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> Balance Sheet of the Farming Sector

Supplement

No. 1

Agriculture Information

**Bulletin** 

No. 403

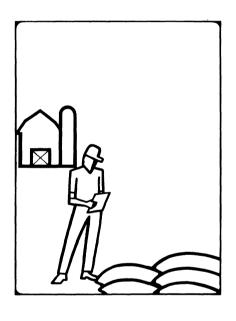
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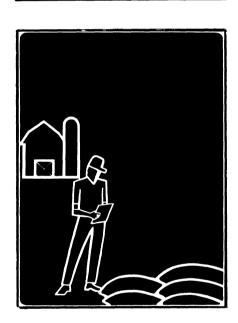
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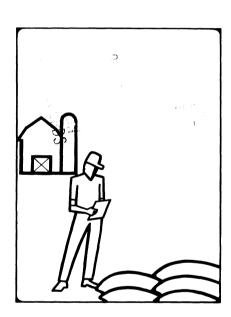
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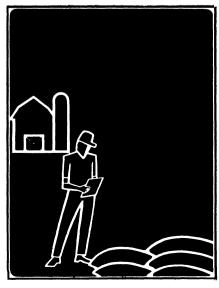
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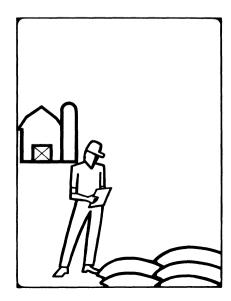
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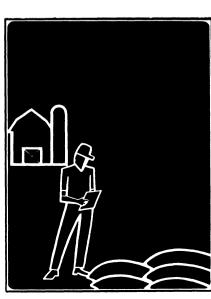












BALANCE SHEET OF THE FARMING SECTOR, SUPPLEMENT 1 to AIB No. 403 by Carson D. Evans and Richard W. Simunek, National Economic Analysis Division, Economic Research Service, U.S. Department of Agriculture.

#### **ABSTRACT**

Farm assets were valued at \$634.3 billion on January 1, 1977, and outstanding debt was \$101.8 billion, leaving farm proprietors an equity of \$532.5 billion. These amounts compare with assets of \$560.4 billion, debt of \$90.8 billion, and equity of \$469.6 billion at the beginning of 1976.

During 1976, farm real estate value increased \$64.0 billion (16 percent) over the revised January 1, 1976, estimate of \$397.3 billion. Farm real estate value has been revised downward for the years 1971-76, based on new data collected in the 1974 Census of Agriculture.

Livestock and poultry value of \$29.1 billion on January 1, 1977, was slightly below the value of a year earlier. Machinery and motor vehicles were valued at \$73.0 billion, an 11-percent increase from the beginning of 1976. The value of crops stored was an estimated \$20.0 billion on January 1, 1977, about the same as a year earlier. The value of household equipment and furnishings rose about 7 percent and on January 1, 1977, stood at \$17.4 billion. Financial assets rose about 5 percent to total an estimated \$33.5 billion at the beginning of 1977. Farm debt rose at a slightly faster rate than during 1975. On January 1, 1977, farm real estate debt outstanding was \$56.1 billion and nonreal estate debt (excluding CCC loans) was \$44.7 billion. CCC loans increased from \$0.3 billion on January 1, 1976, to \$1.0 billion on January 1, 1977, the highest level since 1973. Balance sheets by value of sales class, capital gains on physical assets, farm production assets, and rates of return on equity were reconstructed to reflect revisions in farm real estate values.

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### BALANCE SHEET OF THE FARMING SECTOR, 1976 Supplement I to AIB No. 403

by

Carson D. Evans and Richard W. Simunek
Agricultural Economists
Economic Research Service, U.S. Department of Agriculture

#### **BALANCE SHEET SUMMARY**

Preliminary estimates of the balance sheet of the farming sector for January 1, 1977, showed total farm assets of \$634.3 billion, 13 percent above the value for January 1, 1976 (table 1 and fig. 1). The average annual increase since 1970 was 15 percent. Farm debt increased by \$11.0 billion, pushing the total outstanding on January 1, 1977, to \$101.8 billion. The 12-percent

rate of increase over January 1976 compared with an 11-percent rise during 1975 and the average increase of 13 percent since 1970. Proprietors' equity totaled \$532.5 billion at the beginning of 1977, about 13 percent above a year earlier but 110 percent over January 1, 1970. Balance sheet values per farm are shown in table 2.

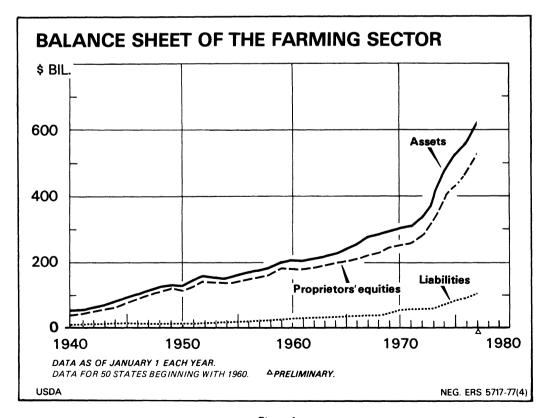


Figure 1

Table 1-Balance sheet of the farming sector, January 1, selected years, 1940-771

												Chi	ange
Item	1940	1950	1960	1970	1971	1972	1973	1974	1975	1976	1977²	1976 to 1977	1976 to 1977
							Billion do	llars				Perc	ent
ASSETS													
Physical assets:													
Real estate	33.6	75.3	130.6	206.9	213.3	228.4	254.6	312.4	349.8	397.3	461.3	64.0	16.1
Livestock <sup>3</sup>	5.1	12.9	15.3	23.5	23.7	27.3	34.1	42.4	24.6	29.5	29.1	4	-1.5
Machinery and motor vehicles	3.1	12.2	22.7	32.3	34.4	36.6	39.3	44.3	56.5	65.9	73.0	7.1	10.8
Crops stored on and off farms <sup>4</sup>	2.7	7.6	7.7	10.9	10.7	11.8	14.5	22.1	23.3	19.8	20.0	.2	1.2
Household equipment and furnishings	4.2	8.6	9.6	9.8	10.3	11.2	12.7	13.6	15.3	16.2	17.4	1.2	7.0
Deposits and currency	3.2	9.1	9.2	11.9	12.4	13.2	14.0	14.9	15.1	15.6	16.2	.6	3.1
U.S. savings bonds	.2	4.7	4.7	3.7	3.6	3.7	4.0	4.1	4.3	4.4	4.5	.1	2.8
Investments in cooperatives	.8	2.1	4.2	7.2	7.6	8.0	8.6	9.5	10.5	11.7	12.8	1.1	9.7
Total <sup>5</sup>	52.9	132.5	204.0	306.2	316.0	340.2	381.8	463.3	499.4	560.4	634.3	73.9	13.2
CLAIMS													
Liabilities:													
Real estate debt	6.6	5.6	12.0	29.2	30.3	32.2	35.7	41.3	46.3	51.1	56.1	5.0	9.8
ccc <sup>6</sup>	.4	1.7	1.2	2.7	1.9	2.3	1.8	.7	.3	.3	1.0	.7	184.1
Other reporting institutions	1.5	2.8	6.7	15.8	17.4	19.6	22.0	26.2	29.2	33.1	37.8	4.7	14.2
Nonreporting creditors <sup>8</sup>	1.5	2.3	4.9	5.3	4.8	5.0	5.8	5.9	6.0	6.3	6.9	.6	9.4
Total liabilities <sup>5</sup>	10.0	12.4	24.8	53.0	54.4	59.1	65.3	74.1	81.8	90.8	101.8	11.0	12.1
Proprietors' equities	42.9	120.1	179.2	253.2	261.6	281.1	316.5	389.2	417.6	469.6	532.5	62.9	13.4
Total <sup>5</sup>	52.9	132.5	204.0	306.2	316.0	340.2	381.8	463.3	499.4	560.4	634.3	73.9	13.2
							Percent						
Debt to asset ratio 9	18.9	9.4	12.2	17.3	17.2	17.4	17.1	16.0	16.4	16.2	16.1		•••

<sup>&</sup>lt;sup>1</sup> Includes Alaska and Hawaii beginning with 1960. <sup>2</sup> Preliminary. <sup>3</sup> Beginning with 1961, horses and mules are excluded. <sup>4</sup> Includes all crops held on farms and crops held off farms by farmers as security for CCC loans. On Jan. 1, 1977, the latter totaled \$397 million.

Federal intermediate credit banks for agricultural credit corporations and livestock loan companies. <sup>8</sup> Loans and credit extended by dealers, merchants, finance companies, individual, and others. Revised beginning with 1961. <sup>9</sup> Computed from unrounded data.

<sup>&</sup>lt;sup>5</sup>Totals of rounded data. <sup>6</sup>Nonrecourse CCC loans secured by crops owned by farmers. These crops are included as assets in this balance sheet. <sup>7</sup>Loans of all operating banks, production credit associations, the Farmers Home Administration, and discounts of the

Table 2—Balance sheet of the farming sector: Average per farm, current prices, January 1, selected years, 1940-1977<sup>1</sup>

		selected years,	940-1977			
Item	1940	1950	1960	1970	1976	1977²
			Dollars			
ASSETS						
Physical assets:						
Real estate	5,297	13,324	32,945	70,026	143,026	167,642
Nonreal estate:						
Livestock & poultry	808	2,283	3,848	7,949	10,622	10,566
Machinery & motor vehicles	482	2,154	5,739	10,934	23,716	26,526
Crops stored on & off farms <sup>3</sup>	420	1,344	1,952	3,697	7,112	7,267
Household equipment &			0.410	2 224	5,842	6,314
furnishings	663	1,524	2,419	3,334	5,842	6,314
Financial assets:				4 005	5.623	5,854
Deposits & currency	510	1,607	2,313	4,025	•	1,653
U.S. savings bonds	39	836	1,177	1,266	1,593	•
Investment in cooperatives	131	364	1,071	2,438	4,201	4,651
Total	8,350	23,436	51,464	103,669	201,735	230,473
CLAIMS						
Liabilities:						
Real estate debt	1.037	988	3,049	9,879	18,383	20,377
Nonreal estate debt:	-,		•			
Excluding CCC loans	473	912	2,909	7,166	14,185	16,247
CCC loans <sup>4</sup>	70	305	294	906	129	370
Total liabilities	1,580	2,205	6,252	17,951	32,697	36,994
	•					
Proprietors' equities	6,770	21,231	45,212	85,718	169,038	193,479
Total	8,350	23,436	51,464	103,669	201,735	230,473
			Percent			
Debt-to-asset ratio	18.9	9.4	12.2	17.3	16.2	16.0

<sup>&</sup>lt;sup>1</sup>Total values divided by total number of farms. Data for 50 States beginning with 1960. <sup>2</sup>Preliminary. <sup>3</sup>All crops held on farms including crops under loan to CCC, and crops held off

farms as security for CCC loans. <sup>4</sup>Nonrecourse CCC loans secured by crops owned by farmers. These crops are included as assets in this balance sheet.

#### Assets

The value of farm real estate on January 1, 1977, was \$461.3 billion. The 16-percent increase from January 1, 1976, was more than the 14-percent increase during 1975 but less than the average annual increase rate of 18 percent since 1970.

The value of livestock and poultry on farms January 1, 1977, was \$29.1 billion, slightly below the value of a year earier. The small increase in the total value of cattle and calves over January 1, 1976, was offset by the sharp drop in the total value of hogs and pigs.

The total value of machinery and motor vehicles on farms at the start of 1977 was an estimated \$73.0 billion, \$7.1 billion over the January 1, 1976, value. The 11-percent increase during 1976 did not match the 17-percent rise from 1975 to 1976.

The value of farmer-owned stored crops on hand at the beginning of 1977 was \$20.0 billion, compared with \$19.8 billion a year earlier. A \$0.5-billion increase in the value of stored soybeans over January 1, 1976, was largely offset by lower values of other crops, especially wheat values which were down almost \$0.3 billion

although wheat stocks were up about one-fifth. The average price of soybeans at the beginning of 1977 was higher than at the beginning of 1976, but most grain prices were lower. As usual, only relatively small quantities of rice, peanuts, cotton, and tobacco were still in farmers' hands at the beginning of the year.

The estimated value of equipment and furnishings in farm households on January 1, 1977, was placed at \$17.4 billion, 7 percent above a year earlier. This was slightly less than the 8-percent average annual increase since 1970.

Farmers' financial assets rose \$1.8 billion from the year-earlier level and totaled \$33.5 billion on January 1, 1977. This was a modest 5-percent increase and was mostly the result of higher net worths of farmer cooperatives. Indications are that farmer-owned bank deposits rose only slightly. Since 1970, the average annual rate of increase of all financial assets was 7 percent.

#### Debt

Farm debt outstanding January 1, 1977, totaled \$101.8 billion, including CCC loans on stored crops. The

12-percent increase from a year earlier was about the annual average rate since 1970 but slightly more than the increase from January 1975 to January 1976.

Farm real estate debt outstanding at the beginning of 1977 was \$56.1 billion, up 10 percent from a year earlier but nearly double the amount outstanding in January 1970. Federal land banks were the most prominent institutional lenders, holding more than twice the amount of loans held by commercial banks or by life insurance companies. However, the increase in Federal land bank loans outstanding between January 1, 1976, and January 1,1977, did not match the rate of increase that occurred between 1975 and 1976. On the other hand, loans held by commercial banks and life insurance companies increased at a faster rate in 1976 than during 1975.

Nonreal estate farm loans (excluding CCC loans) outstanding January 1, 1977, amounted to \$44.7 billion, \$5.3 billion or 13 percent over a year earlier. Commercial banks were the largest lenders and held about half of the nonreal estate farm loans. Banks experienced a 15.5-percent growth in loans held during 1976, compared with a growth rate of 10.5 percent during 1975. Production credit associations, the other large institutional group, increased loans during 1976 by 13.6 percent, about the same rate as during 1975.

CCC loans increased from \$0.3 billion outstanding January 1, 1976, to \$1.0 billion on January 1, 1977. This was the largest amount outstanding since 1973. Evidently farmers placed more eligible crops under loan

with hope that prices would rise, or to use CCC loans as a source of credit.

Farm proprietors' equity in farm assets amounted to \$532.5 billion on January 1, 1977. The \$62.9 billion rise from January 1976, the largest in any year, was 20 percent more than the increase between January 1975 and January 1976.

Farm real estate value increased as a component share of total assets on January 1, 1977, continuing the trend begun in 1950 (table 3). Farm real estate debt and non-real estate debt maintained their usual shares of total debt.

#### Farm Real Estate Value Revisions

The values of farm real estate beginning with 1971 were recently revised based on data received in the 1974 Census of Agriculture. Values for the years between censuses are estimated by prorating the annual percentage changes in land values estimated by the Economic Research Service (ERS) to the latest agricultural census estimates. The 1974 Census information causes estimates after 1970 to be revised downward. The revised values are shown in table 1.

Since the value of real estate is the predominant farm asset value item, changes in its value influence heavily changes in total asset and equity values. The downward revisions in total real estate value raised the debt-to-asset rates slightly.

Over the past 5 years, the average value of farm real estate per acre has increased 114 percent (fig. 2). The

Table 3—Balance sheet components as shares of total assets and liabilities, selected years, 1940-771

Item	1940	1950	1960	1970	1976	1977²
		<del></del>	Perc	cent		
ASSETS						
Physical assets:						
Real estate	63.5	56.9	64.0	67.6	70.9	72.7
Livestock and poultry	9.7	9.7	7.5	7.7	5.2	4.6
Machinery and motor vehicles	5.9	9.2	11.1	10.4	11.8	11.5
Crops stored on and off farms <sup>3</sup>	5.1	5.7	3.8	3.6	3.5	3.2
Household equipment and furnishings	7.9	6.5	4.7	3.3	2.9	2.7
inancial assets:						
Deposits and currency	6.0	6.9	4.5	3.9	2.8	2.6
U.S. savings bonds	.4	3.6	2.3	1.2	.8	.7
Investments in cooperatives	1.5	1.5	2.1	2.3	2.1	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
LIABILITIES						
Real estate debt	66.0	45.2	48.8	55.0	56.2	55.1
Excluding CCC loans	30.0	41.1	46.8	40.0	43.5	43.9
CCC loans <sup>4</sup>	4.0	13.7	4.4	5.0	.3	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

<sup>&</sup>lt;sup>1</sup> Data for 50 States beginning with 1960. <sup>2</sup> Preliminary. <sup>3</sup> All crops held on farms including crops under loan to CCC, and crops held off farms as security for CCC loans. <sup>4</sup> Nonrecourse

CCC loans secured by crops owned by farmers. These crops are included as assets in this balance sheet.

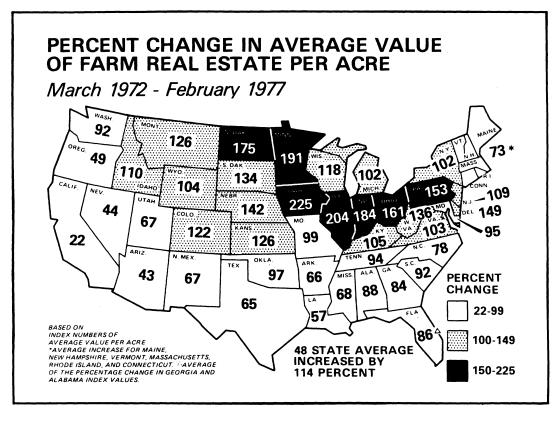


Figure 2

most rapid increases occurred in the Corn Belt and Northern Plains and the smallest rises were in the Southwest.

#### Farm Production Assets and Earnings

The market value of farm production assets, those assets used in actual production of farm goods, was \$533 billion on January 1, 1977 (table 4). That was 14 percent higher than on January 1, 1976, and about the same relative increase as occurred between 1975 and 1976. Of the increase in total production assets, real estate accounted for about 90 percent.

In contrast to the 20-percent rise in 1975, the value of livestock and poultry remained near the January 1, 1976 level, reflecting a leveling off in cattle values. Machinery and motor vehicle value rose 11 percent in 1976, substantially less than the 16-percent increase during 1975 and the 30-percent increase in 1974. The number of machines and motor vehicles on farms changed little, but value per unit was higher at the beginning of 1977. The value of other assets rose only slightly.

Production assets per farm at \$215,648 were up 15 percent. The increase in the value of farm real estate accounted for the bulk of the gain.

The value of production assets per farm worker increased 13 percent during 1976, slightly less than the increase in 1975, but nearly double the 1974 rate. The value rose to \$121,417 per worker on January 1, 1977. The sharp increase in the value of assets was the main reason for the increase as the number of farm workers changed only slightly.

Farm operators' return on equity in farm production assets in 1976 was 3.3 percent (table 5). This was the lowest rate since 1968, less than two-thirds of the 1975 rate and less than one-third of the record for 1973. Both the 15-percent increase in equity in production assets and the 7-percent drop in net income from production helped lower the ratio of earnings to asset equity in 1976.

#### Capital Gains on Farm Physical Assets, 1960-76

The previously mentioned downard revisions in farm real estate values affected to some degree the magnitude of capital gains on farmland for the years after 1970 (table 6 and fig. 3). The revisions affected only real estate, but, since capital gains on that asset are such a large part of total gains, the effect on the total was correspondingly substantial. Whereas the total capital gains for the unrevised values showed accumulated gains

Table 4-Value of production assets: Total, per farm and per farm worker,
January 1, 1960-77

		January 1,	1960-77		
Year	Farm real estate <sup>1</sup>	Livestock <sup>2</sup>	Machinery and motor vehicles <sup>3</sup>	Other <sup>4</sup>	Total
			Billion dollars		
Total					
1960	114.5	15.2	19.3	8.2	157.2
1961	116.3	15.6	19.1	7.9	159.0
1962	122.2	16.4	19.4	8.0	166.0
1963	128.0	17.3	20.2	8.2	173.6
1964	135.8	15.9	20.5	8.6	180.8
1965	144.1	14.5	21.4	8.4	188.4
	154.6	17.6	22.6	8.9	203.7
1966			24.3	9.1	215.8
1967	163.5	19.0			227.6
1968	173.2	18.8	26.6	9.0	
1969	181.6	20.2	28.0	9.1	239.0
1970	187.0	23.5	29.0	9.4	248.9
1971	193.4	23.7	30.8	9.6	257.5
1972	207.4	27.3	32.9	10.0	277.6
1973	230.9	34.1	35.3	11.4	311.7
1974	284.2	42.4	40.5	14.6	381.7
•	318.7	24.6	52.6	15.3	411.0
1975			61.2	14.9	467.8
1976	362.2	29.5			533.1
1977	420.9	29.3	67.8	15.1	533.1
			Dollars		
Per farm					40.505
1960	31,786	3,848	4,880	2,071	42,585
1961	33,332	4,080	5,000	2,070	44,482
1962	36,171	4,450	5,243	2,170	48,034
1963	39,141	4,845	5,652	2,284	51,922
1964	42,994	4,590	5,939	2,482	56,005
1965	46,677	4,319	6,387	2,502	59,885
f	51,285	5,399	6,953	2,730	66,367
1966		·		2,865	72,084
1967	55,533	6,000	7,686		77,990
1968	60,274	6,132	8,656	2,928	
1969	64,810	6,752	9,352	3,050	83,964
1970	68,481	7,949	9,819	3,192	89,441
1971	72,278	8,150	10,597	3,283	94,308
1972	79,204	9,503	11,469	3,496	103,672
1973	90,072	11,983	12,414	4,021	118,490
1974	113,360	14,975	14,322	5,145	147,802
1975	130,049	8,750	18,726	5,431	162,956
1	•	10,624	22,003	5,272	187,072
1976	149,073	•	24,654	5,502	215,648
1977	174,853	10,639	24,034	3,302	213,040
			Dollars		
Per farm worker	<b>.</b>		0.004	1 110	01 416
1960	15,588	2,076	2,634	1,118	21,416
1961	16,482	2,211	2,710	1,122	22,525
1962	17,662	2,374	2,797	1,158	23,991
1963	19,095	2,583	3,013	1,217	25,908
1004	20,831	2,434	3,150	2,327	27,732
1964	23,579	2,372	3,507	1,374	30,832
1965	27,558	3,134	4,036	1,584	36,312
1966				1,737	41,385
1967	31,350	3,638	4,660		
1968	35,311	3,840	5,421	1,834	46,406
1969	38,231	4,263	5,904	1,925	50,323
1970	40,736	5,114	8,318	2,054	54,222
1971	42,743	5,240	6,814	2,111	56,908
1972	46,565	6,125	7,392	2,253	62,335
1973	52,598	7,765	8,044	2,606	71,013
	65,302	9,738	9,313	3,346	87,699
1974	•		11,937	3,462	93,308
1975	72,331	5,578			
		C 774	14 000		
1976	83,142 95,849	6,774 6,668	14,029 15,452	3,425 3,448	107,370 121,417

<sup>&</sup>lt;sup>1</sup> Farmland and service buildings, excluding operator's dwellings, as of March 1. <sup>2</sup> Excludes horses and mules. <sup>3</sup> Includes 40 percent of the value of automobiles on farms and 78 percent of the value of farm trucks and all other farm machinery.

<sup>&</sup>lt;sup>4</sup>Includes one-half of the January 1 inventory of feed crops, (excluding crops under CCC loans), all hay and forage stored on farms, and working capital needed to meet farm production expenses.

Table 5-Return to equity in farm production assets from production income, 1960-76

		inputed	return to—		Residual	Equity in	Ratio of
Year	Net income from production <sup>1</sup>	Labor <sup>2</sup>	Management <sup>3</sup>	Interest on debt <sup>4</sup>	earnings to equity in production assets	Equity in production assets <sup>5</sup>	earnings to asset equity <sup>6</sup>
			Million d	lollars			Percent
1960	16,195	9,502	1,748	1,339	3,606	135,131	2.7
1961		9,307	1,833	1,419	4,520	135,726	3.3
1962		9,070	1.911	1,559	5,000	141,045	3.5
1963		9,098	1,959	1,741	4,879	145,989	3.3
1964	16,656	8,687	1,975	1,899	4,095	150,159	2.7
1965	19.589	8,366	2,091	2,091	7,041	155,197	4.5
1966	21,058	8,437	2,336	2,327	7,958	166,723	4.8
1967	19,453	8.886	2,295	2,582	5,690	175,329	3.2
1968	19,995	8,964	2,382	2,775	5,874	184,112	3.2
1969	22,487	9,608	2,599	3,043	7,237	193,945	3.7
1970	22,899	9,813	2,713	3,365	7,008	201,376	3.5
1971		10,246	2,800	3,533	7,062	207,680	3.4
1972		10,444	3,258	3,879	11,803	223,698	5.3
1973	47,525	11,244	4,484	4,683	27,114	251,467	10.8
1974	•	12,695	4,659	5,745	19,240	311,996	6.2
1975		12,983	4,518	6,438	17,429	331,639	5.2
1976 <sup>7</sup>	38,623	14,185	4,777	7,088	12,573	381,844	3.3

<sup>1</sup>Total net income of farm operators from farming plus cash wages and perquisities of hired labor, interest on real estate and nonreal estate debt, and net rent to nonfarm landlords, minus the imputed interest portion of the rental value of farm dwellings. <sup>2</sup>Number of manhours needed for farm production times the average wage of hired workers without room and

board. <sup>3</sup>Five percent of the total of cash receipts from farm production and Government payments. <sup>4</sup>Interest on real estate and nonreal estate debt, excluding mortgage interest on the farm dweilings. <sup>5</sup>Market value, January 1. <sup>6</sup>Calculated on the market value of equity in production assets, January 1. <sup>7</sup>Preliminary.

Table 6-Capital gains on farm physical assets, 1960-76

Calendar year	Real estate	Machinery and motor vehicles 1	Livestock and poultry	Crops stored on farms	Total
			Million dollars		
960	2,627	74	270	-321	2,650
961	7,335	449	449	177	8,410
962	6.960	590	294	463	8,307
963	8,983	221	-1,835	464	7,833
964	9,893	435	-1,336	548	9,540
965	12,806	501	3,266	-602	15,971
966	11.188	745	1,167	820	13,920
967	12,302	1,086	-224	-1,177	11,987
968	11,125	1,150	1,199	25	13,499
969	6,952	779	3,010	335	11,076
970	8.182	1,365	-437	1,145	10,255
971	16,606	2,148	3,106	-219	21,641
972	27,755	1,883	6,362	2,720	38,720
973	58,947	3,395	6,479	6,954	75,775
974	38,383	9,022	-18,262	3,535	32,678
975	48,861	8,639	5,946	-7,423	56,023
976 <sup>2</sup>	65,544	6,465	-565	381	71,825
Total	354,449	38,947	8,889	7,825	410,110

<sup>&</sup>lt;sup>1</sup> For farm use only. <sup>2</sup> Preliminary.

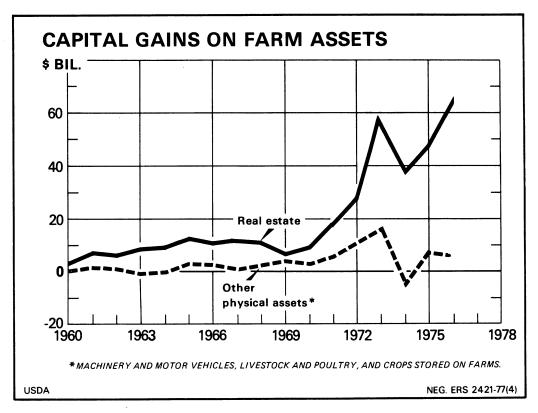


Figure 3

\$313.9 billion on farm real estate from 1960 through 1975, the revised farmland values showed capital gains

of \$288.9 billion. Adding gains for 1976 gave a total of \$354.4 billion.

#### BALANCE SHEET OF THE FARMING SECTOR BY VALUE OF SALES CLASS, 1971-75

Balance sheets of the farming sector by values of sales class for 1971-75 carried previously in the balance sheet publications have been reconstructed because of the revisions in farm real estate values (tables 7-16). The revised farmland values lowered somewhat the total values and the values per farm by value of sales class. Also incorporated are slight revisions in the value of household equipment and furnishings for 1971-73 that have not

been published previously by value of sales class.

Balance sheet values by value of sales class are not yet available for 1976 and 1977. Normally there is a lag of a year or longer in obtaining reliable estimates of some of the basic data, such as the number of farms in each sales class, their cash receipts, and production expenses; which are necessary to disaggregate total values into the various values of sales classes.

Table 7-Balance sheet of the farming sector by value of sales class, January 1, 1971

				Gross	sales			
	IA	IB	11	111	IV	V	VI	
Item	\$100,000 and over	\$40,000 to \$99,999	\$20,000 to \$39,999	\$10,000 to \$19,999	\$5,000 to \$9,999	\$2,500 to \$4,999	Less than \$2,500	AII farms
:				Million	L	L	<u> </u>	ļ
Total								
ASSETS								
Physical assets:								
Real estate	32,203	38,815	43,507	30,710	20,687	17,915	29,431	213,268
Livestock and poultry 1	5,457 3,747	4,455 6,427	4,932 7,940	3,347 5,534	2,105 3,540	1,645 2,887	1,766 4,297	23,707 34,372
Crops stored on and off farms <sup>2</sup>	1,644	2,516	2,922	1,846	905	510	354	10,697
Household equipment and furnishings Financial assets:	781	1,347	1,686	1,326	1,110	1,100	2,929	10,279
Deposits and currency	2,930 298	2,078 423	2,080 535	1,412 445	1,017 395	875 391	2,042 1,101	12,434 3,588
Investments in cooperatives	2,388	1,648	1,545	937	502	289	309	7,618
Total	49,448	57,709	65,147	45,557	30,261	25,612	42,229	315,963
CLAIMS	}							
Liabilities: Real estate debt	6,373	7,283	6,373	4,552	2,427	1,517	1,821	30,346
Nonreal estate debt: Excluding CCC loans	7,792	4,452	4,230	2,894	1,336	668	890	22,262
CCC loans <sup>3</sup>	201	448	548	377	176	83	43	1,876
Total liabilities	14,366	12,183	11,151	7,823	3,939	2,268	2,754	54,484
Proprietors' equities	35,082	45,526	53,996	37,734	26,322	23,344	39,475	261,479
Total	49,448	57,709	65,147	45,557	30,261	25,612	42,229	315,963
				Pero	cent			
Debt to asset ratio	29.1	21.1	17.1	17.2	13.0	8.9	6.5	17.2
				Dol	lars			
Per farm								
ASSETS								
Physical assets: Real estate	555,224	206,463	122,211	80,604	54,155	41,279	26,514	72 212
Nonreal estate:		-		•	•			73,313
Livestock and poultry	94,086 64,603	23,697 34,186	13,854 22,303	8,785 14,525	5,511 9,267	3,790 6,652	1,592 3,871	8,150 11,816
Crops stored on and off farms  Household equipment and furnishings	28,345 13,466	13,383 7,165	8,208 4,736	4,845 3,480	2,369 2,906	1,175 2,535	318 2,639	3,677 3,534
Financial assets:  Deposits and currency	50,517	11,053	5,842	3,706	2,662	2,016	1,840	4,274
U.S. savings bonds	5,138 41,172	2,250 8,766	1,503 4,340	1,168 2,459	1,034 1,314	901 666	992 278	1,233
·		•			79,218			2,619
Total	652,551	306,963	102,997	119,572	79,216	59,014	38,044	108,616
Liabilities: Real estate debt	109,879	38,739	17,902	11,948	6,353	3,495	1,640	10,432
Nonreal estate debt: Excluding CCC loans	134,345	23,681	11,882	7,596	3,497	1,539	802	7,653
CCC loans <sup>3</sup>	3,466	2,383	1,539	989	461	191	39	645
Total liabilities	247,690	64,803	31,323	20,533	10,311	5,225	2,481	18,730
Proprietors' equities	604,861	242,160	151,674	99,039	68,907	53,789	35,563	89,886
Total	852,551	306,963	182,997	119,572	79,218	59,014	38,044	108,616
	1			Perc	ent			
Debt-to-asset ratio	29.1	21.1	17.1	17.2	13.0	8.9	6.5	17.2

<sup>&</sup>lt;sup>1</sup>Excluding horses, mules, and commercial broilers. <sup>2</sup>All crops held on farms including crops under CCC loans and crops held off farms as security for CCC loans to farmers.

<sup>&</sup>lt;sup>3</sup> Nonrecourse CCC loans secured by crops owned by farmers. These crops are included as assets in this balance sheet.

Table 8-Percentage distribution of balance sheet of the farming sector by value of sale class, January 1, 1971

				Gross	sales			
	IA	IB	11	111	ıv		VI	
Item	<u>۱۸</u>	"	l ''					
	\$100,000	\$40,000	\$20,000	\$10,000 to	\$5,000 to	\$2,500 to	Less than	All
	and over	to \$99,999	to \$39,999	\$19,999	\$9,999	\$4,999	\$2,500	1411113
		<u> </u>	L	Percent	J			
		_			£ 4-4-1	e and alain		
		Co	mponents	as snares or	i totai assei	S and Clair	15	
ASSETS								
Physical assets:				67.4	60.4	70.0	60.8	67.5
Real estate:	65.1	67.3	66.8	67.4	68.4	70.0	69.8	67.5
Livestock and poultry 1	11.1	7.7	7.6	7.4	7.0	6.4	4.2	7.5
Machinery and motor vehicles	7.6	11.1	12.2	12.2	11.7	11.3	10.2	10.9
Crops stored on and off farms <sup>2</sup>	3.3	4.4	4.5	4.1	3.0	2.0	.8	3.4
Household equipment and furnishings	1.6	2.3	2.6	2.9	3.6	4.2	6.9	3.2
inancial assets:			2.0	2.1	3.4	3.4	4.8	4.0
Deposits and currency	5.9	3.6	3.2 .8	3.1 .9	1.2	1.6	2.6	1.1
U.S. savings bonds	.6	.7 2.9	.6 2.3	2.0	1.7	1.1	.7	2.4
Investments in cooperatives	4.8	2.9						
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
CLAIMS								
iabilities:				50.0	61.6	66.0	66.1	55.7
Real estate debt	44.4	59.8	57.2	58.2	61.6	66.9	00.1	55.7
Nonreal estate debt:	54.2	36.5	37.9	37.0	33.9	29.4	32.3	40.9
Excluding CCC loans	1.4	36.5	4.9	4.8	4.5	3.7	1.6	3.4
CCC IOans	1	•						
otal liabilities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
roprietors' equities (equity ratio)	71.0	78.9	82.9	82.8	87.0	91.1	93.5	82.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
			Share	s of total c	omponent:	value		
ASSETS								
Physical assets: Real estate:	15.1	18.2	20.4	14.4	9.7	8.4	13.8	100.0
Nonreal estate:	13.1	10.2						
Livestock and poultry 1	23.0	18.8	20.8	14.1	8.9	6.9	7.5	100.0
Machinery and motor vehicles		18.7	23.1	16.1	10.3	8.4	12.5	100.0
Crops stored on and off farms <sup>2</sup>		23.5	27.3	17.3	8.5	4.8	3.2	100.0
Household equipment and furnishings	7.6	13.1	16.4	12.9	10.8	10.7	28.5	100.
Financial assets:							16.4	100
Deposits and currency	23.6	16.7	16.7	11.4	8.2	7.0	16.4	100.0 100.0
U.S. savings bonds	8.3	11.8	14.9	12.4	11.0	10.9 3.8	30.7 4.1	100.0
Investments in cooperatives	31.3	21.6	20.3	12.3	6.6	3.0		
Total	15.7	18.3	20.6	14.4	9.6	8.1	13.3	100.0
CLAIMS								
Liabilities:								
Real estate debt	21.0	24.0	21.0	15.0	8.0	5.0	6.0	100.0
Nonreal estate debt:  Excluding CCC loans	35.0	20.0	19.0	13.0	6.0	3.0	4.0	100.
CCC loans 3	10.7	23.9	29.2	20.1	9.4	4.4	2.3	100.
Total liabilities	. 26.4	22.4	20.5	14.4	7.2	4.1	5.0	100.
Proprietors' equities	1	17.4	20.7	14.4	10.1	8.9	15.1	100.
Total	1	18.3	20.6	14.4	9.6	8.1	13.3	100,
1 Evaluding horses mules and commer			•					by form

 $<sup>^{1}</sup>$  Excluding horses, mules, and commercial broilers.  $^{2}$  All crops held on farms including crops under CCC loans and crops held off farms as security for CCC loans to farmers.

<sup>&</sup>lt;sup>3</sup>Nonrecourse CCC loans secured by crops owned by farmers. These crops are included as assets in this balance sheet.

Table 9—Balance sheet of the farming sector by value of sales class, January 1, 1972

				Gross	sales			
	IA	IB	11	111	IV	V	VI	
Item	\$100,000	\$40,000	\$20,000	\$10,000	\$5,000	\$2,500	Less	All
	and over	to \$99,999	to \$39,999	to \$19,999	to \$9,999	to \$4,999	than \$2,500	farms
	Over	\$99,999	\$39,333	L	L	44,333	42,500	<u> </u>
				Million	aouars			
Total								
ASSETS								
Physical assets:	20.050	45 602	40 227	29,694	18,958	18,502	27,181	228,414
Real estate	39,059	45,683	49,337	•	•	•	•	
Livestock and poultry 1	6,899 4,540	5,509 7,579	5,902 9,007	3,397 5,345	2,053 3,258	1,794 2,966	1,720 3,917	27,274 36,612
Crops stored on and off farms	1,984	3,010	3,357	1,769	843	524	349	11,836
Household equipment and furnishings Financial assets:	1,232	1,747	1,982	1,310	1,030	1,142	2,755	11,198
Deposits and currency	3,248 287	2,204 430	2,152 540	1,346 434	995 393	940 415	2,266 1,177	13,151 3,676
U.S. savings bonds	2,634	1,765	1,640	929	486	292	302	8,048
Total	59,883	67,927	73,917	44,224	28,016	26,575	39,667	340,209
CLAIMS		. ,	•	·	·			
Liabilities: Real estate debt	5,797	8,696	7,086	4,831	2,578	1,610	1,610	32,208
Nonreal estate debt:	8,872	4,929	4,929	2,957	1,479	739	739	24,644
Excluding CCC loans	265	613	658	407	185	86	48	2,262
Total liabilities	14,934	14,238	12,673	8,195	4,242	2,435	2,397	59,114
Proprietors' equities	44,949	53,689	61,244	36,029	23,774	24,140	37,270	281,095
Total	59,883	67,927	73,917	44,224	28,016	26,575	39,667	340,209
				Per	cent			
Debt to asset ratio	24.9	20.9	17.1	18.5	15.1	9.2	6.0	17.4
Debt to asset fatto					llars			
				201				
Per farm								
ASSETS								
Physical assets: Real estate	557,986	205,779	122,424	81,131	54,166	41,765	26,753	79,587
Nonreal estate:	1			-			·	
Livestock and poultry <sup>1</sup>		24,815 34,140	14,645 22,350	9,281 14,604	5,866 9,308	4,050 6,695	1,693 3,855	9,503 12,757
Crops stored on and off farms <sup>2</sup>	28,343	13,559	8,330	4,833 3,579	2,408	1,183 2,578	344 2,712	4,124 3,902
Household equipment and furnishings Financial assets:		7,869	4,918	•	2,943			
Deposits and currency		9,928 1,937	5,340 1,340	3,678 1,186	2,843 1,123	2,122 937	2,231 1,159	4,583 1,281
Investments in cooperatives	37,629	7,950	4,069	2,538	1,389	659	297	2,804
Total	855,472	305,977	183,416	120,830	80,046	59,989	39,044	118,541
CLAIMS								
Liabilities:								
Real estate debt	82,814	39,171	17,583	13,199	7,366	3,634	1,585	11,222
Nonreal estate debt: Excluding CCC loans	126,743	22,203	12,231	8,079	4,226	1,668	727	8,587
CCC loans <sup>3</sup>	3,786	2,761	1,633	1,112	528	194	47	788
Total liabilities	213,343	64,135	31,447	22,390	12,120	5,496	2,359	20,597
Proprietors' equities	642,129	241,842	151,969	98,440	67,926	54,493	36,685	97,944
Total	855,472	305,977	183,416	120,830	80,046	59,989	39,044	118,541
				Per	cent			
Debt-to-asset ratio	24.9	20.9	17.1	18.5	15.1	9.2	6.0	17.4
<sup>1</sup> Excluding horses mules and commer	<del></del>			urse CCC I				

<sup>&</sup>lt;sup>1</sup>Excluding horses, mules, and commercial broilers. <sup>2</sup>All crops held on farms including crops under CCC loans and crops held off farms as security for CCC loans to farmers.

<sup>&</sup>lt;sup>3</sup> Nonrecourse CCC loans secured by crops owned by farmers. These crops are included as assets in this balance sheet.

Table 10-Percentage distribution of balance sheet of the farming sector by value of sale class, January 1, 1972

	Ι			Gross	sales		· <del></del>	
	IA	IB	11	111	IV	V	VI	
Item	\$100,000 and	\$40,000 to	\$20,000 to	\$10,000 to	\$5,000 to	\$2,500 to	Less than	All
	over	\$99,999	\$39,999	\$19,999	\$9,999	\$4,999	\$2,500	lamis
				Percent				
		Co	mponents a	as shares of	total asset	s and clain	ns	
ASSETS								
Physical assets:								
Real estate	65.3	67.3	66.8	67.2	67.7	69.7	68.6	67.2
Livestock and poultry <sup>1</sup>	11.5	8.1	8.0	7.7	7.3	6.8	4.3	8.0
Machinery and motor vehicles	7.6	11.2	12.2	12.1	11.6	11.2	9.9	10.8
Crops stored on and off farms <sup>2</sup>	3.3	4.4	4.5	4.0	3.0	2.0	.9	3.5
Household equipment and furnishings	2.0	2.5	2.6	2.9	3.6	4.2	6.8	3.2
inancial assets:					<u> </u>			
Deposits and currency	5.4	3.3	2.9	3.1	3.6	3.5	5.7	3.9
U.S. savings bonds	.5	.6 2.6	.7 2.3	1.0	1.4	1.6 1.0	3.0 .8	1.1 2.3
Investments in cooperatives	4.4	2.6		2.0	1.8			
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
CLAIMS								
_labilities: Real estate debt	38.8	61.1	55.9	59.0	60.8	66.1	67.2	54.5
Nonreal estate debt:	İ							
Excluding CCC loans		34.6	38.9	36.0	34.9	30.4	30.8	41.7
CCC loans <sup>3</sup>	1.8	4.3	5.2	5.0	4.3	3.5	2.0	3.8
otal liabilities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
roprietors' equities (equity ratio)	75.1	82.0	82.9	81.5	84.9	90.8	94.0	82.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
			Share	s of total c	omponent	value		
ASSETS								
Physical assets:	17.1	20.0	21.6	12.0	0.2	8.1	11.9	100.0
Real estate:	17.1	20.0	21.6	13.0	8.3			
Livestock and poultry 1	25.3	20.2	21.6	12.5	7.5	6.6	6.3	100.0
Machinery and motor vehicles	12.4	20.7	24.6	14.6	8.9	8.1	10.7	100.0
Crops stored on and off farms <sup>2</sup> Household equipment and furnishings	16.8 11.0	25.4 15.6	28.4 17.7	14.9 11.7	7.1 9.2	4.4 10.2	3.0 24.6	100.0 100.0
inancial assets:	ļ							
Deposits and currency	24.7	16.8	16.4	10.2	7.6	7.1	17.2	100.0
U.S. savings bonds	7.8	11.7	14./	11.8	10.7	11.3	32.0	100.0
Investments in cooperatives	32.7	21.9	20.4	11.6	6.0	3.6	3.8	100.0
Total	17.6	20.0	21.7	13.0	8.2	7.8	11.7	100.0
CLAIMS								
_iabilities:								
Real estate debt	18.0	27.0	22.0	15.0	8.0	5.0	5.0	100.0
Nonreal estate debt:		20.0	20.0	12.0	6.0	3.0	3.0	100.0
Nonreal estate debt:	36.0	20.0						1000
	36.0 11.7	27.1	29.1	18 0	8.2	3.8	2.1	100.0
Nonreal estate debt: Excluding CCC loans	3			18 0	8.2 7.2	3.8 4.1	2.1 4.0	100.0
Nonreal estate debt:  Excluding CCC loans	11.7 25.3	27.1	29.1					

<sup>&</sup>lt;sup>1</sup> Excluding horses, mules, and commercial broilers. <sup>2</sup> All crops held on farms including crops under CCC loans and crops held off farms as security for CCC loans to farmers.

<sup>&</sup>lt;sup>3</sup>Nonrecourse CCC loans secured by crops owned by farmers. These crops are included as assets in this balance sheet.

Table 11-Balance sheet of the farming sector by value of sales class, January 1, 1973

Table 11—Balance shee	t of the far	ming secto	r by value	of sales cla	ss, January	1, 1973 		
		<del>,</del>	·	Sales	class	·	·	
Item	IA	IB	- 11	111	ıv.	\ \	VI	
-	\$100,000 and over	\$40,000 to \$99,999	\$20,000 to \$39,999	\$10,000 to \$19,999	\$5,000 to \$9,999	\$2,500 to \$4,999	Less than \$2,500	AII farms
	ļ			Million	dollars			
Total ASSETS	l							
Physical assets:								
Real estate	54,241	61,880	62,135	24,956	13,497	18,335	19,608	254,652
Livestock and poultry 1	10,177 6,128	7,958 9,938	8,080 10,999	3,065 4,321	1,565 2,200	1,917 2,868	1,319 2,828	34,081
Crops stored on and off farms <sup>2</sup>	2,374	4,257	4,735	1,651	652	550	261	39,282 14,480
Financial assets:	2,682	2,656	2,518	1,050	683	1,101	1,961	12,651
Deposits and currency	4,132	2,559 543	2,375 635	1,182 431	791 367	897 427	2,088 1,137	14,024 3,991
Investments in cooperatives	3,143	1,959	1,748	831	418	281	253	8,633
Total	83,328	91,750	93,225	37,487	20,173	26,376	29,455	381,794
CLAIMS								
Liabilities:								
Real estate debt	9,296	10,012	7,867	3,576	1,788	1,788	1,430	35,757
Excluding CCC loans	10,839 229	5,837 520	5,281 545	3,057 280	1,112 122	834 63	834 34	27,794 1,793
Total liabilities	20,364	16,369	13,693	6,913	3,022	2,685	2,298	65,344
Proprietors' equities	62,964	75,381	79,532	30,574	17,151	23,691	27,157	316,450
Total	83,328	91,750	93,225	37,847	20,173	26,376	29,455	381,794
				Perc	ent			
Debt to asset ratio	24.4	17.8	14.7	18.4	15.0	10.1	7.8	17.1
Day 6				Doll	ars			
Per farm								
ASSETS								
Physical assets: Real estate	E11 700	100.005	110 760	74 740				
Nonreal estate:	511,708	188,085	112,768	74,719	50,362	37,804	25,432	89,540
Livestock and poultry 1	96,009 57,811	24,262 30,207	14,691 19.998	9,177 12,937	5,818 8,178	3,953 5,913	1,709 3,663	11,983 13,812
Crops stored on and off farms <sup>2</sup> Household equipment and furnishings	22,396 25,302	12,939 8,076	8,609 4,570	4,943	2,424	1,134	338	5,091
Financial assets: Deposits and currency		•		3,144	2,549	2,270	2,543	4,448
U.S. savings bonds	38,981 4,255	7,778 1,650	4,318 1,155	3,539 1,290	2,941 1,364	1,849 880	2,705 1,473	4,931 1,403
Investments in cooperatives	29,651	5,954	3,177	2,488	1,554	580	327	3,037
Total	786,113	278,877	169,286	112,237	75,190	54,383	38,190	134,245
CLAIMS								
Liabilities: Real estate debt	97 600	30 432	14 224	10 707				
Nonreal estate debt:	87,699	30,432	14,304	10,707	6,647	3,686	1,854	12,573
Excluding CCC loans	102,254 2,160	17,742 1,581	9,601 991	9,153 838	4,134 453	1,720 130	1,080 44	9,773 630
Total liabilities	192,113	49,755	24,896	20,697	11,234	5,536	2,978	22,976
Proprietors' equities	594,000	229,122	144,390	91,540	63,956	48,848	35,212	111,269
Total	786,113	278,877	169,286	112,237	75,190	54,384	38,190	134,245
				Perce	nt			
Debt to asset ratio	24.4	17.8	14.7	18.4	15.0	10.1	7.8	17.1
<sup>1</sup> Excluding horses, mules, and commercia	l broilers.	<sup>2</sup> A II <sup>3</sup> I	Vonrecour	se CCC loa				

 $<sup>^1</sup>$ Excluding horses, mules, and commercial broilers.  $^2$ All crops held on farms including crops under CCC loans and crops held off farms as security for CCC loans to farmers.

<sup>&</sup>lt;sup>3</sup>Nonrecourse CCC loans secured by crops owned by farmers. These crops are included as assets in this balance sheet.

Table 12—Percentage distribution of balance sheet of the farming sector, by value of sales class, January 1, 1973

	Gross sales									
	IA	IB	- 11	111	IV	V	VI			
Item	\$100,000 and over	\$40,000 to \$99,999	\$20,000 to \$39,999	\$10,000 to \$19,999	\$5,000 to \$9,999	\$2,500 to \$4,999	Less than \$2,500	All farms		
		<u> </u>		Percent	-					
		Co	mponents a	s shares of	total assets	and claim	5			
ASSETS										
Physical assets:										
Real estate	65.1	67.5	66.7	66.5	67.0	69.6	66.7	66.6		
Nonreal estate:  Livestock and poultry 1	12.2	8.7	8.5	8.2	7.8	7.3	4.5	8.9		
Machinery and motor vehicles	7.4	10.8	11.8	11.5	10.9	10.9	9.6	10.3		
Crops stored on and off farms <sup>2</sup>	2.9	4.6	5.1	4.4	3.2	2.1	.9	3.8		
Household equipment and furnishings	3.2	2.8	2.7	2.8	3.3	4.1	6.5	3.3		
Financial assets:										
Deposits and currency	5.0	2.8	2.6	3.2	3.9	3.4	7.1	3.7		
U.S. savings bonds	.5	.6	.7	1.2	1.8	1.6	3.9	1.1		
Investments in cooperatives	3.7	2.2	1.9	2.2	2.1	1.0	.8	2.3		
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
CLAIMS										
Liabilities:	45.7	61.0	E7	E1 7	50.2	66 6	62.2	54.7		
Real estate debt	45.7	61.2	57.5	51.7	59.2	66.6	62.2	54.7		
Excluding CCC loans	53.2	35.7	38.6	44.2	36.8	31.1	36.3	42.5		
CCC loans <sup>3</sup>	1.1	3.1	3.9	4.1	4.0	2.3	1.5	2.8		
Total liabilities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
Proprietors' equities (equity ratio)	75.6	82.2	85.3	82.5	85.0	90.6	92.2	82.9		
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
	Shares of total component values									
ASSETS										
Physical assets:										
Real estate:	21.3	24.3	24.4	9.8	5.3	7.2	7.7	100.0		
Livestock and poultry 1	29.9	23.4	23.7	9.0	4.6	5.6	3.8	100.0		
Machinery and motor vehicles	15.6	25.3	28.0	11.0	5.6	7.3	7.2	100.0		
Crops stored on and off farms <sup>2</sup>	16.4	29.4	32.7	11.4	4.5	3.8	1.8	100.0		
Household equipment and furnishings	21.2	21.0	19.9	8.3	5.4	8.7	15.5	100.0		
Financial assets:  Deposits and currency	29.5	18.3	16.9	8.4	5.6	6.4	14.9	100.0		
U.S. savings bonds	11.3	13.6	15.9	10.8	9.2	10.7	28.5	100.0		
Investments in cooperatives	36.4	22.7	20.3	9.6	4.8	3.2	3.0	100.0		
Total	21.8	24.0	24.4	9.8	5.3	6.9	7.8	100.0		
CLAIMS										
Liabilities:  Real estate debt	26.0	28.0	22.0	10.0	5.0	5.0	4.0	100.0		
Nonreal estate debt:  Excluding CCC loans	39.0 12.8	21.0 29.0	19.0 30.4	11.0 15.6	4.0 6.8	3.0 3.5	3.0 1.9	100.0 100.0		
Total liabilities		25.1	21.0	10.6	4.6	4.1	3.4	100.0		
Proprietors' equities	1	23.8	25.1	9.7	5.4	7.5	8.6	100.0		
Total		24.0	24.4	9.8	5.3	6.9	7.8	100.0		
		2 011	3.1.		loans secure	d by cror	s owned	by farmers		

 $<sup>^1</sup>$ Excluding horses, mules, and commercial broilers.  $^2$  All crops held on farms including crops under CCC loans and crops held off farms as security for CCC loans to farmers.

<sup>&</sup>lt;sup>3</sup>Nonrecourse CCC loans secured by crops owned by farmers. These crops are included as assets in this balance sheet.

Table 14-Percentage distribution of balance sheet of the farming sector, by value of sales class, 1974

	Gross sales									
	IA	IB	- 11	П	١٧	<b>v</b>	٧ı			
Item	\$100,000 and over	\$40,000 to \$99,999	\$20,000 to \$39,999	\$10,000 to \$19,999	\$5,000 to \$9,999	\$2,500 to \$4,999	Less than \$2,500	All farms		
		l	l	Percent		L	h	l		
		Co	mponents	as shares of	total asse	ts and clair	ms			
ASSETS										
Physical assets:										
Real estate	65.7	67.5	67.2	68.1	69.6	70.5	68.0	67.		
Nonreal estate:			0.7	0.5	7.0	7.4	4.7	9.		
Livestock and poultry <sup>1</sup>	12.2 6.8	9.0 10.1	8.7 11.0	8.5 10.9	7.9 10.3	10.1	4.7 8.7	9. 9.		
Machinery and motor vehicles Crops stored on and off farms <sup>2</sup>	3.2	6.1	6.3	5.6	4.0	2.5	1.1	4.		
Household equipment and furnishings	2.5	2.2	2.3	2.6	3.4	4.3	8.6	2.		
inancial assets: Deposits and currency	4.8	2.6	2.3	2.2	2.6	3.0	5.6	3.		
U.S. savings bonds	.8	.6	.6	.7	1.1	1.4	2.9			
Investments in cooperatives	4.0	1.9	1.6	1.4	1.1	.8	.4	2.		
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.		
CLAIMS										
iabilities:										
Real estate debt	49.0	65.1	57.6	45.4	62.3	55.1	71.1	55.		
Excluding CCC loans	50.5	33.8	40.8	53.0	36.4	43.0	27.7	43.		
CCC loans <sup>3</sup>	.5	1.1	1.6	1.6	1.3	1.9	1.2	1.		
otal liabilities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.		
roprietors' equities (equity ratio)	72.8	83.6	86.4	87.1	87.7	95.2	96.3	84.		
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.		
	Shares of total component value									
ASSETS										
hysical assets:										
Real estate:	22.1	25.1	24.9	9.2	4.8	7.1	6.8	100.		
Livestock and poultry 1	30.2	24.6	23.8	8.4	4.0	5.5	3.5	100.		
Machinery and motor vehicles	16.2	26.5	28.6	10.4	5.0	7.2	6.1	100.		
Crops stored on and off farms <sup>2</sup>	15.1	32.1	33.2	10.6	3.9	3.6	1.5	100.		
Household equipment and furnishings	19.0	18.5	19.3	8.0	5.6	9.9	19.7	100.		
Deposits and currency	33.9	19.9	17.9	6.3	3.8	6.4	11.8	100.		
U.S. savings bonds	20.1	17.1	17.7	7.5	5.5	10.5	21.6	100.		
Investments in cooperatives	44.0	23.9	19.4	6.1	2.5	2.5	1.6	100.		
Total	22.7	25.1	25.0	9.1	4.7	6.8	6.6	100.		
CLAIMS										
Liabilities:										
Real estate debt	34.0	30.0	22.0	6.0	4.0	2.0	2.0	100.		
Excluding CCC loans	45.0	20.0	20.0	9.0	3.0	2.0	1.0	100		
CCC loans <sup>3</sup>	16.4	29.5	32.7	11.3	4.5	3.7	1.9	100		
	38.6	25.7	21.2	7.4	3.6	2.0	1.5	100.		
otal liabilities										
otal liabilities	19.7	25.0	25.7	9.4	4.9	7.7	7.6	100		

<sup>&</sup>lt;sup>1</sup> Excluding horses, mules, and commercial broilers. <sup>2</sup> All crops held on farms including crops under CCC loans and crops held off farms as security for CCC loans to farmers.

<sup>&</sup>lt;sup>3</sup>Nonrecourse CCC loans secured by crops owned by farmers. These crops are included as assets in this balance sheet,

Table 13-Balance sheet of the farming sector by value of sales class, January 1, 1974

Table 10 Balance and	Gross sales									
	IA	IB	11	Ш	IV	V	VI			
Item	\$100,000 and over	\$40,000 to \$99,999	\$20,000 to \$39,999	\$10,000 to \$19,999	\$5,000 to \$9,999	\$2,500 to \$4,999	Less than \$2,500	All farms		
				Million o	iollars					
Total										
ASSETS										
Physical assets:										
Real estate	69,036	78,408	77,783	28,739	14,994	22,179	21,242	312,381		
Livestock and poultry <sup>1</sup>	12,801 7,181	10,437 11,747	10,098 12,678	3,563 4,610	1,697 2,216	2,327 3,192	1,455 2,705	42,378 44,329		
Crops stored on and off farms <sup>2</sup> Household equipment and furnishings	3,335 2,584	7,090 2,516	7,333 2,624	2,341 1,101	861 748	795 1,346	332 2,679	22,087 13,598		
Financial assets:	5,049	2,964	2,655	938	568	956	1,747	14,877		
Deposits and currency	838 4,190	712 2,277	737 1,844	312 578	229 238	438 234	900 153	4,166 9,514		
Total	l	116,151		42,182	21,551	31,467	31,213	463,330		
CLAIMS	105,014	110,101	110,702	,			•	·		
Liabilities:								•		
Real estate debt	14,026	12,376	9,076	2,475	1,650	825	825	41,253		
Excluding CCC loans	14,460 123	6,427 221	6,427 245	2,892 85	964 34	643 28	321 14	32,134 750		
Total liabilities		19,024	15,748	5,452	2,648	1,496	1,160	74,137		
Proprietors' equities		97,127	100,004	36,730	18,903	29,971	30,053	389,193		
Total	-	116,151	115,752	42,182	21,551	31,467	31,213	463,330		
, otal		,-		Perc	ent					
Debt to asset ratio	27.2	16.4	13.6	12.9	12.3	4.8	3.7	16.0		
2021 10 2020 12 10 10 10 10 10 10 10 10 10 10 10 10 10				Dol	lars					
Per farm										
ASSETS										
Physical assets:							00.700	110 200		
Real estate				88,156	60,217	44,988	29,792	110,382		
Livestock and poultry 1 Machinery and motor vehicles	62,991	29,651 33,372	17,321 21,746	10,929 14,141	6,815 8,900	4,720 6,475	2,041 3,794	14,975 15,664		
Crops stored on and off farms <sup>2</sup>	29,254 22,667	20,142 7,148	12,578 4,501	7,181 3,377	3,458 3,004	1,613 2,730	466 3,757	7,805 4,805		
Financial assets:  Deposits and currency		8,420	4,554	2,877	2,281	1,939	2,450	5,257		
U.S. savings bonds	7,351	2,023 6,468	1,264 3,163	958 1,773	920 955	. 888 . 475	1,262 215	1,472 3,361		
Total	921,175	329,974	198,546	129,392	86,550	63,828	43,777	163,721		
CLAIMS										
Liabilities:		05	15.555	7.500	6 607	1 672	1 167	14 577		
Real estate debt	1	35,159	15,568		6,627	1,673	1,157	14,577		
Excluding CCC loans	126,842				3,871 137	1,304 58	450 20	11,355 265		
Total liabilities	1	54,046	27,012	16,724	10,635	3,035	1,627	26,197		
Proprietors' equities	670,219	275,928	171,534	112,668	75,915	60,793	42,150	137,524		
Total	921,175	329,974	198,546	129,392	86,550	63,828	43,777	163,721		
				Per	rcent					
Debt-to-asset ratio	. 27.2	16.4	13.6	12.9	12.3	4.8	3.7	16.0		
<sup>1</sup> Excluding horses, mules, and commer	cial broiler	s <sup>2</sup> All	3 Nonreco	urse CCC	loans secu	red by cro	ps owned	by farmers		

 $<sup>^{1}\,\</sup>mathrm{Excluding}$  horses, mules, and commercial broilers.  $^{2}\,\mathrm{All}$  crops held on farms including crops under CCC loans and crops held off farms as security for CCC loans to farmers.

 $<sup>^{\</sup>rm 3}$  Nonrecourse CCC loans secured by crops owned by farmers. These crops are included as assets in this balance sheet.

Table 15-Balance sheet of the farming sector by value of sales class, January 1, 1975

	Gross sales									
	IA	IB	11	111	IV	V	VI	Ī		
Item	\$100,000	\$40,000	\$20,000	\$10,000	\$5,000	\$2,500	∟ess	All		
	and over	\$99,999	\$39,999	\$19,999	\$9,999	\$4,999	\$2,500	farms		
			****	Million	dollars		<u> </u>	· · · · · · · · · · · · · · · · · · ·		
Total										
ASSETS										
Physical assets: Real estate	1	86,408	86,758	32,884	17,142	25,188	24,838	349,831		
Livestock and poultry		5,986 14,569	5,827 16,037	2,102 5,986	1,018 2,993	1,326 4,122	852 3,727	24,570 56,469		
Crops stored on and off farms <sup>2</sup>	3,491	7,331 2,618	7,704 3,047	2,560 1,302	954 934	838 1,654	396 3,414	23,274 15,312		
Financial assets:  Deposits and currency	1	2,896	2,584	996	634	1,151	2,144	15,060		
U.S. savings bonds	706	693 2,531	749 2,029	347 578	264 237	502 248	1,070 159	4,331 10,513		
Total	109,033	123,032	124,735	46,755	24,176	35,029	36,600	499,360		
CLAIMS										
Liabilities: Real estate debt	16,200	14,350	9,720	2,314	1,852	926	926	46,288		
Nonreal estate debt:	1	7,750	7,045	2,818	705	352	352	35,226		
Excluding CCC loans	48	103	106	34	12	11	5	319		
Total liabilities	32,452	22,203	16,871	5,166	2,569	1,289	1,283	81,833		
Proprietors' equities	1	100,829	107,864	41,589	21,607	33,740	35,317	417,527		
Total	109,033	123,032	124,735	46,755	24,176	35,029	36,600	499,360		
				Perce	nt					
Debt to asset ratio	29.8	18.1	13.5	11.1	10.6	3.7	3.5	16.4		
				Doll	ars					
Per farm										
ASSETS										
Physical assets: Real estate	696,482	254,891	153,554	100,871	67,488	51,934	34,071	124,534		
Nonreal estate: Livestock and poultry <sup>1</sup>	67,809	17,658	10,313	6,448	4,008	2,734	1,168	8,750		
Machinery and motor vehicles Crops stored on and off farms 2	31,736	42,976 21,625 7,723	28,384 13,635 5,395	18,362 7,853 3,994	11,783 3,756 3,677	8,499 1,728 3,410	5,112 543 4,683	20,110 8,289 5,453		
Financial assets:  Deposits and currency	42,318	8,543	4,573	3,055	2,496	2,373	2,941	5,363		
U.S. savings bonds		2,044 7,466	1,326 3,592	1,064 1,773	1,039 934	1,035 511	1,467 211	1,542 3,744		
Total	991,208	362,926	220,772	143,420	95,181	72,224	50,196	177,785		
CLAIMS										
Liabilities: Real estate debt	147,273	42,330	17,204	7,098	7,291	1,909	1,270	16,484		
Nonreal estate debt: Excluding CCC loans	147,309	22,861	12,469	8,644	2,776	726	482	12,545		
CCC loans <sup>3</sup>	436	304	188	105	47	23	6	114		
Total liabilities	295,018	65,495	29,861	15,847	10,114	2,658	1,758	29,143		
Proprietors' equities	696,134	297,431	190,911	127,573	85,067	69,566	48,438	148,642		
Total	991,152	362,926	220,772		95,181	72,224	50,196	177,785		
Debt.to cont. vot.				Perce						
Debt-to-asset ratio	29.8	18.1	13.5	11.1	10.6	3.7	3.5	16.4		

<sup>&</sup>lt;sup>1</sup>Excluding horses, mules, and commercial broilers. <sup>2</sup>All crops held on farms including crops under CCC loans and crops held off farms as security for CCC loans to farmers.

<sup>&</sup>lt;sup>3</sup>Nonrecourse CCC loans secured by crops owned by farmers. These crops are included as assets in this balance sheet.

Table 16—Percentage distribution of balance sheet of the farming sector, by value of sales class, January 1, 1975

	Gross sales								
	IA	IB	П	111	IV	V	VI		
Item	\$100,000 and over	\$40,000 to \$99,999	\$20,000 to \$39,999	\$10,000 to \$19,999	\$5,000 to \$9,999	\$2,500 to \$4,999	Less than \$2,500	All farms	
						• ,,,,,,,,		L	
				Pero	cent				
		С	omponents	as shares o	f total asse	ts and clair	ns		
ASSETS									
Physical assets:									
Real estate	70.3	70.2	69.6	70.3	70.9	71.9	67.9	70.1	
Nonreal estate:  Livestock and poultry 1	6.8	4.9	4.7	4.5	4.2	3.8	2.3	4.9	
Machinery and motor vehicles	8.3	11.8	12.9	12.8	12.4	11.8	10.2	11.3	
Crops stored on and off farms <sup>2</sup>	3.2	6.0	6.2	5.5	4.0	2.4	1.1	4.7	
Household equipment and furnishings	2.2	2.1	2.4	2.8	3.9	4.7	9.3	3.1	
Financial assets:  Deposits and currency	4.3	2.4	2.1	2.1	2.6	3.3	5.9	3.0	
U.S. savings bonds	.7	.6	.5	.7	1.0	1.4	2.9	.9	
Investments in cooperatives	4.2	2.0	1.6	1.3	1.0	.7	.4	2.0	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
CLAIMS									
Liabilities:									
Real estate debt	49.9	64.6	57.6	44.8	72.1	71.8	72.2	56.6	
Excluding CCC loans	49.9	34.9 .5	41.8 .6	54.5 .7	27.4 .5	27.3 .9	27.4 .4	43.0 .4	
CCC loans	.2	.5	.6	.,	.5	.9	.4	.4	
Total liabilities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Proprietors' equities (equity ratio)	70.2	82.0	86.5	89.0	89.4	93.6	91.0	83.6	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
			Shares	of total co	omponent v	value			
ASSETS									
Physical assets:	21.0	24.7	24.8	9.4	4.9	7.2	7.1	100.0	
Real estate:	21.9	24.7	24.0	5.4	4.5	7.2	7.1	100.0	
Livestock and poultry 1	30.3	24.4	23.7	8.6	4.1	5.4	3.5	100.0	
Machinery and motor vehicles	16.0	25.8	28.4	10.6	5.3	7.3	6.6	100.0	
Crops stored on and off farms <sup>2</sup>	15.0	31.5	33.6	11.0	4.1	3.6	1.7	100.0	
Household equipment and furnishings	15.3	17.0	19.8	8.5	6.0	10.8	22.6	100.0	
Financial assets:	30.9	19.2	17.1	6.6	4.2	7.6	14.4	100.0	
Deposits and currency	16.3	16.0	17.1	8.0	6.0	11.5	25.0	100.0	
Investments in cooperatives	45.0	24.0	19.2	5.4	2.2	2.3	1.9	100.0	
Total	21.8	24.6	25.0	9.4	4.8	7.0	7.4	100.0	
CLAIMS									
Liabilities:									
Real estate debt	35.0	31.0	21.0	5.0	4.0	2.0	2.0	100.0	
Excluding CCC loans	46.0	22.0	20.0	8.0	2.0	1.0	1.0	100.0	
CCC loans <sup>3</sup>	15.0	32.2	33.2	10.6	3.8	3.4	1.8	100.0	
Total liabilities	39.7	27.1	20.6	6.3	3.1	1.6	1.6	100.0	
Proprietors' equities	18.5	24.2	25.8	9.9	5.2	8.0	8.4	100.0	
Total	21.8	24.6	25.0	9.4	4.8	7.0	7.4	100.0	
<sup>1</sup> Excluding horses, mules, and commerce	ial broilers	2 A II	<sup>3</sup> Nonrecou	rse CCC I	oans secur	ed by crop	s owned	by farmers	

<sup>&</sup>lt;sup>1</sup> Excluding horses, mules, and commercial broilers. <sup>2</sup> All crops held on farms including crops under CCC loans and crops held off farms as security for CCC loans to farmers.

 $<sup>^{\</sup>rm 3}$  Nonrecourse CCC loans secured by crops owned by farmers. These crops are included as assets in this balance sheet.

#### BALANCE SHEET OF THE FARMING SECTOR, ALASKA, 1971-77

In 1974, ERS published a balance sheet for Alaska's farming sector for the years 1969-74. Since then, additional data were acquired through the 1974 Census of Agriculture, the 1975 Alaska Farm Cost of Production Survey, and other sources which were used to revise the earlier estimates.

Farm asset values in Alaska rose steadily from 1970, following closely the increase in farm real estate value (table 17). The value of farm machinery and motor vehicles and the vaue of stored crops also showed relatively sharp gains after 1970. Financial assets showed substantial growth, with the sharpest gains occurring during the last several years.

The amount of farm debt outstanding in Alaska rose from \$8.1 million on January 1, 1970, to \$14.1 million at the beginning of 1974, then declined to about \$10.1 million at the beginning of 1977. Farm real estate debt and nonreal estate debt followed the same pattern.

Proprietors' equity in farm assets posted steady gains after 1970, with the sharpest increases coming after 1973. On January 1, 1977, equity totaled \$77.6 million, more than double the January 1, 1975, value.

With the increase in the importance of farm real estate as a farm asset, values shifted somewhat from their relationship in 1970 (table 18). The value of farm real estate accounted for almost three-fourths of total asset value in 1977; whereas in 1970, its share was less than two-thirds. The relationship between the outstanding amount of real estate loans and nonreal estate loans also changed during 1970-77. Farm real estate debt was 64 percent of the total in 1970, but rose to claim over 80 percent of total debt by 1977.

#### **Balance Sheet Components**

#### Assets

The value of privately owned farm real estate (including farmland and buildings) in Alaska on January 1, 1977, was an estimated \$64.8 million (table 17). Since 1970, the value increased 255 percent, with the bulk of the increase occurring after 1974. A small portion of the

increase in total value was because of a slight increase in acreage, but the bulk of the value increase was caused by sharply higher per acre values. The per acre value rose partially because of the strong demand for available farmland and partially because several thousand acres of uncleared or marginally tillable land were developed into much more productive farmland. However, the loss of some farmland to residential subdivisions, especially in the Matanuska Valley, and expectations that more farmland would be subdivided also influenced the sharp rise in per acre value in the last few years.

Livestock and poultry (excluding horese) on farms January 1, 1977, were valued at \$3.6 million, about 4 percent less than a year earlier and 20 percent below the record high \$4.5 million on January 1, 1974. Cattle and calves accounted for over four-fifths of total livestock and poultry value in most years. Since the early seventies, the value of sheep and hogs has shown a steady decline, mostly because of fewer animals. Most livestock in Alaska are owned by relatively few farmers, which probably accounts for the rather uneven annual changes in number on hand and total value. About 13 dairies operate in Alaska, and the value of their cattle and calves make up about half of total cattle value and about 40 percent of the total value of livestock and poultry, excluding horses.

The value of machinery and motor vehicles on farms January 1, 1977, was \$6.4 million, 10 percent higher than a year earlier and two-and-a-half times the value of 1970. Motortruck and tractor values usually make up over half the total value of machinery and motor vehicles. On smaller farms, the machinery and equipment are often less modern and smaller in size or capacity than those on the larger farms where more powerful and more reliable units are required to cover the larger acreage.

The value of crops stored on farms on January 1, 1977, was estimated to be \$3.2 million, about the same as on January 1, 1976. Storable crops in Alaska are usually limited to potatoes, hay, silage, and barley. The volume of each in storage varies considerably from one year to the next depending on the amount produced and the demand after harvest. For example, livestock feed may be used up soon after harvest if output is much lower than expected because of dry weather. In this case, the volume and the total value of feed still in storage on the following January 1 would be less than it otherwise might be under more favorable conditions.

<sup>&</sup>lt;sup>1</sup> Evans, Carson D. "Balance Sheet of the Farming Sector, Alaska, 1969-74." Balance Sheet of the Farming Sector, 1974, USDA-ERS, AIB-376, Sept. 1974. The reader is directed to that article for more detail on items covered and background on farming in Alaska.

Table 17-Balance sheet of the farming sector, Alaska, January 1, 1970-77

Table 17—Balance sheet of the farming sector, Alaska, January 1, 1970-77											
Item	1970	1971	1972	1973	1974	1975	1976	1977 <sup>1</sup>			
				1,000	dollars						
ASSETS											
Physical assets:											
Real estate	18,270	20,400	22,140	25,200	29,250	33,500	45,500	64,800			
Livestock and poultry	2,920	3,070	3,195	3,155	4,510	2,225	3,740	3,580			
Machinery and motor vehicles	2,650	3,150	3,660	4,180	4,710	5,260	5,830	6,430			
Crops stored on farms Household equipment and	916	1,176	1,054	1,622	1,686	2,367	3,156	3,150			
furnishings	2,000	2,100	2,150	2,200	2,250	2,350	2,600	2,900			
Bank deposits and savings							4 000				
accounts	1,000	1,300	1,700	2,200	2,800	3,600	4,800	6,000			
Investment in cooperatives	515	533	554	546	590	650	710	788			
TOTAL	28,271	31,729	34,453	39,103	45,796	49,952	66,336	87,648			
CLAIMS											
Liabilities:											
Real estate debt:											
Federal land bank <sup>2</sup>	935	842	1,532	1,816	3,410	2,066	2,027				
Banks (all operating)	779	904	1,330	1,868	1,325	1,495	1,190				
Farmers Home Administration											
(Direct and insured loans) <sup>3</sup>	992	873	1,047	822	858	725	471				
ARRC	792	744	961	927	918	1,077	1,073				
ARLF <sup>5</sup>	810	1,260	1,913	2,187	2,377	2,598	2,813				
Other	860	920	1,240	1,430	1,680	1,525	1,580				
Total real estate debt	5,168	6,287	8,023	9,050	10,568	9,486	9,154	8,159			
Ionreal estate debt:											
Banks (all commercial)	998	1,241	1,109	1,776	1,036	866	690				
Production credit association		376	769	832	697	597	641	• • • •			
Farmers Home Administration											
(Direct and insured loans)	1,186	993	796	680	531	373	88				
ARRC	62	111	77	57	67	65	68				
ARLF <sup>5</sup>	528	818	1,094	1,120	1,058	1,014	1,024				
Other	140	160	190	225	190	180	190				
Total nonreal estate debt	2,914	3,699	4,035	4,690	3,579	3,095	2,701	1,929			
Total debt	8,082	9,986	12,058	13,740	14,147	12,646	11,855	10,088			
Equity	20,189	21,743	22,395	25,363	31,649	37,306	54,481	77,560			
Debt-to-asset ratio (percent)	28.6	31.5	35.0	35.1	30.9	25.3	17.9	11.5			

<sup>&</sup>lt;sup>1</sup> Preliminary. <sup>2</sup> Excludes housing loans. <sup>3</sup> Farm ownership and farm rural housing loans. <sup>4</sup> Alaska Rural Rehabilitation

Corporation. <sup>5</sup> Agriculture Revolving Loan Fund. <sup>6</sup> Farm operating, emergency and economic opportunity loans.

Table 18—Balance sheet components as shares of total assets and liabilities, Alaska, 1970-77

Item	1970	1971	1972	1973	1974	1975	1976	1977¹
				Perc	ent	•		
ASSETS								
Physical assets:								
Real estate	64.7	64.3	64.3	64.4	63.9	67.1	68.6	73.8
Livestock and poultry	10.3	9.7	9.3	8.1	9.8	4.5	5.6	4.1
Machinery and motor vehicles	9.4	9.9	10.6	10.7	10.3	10.5	8.8	7.3
Crops stored on and off farms	3.2	3.7	3.1	4.2	3.7	4.7	4.8	3.4
Household equipment and furnishings	7.1	6.6	6.2	5.6	4.9	4.7	3.9	3.6
Financial assets:								
Bank deposits and sayings accounts	3.5	4.1	4.9	5.6	6.1	7.2	7.2	6.9
Investments in cooperatives	1.8	1.7	1.6	1.4	1.3	1.3	1.1	.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LIABILITIES								
Real estate debt	63.9	63.0	66.5	65.9	74.7	75.5	77.3	80.9
Nonreal estate debt	36.1	37.0	33.5	34.1	25.3	24.5	22.7	19.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>&</sup>lt;sup>1</sup> Preliminary.

No farmer-owned crops are stored on or off farms in Alaska under Commodity Credit Corporation loans.

Household equipment and furnishings on Alaska farms on January 1, 1977, were valued at \$2.9 million. There has been a steady rise in value since 1970 with the last few years showing larger increases.

Financial assets of farmers totaled an estimated \$6.8 million on January 1, 1977. This was almost one-fourth above 1976 and four-and-a-half times what they were in 1970. Financial assets are difficult to estimate, but recent survey data indicate that farmers have considerably more financial assets than the earlier balance sheets indicated for Alaska's farm sector. Although there are no substantiating data, farmers' financial assets may have received a large boost in the last couple of years from nonfarm income, especially income received from jobs on or related to the construction of the trans-Alaska oil pipeline.

#### Liabilities

Farm debt showed a gradual increase from \$8.1 million in 1970 to \$14.1 million in 1974, then declined to \$10.1 million on January 1, 1977. The rapid increase in financial assets mentioned above and the decline in farm debt since 1974 are probably related. Increased earnings from off-farm employment most likely enabled farmers to reduce their debts as well as increase cash savings.

Farm real estate debt on January 1, 1977, totaled \$8.2 million, 11 percent less than in 1976 but 60 percent above the amount outstanding at the start of 1970. There are several sources of farm long-term credit in Alaska, including the Federal land bank, commercial banks, Farmers Home Administration, and miscellaneous private lenders. Additionally, the Agricultural Revolving Loan Fund (ARLF), a State-sponsored lending agency,

and the Alaska Rural Rehabilitation Corporation (ARRC), a locally administered loan organization, supply farm real estate loans.

The Federal land bank and the ARLF are the two major lenders. In the last few years, new Federal land bank loans have almost all been for farm or rural housing. However, data for housing loans are not included.

Nonreal estate farm loans outstanding in Alaska on January 1, 1977, totaled \$1.9 million. This amount compared with \$2.7 million at the beginning of 1976 and with \$2.9 million in 1970. Since 1970, the year with highest outstanding farm nonreal estate debt has been 1973, when it was \$4.7 million.

Alaskan farmers have the same three traditional institutional lenders of short- and intermediate-term loans as farmers in the "Lower 48", namely commercial banks, production credit associations, and Farmers Home Administration. In addition, as with farm real estate loans, both the ARLF and ARRC make farm nonreal estate loans. The ARLF has emerged as the main source of farm nonreal estate loans.

Farm proprietors' equity in farm assets climbed rapidly since 1970 and totaled \$77.6 million on January 1, 1977. The sharpest increases occurred in the last 2 or 3 years as farm real estate value shot up while farm real estate debt actually declined.

The farm debt-to-asset ratio on January 1, 1977, was 11.5 percent. This is much lower than other years since 1970 and reflects both the decline in farm real estate debt and the rapid appreciation in farmland values. Until 1976, the debt-to-asset ratio of the Alaskan farm sector was about double that of the 48-State farm sector which has averaged from 16.0 percent to 17.4 percent the last 10 years.

## THE WIDE ECONOMIC IMPACT OF THE PRODUCTION OF FARMERS' FIXED CAPITAL

by
\*Thomas A. Niles and Gerald E. Schluter

The capital assets of farmers and appear in the Balance Sheet of the Farming Sector can be viewed from several different perspectives. Within the balance sheet itself, they are broken down between physical assets and financial assets. Physical assets are split between real estate and nonreal estate. The assets addressed in this article are tractors, motor trucks, automobiles, other farm machinery and equipment, land improvements, dwellings, and service buildings.

Most often capital assets are viewed using the stock concept of capital. Capital stock can be viewed as the long-term accumulation of investment flows. Investment can be further disaggregated into replacement investment (to maintain current levels of the capital stock) and new net investment (to increase the level of capital stock). Net investment is the only investment that increases agricultural capacity and the only investment that could replace labor intensive technology with more machinery intensive technology.

The annual rate of net investment in farm capital in the 5-year period 1971-75 was \$790 million. This is lower than the \$848 million and \$873 million annual averages for the forties and fifties but above the \$712 million for the sixties. At the same time, total farm capital expenditures were rising from an average of \$2.3 billion in the forties to \$10.2 billion in the 1971-75 period. This indicates a trend to an increasing proportion of farm capital expenditures committed simply to the replacement of current capital. As important as the differentiation between new and replacement investment is to adjustments in the capital stock, it is the total level of investment which influences the level of business activity and employment in the capital-producing industries. The sectors of the economy directly and indirectly involved in producing capital are less interested in how their outputs are used, whether for replacement of or additions to capital stocks, than they are in the aggregate level of investment that is done by the agricultural sector. The remainder of this report will therefore consider the interindustry impacts of total investment.

In 1971, farmers spent \$7.0 billion for all capital items. This original expenditure for capital items generated additional economic activity within the U.S. economy because the firms which supplied the \$7.0 billion worth of materials and services in turn had to purchase goods and services from other firms, thus requiring a total economic effort greater than the original \$7.0 billion spent. The total business activity stimulated by the \$7.0 billion in capital expenditures was an estimated \$15.1 billion. Each dollar that farmers spent for capital items in 1971 stimulated \$2.10 of total business in the economy.

The total outlays for capital items in 1971 can be further disaggregated. Farmers spent around \$4.9 billion for farm machinery alone. This expenditure generated some \$10.4 billion worth of total business activity that year. This additional output was needed to provide for the indirect demands for producing the farm machinery. Machinery production requires output from such sectors as steel, rubber, machine tools, general manufacturing, and construction. To support these activities, increased output was required from the sales and service sectors.

At the same time, farmers invested \$2.1 billion to improve their real estate assets. This consisted of improvements to and construction of buildings and other land improvements. This \$2.1 billion worth of improvements generated \$4.7 billion of total business activity.

To maintain this level of economic activity, nearly 640,000 workers were needed to produce and deliver farm capital items in 1971. With a total civilian labor force of 84 million, this result suggests that nearly 1 percent of the U.S. civilian work force was employed in providing fixed capital items for the farming sector in 1971. Each \$1 million worth of direct expenditures was associated with the employment of about 91 workers. On the other hand, the steady accumulation of farm

<sup>\*</sup>Agricultural Economists, Economic Research Service, U.S. Department of Agriculture.

<sup>&</sup>lt;sup>1</sup> Farm Production Expenditures for 1971, Statistical Reporting Service, USDA, Washington, D.C., May 1975. 1971 is the latest year for which detailed breakdown of capital expenditures by farmers' is available.

capital stock has been accompanied by a steady decline in the farm labor force. A direct comparison of the employment needs of investment with the number of workers displaced by investment may not be meaningful. Intertemporal comparisons complicate the relationship. Although investment is made in one period, it displaces the farm workers for the life of the capital stock. Similarly, the number of workers leaving the farm is not a complete measure of the people being displaced by farm capital investment. Capital investment in agricultural input and processing industries can cause jobs as well as workers to be transferred to the nonfarm sector. While a direct comparison may not be meaningful, it is useful to note this capital substitution process is not costless initially and later takes a certain level of factor commitments (labor, raw material, etc.) for replacement investment.

Agricultural capital expenditures do not impact uniformly on all sectors of the economy (fig. 1). The capital expenditures within the real estate sector for building and other improvements generated about \$1.9 billion worth of economic activity in the construction sectors. Farm machinery and equipment expenditures generated nearly \$4.3 billion in activity in the machinery manufacturing sector. The material input sectors were affected

about equally by both investment in real estate improvement and investment in machinery and equipment. These input sectors included such goods as wood, metal, plastics, rubber, and petroleum products. Collectively, these material input sectors had their output augmented by over \$3 billion. The remainder of the manufacturing sectors generated \$1.6 billion in additional output.

Expenditures for farm machinery and equipment had a particularly heavy impact on the wholesale and retail trade sectors, with nearly \$1.8 billion worth of economic activity generated. About 3 percent of the \$15.1 billion of total economic activity went to the transportation sector. Utilities received only 1 percent of that total. Foreign imports totaling just over \$400 million were consumed in the total economic activity generated. This represented about 2 percent of the activity generated by real estate improvements and 3 percent of the activity from machinery and equipment expenditures. Other service sectors and the farm sector received the remaining \$1.4 billion of total economic activity.

#### **Employment Levels Also Influenced**

Employment also benefits from the economic activity stimulated by farmers' capital expenditures. Assuming employment varies directly with the level of business

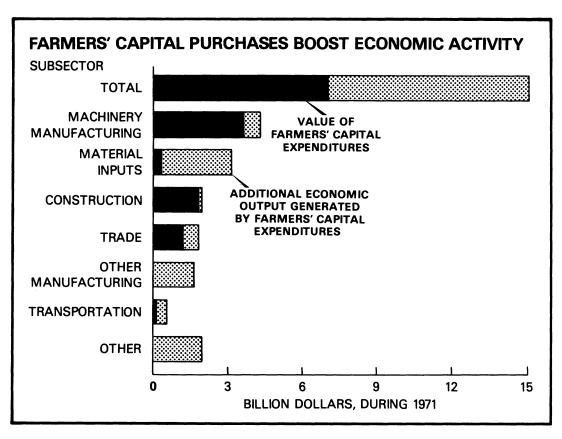


Figure 1

activity, then the \$4.7 billion worth of economic activity associated with farmers' capital expenditures to improve real estate required the employment of about 206,000 workers in 1971. The production of farmers' machinery and equipment required 431,000 workers.

The employment impact of improvements to real estate and to machinery did not fall evenly on the economy. The employment associated with machinery and equipment was largely within the wholesale and retail trade sector. The employment effect in this sector totaled about 140,000 workers in 1971. This is in part a reflection of the concentration of machinery and equipment manufacturing, both economically and geographically, and the dispersion of the farm market which requires an extensive trade network to link the two.

#### Resulting Distribution of Income

Each time a transaction occurs between two sectors, a proportion is kept in the receiving sector as income or factor payments, and the remainder is passed on to other sectors through purchases of inputs. Thus, the income generated must be less than the total economic activity generated. The distribution of this income need not resemble the distribution of the initial farmers' expenditures.

About 86 cents of each farmer's dollar spent for buildings and other improvements was received by the construction sector. Ultimately, this sector retained 32 cents of this total and passed the remainder on to other sectors through purchases of inputs. On the other hand, the material supplies sectors received directly only 11 cents of each farmer's dollar spent for buildings and other improvements, but finally received 29 cents as the construction sector purchased additional material inputs. Trade, transportation, and several other sectors also benefited from this transfer effect.

Table 1—Distribution of income dollar due to farmers' capital expenditures, 1971

_	Buildin oth improv	er	Machinery and equipment		
Subsector	Initial	Final	Initial	Final	
		Ce	ents		
Construction	86 11  3 	32 29  12 5 9	2 73 23 1 1	1 15 32 23 4 11	
Total	100	100	100	100	

The machinery sector received about 73 cents of each dollar of farm investment in machinery and equipment and retained about 32 cents. The materials supplies and trade also received a large share of farmers' machinery and equipment expenditures. The remainder was shared by several other sectors.

The accumulation of the agricultural capital reported in the Balance Sheet of the Farming Sector has been shown to have a wide impact on the economy. While the farm machinery industry is the most visibly influenced by the process, this study has revealed a rather wide impact on the total economy. The interrelated nature of production in the U.S. economy demands that additional economic activity must be generated throughout much of the rest of the economy in order to provide for farmers' capital needs.