FARM FINANCIAL CONDITIONS, PERSPECTIVES AND PROSPECTS

August 1978

U.S. Department of Agriculture

Economics, Statistics, and Cooperatives Service

ESCS-33

FARM FINANCIAL CONDITIONS: PERSPECTIVES AND PROSPECTS, AUGUST 1978. National Economic Analysis Division, Economics, Statistics, and Cooperatives Service, U.S. Department of Agriculture, ESCS-33.

ABSTRACT

An inquiry into the financial condition of agriculture found the industry generally sound and conditions improving, although the existence of possible credit problems in selected instances is acknowledged. This report examines levels of debt and notes the availability of loan funds to farmers. It discusses the cash flow squeeze produced by steadily increasing production costs and varying receipts; farm asset values; levels of investment and capital formation; and off-farm income. The report then considers conditions on several key types of grain and livestock farms.

Keywords: Income, finance, credit, cash flow, investment, asset values, receipts, capital formation, debt, production costs.

ACKNOWLEDGMENTS

This report was prepared by Eldon E. Weeks from materials, analyses, comments, and consultations supplied by Phillip Allen, Eddy LaDue, Larry Walker, Robert Reinsel, Leo Strickland, Carson Evans, and Bruce Hottel, all of ESCS; Emanuel Melichar, Board of Governors of the Federal Reserve System; and John Moore, Farm Credit Administration.

Washington, D.C. 20250 August 1978

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HIGHLIGHTS

This report provides background and an update on current and prospective financial conditions in agriculture.

Background. This background on financial conditions in agriculture offers a brief historical perspective and then discusses evidence of recent credit and cash flow problems.

Aggregate statistics project an image of the 1972-74 period as a financially rewarding time for farmers. Farm asset values rose more than $150 billion, while debts increased about $20 billion; gross income increased almost $40 billion, while expenses rose $25 billion; and the net income of farmers from all sources rose by $22 billion.

The events of the 1972-74 period affected various segments of the farm sector differently. Crop prices soared, led by wheat and feed crops, and so did the cost of feed, leading to hard times in the livestock sector and the liquidation phase of the beef cattle cycle.

Then in 1975, crop receipts began to ease, and by 1977 net income from farming was only $2.3 billion above what it was in 1972. But the level of debt was up $43.6 billion. The need to service a nearly $20-billion increase in nonreal estate debt was especially pressing on income. One group of commodity producers after another was faced with adverse cash flow conditions. Some farmers who were highly leveraged for one reason or another, including beginning farmers, had cash flow problems serious enough to affect their credit worthiness.

In March 1978, a survey of financial institutions in 12 States indicated that about twice the normal number of farmers were having credit problems, although relatively few farmers were in serious difficulty. The situation had been and was being helped by a number of Government programs, including emergency loans, increased Commodity Credit Corporation loans, and distribution of wheat deficiency payments followed by a number of commodity program adjustments. Also, a number of farmers were using increased real estate equities as security for refinancing short-term debt.

Update. Gross farm income for 1978 will approach $120 billion, up 13 percent from 1977, according to an early summer USDA forecast. Net income before inventory adjustment was forecast to approach $26 billion, up about one-quarter.

The improved financial conditions of dairy farmers, thanks to higher support prices, should be sustained through 1978 and beyond. Prices for livestock and livestock products are stronger than had been expected and continued basic strength is likely. Recent actions involving feed grain, cotton, and wheat program provisions should improve cash flow positions for crop producers barring further severe weather disruptions.

Examination of year-to-year comparative budgets for selected typical farms emphasizing grain and cotton production revealed that recent financial conditions have been relatively good, and should remain so on combination rice and other crop farms in Arkansas and California and on east central Illinois corn-soybean farms. Good conditions that had prevailed in 1975 on Montana wheat-fallow farms had deteriorated by 1977 to about half the receipts of 1975, but significant improvement is projected for 1978. Financial conditions were not good throughout the 1975-77 period for southwest Oklahoma cotton, wheat, and beef farms; Texas High Plains cotton and sorghum farms; and Mississippi Delta cotton farms. The cash flow positions of these farms should improve considerably in 1978, but returns to equity will probably remain low.

FARM FINANCIAL CONDITIONS:

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INTRODUCTION

By late 1977 and early 1978, reduced farm income and high levels of debt combined to cause some farmers and policymakers to express concern over the financial health of the farm sector. Some farmers indicated having difficulty in obtaining loan funds for continued operation. Others were concerned over their ability to repay loans from reduced cash flow. Net farm income had declined significantly since 1973, while both farm assets and debts had risen sharply. In March 1978, survey results showed that more farmers than normal in some States had credit problems. Conditions have since improved.

This report provides a midyear update on financial conditions in agriculture. First, background for this update is discussed. Then conditions in agriculture are examined, focusing on selected industry characteristics as indicators of current and prospective financial health.

BACKGROUND

This background on financial conditions in agriculture covers a decade of historical perspective, direct evidence of the existence of credit and cash flow problems in the past, and recent events and actions that bear on reported financial problems in agriculture.

Historical Perspective

Credit problems are usually thought to be symptoms of current or anticipated cash flow difficulties, or low asset equities for loan security purposes, or both. A look at the historical relationships among debt, income, and asset values can help in assessing current and prospective financial health of an industry.

In the 1968-71 period, compared with what was to follow, finance-related conditions in agriculture appeared stable. The industry was operating at rates obviously below full capacity. Although levels of asset values, debt, income, and expenses were trending upward, their relationships to each other were relatively stable (table 1). The totals for all livestock and all crop receipts were advancing at about the same rate, and livestock receipts were running 58-59 percent of total receipts through 1972.

To look at aggregate statistics, one might think of the period 1972-74 as a financially rewarding time for farmers. The value of farm assets increased by more than $150 billion, while debts rose by about $20 billion; gross income increased by nearly $40 billion, while production expenses rose about $25 billion; and the net income of farmers from all sources rose by $22 billion. From the standpoint of net income, most of the advances were registered in 1972 and 1973. By 1974, production expenses had shot up, earlier income gains were being capitalized into asset values, and capital expenditures were abnormally high for the second consecutive year.

But events of the 1972-74 period impacted differently on various segments of the farm sector. Crop prices soared, led by wheat and feed crops. Receipts from crops rose to over half of farm receipts (table 2). Among other things, this translated into extraordinarily high feed costs. In 1974, receipts from marketings of cattle and calves were below those for 1972 (table 3), while feed costs were up by 73 percent (table 4). This period was the beginning of hard times in the livestock sector and the liquidation phase of the beef cattle cycle.

In 1975, crop receipts began to ease because of larger supplies and lower prices, but production expenses continued to rise. Hog and poultry farmers were able to adjust more quickly than were other livestock farmers. Dairy farmers weathered the higher costs, eventually gaining increased price support levels. Until recently, beef cattle ranches and feedlots continued to feel pressure on prices, and marketings of nonfed cattle were heavy.

By 1977, a year of considerable damage from drought, net income from farming was $2.3 billion above 1972, and the level of debt was up $43.6 billion. Especially pressing on income was the nearly $20-billion increase in nonreal estate debt (table 1).

The historical stage was set. It was apparent that large new capital expenditures would add to debt. Net income underwent a sharp drop while production expenses and debt rose significantly. One group of commodity producers after another was faced with adverse cash flow conditions--and then came the drought. Certain types of farmers, farmers in selected geographic areas, and farmers who were highly leveraged for one reason or another, including beginning farmers, had cash flow problems serious enough to affect their

Table 1--Selected aggregate financial indicators for agriculture

Measure	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
	Billion dollars										
Assets	288.0	302.8	314.9	325.6	351.0	393.7	477.2	516.0	578.6	658.4	708.9
Debts (Jan. 1)	47.4	50.5	53.0	54.5	59.1	65.3	74.1	81.8	90.8	102.7	119.7
Real estate	25.1	27.4	29.2	30.3	32.2	35.7	41.3	46.3	51.1	56.6	64.2
Nonreal estate	22.3	23.1	23.8	24.2	26.9	29.6	32.8	35.5	39.7	46.1	55.5
Equity in assets (Jan. 1)	240.6	252.3	261.9	271.1	291.9	328.4	403.1	434.2	487.8	552.1	589.2
Realized gross farm income	51.7	56.3	58.6	60.6	70.1	95.5	100.0	96.9	104.1	108.1	119.2 1/
Production expenses	39.5	42.1	44.4	47.4	52.3	65.6	72.2	75.9	83.0	88.0	93.5 1/
Realized net farm income	12.2	14.2	14.2	13.2	17.8	29.9	27.8	21.0	21.1	20.1	25.7 1/
Off-farm income	15.5	16.6	17.4	18.8	20.6	23.7	26.4	28.5	31.0	33.5 2/	36.0 2/
Net income from all sources	27.7	30.8	31.6	32.0	38.4	53.6	54.2	49.5	52.1	53.6	61.7 1/
	Index of change (1968=100)										
Assets	100	105	109	113	122	137	166	179	201	229	246
Debts	100	106	112	115	125	138	156	173	192	217	252
Real estate	100	109	116	121	128	142	164	184	204	226	256
Nonreal estate	100	104	107	108	121	133	147	159	178	207	249
Equity in assets	100	105	109	113	121	136	168	180	203	230	245
Realized gross farm income	100	109	113	117	136	185	193	187	201	209	231
Production expenses	100	107	112	120	132	166	183	192	210	223	237 1/
Realized net farm income	100	116	116	108	146	245	228	172	173	165	211 1/

Continued

Table 1--Selected aggregate financial indicators for agriculture--Continued

Measure	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
	Index of change (1968=100)										
Off-farm income	100	107	112	121	133	153	170	184	200	216	232 1/
Net income from all sources	100	111	114	116	139	194	196	179	188	194	223 1/
	Percent										
Debts as a percentage of:											
All assets	16	17	17	17	17	17	16	16	16	16	17
Equity in assets	20	20	20	20	20	20	18	19	19	19	20
Realized gross farm income	92	90	90	90	84	68	74	84	87	95	100 1/
Realized net farm income	388	356	373	413	332	218	266	390	430	511	466 1/
Net income from all sources	171	164	168	170	154	122	137	165	174	192	194 1/

1/ Projected.
2/ Extrapolated from data for 1971-76.

Table 2--Commodity receipts as a proportion of total receipts

Commodity	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
	Percent									
Corn	6	6	7	7	6	8	11	10	10	9
Wheat	4	4	4	4	5	7	8	8	6	5
Soybeans	6	6	6	6	6	8	10	7	9	9
Cotton	3	3	2	3	3	3	3	3	4	4
Fruits and vegetables	11	10	10	10	10	9	9	10	9	10
Other crops	13	12	12	12	12	12	14	14	13	12
All crops	42	41	42	42	42	47	55	51	51	50
Hogs	9	10	9	8	9	9	8	9	8	8
Dairy	13	13	13	13	12	9	10	11	12	12
Cattle and calves	25	26	27	28	30	26	19	20	21	21
Other livestock	10	11	10	9	8	9	8	9	9	9
All livestock	58	59	58	58	58	53	45	49	49	50
All cash receipts	100	100	100	100	100	100	100	100	100	100

Table 3--Indexes of cash receipts

(1968=100)

Commodity	1969	1970	1971	1972	1973	1974	1975	1976	1977
Corn	107	123	133	139	270	367	313	362	326
Wheat	111	132	127	189	387	463	427	359	312
Soybeans	108	129	135	158	281	373	261	327	340
Cotton	107	95	113	140	213	220	176	270	301
Fruits and vegetables	102	99	108	118	158	178	180	174	199
Other crops	103	110	115	127	180	229	215	216	205
All crops	105	112	119	136	220	273	241	256	254
Hogs	125	119	109	142	200	184	209	194	196
Dairy	104	110	114	120	136	159	166	192	198
Cattle and calves	112	121	134	162	199	158	155	172	178
Other livestock	113	110	102	110	175	159	172	183	182
All livestock	112	116	120	140	180	162	169	182	186
All cash receipts	109	114	120	138	197	209	199	213	215

Table 4--Indexes of total farm production expenditures by type

(1968=100)

Commodity	1969	1970	1971	1972	1973	1974	1975	1976	1977	Projected 1978
Feed	112	126	126	132	208	228	199	218	216	225
Livestock	115	118	139	181	219	140	134	158	174	218
Nonfarm purchased inputs	101	104	112	115	137	189	213	222	226	234
Labor	106	111	111	117	133	154	162	178	194	212
Interest	110	121	127	140	169	207	235	264	290	323
Property tax	107	113	110	122	126	135	145	154	165	178
Rent (Net)	103	106	112	175	284	255	230	205	195	190
Depreciation	106	109	119	127	144	170	203	224	242	261
Overhead minus depreciation plus operating interest	107	114	120	144	187	197	205	212	223	238
Total	107	112	120	132	166	183	192	207	217	232

credit worthiness. Evidence of credit problems and improvements in conditions and prospects will be discussed in the following sections.

Evidence of Credit Problems

A March 1978 survey of banks and Production Credit Associations (PCA's) in 12 States by the USDA's Economics, Statistics, and Cooperatives Service (ESCS) found that about twice the normal number of farmers (normal was indicated to be 1-2 percent) could not get loan funds from commercial sources this year, although the number was still small. 1/ Also, about twice the normal number of farmers were borrowed to their limit and ineligible for further nonreal estate loans. Many farmers had avoided delinquency by refinancing debts, often securing their debts with real estate.

Nearly half the PCA's said their farm loan portfolios had deteriorated in quality over the past year, but three-fourths of commercial bankers said the quality of their farm loan portfolios were as good as or better than a year ago. More than 85 percent of the bankers said the quality of their farm loan portfolios were as good as or better than their nonfarm portfolios.

In the surveyed States, there were large increases in emergency loans by the Farmers Home Administration (FmHA) and the Small Business Administration (SBA). Four percent of the farmers in these States had emergency loans from these agencies. Nonreal estate debt from FmHA rose by 87 percent during 1977.

One report noted improvement in the financial position and prospects for agricultural banks and farm borrowers, but said they will remain unusually vulnerable to any new financial setbacks. 2/

Government Programs and Higher Prices Improve Conditions

In 1977, FmHA emergency farm loans became important in States where drought had resulted in production losses. FmHA loans rose $1.6 billion in 1977, largely reflecting the rise in emergency loans in the year. The number of farmers with FmHA emergency loans increased by about 18,000, rising to 57,000 by the end of the year. In the first quarter of 1978, FmHA emergency loans increased by more than $1 billion and 15,000 new borrowers were added. About half the dollar volume of the loans made in 1977-78

1/ U.S. Department of Agriculture, Economics, Statistics, and Cooperatives Service, Farmer Credit Survey, March 1978, ESCS-17, May 1978.

2/ Melichar, Emanuel, Agricultural Finance Commentary, April 1978, Division of Research and Statistics, Board of Governors of the Federal Reserve System, Washington, D.C., p. 8.

was for production losses and half for more basic investments or debt restructuring. A large number of SBA loans--about 9,000 of the national total of 15,000--were made in 2 of the 12 States, Georgia and Iowa. An estimated 41,000 farmers in the 12 States had emergency loans outstanding (FmHA or SBA) in early March 1978. Farmers with emergency loans in the States varied from 1 to 15 percent.

There was a fourfold increase in Commodity Credit Corporation (CCC) loans from January 1, 1977 to January 1, 1978. Without these funds, commercial lenders might have been harder pressed to meet farmers' loan requests and farm credit problems might have become more severe than they were.

As was noted previously, many farmers were able to use high and rising asset equity positions, especially in real estate, to refinance nonreal estate debts, thus helping to reduce short-term debt repayment pressures.

About $750 million of Government wheat deficiency payments were made to wheat producing areas late in 1977 and about $400 million more were distributed early in 1978.

A number of other factors further bolster the view that cash flow positions and prospects in agriculture are sharply improved. As a result of higher support prices, the improved financial conditions of dairy farmers should be sustained through 1978 and beyond. Prices for livestock and livestock products are even stronger than had been expected, and the prospects for the remainder of 1978 are for continued strength. The grain reserve program, recent changes in feed grain and cotton diversion provisions, and the recent increase in wheat target price should improve cash flow positions for producers of these crops, barring further severe weather disruptions.

Domestic and foreign market demands for U.S. agricultural products are becoming stronger. By early summer, realized gross farm income for 1978 is forecast to approach $120 billion, up 13 percent from 1977. Net income before inventory adjustment is forecast to approach $26 billion, up about one-quarter. As a reflection of the improved financial prospects for the sector, farm equipment sales are reported to have increased recently.

AGGREGATE INDICATORS OF FINANCIAL CONDITIONS

Credit problems are usually closely related to adverse cash flow conditions. A cash flow problem exists when receipts are low relative to claims against them. The claims against net farm receipts include family living expenses, debt principal repayment, and net new investment. This section will address the cash flow situation and prospects in terms of debts and assets, income and expenses, capital expenditures, and size of farm as indicated by value of sales class averages.

Debts and Assets

Debts, assets, and equity in assets on January 1, 1978 all were roughly 2-1/2 times their values on January 1, 1968. The relative magnitude of debt stayed at 16-17 percent of all assets and 18-20 percent of equity in assets throughout the time period (table 1). From 1968 through 1973, total assets and total debts increased in value by 37 and 38 percent, respectively. From 1973 through January 1, 1976, the value of total assets increased by 47 percent and the value of equity in assets by 49 percent. Since January 1, 1976, the value of total assets has risen by 22 percent while debt has increased by 33 percent. Despite the rapid relative increase in debt over the last 2 years, the level of debt does not, in general, appear high in relation to asset values.

By January 1, 1976, real estate debt had increased 104 percent since 1968, and nonreal estate debt had increased about 78 percent (table 1). Since January 1, 1976, real estate debt has increased about 26 percent while nonreal estate debt has increased by 40 percent. Shorter amortization periods and higher principal payments are usually associated with nonreal estate debt. Thus, debt repayment claims against net income may be higher than they would be if total debt composition had not changed in the past 2-1/2 years.

Returns to equity in farm production assets were 3.1 to 3.6 percent from 1968 through 1971. 3/ They rose to 5.1 percent in 1971, and rose again to 10.3 percent in 1973. Then a declining trend appeared. Returns to equity in production assets were 5.6, 4.5, and 2.6 percent in 1974, 1975, and 1976, respectively. Preliminary estimates for 1977 put the rate of return at 2.3 percent, the lowest rate in the last couple of decades, caused mainly by lower farm income and rising real estate taxes.

Income and Expenses

Gross farm income and production expenses were increasing at generally similar rates from 1968 until 1973. In 1973, gross farm income suddenly took a 36-percent jump while production expenses rose 26 percent. This was followed by another 4-percent increase in gross income and a 10-percent increase in production expenses in 1974. In 1977, gross farm income and production expenses were up 8 and 22 percent, respectively, compared with 1974, illustrat-

3/ U.S. Department of Agriculture, Economics, Statistics, and Cooperatives Service, Balance Sheet of the Farming Sector, 1978, AIB-416, p. 11.

ing the tightening cash flow squeeze faced by farmers generally. But the general situation has brightened since 1977. The projected levels for 1978 of gross farm income and production expenses are above the 1977 levels by 10 and 6 percent, respectively.

Net farm income before inventory adjustment is the difference between gross farm income and production expenses. In this discussion, this measure of net income is the amount available to meet living expenses, debt principal repayment, and net new investment. Net farm income has been subject to large changes up and down since 1971 (table 1). It rose 35 percent in 1972, 68 percent in 1973, and is forecast to rise about one-quarter in 1978. It fell 7 percent in 1974 and another 25 percent in 1975. If all net farm income could be committed to debt principal repayment, all outstanding farm debt would be liquidated in 2.2, 5.1, and 4.7 years at 1973, 1977, and projected 1978 income levels, respectively.

Off-farm income of farm operator families has risen persistently from 1968 to the present, at rates nearly parallel to those for increases in debt and asset values (table 1). Except for 1973 and 1974, off-farm income has exceeded net farm income (before inventory adjustment) in every year since 1968. Thus, such income is important to those families receiving it and to the cash flow picture for agriculture. The relative year-to-year stability in off-farm income softens sudden downward changes in net farm income for those families who receive it. Even though aggregate farm debts have risen sharply in the last year or two, increases in net income from all sources have nearly kept pace. And the level of all farm debt is less than twice net income from all sources.

Increases in the value of asset equity have been greater than net farm income (before inventory adjustment) every year since 1972. And in half the years since then, asset equity gains have exceeded net income from all sources.

Capital Formation

Both gross farm capital expenditures and the value of farm capital consumption rose persistently from 1968 to 1977, with extra large increases in farm capital expenditures in 1973 and 1974 reflected in sharply increased depreciation since that time (table 5). There have been net additions to capital stocks each year since 1968, with a large bulge in 1973 and 1974. The net additions were small in 1976 and 1977, amounting to 1.1 and 0.7 percent of gross capital expenditures, respectively. If some parts of agriculture are financially distressed and not reinvesting in plant and equipment, others appear to have been able and willing to reinvest at a pace sufficient to provide offsets.

Table 5--Gross and net farm capital formation, 1968-77

Year	Gross capital expenditures	Farm capital consumption	Farm net capital investment	Net investment as a proportion of gross capital expenditures
	--- Million dollars ---			Percent
1968	6,696	6,200	496	7.4
1969	6,865	6,574	291	4.2
1970	7,285	6,760	525	7.2
1971	7,357	7,350	7	0.1
1972	8,045	7,887	158	2.0
1973	10,709	8,945	1,764	16.5
1974	12,590	10,563	2,027	16.1
1975	13,337	12,586	751	5.6
1976	14,155	14,002	153	1.1
1977	15,365	15,248	117	0.7

Size of Farm

Farm assets, debts, and equity are not evenly distributed among farms or groups of farms. In terms of dollar volume, financial activity is heavily concentrated among those farms falling into the highest sales classes. In 1977, 31 percent of the farms had sales of $20,000 or over. However, those farms had half the total assets according to value, owed four-fifths of the farm debt, and accounted for two-thirds of the equity (table 6). Almost half the total farm debt was accounted for by 6 percent of farms with sales of $100,000 and over. Such farms had 31 percent of the assets and 28 percent of the equity in assets. In 1976, this 6 percent of farms accounted for 60 percent of cash receipts from farming.

The debt and asset data for the Nation as a whole, and for the various sizes of farms as grouped by value of sales classes, depict what appears to be a healthy farm financial position. However, there are financially unhealthy individual farm businesses.

Table 6-- Balance sheet of the farming sector by value of sales class, January 1, 1977

Item	$100,000 and over	$40,000 to 99,999	$20,000 to 39,000	$10,000 to 19,999	$ 5,000 to 9,999	$2,500 to 4,999	Less than 2,500	All farms
Assets	Million dollars							
Physical assets								
Real estate	157,606	116,837	71,594	44,746	29,831	23,865	52,701	497,180
Nonreal estate:								
Livestock and poultry	12,284	6,509	3,959	2,346	1,455	1,019	1,506	29,078
Machinery and motor vehicles	17,647	18,514	12,512	7,738	4,846	3,688	7,377	72,322
Crops stored on and off farms	5,640	7,078	4,537	2,450	1,159	571	427	21,862
Household equipment and furnishings	3,319	2,624	1,824	1,338	1,216	1,199	5,855	17,375
Financial assets:								
Deposits and currency	6,053	2,523	1,517	990	830	767	3,290	15,970
U.S. savings bonds	851	581	423	323	314	323	1,550	4,365
Investments in cooperatives	6,854	2,698	1,483	716	384	230	423	12,788
Total	210,254	157,364	97,849	60,647	40,035	31,662	73,129	670,940
Claims								
Real estate debt	24,900	14,713	6,225	3,961	1,698	1,132	3,961	56,590
Nonreal estate debt:								
Excluding CCC loans	24,784	8,562	4,957	3,605	1,351	901	901	45,061
CCC loans	263	325	213	110	51	31	19	1,012
Total liabilities	49,947	23,600	11,395	7,676	3,100	2,064	4,881	102,663
Proprietors' equities	160,307	133,764	86,454	52,971	36,935	29,598	68,248	568,277
Total	210,254	157,364	97,849	60,647	40,035	31,662	73,129	670,940

New or recently expanded businesses, as well as farms with enterprises that have suffered from low incomes for a number of years (such as beef production), could be in a much less favorable financial position.

In 1968, farms with $100,000 or more sales received about 12 percent of the net returns to the farm production sector. By 1974, the share received by such farms had increased to about 45 percent. Net income per farm for this class rose from $32,200 in 1968 to $83,800 in 1973. By 1977, net income per farm in this class had declined to $38,310 (table 7), 66 percent of that for 1968 in real terms. 4/ Per farm returns for all other size groups combined changed less sharply over the 1968-77 period as farm operators shared unequally in the increased returns in 1973 and 1974 and in the declines occurring since then. Their sales involved smaller physical volumes of commodities, and nonmoney income items constituted higher proportions of their net farm incomes. By 1977, off-farm income received by families operating the largest size class of farms was, on the average, about one-fourth of realized net farm income.

CONDITIONS VARY BY TYPE OF FARM

Net farm income increased by 161 percent between 1968 and 1973. However, because of declining commodity prices, increasing prices for inputs, and increasing quantities of inputs used, net farm income for 1977 was only 62 percent above the 1968 level in current prices. In constant dollars, it was only 95 percent of 1968.

As previously discussed, it was observed that much of the Nation's agricultural finance activity is concentrated on larger farms; therefore changes in conditions affecting cash flow are likely to impact more heavily on large farms than smaller ones.

The debt, asset, and income data for the Nation as a whole depict an industry with good basic financial health going into a time of improving financial conditions. This inquiry will now turn to conditions for types of farms specializing in particular major commodities and commodity groups. Discussion will first focus on indicators of financial situation and prospects for livestock producers, then for producers of selected major crops. Finally, budgetary analyses of selected typical farms, primarily crop farms, will be presented.

4/ Part of the apparent shift in receipts and income is due to the inclusion of more farms in the upper size classes because of inflation.

Table 7--Selected financial measures for the farming sector, averages per farm by value of sales class 1/

Measure	$100,000 and over	$40,000 to $99,999	$20,000 to $39,000	$10,000 to $19,999	$5,000 to $9,999	$2,500 to $4,999	Less than $2,500	All farms
	Thousands							
Number of farms	162	348	321	311	302	304	958	2,706
	Dollars							
Net income from farm and off-farm sources	47,946	24,513	16,949	14,453	14,875	16,067	16,595	19,035
Net income from farming	38,310	18,502	9,993	4,987	2,696	1,508	1,518	7,439
Income from off-farm sources	9,636	6,011	6,956	9,466	12,129	14,559	15,077	11,596
Total assets	1,297,864	452,195	304,826	195,006	132,566	104,151	76,335	247,945
Real estate	972,876	335,738	223,034	143,878	98,778	78,503	55,012	183,732
Nonreal estate physical assets	240,062	99,784	71,128	44,604	28,728	21,306	15,830	51,972
Financial assets	84,926	16,673	10,664	6,524	5,060	4,342	5,493	12,241
Total Claims	1,297,864	452,195	304,826	195,006	132,566	104,151	76,335	247,945
Total liabilities	308,315	67,816	35,498	24,681	10,264	6,790	5,095	37,939
Real estate debts	153,704	42,279	19,392	12,736	5,622	3,724	4,135	20,913
Nonreal estate debt	154,611	25,537	16,106	11,945	4,642	3,066	960	17,026
Proprietors' equities	989,549	384,379	269,328	170,325	122,302	97,361	71,240	210,006
	Percent							
Debt to:								
All assets	24	15	11	13	8	6	7	15
Equity in assets	31	18	13	14	8	7	7	18
Net income from farming	805	366	355	495	381	450	336	510
Income from farm and off-farm sources	643	277	209	171	69	42	31	199

1/Distributional data used to compute entries in this table are in various stages of revision. Consequently, measures shown must be considered preliminary.

Improvements for Livestock and Livestock Products

Producers of livestock and livestock products generally were hit hard by increases in costs, especially feed, in 1973 and 1974. Varying lengths of adjustment time were required for recovery by different commodity producers. This section contains updates of financial conditions and prospects for beef cattle, hog, and dairy producers.

Beef Cattle

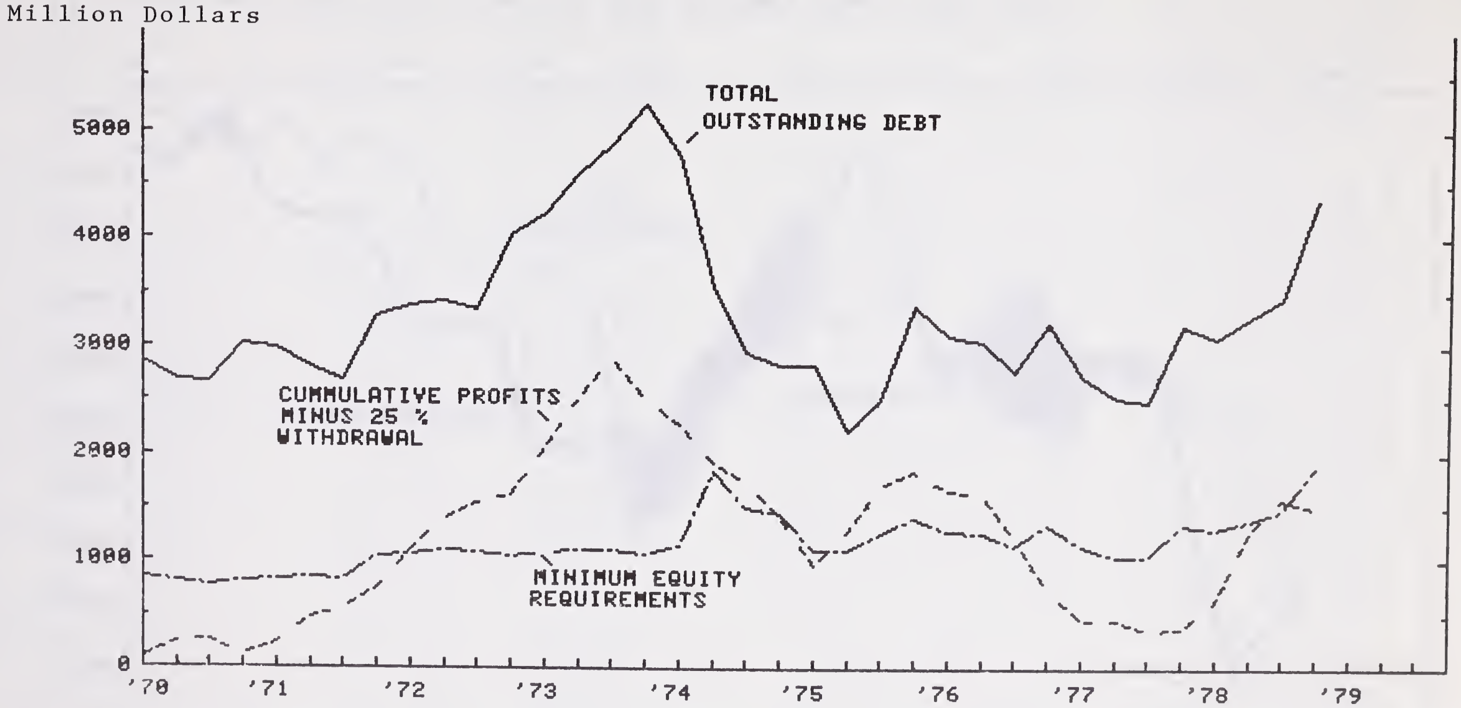
The rapid growth in cattle feeding before 1973 occurred because substantial profits existed in the industry (fig.1). From 1968 through most of 1973, prices received for fed cattle increased in comparison to cattle feeding costs and the favorable prices encouraged rapid expansion in feedlot production. In 1973, feeding costs increased sharply. And during most of the 1973-77 period, such costs have generally been high relative to prices received for fed cattle (fig. 2). Heavy losses in feedlot operations and a general curtailment in numbers of livestock on feed occurred during this period. From 1973 until late 1977, profits occurred in only three quarters. Although production costs for livestock products remain high and are rising, financial conditions of feedlots began to improve in late 1977. Projected fed cattle prices and production costs for the remainder of 1978 now indicate continued strength for 1978 as a whole, although current increases in feed grain prices could lead to lower profits or losses late in the year.

Because of the heavy losses in cattle feeding since 1973, accumulated returns fell below the minimum equity required to support outstanding debt, illustrating the generally poor economic condition of the industry. 5/ Now with good prospects for cattle feeding, "outside capital" may again be available as it was to provide the equity reserves for expansion.

During 1968-73, prices received by cattle ranchers were very favorable relative to production costs. But these favorable prices contributed to a record buildup in cattle numbers and lower cattle prices. In 1973, rapidly increasing costs of feed grain occurred concurrent with a drop in fed cattle prices, reducing the demand for calves. A sharp drop in feeder cattle prices followed, starting the liquidation phase of the cattle cycle. This liquidation of herds added to the oversupply of beef and the further reduction in prices.

5/ A proxy for the capital created in cattle feeding over the period 1970-78 is shown in fig. 2. "Equity created" is arbitrarily defined as accumulated profits from cattle feeding since 1970, minus a capital withdrawal equal to 25 percent of any profits which occurred during that period.

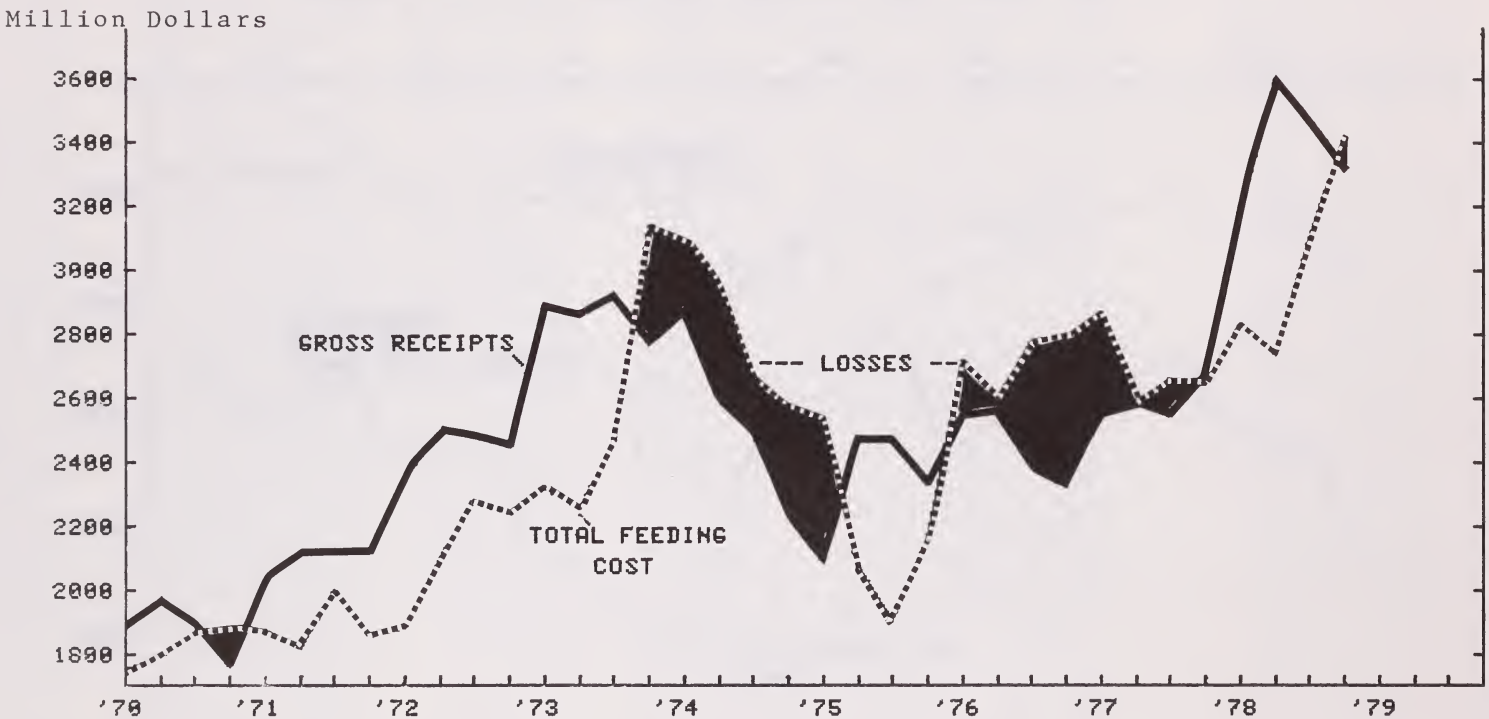
CATTLE FEEDING: TOTAL DEBT, MINIMUM EQUITY TO SUPPORT DEBT AND CUMULATIVE PROFITS, 23 STATES, 1970-78*



* BASED UPON MODEL SPECIFICATIONS (SEE LMS-209, USDA, JUNE, 1976.)

Figure 1

CATTLE FEEDING: GROSS RECEIPTS, TOTAL FEEDING COSTS, PROFITS AND LOSSES, 23 STATES, 1970-78*



* BASED UPON MODED SPECIFICATIONS (SEE LMS-209, USDA, JUNE, 1976.)

Figure 2

Returns to equity capital on cattle ranches have historically been relatively low, especially on smaller farms (table 8). 6/ However, net returns from ranching have tended to vary cyclically in line with cattle production and price cycles. Returns rose strongly during 1968-73, but fell sharply after 1973 because of declining calf prices and rising feed costs. Although debt in relation to equity tends to be higher for larger ranches, the debt-to-equity ratio has been relatively low and stable since 1968. Rising land values have contributed to the solvency in the industry.

Earnings of cattle raisers improved some in 1977 and have continued to improve further in the first half of 1978. Higher prices for fed cattle during the first quarter of 1978 increased the demand for feeder cattle. Calf prices are up significantly and cattle raisers have started to stabilize their herds. This should reduce beef slaughter in the shortrun and further strengthen cattle prices. However, several good years are needed to materially improve the financial condition of feeder livestock producers. The loan repayment difficulties of cattle raisers are expected to ease, but substantial refinancing can be expected as the buildup phase of the cattle cycle gets underway.

Hogs

With the exception of poor years in 1971 and 1974, hog producers appear to have maintained a favorable financial position during most of the 1968-77 period. Although producers faced the same increases in feed and other production costs as the cattle industry, prices received by pork producers maintained a more favorable relationship to prices paid (fig. 3).

The economic situation in 1978 is expected to be favorable and hog producers appear to be in relatively good financial condition. A slight increase in pork production is now expected in 1978. Prices should average well above those of last year, and no major financial problems are evident.

Dairy

Most dairy farmers had quite favorable returns during the 5-year period, 1968-72 (table 9). Skyrocketing feed costs caused a profit squeeze in 1973, although milk prices were rising (fig. 4).

6/ These estimates reflect general indications of financial conditions and do not indicate distributions of financial conditions among farms within farm size categories. The structure of debt and net returns for any farm within each size class is not known currently and could be substantially below or above the average estimates shown.

Table 8--Average per farm level of debt, equity, and returns on U.S. livestock ranches 1/

Item	Unit	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
		Average per farm									
Small farms 2/											
Debt	Dol.	9,240	9,697	10,240	10,680	11,500	12,842	14,841	16,508	18,311	20,488
Equity	"	112,557	111,612	114,901	119,634	130,151	148,803	183,536	195,048	217,226	248,441
Debt/equity 3/	"	.08	.09	.09	.09	.09	.09	.08	.08	.08	.08
Net return 4/	"	893	1,428	1,373	1,532	2,454	3,460	-133	-2,029	2,302	-2,026
Return to equity	Pct.	-2.0	-1.7	-1.8	-1.7	-0.1	-0.6	-2.7	-3.7	-3.5	-3.1
Medium farms 2/											
Debt	Dol.	39,117	40,983	43,261	45,127	48,625	54,311	62,764	69,791	77,427	86,688
Equity	"	275,629	294,243	302,457	315,023	343,539	394,708	483,196	511,903	723,369	649,487
Debt/equity 3/	"	.14	.14	.14	.14	.14	.14	.13	.14	.14	.13
Net return 4/	"	4,182	6,215	4,989	6,915	10,627	15,273	1,869	-5,297	6,030	-4,877
Return to equity	Pct.	0.1	0.6	0.1	0.7	1.6	2.3	-1.0	-2.4	-2.4	-1.9
Large farms 2/											
Debt	Dol.	329,171	338,432	355,946	372,162	403,560	452,230	522,522	578,749	643,657	725,157
Equity	"	1,275,930	1,374,786	1,410,137	1,468,922	1,607,848	1,864,427	2,257,885	2,371,441	2,618,817	2,987,227
Debt/equity 3/	"	.26	.25	.25	.25	.25	.24	.23	.24	.25	.24
Net return 4/	"	14,911	41,298	38,447	49,771	93,104	152,538	-31,544	-137,514	-153,293	-145,176
Return to equity	Pct.	0.1	1.9	1.6	2.3	4.7	7.0	-2.4	-6.8	-6.8	-5.7

1/ Includes ranch operations in the 17 Western States, Louisiana, Florida, Hawaii, and Alaska, where sales of livestock represent over 50 percent of farm cash receipts and pastureland was at least 100 acres and at least 10 times greater than acres of cropland harvested.

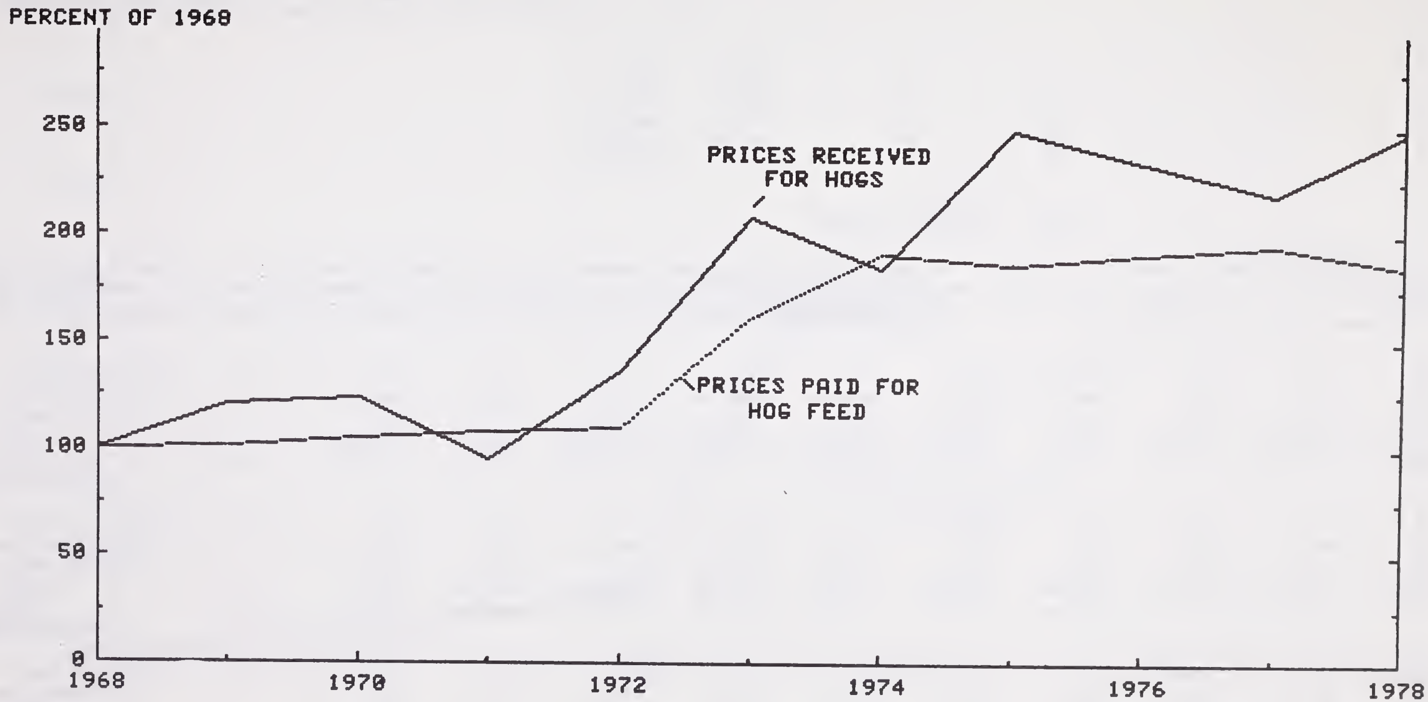
2/ Small farms are those with annual cash farm receipts from $5,000 to $19,999; medium farms from $20,000 to $39,999; and larger farms of $100,000 and greater. In 1970, the distribution of farm numbers and value of farm income on livestock ranches by the value of cash receipts was:

	Number of farms	Value
	Percent	
$100,000 +	5	57
$ 40,000 - 100,000	9	16
$ 20,000 - 39,999	13	11
$ 10,000 - 19,999	17	7
$ 5,000 - 9,999	24	5
$ 2,500 - 4,999	32	4

3/ Dollars of farm debt for each dollar of farm equity or net worth.

4/ Net returns to equity, operator labor, and management.

HOGS: RELATIVE PRICES RECEIVED AND PAID, 1968-78 *



*U.S. ANNUAL PRICES FOR 1968-77, AND JAN,-FEB. FOR 1978. HOG CONCENTRATE FEED IS 14-18% PROTEIN.

Figure 3

Table 9--Average per farm level of debt, equity, and returns on U.S. dairy farms 1/

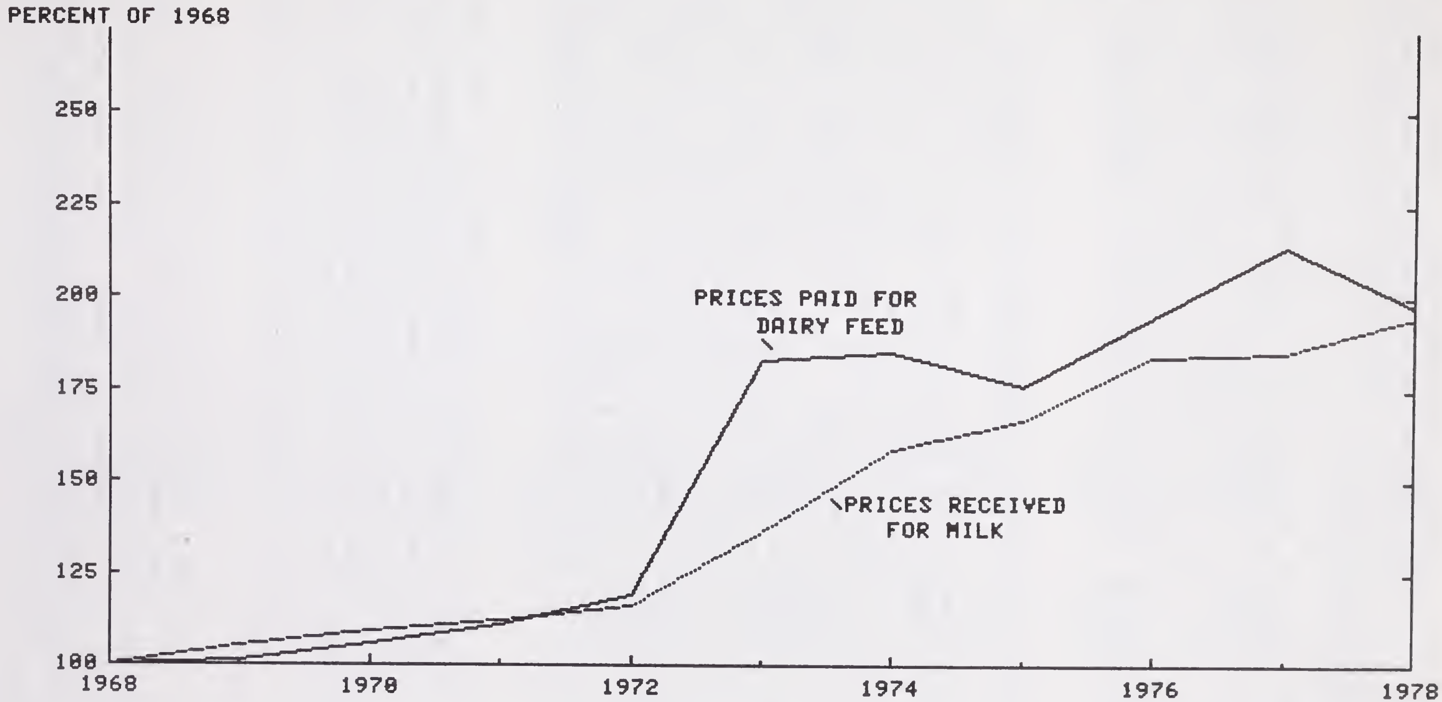
Item	Unit	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
		Average per farm									
Small farms 2/											
Debt	Dol.	5,411	5,584	5,879	6,142	6,652	7,450	8,608	9,542	10,607	11,935
Equity	"	33,261	36,726	36,726	38,313	41,522	47,261	56,896	60,539	67,660	76,275
Debt/equity 3/	"	.16	.16	.16	.16	.16	.16	.15	.16	.16	.16
Net return 4/	"	3,039	3,254	3,356	3,348	3,624	2,921	2,284	2,987	4,157	5,279
Returns to equity	Pct.	1.4	1.2	-1.4	-1.7	-1.5	-4.1	-5.5	-4.5	-2.9	-1.5
Medium farms 2/											
Debt	Dol.	25,217	26,200	27,612	28,833	31,154	34,847	40,269	44,699	49,644	55,735
Equity	"	76,774	82,536	84,784	88,436	95,850	109,464	133,021	141,468	158,274	178,527
Debt/equity 3/	"	.33	.32	.33	.33	.32	.31	.30	.32	.31	.31
Net return 4/	"	9,759	10,387	10,767	10,740	11,514	8,829	6,423	8,764	12,910	16,711
Return to equity	Pct.	5.4	5.4	5.4	4.9	4.8	0.6	-2.0	-0.4	1.8	3.5
Large farms 2/											
Debt	Dol.	135,144	138,900	146,079	152,739	165,644	185,632	214,485	237,549	264,202	297,688
Equity	"	325,818	352,065	361,726	377,612	410,269	471,388	572,287	595,597	669,009	758,653
Debt/equity 3/	"	.41	.39	.40	.40	.40	.39	.37	.40	.39	39
Net return 4/	"	37,325	41,832	43,263	42,103	46,616	13,796	-15,969	1,594	32,318	66,471
Return to equity	Pct.	6.7	7.2	7.2	6.4	6.6	-2.0	-7.3	-4.2	0.6	4.9

1/ Farms with dairy products accounting for more than 30 percent of value of products sold.
2/ Small farms are those with annual cash farm receipts from $5,000 to $19,999; medium farms from $20,000 to $39,999; and larger farms of $100,000 and greater. In 1970, the distribution of farm numbers and value of farm income on dairy farms by value of cash receipts was:

	Number of farms	Value
	Percent	
$100,000 +	2	16
$ 40,000 - 100,000	12	26
$ 20,000 - 39,999	32	35
$ 10,000 - 19,999	29	17
$ 5,000 - 9,999	17	5
$ 2,500 - 4,999	8	1

3/ Dollars of farm debt for each dollar of farm equity or net worth.
4/ Net returns to equity, operator labor, and management.

DAIRY: RELATIVE PRICES RECEIVED AND PAID, 1968-78*



*U.S. ANNUAL PRICES FOR 1968-77, AND JAN.-FEB. FOR 1978. DAIRY CONCENTRATE FEED IS 32% PROTEIN.

Figure 4

The problem continued through 1974 and 1975. Many dairy farmers experienced negative returns to their labor and management during this time. Financial conditions improved some in 1976 and returns were sharply higher in 1977.

The Food and Agriculture Act of 1977 requires a milk price support level of not less than 80 percent of parity through March 1979 (then the minimum support level reverts to not less than 75 percent of parity). The Act also requires that the support level be adjusted semiannually through March 31, 1981 to reflect changes in the parity index. As a result of the higher support prices, the financial conditions of dairy farmers should improve in 1978 and beyond.

Grain Producers' Situations and Prospects

On grain farms, particularly wheat farms, value of production and cash receipts rose sharply from 1971 to 1974. In 1975, wheat prices slipped, but with expanded acres, total receipts increased. When prices declined further in 1976, the still larger acreage was not sufficient to hold total value of production at the 1975 level. Prices declined again in 1977 and earnings fell sharply. Calculated as a return to land, earnings fell from $47.65 per acre in 1974 to minus $6.81 at 1977 market prices (table 10). Thus, while earnings in 1974 could have amortized a debt of $468 per acre at 9-percent interest over a 25-year period, returns in 1977 were insufficient to pay labor and management their opportunity costs. Debt repayments had to be made out of labor and management returns or from other resources (table 11). However, including deficiency payments to wheat producers, land returns were about $13 per acre, leaving some debt repayment capacity and bringing earnings above the 1976 level.

For corn producers, land earnings reached $99 per acre in 1974, enough to cover a debt of $973 per acre at 9-percent interest over 25 years. Land earnings per acre declined from 1974 through 1977. By 1977, the $36.43 net earnings would support a debt of only $358 per acre. With corn land having an average value of $1,285 per acre, the operator with a debt-to-value ratio of greater than 28 percent was in a very tight position with respect to loan repayment. Soybean producers fared much better than producers of corn or wheat.

Returns to equity on cash grain farms were substantially lower in 1977, especially for the smaller operations, although debt-to-equity ratios remained relatively constant, primarily due to rising land values (table 12). Losses on wheat, corn, and grain sorghum farms were the primary factors contributing to lower earnings during 1977. These losses offset more favorable returns from soybeans, other beans, and pea crops.

Table 10--Value of production, cost of production, and return to land by selected crops, 1974-77

Item	1974	1975	1976	1977
	Dollars			
Wheat				
Value of production/acre	102.84	101.20	77.32	62.02
Cost/acre	55.19	68.58	68.36	68.83
Net to land	47.65	32.63	8.96	1/-6.81
Corn				
Value of production/acre	216.07	217.92	206.76	182.78
Cost/acre	117.06	132.62	143.17	146.35
Net to land	99.01	80.30	63.59	36.43
Sorghum				
Value of production/acre	125.58	115.58	101.70	98.22
Cost/acre	71.86	89.52	92.83	97.37
Net to land	53.72	26.06	8.37	.85
Soybeans				
Value of production/acre	150.81	139.52	168.98	196.42
Cost/acre	65.75	84.15	87.51	97.17
Net to land	85.06	55.37	81.47	100.40
Cotton				
Value of production/acre	217.91	246.24	323.08	273.77
Cost/acre	190.57	217.67	245.28	258.90
Net to land	27.34	28.57	77.80	14.87

1/ Excludes deficiency payment.

Table 11--Debt load supportable by land earnings per acre if earnings in the year specified are expected to continue for 25 years 1/

Commodity	1974	1975	1976	1977
	Dollars			
Wheat	468	321	88	2/ 0
Corn	973	789	625	358
Sorghum	528	256	82	0
Soybeans	836	543	800	986
Cotton	268	281	764	146

1/ Assumes a 25-year mortgage at 9 percent interest amortized over the loan period.
2/ Excluding deficiency payments.

Table 12--Average per farm level of debt, equity, and returns on U.S. cash grain farms 1/

Item	Units	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
						Average Per Farm					
Small farms 2/											
Debt	Dol.	9,436	9,947	10,511	10,958	11,784	13,148	15,196	16,918	18,755	20,958
Equity	"	62,108	65,762	67,799	70,491	75,560	85,836	111,376	118,921	133,192	151,077
Debt/equity 3/	"	.15	.15	.16	.16	.16	.15	.14	.14	.14	.14
Net return 4/	"	4,494	4,403	4,592	4,656	5,307	10,580	13,128	9,934	8,158	5,684
Return to equity	Pct.	1.1	0.6	0.61	0.5	0.9	6.1	6.5	3.1	1.2	-0.8
Medium farms 2/											
Debt	Dol.	27,414	28,589	30,152	31,652	33,961	37,963	43,870	48,735	54,099	60,662
Equity	"	169,259	179,559	185,097	192,030	206,154	235,942	308,116	326,900	365,536	414,152
Debt/equity 3/	"	.16	.16	.16	.17	.17	.16	.14	.15	.15	.15
Net returns 4/	"	16,254	15,783	16,649	17,215	19,251	40,425	51,413	39,099	32,454	22,012
Return to equity	Pct.	0.63	5.4	5.61	5.6	5.9	13.5	13.7	9.0	6.1	2.8
Large farms 2/											
Debt	Dol.	152,624	160,062	168,986	176,258	189,856	212,020	245,025	275,510	302,291	338,336
Equity	"	793,915	840,620	866,785	901,220	965,169	1,097,501	1,435,351	1,527,779	1,713,804	1,947,652
Debt/equity 3/	"	.19	.19	.19	.20	.20	.19	.17	.18	.18	.17
Net returns 4/	"	72,206	67,798	72,549	77,202	85,625	213,430	282,743	206,059	165,164	100,189
Return to equity	Pct.	6.8	5.8	6.05	6.3	6.5	16.9	17.6	11.5	7.7	3.4

1/ Farms on which 50 percent or more of farm cash receipts are from crops of corn, sorghum, wheat, and other small grains, soybeans for beans, cowpeas for peas, dry field and seed beans, or peas.

2/ Small farms are those with annual cash farm receipts from $5,000 to $19,999; medium farms from $20,000 to $39,999; and larger farms of $100,000 and greater. In 1970, the distribution of farm numbers and value of farm income on cash grain farms by the value of cash receipts was:

	Number of farms	Value
	Percent	
$100,000 +	1	11
$ 40,000 - 100,000	8	26
$ 20,000 - 19,999	19	30
$ 10,000 - 9,999	25	20
$ 5,000 - 9,999	24	9
$ 2,500 - 4,999	23	4

3/ Dollars of farm debt for each dollar of farm equity or net worth.

4/ Net returns to equity, operator labor, and management.

Prospects of stronger demand for grains and a number of specific actions--including recent changes in the grain reserve program, feed grain and cotton diversion provisions, and the increase in wheat target price--should, as was noted earlier, improve the income and cash flow positions for producers of these crops. The extent of expected improvement is illustrated below with budgets of selected typical farms.

Selected ESCS Typical Farm Budgets

Data for selected typical farms further support observations that some types of farms were earning favorable returns while others were incurring losses in 1975, 1976, and 1977. The following discussions of typical farms emphasize grain production.

Comparative budgets for a typical northwest Arkansas rice and soybean farm of 850 acres indicate that it experienced higher returns over variable cost in 1977, as compared to 1976, and the rate of return to current value of equity in that operation was up from 5.2 to 14.1 percent (table 13). Conditions are expected to remain favorable in 1978.

Comparative budgets for a typical 3,040-acre Montana wheat farm indicate that returns fell sharply from 1975 to 1976, and dropped further in 1977 (table 14). Given the better price prospects and barring adverse weather, improvement should be substantial in 1978. Returns to equity capital were 22.4 percent in 1975, 7.1 percent in 1976, and 2.7 percent in 1977. Recovery of just over 7 percent is expected in 1978, reflecting an increase in return to equity of 173 percent and an increase in the level of asset equity of 3.4 percent over 1977.

Comparative budgets for a southwest Oklahoma cotton, wheat, and beef farm indicate that returns have been continuously low during 1975-77 (table 15). The dollar level of net return to equity is forecast to approach $8,000 in 1978, nearly double that of 1977. But the rate of return to equity is expected to remain just under 3 percent because of large increases in asset values. Conditions have been similar, and possibly even more depressed, on a Texas High Plains cotton and sorghum farm (table 16). The rate of return to equity capital for 1978 is projected to be 0.3 percent, an improvement from -3 percent in 1977. However, equity in assets rose about 16 percent from January 1, 1977 to January 1, 1978.

On a 400-acre east central Illinois corn and soybean farm, the debt to equity level for 1977 was well below those for 1975 and 1976 (table 17). Asset values in 1977 rose more sharply than debts and, combined with a substantially lower net cash income, dropped the net return to equity from 15.5 percent in 1976 to 5.8 percent in 1977. Income is expected to make a substantial recov-

Table 13--Arkansas rice and soybean farm 1/

Item	Unit	1975	1976	1977	1978 (projected)
Balance sheet					
Assets (market value), Jan. 1	Dol.	213,232	233,138	261,690	286,204
Debts, Jan. 1	"	61,440	75,798	81,182	87,378
Equity	"	151,792	157,340	180,508	198,826
D/E ratio	"	.40	.48	.45	.44
Net income					
Receipts	Dol.	106,053	103,400	127,293	129,912
Cash cost	"	66,804	70,113	75,202	78,909
Net cash income	"	39,249	33,287	52,091	51,003
Less:					
Depreciation	"	10,089	12,136	13,400	14,042
Operator's family labor and management	"	13,001	13,042	13,275	13,508
Net return to equity	"	16,159	8,109	25,416	23,453
Net return to equity	Pct.	10.7	5.2	14.1	11.8
Cash flow					
Net cash income	Dol.	39,249	33,287	52,091	51,003
Less: Principal payment on debt	"	8,172	9,853	10,840	11,386
Remaining net cash income after principal payment	"	31,077	23,434	41,251	39,617

1/ 850-acre farm with 250 acres of rice, 100 acres of irrigated soybeans, and 400 acres of dryland soybeans.

Table 14--Montana winter wheat on fallow farm 1/

Item	Unit	1975	1976	1977	1978 (projected)
Balance sheet					
Assets (market value) Jan. 1	Dol.	526,012	596,783	657,609	680,034
Debts, Jan. 1	"	108,133	101,758	96,942	100,446
Equity	"	417,879	495,025	560,667	579,588
D/E ratio	"	.26	.21	.17	.17
Net income					
Receipts	Dol.	157,031	99,517	80,458	101,960
Cash cost	"	42,866	42,773	42,461	38,282
Net cash income	"	114,165	56,744	37,997	63,678
Less:					
Depreciation	"	8,260	9,380	10,272	10,256
Operator's family labor and management	"	12,366	12,366	12,366	11,426
Net return to equity	"	93,539	34,998	15,359	41,996
Net return to equity	Pct.	22.4	7.1	2.7	7.2
Cash flow					
Net cash income	Dol.	114,165	56,744	37,997	63,678
Less: Principal payment on debt	"	5,734	6,267	6,827	7,126
Remaining net cash income after principal payment	"	108,431	50,477	31,170	56,552

1/ 3,040 acre farm with 940 acres of winter wheat, 220 acres of barley, and 200 acres of spring wheat.

Table 15--Southwest Oklahoma, cotton, wheat, and beef farm 1/

Item	Unit	1975	1976	1977	1978 (projected)
Balance sheet					
Assets (market value) Jan. 1	Dol.	308,343	322,420	348,710	364,568
Debts, Jan. 1	"	60,855	69,581	77,277	79,671
Equity	"	247,488	252,839	271,433	284,897
D/E ratio	"	.25	.28	.28	.28
Net income					
Receipts	Dol.	58,250	63,870	63,422	74,410
Cash cost	"	43,995	45,807	47,974	45,025
Net cash income	"	14,255	18,063	15,448	29,385
Less:					
Depreciation	"	6,970	5,375	5,920	6,798
Operator's family labor and management	"	11,694	13,431	13,675	14,594
Net return to equity	"	4,409	743	4,147	7,993
Net return to equity	Pct.	1.8	.3	1.5	2.8
Cash flow					
Net cash income	Dol.	14,255	18,063	15,448	29,385
Less: Principal payment on debt	"	6,088	6,008	6,659	7,126
Remaining net cash income after principal payment	"	8,167	12,055	8,789	22,259

1/ 960-acre farm with 140 acres of cotton, 420 acres of wheat, 50 acres of hay, 320 acres of pasture, and 30 cows.

Table 16--Texas High Plains, cotton and sorghum farm 1/

Item	Unit	1975	1976	1977	1978 (projected)
Balance sheet					
Assets (market value) Jan. 1	Dol.	266,090	275,124	295,725	340,402
Debts, Jan. 1	"	84,346	90,379	95,862	109,481
Equity	"	181,744	184,745	199,863	230,921
D/E ratio	"	.46	.49	.48	.47
Net income					
Receipts	Dol.	78,812	87,871	79,063	89,934
Cash cost	"	57,814	53,959	57,619	60,243
Net cash income	"	20,998	33,912	21,444	29,691
Less:					
Depreciation	"	10,969	13,730	15,157	18,299
Operator's family labor and management	"	10,893	11,959	12,173	11,974
Net return to equity	"	-864	8,223	-5,886	-582
Net return to equity	Pct.	-.48	4.45	-2.95	-.3
Cash flow					
Net cash income	Dol.	20,998	33,912	21,444	29,691
Less: Principal payment on debt	"	11,568	11,669	12,934	15,190
Remaining net cash income after principal payment	"	9,430	12,243	8,510	14,501

1/ 720-acre farm with 200 acres of irrigated cotton, 250 acres of irrigated sorghum, 100 acres dryland of cotton, and 90 acres of dryland sorghum.

Table 17--East central Illinois corn-soybean farm 1/

Item	Unit	1975	1976	1977	1978 (projected)
Balance sheet					
Assets (market value), Jan. 1	Dol.	245,416	245,589	312,529	395,666
Debts, Jan. 1	"	47,126	45,128	48,053	59,063
Equity	"	198,290	200,461	264,476	336,603
D/E ratio	"	.24	.23	.18	.18
Net income					
Receipts	Dol.	60,738	67,835	54,315	61,269
Cash cost	"	24,828	23,498	25,001	26,015
Net cash income	"	35,910	44,337	29,314	35,254
Less:					
Depreciation	"	6,492	6,381	6,942	7,216
Operator's family labor and management	"	5,675	6,859	7,010	7,112
Net return to equity	"	23,743	31,097	15,362	20,926
Net return to equity	Pct.	12.0	15.5	5.8	6.2
Cash flow					
Net cash income	Dol.	35,910	44,337	29,314	35,254
Less: Principal payment on debt	"	5,470	5,353	5,945	6,899
Remaining net cash income after principal payment	"	30,440	38,984	23,369	28,355

1/ 400-acre farm with 200 acres of corn and 180 acres of soybeans.

ery in 1978, and the return to equity ratio should again exceed 6 percent.

Conditions on a typical 900-acre Mississippi Delta cotton farm did not reflect prosperity in 1975 and 1976, and they worsened in 1977 (table 18). In 1975 and 1976, net returns largely covered the labor and management charges of the operator's family and yielded net returns to equity of 0.2 and 0.4 percent, respectively. Principal payments on debt took nearly half the net cash income. In 1977, the net return to equity dropped to -4.5 percent and indicated debt principal payment was larger than net cash income. For 1978, net cash income is expected to be about 4 times what it was in 1977. However, a 15-percent rise in the value of asset equity is forecast to limit the rate of return to equity to just over 3 percent. The dollar level of net return to equity for 1978 is expected to approach $15,000, roughly a $32,000 turnaround from 1977.

Comparative budgets for a typical California rice, wheat, and grain sorghum farm reflected the highest debt-to-equity ratios but still appeared more prosperous than the other typical farms reviewed (table 19). The net return to equity was 16 percent in 1976. By comparison, it was 26.2 in 1975 and 32.6 percent in 1977. Financial conditions should continue to be good for such farms in 1978.

In summary, financial conditions on selected ESCS typical farms with some emphasis on grain production are expected either to remain good in 1978 or, among the more stressed ones, to improve substantially from what they were in 1977. Improvement is expected especially in terms of cash flow, which is so important in coping with debt principal repayment.

CONCLUSION

The events of 1972-74 introduced a series of changing financial situations, each bearing unevenly across various segments of the U.S. farm economy. Some farmers, including beginning farmers and those who invested heavily in land and new equipment, had degenerating cash flow positions due to price declines, rising production expenses, drought, and the erosion of income from inflation. Deteriorated cash flow positions led to some credit problems by late 1977, these credit problems threatened to become serious, particularly in cash grain producing areas. Still, many farmers were able to refinance short-term debt using rising real estate values as security.

Cash flow positions were helped substantially by a series of recent Government program actions and by strong foreign and domestic demands for farm products. Cash flow positions improved during the first half of 1978, and the improvements should be sustained

Table 18--Mississippi Delta cotton farm 1/

Item	Unit	1975	1976	1977	1978 (projected)
Balance sheet					
Assets (market value), Jan. 1	Dol.	441,788	455,375	517,767	588,030
Debts, Jan. 1	"	102,205	105,041	116,243	127,464
Equity	"	339,583	350,334	401,524	460,566
D/E ratio	"	.30	.30	.29	.28
Net income					
Receipts	Dol.	138,998	146,984	135,238	176,031
Cash cost	"	112,986	118,584	123,907	131,347
Net cash income	"	26,012	28,400	11,331	44,684
Less:					
Depreciation	"	17,053	18,294	20,189	21,187
Operator's family labor and management	"	8,148	8,889	9,028	8,712
Net return to equity	"	811	1,217	-17,886	14,785
Net return to equity	Pct.	.2	.4	-4.5	3.2
Cash flow					
Net cash income	Dol.	26,012	28,400	11,331	44,684
Less: Principal payment on debt	"	12,023	12,922	14,316	15,038
Remaining net cash income after principal payment	"	13,989	15,478	-2,985	29,646

1/ 900-acre farm with 360 acres of cotton, 370 acres of soybeans, and 80 acres of wheat.

Table 19--California rice, wheat and grain sorghum farm 1/

Item	Unit	1975	1976	1977	1978 (projected)
Balance sheet					
Assets (market value) Jan. 1	Dol.	800,080	864,623	987,317	1,153,513
Debt, Jan. 1	"	296,030	323,663	317,595	350,158
Equity	"	504,050	540,960	669,722	803,355
D/E ratio	"	.59	.60	.47	.44
Net income					
Receipts	Dol.	338,148	311,351	472,426	371,234
Cash cost	"	174,944	191,343	217,059	205,162
Net cash income	"	163,204	120,008	255,367	166,072
Less:					
Depreciation	"	13,046	14,303	15,794	18,433
Operator's family labor and management	"	17,950	17,353	21,311	22,821
Net return to equity	"	132,208	88,352	218,262	124,818
Net return to equity	Pct.	26.2	16.3	32.6	15.5
Cash flow					
Net cash income	Dol.	163,204	120,008	223,783	166,072
Less: Principal payment on debt	"	25,213	20,690	22,783	26,297
Remaining net cash income after principal payment	"	137,991	99,318	201,000	139,775

1/ 1,200-acre farm with 650 acres of rice, 140 acres of irrigated grain sorghum, and 386 acres of irrigated wheat.

through the last half of the year and into 1979. Net farm income, before inventory change adjustment, is pexpected to approach $26 billion in 1978. Generally, farmers seem to be in a good equity position, particularly established farmers who have benefited from rising real estate values. Although some farmers in important farming areas of the Nation remain vulnerable to further financial setbacks, the overall financial health of the industry appears sound.