AGRICULTURAL FINANCE COMMENTARY, DECEMBER 1974

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The farm financial developments of 1973 that were called "extraordinary" in the Commentary of May 1974 look even more so now that several estimates have been revised substantially upward: net farm income by 34 per cent, capital expenditures by 11 per cent, and the increase in the value of assets by 21 per cent. Data for earlier years were also generally revised to reflect the newly-available findings of the 1970 Census of Agriculture, and conceptual changes were simultaneously introduced in several series. The revised historical record is worth reviewing, particularly because the financial behavior stimulated or accelerated by the 1973 experience may well influence an extended period.

Income

A sharp rise in the profitability of most farming operations during 1972 and 1973 was the basic factor behind other major financial developments. Production of crops and feeder livestock was particularly profitable through 1973; livestock feeding was profitable until the last quarter of 1973.

Farm income

	1966-70 average	1971	1972	1973
Total (billions of dollars):				
Gross income	53.6	62.0	70.8	100.9
Production expenses	40.2	47.6	52.4	64.7
Net income	13.4	14.4	18.4	36.2
Net income per farm (dollars)	4,343	4,957	6,410	12,744

Quarterly data indicate that income rose steadily during 1973. At the fourth-quarter peak, total net farm income (seasonally-adjusted annual rate) was 219 per cent above the 1966-70 average, and income per farm was 246 per cent higher. In 1974, however, gross income leveled out while production expenses continued to rise rapidly. Consequently, by the third quarter net income (SAAR) had fallen by 35 per cent from 1973's year-end peak.

Farm income
(seasonally-adjusted annual rate)

	1972 4Q	1973 1Q	1973 2Q	1973 3Q	1973 4Q	1974 1Q	1974 2Q	1974 3Q
Total (billions of dollars):								
Gross income..........	75.4	86.2	93.2	101.8	106.7	105.0	98.4	102.1
Production expenses...	54.6	60.1	62.9	67.0	69.0	72.1	74.5	76.5
Net income...........	21.5	29.6	33.3	39.3	42.7	36.9	26.9	27.6
Net income per farm (dollars).........	7,490	10,410	11,710	13,820	15,010	13,080	9,540	9,790

Investment

Improved farm income, increased crop acreage, and higher prices for farm machinery and building materials were among major factors combining to push farm capital expenditures upward. Total capital spending in 1973 was 31 per cent above that of 1972 and 49 per cent above the 1966-70 average.

Farm capital expenditures (billions of dollars)

	1966-70 average	1971	1972	1973
Capital expenditures.........	6.9	7.4	7.9	10.4
Buildings..................	2.2	2.5	2.4	3.0
Autos......................	.4	.3	.4	.4
Trucks.....................	.6	.6	.7	.7
Tractors...................	1.1	1.2	1.5	1.9
Other farm machinery.......	2.7	2.7	3.1	4.4

Assets

The large per-acre profits extracted from farm land in 1973 and in prospect for 1974 triggered sharp advances in farm land prices. Farm real estate prices nationally rose by 13 per cent in 1972 and by 25 per cent in 1973 (data are for years starting March 1). Thus the total value of farm real estate rose by $65 billion in 1973. In addition, the assets and net worth of the farming sector were swelled by increases in the prices of holdings of livestock and stored crops and by continued uptrends in machinery, financial, and household assets.

Annual changes in farm assets and proprietors' equities

	1966-70 average	1971	1972	1973
	Total change (billions of dollars)			
Assets	12.5	25.4	43.6	91.8
Real estate	8.4	16.4	29.0	64.7
Machinery	1.7	2.2	2.5	4.5
Livestock	1.2	3.5	6.8	11.7
Stored crops	.2	1.1	2.6	7.6
Household	.3	.9	.9	1.7
Financial*	.7	1.2	1.8	1.7
Proprietors' equities	8.5	19.6	36.5	82.6
	Change per farm (dollars)			
Assets	4,061	8,726	15,203	32,308
Real estate	2,713	5,640	10,091	22,748
Proprietors' equities	2,742	6,740	12,732	29,052

* Financial assets include only currency, bank deposits, U.S. savings bonds, and investments in cooperatives.

In 1971, for the first time since the land boom of 1919, the increase in the value of farm real estate exceeded the year's total net farm income. How striking, therefore, that in 1973 the real estate appreciation exceeded that year's extraordinary net farm income by 79 per cent.

During the past decade, several articles argued that various farm behavior could be better explained if the annual appreciation in land values were regarded as a significant component of total returns to farm owners and landlords. Over 1966-70, these capital gains averaged $2,700 per farm. They then rose to $10,100 in 1972 and $22,700 in 1973. The "total return" (these real estate gains plus net income) averaged $7,100 in 1966-70, $16,500 in 1972, and $35,500 in 1973.

Indications of the course of land prices in one region--the Corn Belt--during 1974 were given by a quarterly survey of rural bankers in the Chicago Federal Reserve District. These bankers reported a real boom early in the year, with price increases averaging 12 per cent during the first quarter. The average price advance moderated to 3 per cent during the second quarter but accelerated to 8 per cent in the third quarter as crop prices rallied. Nationally, real estate values rose by another 10 per cent between March 1 and November 1--a further gain of $32.5 billion, or $11,600 per farm.

Credit

Net borrowing, first half of 1974

At the institutions that regularly report their farm lending, total net borrowing in the first half of 1974 was slightly greater than the previous record increase in 1973. The gain occurred in real estate lending, primarily at Federal Land Banks. Net non-real-estate borrowing trailed that of 1973, but in contrast to that year it was much stronger at PCA's than at banks.

Net changes in farm debt owed to reporting lending institutions
First half of year

	1966-70 average	1971	1972	1973	1974
	Net change (billions of dollars)				
Total	2.4	3.0	2.9	4.5	4.7
Banks	.9	1.4	1.5	2.1	1.7
Farm Credit System	1.0	1.3	1.3	1.9	2.5
Life insurance companies	.1	-.1	-	.1	.1
Farmers Home Administration	.3	.3	.2	.4	.4
Real-estate-secured	.7	.7	1.0	1.6	1.9
Banks	.1	.3	.4	.5	.4
Federal Land Banks	.4	.4	.5	1.0	1.2
Life insurance companies	.1	-.1	-	.1	.1
Farmers Home Administration	.1	.2	.1	.1	.1
Non-real-estate	1.6	2.2	1.9	2.9	2.8
Banks	.8	1.1	1.1	1.7	1.3
PCA's and FICB's	.7	1.0	.7	.9	1.3
Farmers Home Administration	.1	.1	.1	.3	.2
	Percentage change				
Total	8.0	8.2	7.3	10.1	9.0
Banks	7.8	9.6	8.8	11.3	7.4
Farm Credit System	11.6	10.6	8.8	11.9	13.1
Life insurance companies	2.3	-1.5	-.3	1.0	2.0
Farmers Home Administration	9.6	8.5	5.6	10.7	9.2
Real-estate-secured	4.8	4.1	4.9	7.2	7.4
Banks	4.6	8.0	8.6	9.6	7.4
Federal Land Banks	7.0	5.5	6.5	10.8	11.2
Life insurance companies	2.3	-1.5	-.3	1.0	2.0
Farmers Home Administration	6.0	6.6	4.8	4.1	4.2
Non-real-estate	12.1	12.6	9.8	13.0	10.6
Banks	8.9	10.1	8.9	11.7	7.4
PCA's and FICB's	18.6	17.4	11.7	13.3	15.6
Farmers Home Administration	18.0	14.2	8.1	34.9	26.6

Evaluation of the net non-real-estate borrowing during the first half of 1974 may require noting the unusual strength that such borrowing displayed during the last half of 1973, as described in the Commentary of May 1974. Outstanding non-real-estate debt as of January 1 was unusually inflated by delayed marketing of both crops and livestock and by accelerated purchases of production inputs to secure tax deductions or investment tax credits as well as in expectation of future shortages or price increases.

A comparison for years ending in June may therefore provide a more appropriate indication of relative net non-real-estate borrowing during the last two crop production seasons. On this basis it is evident that the pace of bank lending continued at the high level of 1973, while activity at PCA's surged after relative weakness during the two preceding seasons.

Net changes in farm non-real-estate debt owed to reporting lending institutions, year ending June 30

	1966-70 average	1971	1972	1973	1974
		Net change (billions of dollars)			
Total	1.3	1.9	1.9	3.3	4.2
Banks	.7	1.0	1.4	2.4	2.5
PCA's and FICB's	.5	.9	.6	.7	1.7
Farmers Home Administration	-	-	-.1	.2	.1
		Percentage change			
Total	9.3	10.9	9.7	15.4	16.8
Banks	7.9	9.2	11.3	17.4	15.4
PCA's and FICB's	14.2	16.2	9.0	10.1	21.4
Farmers Home Administration	2.0	-.4	-8.2	26.4	5.4

Credit conditions, second half of 1974

Demand for farm loans continued at a high level during the summer and fall, as shown most vividly by the magnitude of increases in debt owed to the PCA's and the Federal Land Banks (table at top of page 6). As in 1973, PCA loans rose contra-seasonally during the third quarter. The pace of lending at the Federal Land Banks reflected the continued strong land market, their relatively attractive current interest rates, and the reduced availability of mortgage loans from commercial banks and life insurance companies.

Net changes in outstanding farm debt, July through October

	1966-70 average	1971	1972	1973	1974
	(Net change (millions of dollars)				
Production credit associations.....	-126	-158	-283	145	239
Federal Land Banks................	162	247	427	619	897
	Percentage change				
Production credit associations.....	-3.1	-2.5	-4.2	1.9	2.6
Federal Land Banks................	2.9	3.3	5.1	6.1	7.4

As 1974 began, commercial banks in general were sufficiently liquid to service the additional farm loan demands that were widely anticipated. With the lifting of the Arab oil embargo in March, however, bank deposits and loans nationally began to rise faster than the rates that the Federal Reserve was willing to accommodate. Money-market interest rates therefore rose, reaching relatively high levels in July, and growth in rural bank deposits subsequently slowed in many areas.

In the Chicago and Minneapolis Federal Reserve Districts, where the Reserve Banks conduct quarterly surveys of rural credit conditions, the average loan/deposit ratio at rural banks rose sharply in mid-summer. At many banks the ratio reached a level higher than the management desired. Thus, by October 1 only 27 per cent of the rural banks in the Minneapolis District were actively seeking new farm loan accounts--the lowest proportion since the survey began in 1964. During the third quarter, 35 per cent of the banks had reduced or refused a loan request because of shortage of funds and 30 per cent expected such problems in the next quarter--both new high levels for the survey. In the Chicago District, nearly half of the rural banks reported that their availability of funds for farm loans had fallen during the third quarter.

In both Districts, the rate of debt repayment was down and demand for renewals and refinancing had increased. In the Minneapolis District, 35 per cent of the banks considered farm loan repayments to be slow, compared with 4 per cent on January 1. In both regions, the bankers indicated that demand for short-term loans was stronger than the demand for machinery and real estate loans. Looking ahead to the fourth quarter, bankers in the Chicago District were expecting strength in operating and crop storage loans, but further weakness in lending to cattle feeders and dairy operators.

Interest rates

Average interest rates on farm loans rose sharply during the second and third quarters. The largest increases were reported by large banks, many of which were posting a prime rate around 12 per cent during the third quarter. At the Federal Land Banks, the variable-rate plan continued to make their billing rates relatively attractive during this period of generally rising rates.

Average interest rates on new farm loans (per cent)

	1972	1973	1974			
	Jan. 1	Jan. 1	Jan. 1	Apr. 1	Jul. 1	Oct. 1
Rural commercial banks						
Chicago F.R. District:						
Feeder cattle loans............	7.54	7.52	8.28	8.30	8.60	9.05
Real estate loans..............	7.69	7.67	8.50	8.39	8.60	9.06
Minneapolis F.R. District:						
Short-term loans...............	8.09	8.06	8.56	8.53	8.82	9.04
Intermediate-term loans........	8.23	8.20	8.74	8.65	9.05	9.33
Long-term loans................	7.96	7.92	8.45	8.43	8.70	8.91
Banks reporting for G.10 release:[a]						
Feeder cattle loans..............	7.55	7.74	9.70	9.69	10.74	11.09
Other production loans...........	7.63	7.89	9.15	9.30	9.92	10.51
Production credit associations[b]....	7.39	7.43	9.25	9.34	9.55	9.77
Federal Land Banks[b]................	7.56	7.35	7.79	7.83	8.06	8.46
Life insurance companies[c]..........	8.87	8.39	9.01	9.22	9.35	NA

a Mostly larger commercial banks, most common rates in first week of month.
b Simple averages estimated by Federal Reserve Board staff. Federal Land Bank rates are not adjusted for stock purchase required.
c Average rate on commitments in the quarter ending day before date shown.

During the summer it gradually became apparent that the economy was not resuming real growth, and growth in bank deposits slowed markedly. After July, money-market interest rates declined as the Federal Reserve probed for a level at which bank deposits would resume the somewhat faster expansion that it desired. By late September, the Federal Funds rate--the interest rate received by banks on one-day loans to other banks--had declined to around 11 per cent from its peak of 13.5 per cent in July, and large banks began to reduce their prime rates. Early in December, the Federal Funds rate had fallen further to the 9 per cent area, and large banks had reduced their prime rates to around 10 per cent. Real economic activity was also declining nationally. Except at the Federal Land Banks, therefore, upward pressures on farm loan rates had abated.