 1, 1940-71<sup>1</sup>

<sup>1</sup>Data for 1961 and later years are revised.

<sup>2</sup> Farmland and service buildings, excluding operators' dwellings, as of March 1.

<sup>3</sup> Excludes horses and mules.

<sup>4</sup> Includes horses and mules through 1960. Includes 40 percent of the value of automobiles on farms. Beginning in 1950, a small but increasing proportion of the value of motortrucks was allocated to farm household use.

<sup>5</sup> Includes one-half of the January 1 inventory value of feed crops (excluding CCC loans), hay and forage stored on farms, and working capital needed to meet farm production expenses. <sup>6</sup>Detail may not add to total because of rounding.

<sup>7</sup> Preliminary.

#### Table 22.—Average value of production assets per farm, 48 States, January 1, specified years, 1940-71<sup>1</sup>

Year	Farm real estate <sup>2</sup>	Live- stock <sup>3</sup>	Machinery and motor vehicles <sup>4</sup>	Other <sup>5</sup>	Total <sup>6</sup>
			Dollars		
1940	4,600,	600	600	400	6,200
1945	7,800	1,300	1,200	900	11,200
1950	11,800	2,200	2,000	1,200	17,200
1955	18,400	2,400	3,400	1,600	25,800
1960	31,700	3,800	4,800	1,800	42,100
1961	33,200	4,000	4,900	1,800	43,900
1962	36,100	4,400	5,100	1,900	47,500
1963	39,000	4,800	5,400	2,000	51,200
1964	42,900	4,500	5,800	2,100	55,300
1965	46,900	4,300	6,300	2,100	59,600
1966	52,000	5,400	7,000	2,300	66,700
1967	56,700	6,000	7,700	2,500	72,900
1968	61,900	6,200	8,600	2,500	79,200
1969	66,900	6,800	9,300	2,700	85,700
1970	71,600	8,000	9,900	2,700	92,200
<b>1971</b> <sup>1</sup>	74,700	8,200	10,800	2,800	96,500

<sup>1</sup> Data for 1961 and later years are revised.

<sup>2</sup> Farmland and service buildings, excluding operators'

dwellings, as of March 1.

<sup>3</sup> Excludes horses and mules.

<sup>4</sup> Includes horses and mules through 1960. Includes 40 percent of the value of automobiles on farms. Beginning in 1950, a small but increasing proportion of the value of motortrucks was allocated to farm household use.

<sup>5</sup> Includes one-half of the January 1 inventory value of feed crops (excluding CCC loans), hay and forage stored on farms, and working capital needed to meet farm production expenses. <sup>6</sup> Detail may not add to total because of rounding.

<sup>7</sup> Preliminary.

# Table 23.—Average value of production assets per farmworker, 48 States, January 1, specified years, 1940-71<sup>1</sup>

Year	Farm real estate <sup>2</sup>	Live- stock <sup>3</sup>	Machinery and motor vehicles <sup>4</sup>	Other <sup>5</sup>	Total <sup>6</sup>
			Dollars		
1940	2,500	300	300	200	3,300
1945	4,500	800	700	500	6,500
1950	6,400	1,200	1,100	700	9,400
1955	9,700	1,300	1,800	900	13,700
1960	15,500	2,000	2,600	1,000	21,100
1961	16,400	2,200	2,600	1,000	22,200
1962	17,600	2,400	2,700	1,000	23,700
1963	19,000	2,600	2,900	1,000	25,500
1964	20,800	2,400	3,100	1,100	27,400
1965	23,500	2,400	3,500	1,200	30,600
1966	27,500	3,100	4,000	1,300	35,900
1967	31,400	3,600	4,700	1,500	41,200
1968	35,300	3,800	5,400	1,600	46,100
1969	38,400	4,300	5,800	1,600	50,100
970	40,700	5,100	6,300	1,700	53,800
971 <sup>1</sup>	42,400	5,200	6,900	1,800	56,300

<sup>1</sup> Data for 1961 and later years are revised.

<sup>2</sup> Farmland and service buildings, excluding operators' dwellings, as of March 1.

<sup>3</sup> Excludes horses and mules.

<sup>4</sup> Includes horses and mules through 1960. Includes 40 percent of the value of automobiles on farms. Beginning in 1950, a small but increasing proportion of the value of motortrucks was allocated to farm household use.

<sup>5</sup> Includes one-half of the January 1 inventory value of feed crops (excluding CCC loans), hay and forage stored on farms, and work working capital needed to meet farm production expenses. <sup>6</sup> Detail may not add to total because of rounding.

<sup>7</sup> Preliminary.

per farm and per farmworker by region	Table 24.—Farm production assets: Total,
	per farm, and per farmworker, by region,

January 1, 1971

Region	All fa	rms	Per farm	Per farm worker		
	Bil. dol.	Bil. dol. Pct.		Dollars		
Northeast	13.7	5.4	78,400	39,800		
Lake States	21.2	8.3	71,900	41,600		
Corn Belt	58.9	23.1	103,700	70,500		
Northern Plains	30.4	11.9	132,500	90,000		
Appalachian	18.1	7.1	40,500	26,000		
Southeast	15.9	6.3	72,200	41,700		
Delta States	13.9	5.5	69,400	40,300		
Southern Plains	32.2	12.6	124,400	78,800		
Mountain	21.6	8.5	181,300	88,300		
Pacific	28.8	11.3	229,700	68,600		
48 States	254.9	100.0	96,500	56,300		

		Imputed re	turn to		Residual		
Year	Net income from pro- duction 1/	Labor 2/	Manage- ment 3/	Interest on debt 4/	earnings to equity in production assets	Equity in production assets	Ratio of earnings to asset equity 5/
	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Percent
1950 1955	17,825 15,399	10,445 10,503	1,437 1,486	544 782	5,399 2,628	86,437 107,279	6.2 2.4
1960         1961         1962         1963         1964         1965         1966         1967         1968         1969	16,568 17,692 18,064 18,185 17,394 20,308 21,952 20,600 21,022 23,526	9,501 9,306 9,069 9,097 8,850 8,864 9,079 9,668 10,017 9,641	1,735 1,820 1,896 1,945 1,961 2,081 2,310 2,276 2,784 3,207	1,257 1,349 1,491 1,575 1,849 1,012 2,266 2,560 2,885 3,029	4,075 5,217 5,608 5,568 4,734 7,351 8,297 6,096 5,336 7,649	133,458 133,694 138,853 142,962 146,922 152,358 164,037 172,347 179,676 188,497	3.1 3.9 4.0 3.9 3.2 4.8 5.1 3.5 3.0 4.1
1970 6/	23,108	10,704	3,651	3,593	5,160	194,924	2.6

Table 25.-Return to equity in farm production assets from production income, 48 States, selected years, 1950-70

1/Total net income of farm operators from farming plus cash wages and perquisites of hired labor, interest on short- and long-term debt and net rent to nonfarm landlords, minus the imputed interest portion of the rent rental value of farm dwellings.

2/Number of man-hours needed for farm production times the average wage of hired workers without room and board.

3/Five percent of the total of cash receipts from farm production and Government payments.

4/Interest on real estate and non-real estate debt excluding debt on dwellings.

5/Calculated on the market value of equity in production assets.

6/Preliminary.

Item	1940	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
ASSETS						Bi	llion doll	ars					• • • • • •	
Physical assets:														
Real estate	33,6	53.9	61.0	68.5	73.7	76.6	75.3	86.6	95.1	96.5	95.0	98 <b>.2</b>	102.9	110.4
Livestock <sup>2</sup>	5.1	9.0	9.7	11.9	13.3	14.4	12.9	17.1	19.5	14.8	11.7	11.2	10.6	11.0
Machinery and motor vehicles	3.1	6.5	5.4	5.3	7.4	10.1	12.2	14.1	16.7	17.4	18.4	18.6	19.3	20.3
Crops stored on and off farms <sup>3</sup>	2.7	6.7	6.3	7.1	9.0	8.6	7.6	7.9	8.8	9.0	9.2	9.6	8.3	8.3
Household equipment and furnishings	4.2	5.6	6.1	7.7	8.5	9.1	8.6	9.7	10.3	9.9	9.9	10.0	10.5	10.0
Financial assets:														
Deposits and currency	3.2	7.9	9.4	10.2	9.9	9.6	9.1	9.1	9.4	9.4	9.4	9.4	9.5	9.4
U.S. savings bonds	.2	3.4	4.2	4.2	4.4	4.6	4.7	4.7	4.7	4.6	4.7	5.0	5.2	5.1
Investments in cooperatives	.8	1.2	1.4	1.5	1.7	1.9	2.1	2.3	2.5	2.7	2.9	3.1	3.3	3.5
Total <sup>4</sup>	52.9	94.2	103.5	116.4	127.9	134.9	132.5	151.5	167.0	164.3	161.2	165.1	169.6	178.0
CLAIMS														
Liabilities:														
Real estate debt	6.6	4.9	4.8	4.9	5.1	5.3	5.6	6.1	6.7	7.2	7.7	8.2	9.0	9.8
Commodity Credit Corporation <sup>5</sup>	.4	.7	.3	.1	.1	1.2	1.7	.8	.6	1.2	2.4	2.2	1.9	1.0
Other reporting institutions <sup>6</sup>	1.5	1.6	1.7	2.0	2.3	2.7	2.8	3.4	4.1	4.2	3.7	4.0	4.4	4.
Nonreporting creditors <sup>7</sup>	1.5	1.1	1.2	1.5	1.8	2.2	2.3	2.8	3.3	3.5	3.1	3.2	3.5	3.
Total liabilities <sup>4</sup>	10.0	8.3	8.0	8.5	9.3	11.4	12.4	13.1	14.7	16.1	16.9	17.6	18.8	19.
Proprietors' equities	42.9	85.9	95.5	107.9	118.6	123.5	120.1	138.4	152.3	148.2	144.3	147.5	150.8	158.
Total <sup>4</sup>	52.9	94.2	103.5	116.4	127.9	134.9	132.5	151.5	167.0	164.3	161.2	165.1	169.6	178.

Table 26.–Balance Sheet of the Farming Sector, United States, Jan. 1, 1940-71<sup>1</sup>

<sup>1</sup>See footnotes at end of table.

-Continued

Item	1958	1959	, 1960	1961	1962	1963	1964	1965	196ó	1967	1968	1969	1970	1971 <sup>8</sup>
ASSETS						Billio	on dollars	; · ·		• • • • • • • •				
Physical assets:														
Real estate	115.9	124.4	130.2	131.7	138.0	143.8	152.1	160.9	172.5	182.5	193.1	202.6	208.2	214.0
Non-real estate:														
Livestock <sup>2</sup>	13.9	17.7	15.2	15.6	16.4	17.3	15.8	14.5	17.5	18.9	18.8	20.2	23.5	23.7
Machinery and motor vehicles	20.2	21.8	22.2	21.8	22.3	22.7	24.1	25.5	27.1	28.9	31.4	33.0	34.1	36.6
Crops stored on and off farms <sup>3</sup>	7.6	9.3	7.7	8.0	8.8	9.3	9.8	9.2	9.7	10.0	9.6	10.6	10.9	10.7
Household equipment and furnishings	9.9	9.8	9.6	8.9	9.1	9.0	8.9	8.6	8.6	8.4	9.0	9.6	9.6	9.7
Financial assets:														
Deposits and currency	9.5	10.0	9.2	8.7	8.8	9.2	9.2	9.6	10.0	10.3	10.9	11.5	11.9	12.4
U.S. savings bonds	5.1	5.2	4.7	4.6	4.5	4.4	4.2	4.2	4.1	3.9	3.8	3.7	3.7	3.7
Investments in cooperatives	3.7	4.0	4.3	4.7	5.0	5.3	5.7	6.0	6.3	6.6	7.0	7.3	7.7	8.1
Total <sup>4</sup>	185.8	202.2	203.1	204.0	212.9	221.0	229.8	238.5	255.8	269.5	283.6	298.5	309.6	318.9
CLAIMS														
Liabilities:														
Real estate debt	10.4	11.1	12.1	12.8	13.9	15.2	16.8	18.9	21.2	23.3	25.5	27.1	28.4	29.5
Non-real estate debt to:														
Commodity Credit Corporation <sup>5</sup>	1.2	2.5	1.2	1.4	1.9	2.0	1.9	1.5	1.4	1.2	1.4	2.7	2.7	1.9
Other reporting institutions <sup>6</sup>	5.0	5.7	6.7	7.0	7.5	8.5	9.5	10.0	11.1	12.4	13.7	14.5	15.8	17.4
Nonreporting creditors <sup>7</sup>	3.8	4.3	4.8	5.0	5.4	6.0	6.7	7.1	7.9	8.8	9.8	10.3	11.2	12.3
Total liabilities <sup>4</sup>	20.4	23.6	24.8	26.2	28.7	31.7	34.9	37.5	41.6	45.7	50.4	54.6	58.1	61.1
Proprietors' equities	165.4	178.6	178.3	177.8	184.2	189.3	194.9	201.0	214.2	223.8	233.2	243.9	251.5	257.8
Total <sup>4</sup>	185.8	202.2	203.1	204.0	212.9	221.0	229.8	238.5	255.8	269.5	283.6	298.5	309.6	318.9

Table 26.—Continued

<sup>1</sup>Data for 48 States only. Revised. <sup>2</sup>Beginning with 1961, horses and mules are excluded.

<sup>3</sup>Includes all crops held on farms and crops held off farms by farmers as security for CCC loans. On Jan. 1, 1971, the latter totaled \$722 million,

<sup>4</sup>Totals of rounded data.

<sup>5</sup> Nonrecourse CCC loans secured by crops owned by farmers and included as assets in this balance sheet.

<sup>6</sup>Loans of all operating banks, the production credit associations and the Farmers Home Administration, and discounts of the Federal intermediate credit banks for agricultural credit corporations and livestock loan companies.

<sup>7</sup>Loans and credit extended by dealers, merchants, finance companies, individuals, and others.

<sup>8</sup> Preliminary.

Note: Data for 1941 through 1944 may be obtained from The Balance Sheet of Agriculture, 1966, U.S. Dept. Agr. Information Bul. 314, September 1966.

by

Forest G. Warren and Van E. Eitel

#### ABSTRACT

This article classifies for the first time farm mortgage loan characteristics—average term, interest rate, and size-by 21 types of farming areas. Loan characteristics vary by lender within a farming area, and also vary by lender between types of farming areas. The data provide lenders and the borrowers with information based on type of farming area in addition to that based purely on geographical regions.

Key Words: Credit, credit sources, farm loans, farm mortgages, interest rates.

Farm mortgage debt of \$29.5 billion outstanding on January 1, 1971, was 3.9 percent higher than a year earlier and more than double the level of a decade earlier.

The increase has resulted from larger farm units, increased use and costs of nonfarm inputs, and higher real estate prices. The average size of farm mortgages recorded during the last half of 1970, \$23,400, was 6.7 percent larger than a year earlier and nearly  $2\frac{1}{2}$  times larger than 10 years earlier.<sup>1</sup> The average interest rate for the first half of 1969 was 6.80 percent for all lenders and the average term was 18.2 years, compared with 6.07 percent and 18.6 years 2 years earlier and 5.4 percent and 14.5 years a decade earlier.<sup>2</sup>

Characteristics of new farm mortgage loans—average interest rate, term, and size—not only change over time but also vary by geographical location, lender, and borrower. This paper presents loan characteristics based on types of farming area.<sup>3</sup> Although data recorded in public records on farm mortgages usually do not provide sufficient information to identify the type of farm used as security for the loan, the county in which the property is located is identified. Therefore, loans can be grouped by counties having predominantly similar types of farming. Figure 1 shows the boundaries of each type of farming area.

#### **General Patterns**

From 1967 to 1969, farm mortgages tended toward higher interest rates, larger average size of loan, and slightly shorter terms (tables 27 and 28).

The major exception was in the California Specialty Area, where the average loan size decreased from \$37,740 to \$31,210-a 17-percent drop, compared with a 15-percent increase nationally. The average term dropped 18 percent, compared with a U.S. drop of only 2 percent. The average interest rate for this area increased 1.47 percentage points, while the U.S. average increased only 0.73 percentage point. Farmers in the California Specialty Area on the average had less favorable loan terms compared with 1967 than did other U.S. farmers.

For the first half of 1969, the average interest rate was lowest in the Northwest Dairy Area, 6.46 percent, and highest in the California Specialty Area, 7.49 percent. The average term was shortest in the Central Cotton Area, 11.8 years, and longest in the Northwest Area, 25.9 years. Average size varied from \$13,500 in the Eastern Tobacco Area to \$38,020 in the Southern Range Livestock Area.

#### Loan Characteristics by Lenders

Several reasons account for the variation in loan characteristics among types of farming area. First, lenders tend to vary their interest rates, loan maturities, and loan sizes according to the needs and situation of each type of farm, particularly taking into consideration the value of farm business, prices, production risks, the rate of capital turnover, and competitive factors. Tables 29-31 show the average rate, term, and size of farm mortgages recorded during the first half of 1969, by type of farming area and by lender. Differences in loan characteristics also reflect variation among areas in availability of loan funds, lender competition, lending costs, and historical lending customs.

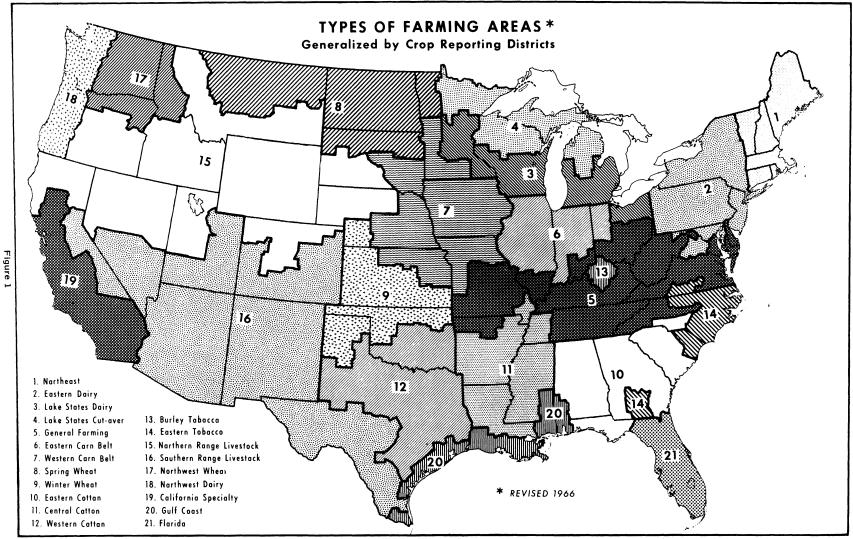
Lending customs and the predominant kind of lender in an area are especially important in determining the

<sup>&</sup>lt;sup>1</sup>Farm Credit Administration, "Farm Real Estate Mortgages Recorded Second-Half 1970," Wash., D.C., June 1971.

<sup>&</sup>lt;sup>2</sup>Eitel, Van E., "Farm Mortgages Recorded in 1959-Interest Rates, Terms, and Sizes with Historical Data, 1949-1959," ERS-61, Econ. Res. Serv., U.S. Dept. Agr., April 1962.

\_\_\_\_\_, Agricultural Finance Review Supplement, Vol. 31, Econ. Res. Serv., U.S. Dept. Agr., Dec. 1970.

<sup>&</sup>lt;sup>3</sup> The average interest rate, term, and size for farm mortgage loans recorded are based on data collected on a biennial basis by the Farm Credit Administration. Data for the first half of 1971 will be available in early 1972. The data are based on a sample of 1,742 agricultural counties throughout the United States. The data used herein omit loans of \$250,000 and over. The average interest rate, term, and size for 1967 and 1969 are published by State and by farm production region in the Agricultural Finance Review Supplement, Volume 31, Econ. Res. Serv., U.S. Dept. Agr., Dec. 1970, pages 78 to 83.



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#### Table 27.-Distribution of farm mortgage loans, average interest rate, term, and size by type of farming area, first half 1969 1/

Type of farming area	Distribution of amount	Average interest rate	Average term	Average size
	Percent	Percent	Percent	Percent
Corn Belt Western Corn Belt Eastern Corn Belt	16.9 10.5	6.53 6.90	23.6 19.6	27,270 27,590
Cotton Belt Central Cotton Western Cotton Eastern Cotton	8.2 9.2 4.5	7.09 6.85 6.92	11.8 15.0 14.9	23,490 22,860 16,060
General Farming Belt General Farming	13.4	6.75	14.3	<b>16,</b> 460
Range Livestock Belt Northern Range Livestock Southern Range Livestock	6.0 4.6	6.82 6.89	20.1 17.8	35,700 38,020
Wheat Belt Winter Wheat Spring Wheat Northwest Wheat	5.8 2.5 1.8	6.89 6.74 6.68	21.0 22.4 23.6	27,780 27,430 36,140
Dairy Belt Eastern Dairy Lake States Dairy Northwest Dairy	4.7 3.9 .9	6.73 6.92 6.46	19.0 18.2 22.8	28,400 22,040 19,590
Tobacco Belt Eastern Tobacco Burley Tobacco	2.1 1.5	6.55 6.72	18.1 13.2	13,500 19,700
Other areas California Specialty Gulf Coast Florida Lake States Cut-over Northeast	.9 .8 .8 .5 .5	7.49 7.19 6.93 7.10 6.73	18.7 18.9 14.4 18.4 25.9	31,210 24,530 30,600 14,730 29,030
United States	100.0	6.80	18.2	23,570

1/Excludes Alaska and Hawaii. Excludes loans of \$250,000 and over. Interest rates and terms are weighted by the amounts of the mortgages. Mortgages payable on demand and the amortised over periods of more than 40 years are excluded.

Table 28.-Distribution of farm mortgage loans, average interest rate, term, and size, by type of farming area, first half 1967 1/

	- <u>+</u>		·····	
Type of farming area	Distribution of amount	Average interest rate	Average term	Average size
	Percent	Percent	Years	Dollars
Corn Belt				
Western Corn Belt	18.3	5.88	23.2	23,950
Eastern Corn Belt	11.0	6.07	20.3	25,460
Cotton Belt				
Central Cotton	8.4	6.40	12.4	20,100
Western Cotton	7.8	6.15	16.6	20,610
Eastern Cotton	4.0	6.30	14.1	12,500
General Farming Belt				
General Farming	13.4	6.09	15.1	13,940
Range Livestock Belt				
Northern Range Livestock.	6.0	5.98	21.5	30,490
Southern Range Livestock.	4.8	6.17	18.4	34,980
Wheat Belt				
Winter Wheat	5.8	6.02	21.4	25,960
Spring Wheat	2.5	6.03	23.5	24,260
Northwest Wheat	1.8	6.09	24.1	28,680
Dairy Belt	1			
Eastern Dairy	4.2	5.86	17.4	22,790
Lake States Dairy	3.5	6.10	19.0	17,060
Northwest Dairy	• 4	6.01	23.1	15,580
Tobacco Belt				
Eastern Tobacco	2.2	6.01	17.2	10,160
Burley Tobacco	1.3	6.05	15.7	17,370
Other Areas				
California Specialty	2.3	6.02	22.7	37,740
Gulf Coast	.9	6.32	17.0	23,750
Florida	.7	6.63	12.9	23,620
Lake States Cut-over	.3	6.17	20.1	11,310
Northeast	.3	5.77	24.5	20,680
United States	100.0	6.07	18.6	20,490

1/Excludes Alaska and Hawaii. Excludes loans of \$250,000 and over. Interest rates and terms are weighted by the amounts of the mortgages. Mortgages payable on demand and those amortised over periods of more than 40 years are excluded.

characteristics of mortgage loans available to farmers. For example, Federal land banks usually make loans of about 30-year terms, life insurance companies average about 20 years, and commercial banks usually lend for less than 10 years. Commercial bank regulations frequently restrict the size of individual loans, whereas life insurance companies often seek large loans. The proportion of loans made by different lenders varies among areas and this may explain as much of the variation in average loan characteristics as does variation in area conditions themselves.

The custom of commercial banks and production credit associations in taking real estate mortgages as supplemental security for crop and seasonal operating loans in sections of the South should also be considered in appraising area differences in loan characteristics. Where this is the practice, the average farm mortgage loan has a much shorter term and perhaps is smaller than would be the case if only the more usual loans for longer term purposes were included.

For the first 6 months of 1969, the average interest rate on farm mortgage loans recorded was 6.80 percent. Loans made by the life insurance companies averaged 7.69 percent, the highest lender rate, and those made by individuals averaged 6.16 percent—the lowest rate except for the Farmers Home Administration (FHA), which averaged 4.97 percent. FHA rates are subsidized and thus are not comparable to rates charged by the other lenders.

Excluding FHA, individuals and miscellaneous lenders charged the lowest rates in all but 2 farming areas. In the California Specialty Area, the Federal land banks had the lowest average rate and in the Gulf Coast Area, the life insurance company group was the lowest.

Life insurance companies charged the highest average rate in 10 of 17 areas in which adequate life insurance company data were available. In the other 11 types of farming area, located mainly in the Southwest and Northeast, no one lender group consistently charged higher rates than other lender groups. The highest average rates in these 11 areas were held by 5 lender groups. Production credit associations averaged highest in 4 areas, savings and loan associations in 3, and banks and trust companies in 2. Federal land banks and miscellaneous lender groups each were highest in 1 area.

#### Loan Characteristics by Type of Farming within States

Classification of the characteristics of farm mortgage loans recorded by State and type of farming area provides a good picture of loan characteristics within States. Many States encompass more than one type of farming area. In North Carolina, for example, there are different types of farming areas, general farming, eastern cotton, and eastern tobacco. Loan characteristics by type of farming area for 1969 were:

North Carolina	Interest rate	Term	Size
	Percent	Years	Dollars
General Farming	6.49	16.7	11,760
Eastern Cotton	6.41	20.7	13,780
Eastern Tobacco	6.31	19.1	12,820
Average	6.38	18.7	12.520

The average real estate loan recorded in the Eastern Tobacco Area of North Carolina averaged \$1,000 larger, carried a 0.18-percentage-point lower interest rate, and was repayable over a longer period than in the General Farming Area. Similar variations between farming areas exist within the other States.<sup>4</sup>

Although the classification of the loan characteristics by type of farming area provide a useful picture of loan characteristics, lenders and borrowers are also concerned with more localized characteristics than provided by the area approach. Many of the type of farming areas are so large in geographical coverage that local factors other than type of farming affect the average interest rate, term, and size. For example, the average interest rate by States within the 2 Corn Belt areas ranged from a high of 7.00 percent for Indiana to a low of 6.43 percent for Iowa. The average term ranged from 26.1 years for South Dakota Corn Belt farms to only 17.0 years for Indiana. Loan characteristics in 1969 for recorded real estate loans in the 2 Corn Belt areas by State were as follows:

States	Interest rate	Term	Size
	Percent	Years	Dollars
Western Corn Belt			
Iowa	6.43	25.2	33,350
Missouri	6.56	17.1	20,680
Minnesota	6.98	21.3	20,380
South Dakota	6.47	26.1	21,620
Nebraska	6.69	21.8	26,510
Kansas	6.93	26.0	19,790
Average	6.53	23.6	27,270
Eastern Corn Belt			
Illinois	6.86	22.7	30,350
Indiana	7.00	17.0	25,150
Ohio	6.73	19.1	28,640
Average	6.90	19.6	27,590

<sup>&</sup>lt;sup>4</sup> Eitel, Van E., Warren, Forest G., and Mitchem, Nan P., Characteristics of Farm Mortgages Recorded - First Half, 1967 and 1969, mimeograph, Econ. Res. Serv., U.S. Dept. Agr., March 2, 1970.

Type of farming area	Principal lender groups									
	Federal land banks <u>Percent</u>	Life insurance companies <u>Percent</u>	Banks and trust companies <u>Percent</u>	Farmers home adminis- tration <u>Percent</u>	Produc- tion credit associ- ations <u>Percent</u>	Savings and loan associ- ations <u>Percent</u>	Indivi- uals Percent	Miscel- laneous lenders 2/ <u>Percent</u>	All lenders <u>Percent</u>	
										Northeast
Eastern dairy	7.01	6.90	7.02	4.99	7.55	7.37	6.07	7.20	6.78	
Lake states dairy	7.25	7.62	7.12	5.01	7.26	7.31	5.90	7.15	6.92	
Lake states cut-0	7.20	3/	6.97	5.00	7.34	7.20	5.85	7.65	7.10	
General farming	7.08	7.76	7.10	5.01	6.77	7.12	6.21	7.23	6.75	
Eastern corn belt	7.08	7.36	7.02	4.98	7.06	7.21	6.06	6.78	6.90	
Western corn belt	7.08	7.61	7.28	5.03	7.24	7.51	5.82	6.88	6.53	
Spring wheat	7.15	7.46	7.37	4.99	7.14	7.35	5.73	6.27	6.74	
Winter wheat	7.16	8.14	7.47	4.93	7.44	6.85	6.25	5.92	6.89	
Eastern cotton	7.04	7.82	7.52	4.80	7.39	7.30	6.51	7.22	6.92	
Central cottoo	7.42	7.75	7.46	4.74	7.07	7.15	6.39	7.33	7.09	
Western cotton	7.12	7.56	7.75	5.01	7.57	7.61	6.45	6.32	6.85	
Burley tobacco	7.06	7.10	6.83	5.02	7.00	6.90	6.10	6.82	6.72	
Eastern tobacco	6.88	3/	6.76	4.90	6.72	6.24	6.17	6.28	6.55	
Northern range LVSK	7.09	7.90	7.72	4.92	7.32	7.77	6.18	5.98	6.82	
Southern range LVSK	7.16	7.80	7.87	5.03	7.43	7.49	6.27	7.07	6.89	
Northwest wheat	7.11	7.82	8.09	4.84	6.73	7.92	6.60	4.47	6.68	
Northwest dairy	7.12	3/	7.20	4.98	8.20	7.79	6.61	4.43	6.46	
Calif specialty	7.12	7.73	7.83	3/	8.89	3/	7.57	7.48	7.49	
Gulf coast	7.52	7.00	7.42	5.04	7.29	7.87	6.43	7.32	7.19	
Florida	6.88	3/	7.60	5.01	7.43	3/	6.48	3/	6.93	
United States	7.11	7.69	7.27	4.97	7.14	7.27	6.16	6.73	6.80	

#### Table 29.-Farm mortgages recorded: Average interest rates, by lender groups and type

of farming area, Jan. 1 through June 30, 1969 1/

1/ Excludes Alaska and Hawaii. Excludes loans of \$250,000 and over. Interest rates are weighted by the amounts of the mortgages.
2/ Includes mortgage and investment companies, state and local governmental agencies, merchants and dealers, and unidentified lenders.

3/ Adequate data not available.

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Type of farming area	Principal lender groups									
	Federal land banks Years	Life insurance companies Years	Banks and trust companies Years	Farmers home adminis- tration Years	Produc- tion credit associ- ations Years	Savings and loan associ- ations Years	Individ- uals Years	Miscel- laneous lenders 2/ Years	All lenders Years	
										lortheast
astern dairy	29.3	21.0	11.5	38.0	6.9	10.6	10.3	12.3	19.0	
ake states dairy	24.6	22.1	11.6	39.2	2.2	14.8	11.7	13.6	18.2	
ake states cut-0	20.7	3/	11.9	40.0	1.0	16.0	9.5	6.6	18.4	
eneral farming	29.5	20.6	6.5	34.9	1.9	16.1	9.2	9.9	14.3	
astern corn belt	33.8	22.4	9.9	37.9	2.1	15.3	9.4	9.8	19.6	
estern corn belt	32.4	21.5	7.9	38.6	2.6	15.3	14.7	10.7	13.6	
pring wheat	29.8	21.9	5.7	36.2	1.9	19.9	12.3	18.2	22.4	
Inter wheat	28.8	19.9	6.4	37.9	1.4	15.0	10.5	25.2	21.0	
astern cotton	26.3	20.3	3.4	33.3	3.8	16.0	8.0	9.5	14.9	
entral cotton	26.2	20.8	2.8	28.7	1.7	17.0	10.5	6.0	11.8	
estern cotton	28.1	20.3	5.3	37.6	1.6	14.8	11.5	22.2	15.0	
rley tobacco	32.0	21.4	3.0	36.2	2.3	17.2	8.1	10.4	13.2	
astern tobacco	28.1	3/	4.6	37.1	3.3	17.2	6.8	4.7	18.1	
orthern range lvsk	31.5	20.0	5.1	30.2	3.4	18.9	11.6	17.5	20.1	
outhern range lvsk	28.5	21.1	4.4	36.7	1.4	17.1	11.2	8.4	17.8	
orthwest wheat	34.2	22.2	9.6	28.7	3.7	25.0	11.3	22.0	23.6	
orthwest dairy	32.9	3/	9.7	38.7	1.7	18.0	12.3	25.5	22.8	
alif specialty	23.5	21.0	17.1	33.0	1.0	3/	18.9	4.9	18.7	
ulf coast	27.4	20.7	4.6	32.5	2.2	17.1	9.5	12.0	18.9	
lorida	24.8	3/	5.5	35.4	5.7	3/	9.0	3/	14.4	
United States	30.1	21.0	6.8	35.7	2.3	15.9	11.4	14.2	18.2	

# Table 30.-Farm mortgages recorded: weighted average term, by lender groups and type of farming area Jan. 1 through June 30, 1969 1/

1/ Excludes Alaska and Hawaii. Excludes loans of \$250,000 and over. Terms are weighted by the amounts of the mortgages, excluding those payable on demand and those amortized over periods of more than 50 years.

2/ Includes morgage and investment companies, state and local governmental agencies, merchants and dealers.

3/ Adequate data not available.

Type of farming area	Principal lender groups									
	Federal land banks	Life insurance <b>companie</b> s	Banks and trust companies	Farmers home Adminis- tration	Produc- tion credit associ- ations	Savings and loan associ- ations	Individ- uals	Miscel- laneous lenders 2/	All lenders	
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	
ortheast	34,440	3/	15,570	19,000	31,150	3/	32,740	24,460	29,030	
astern dairy	35,330	41,880	23,490	19,600	29,890	19,130	32,280	28,610	28,400	
ake states dairy	25,580	48,480	17,880	24,020	33,740	19,280	21,540	11,410	22,040	
ake states cut-0	17,220	3/	11,520	14,990	31,830	9,760	13,180	8,870	14,730	
eneral farming	24,950	57,670	12,040	14,410	21,190	15,940	16,960	10,730	16,460	
astern corn belt	32,590	44,600	19,810	28,880	36,920	22,070	23,050	18,260	27,590	
estern corn belt	29,030	39,960	15,820	27,520	35,770	18,260	31,290	17,300	27,270	
oring wheat	32,740	45,110	19,460	25,060	34,020	18,960	22,290	19,400	27,430	
inter wheat	28,860	51,720	18,310	23,900	49,810	16,480	23,130	17,890	27,780	
astern cotton	22,770	65,930	9,760	13,680	19,030	11,330	17,040	9,540	16,060	
entral cotton	27,020	73,930	14,120	13,130	33,920	13,650	20,090	28,260	23,490	
estern cotton	21,460	52,390	16,520	22,050	49,660	20,520	26,400	16,560	22,860	
irley tobacco	30,060	54,410	15,070	20,120	21,170	15,760	19,060	10,450	19,700	
astern tobacco	19,220	3/	11,370	17,710	11,870	15,830	12,040	9,860	13,500	
orthern range lvsk	34,350	68,300	27,820	24,870	64,300	13,440	30,860	29,270	35,700	
outhern range lvsk	35,020	78,600	26,890	28,070	65,030	20,810	35,920	41,590	38,020	
orthwest wheat	35,290	63,540	29,720	29,780	48,830	17,310	28,100	36,900	36,140	
orthwest dairy	25,630	3/	15,160	21,430	34,860	18,260	19,310	16,900	19,590	
alif specialty	51,110	87,400	26,670	29,040	49,600	3/	22,240	45,060	31,210	
11f coast	27,700	38,070	16,410	14,530	28,210	25,070	30,130	17,640	24,530	
lorida	35,660	3/	17,700	14,290	43,660	3/	26,410	3/	30,600	
United States	28,500	51,670	15,810	21,280	28,580	17,590	24,630	18,870	23,570	

#### Table 31.-Farm mortgages recorded: Average size, by lender groups and type of farming area, January 1 through June 30, 1969 1/

1/Excludes Alaska and Hawaii. Excludes loans of \$250,000 and over.

2/Includes mortgage and investment companies, State and local governmental agencies, merchants and deal rs, and unidentified lenders. 3/Adequate data not available.

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The Balance Sheet of the Farming Sector