## 232 CLASSROOM OFFICE BLOG 1994 BUPORD AVENUE, UNIVERSITY OF MINNESOTA

ST. PAUL, MINNESOTA 55108

# AGRICULTURAL LETTER

FEDERAL RESERVE BANK OF CHICAGO Number 1758 April 21, 1989

### Farm debt by lender\*

	Banks	Farm Credit System	Farmers Home Adm.	Life insurance companies	Individuals and others	Total	
	(		bill	ion dollars		)	
1970	13.8	11.7	2.9	5.1	152	48.8	
1975	24.7	25.2	4.6	6.2	24.3	85.0	
1980	37.7	53.0	17.5	12.0	46.6	166.8	
1985 1986 1987 1988	44.2 41.4 40.9 42.6	55.2 45.4 39.1 36.6	24.3 23.9 23.4 21.7	11.0 10.2 9.2 9.0	40.5 34.5 30.0 28.7	175.2 155.3 142.7 138.6	
% change	4.0%	-6.4%	-7.1%	-2.4%	-4.4%	-2.8%	
% of total	30.7%	26.4%	15.7%	6.5%	20.7%	100%	

<sup>\*</sup>Excludes CCC price support loans and loans for farm operator households and homesteads. Figures for year-end 1988 are preliminary, based on adjusted year-end lender reports and USDA projections.

nonreal estate component. Farm debt owed to the vastly restructured entities of the Farm Credit System (FCS) declined nearly 6.5 percent last year, encompassing reductions of approximately 4.5 percent in farm real estate mortgages and nearly 7 percent in nonreal estate loans. During the downtrend that has now lasted six years, farm loans owed to the FCS have declined 43 percent. Following a 2.4 percent decline last year, farm debt owed to life insurance companies has retreated 26 percent over the past 7 years. Virtually all of the farm loans held by life insurance companies are secured by real estate.

The continuing decline in farm debt stems from several factors. But unlike the situation in the mid 1980s, write-offs on bad farm loans have been a diminishing factor the past couple of years (see discussion below). Farm loan repayment rates remained at a high level in 1988, despite the drought and some evidence of a slowing during the latter part of the year. The strong loan repayment rate was supported by a high level of government payments to farmers and high prices which boosted cash receipts from farm commodity marketings 10 percent last year to more than \$151 billion. The demand for new farm loans, although firming somewhat, remained relatively weak last year, despite gains in farm operating expenses and in capital expenditures by farmers. Farmland values, especially in the Midwest, recovered further last year and the number of land transfers apparently strengthened. But various reports imply that the use of debt to finance land transfers remained modest by historical standards.

### Farm debt declined further last year

FRB CHICAGO

Recent reports from institutional lenders that serve farmers indicate that farm debt declined further last year and that the quality of farm loans still held by most lenders continued to improve. Those reports suggest that outstanding farm debt (excluding CCC price support loans and loans for farm households and homesteads) declined nearly 3 percent to less than \$139 billion as of the end of 1988. About \$77.0 billion of the total was secured by farm real estate while the remaining \$61.6 billion represented other loans to farmers that are mostly short-or-intermediate-term loans to finance farm operating expenses and capital expenditures. Both components declined for the fifth consecutive-year in 1988, although the decline for nonreal estate loans was a rather nominal 0.5 percent. Relative to the 1983 peaks, farm real estate debt is down nearly 27 percent while nonreal estate farm debt is down 30 percent. With the extended declines, both components have retreated to 10-year lows.

Institutional lenders account for nearly 80 percent of the USDA's series on outstanding farm debt. Year-end reports from those lenders provide a reasonable approximation of what forthcoming final USDA estimates will show for farm debt. The remaining share is held by a broad category of individual and other lenders for which only limited year-end 1988 information is available. In a preliminary estimate, however, the USDA has suggested that farm debt owed to individuals and others declined 4.4 percent last year.

The trends in farm debt owed to institutional lenders varied last year. Farm debt owed to banks increased 4 percent nationwide last year, reversing the downtrend of the three previous years. The overall gain for banks encompassed a 7 percent rise in loans secured by farm real estate and a rise of roughly 2.5 percent in other loans to farmers. Among states in the Seventh Federal Reserve District, both farm real estate and nonreal estate farm loans owed to banks rose about 8 percent last year.

Farm debt owed to all other reporting institutional lenders declined further last year, offsetting the rise for banks. Following comparatively modest declines the previous two years, farm debt owed to the Farmers Home Administration (FmHA) declined more than 7 percent in 1988, paced by a 9 percent decline in the

The recent year-end reports for banks and the FCS also indicated that the quality of farm loans still in portfolio at those lenders improved further in 1988. Among agricultural banks nationwide, nonperforming loans (loans delinquent 90 days or more and loans that no longer accrue interest) represented only about 2.3 percent of all loans at those banks as of the end of 1988. That compares to 2.9 percent the year before and a peak of 4.8 percent during the height of the financial distress in agriculture in 1986. It was also the lowest ratio of nonperforming loans-to-total loans since at least 1982. Among agricultural banks in District states, nonperforming loans fell to 1.7 percent of total loans as of the end of 1988, down from 2.3 percent the year before.

The portfolio of problem farm loans within the FCS, although still substantial, has also retreated sharply. As of the end of 1988, loans no longer accruing interest among entities within the FCS (including a small amount of loans to farmer cooperatives) were down 36 percent from the year before and 58 percent below the peak in the fall of 1986. And despite extensive loan restructuring the past two years, the amount of restructured and other high risk loans held by FCS entities at the end of 1988 was down 18 percent from the year before and off 28 percent from the early 1987 peak.

Charge-offs of bad loans by banks and the FCS have also retreated considerably. In 1988, net charge-offs of farm loans by banks dropped to about \$140 million, down from \$530 million the year before and a peak of \$1.3 billion in 1985. Net charge-offs of farm loans by banks in District states retreated to \$30 million last year, down from around \$110 million the year before and the 1985 high of almost \$400 million. Within the FCS, some \$413 million in farm loans (including loans to farm cooperatives) were charged off in 1988. The system-wide total included some \$244 million in charge-offs associated with the liquidation of the Jackson Federal Land Bank, but was nevertheless down from the \$488 million in charge-offs the year before and the 1986 peak of \$1.4 billion. Since the beginning of 1984, net charge-offs of loans within the FCS have approximated \$3.8 billion, slightly less than the roughly \$4.1 billion in farm loans written off by banks during the same period.

Gary L. Benjamin

#### Farm sector balance sheet

The balance sheet of the U.S. farming sector continued to show improvement last year. Following a long decline since the early 1980s, the value of farm assets and equity both registered second consecutive annual

gains in 1988. Although far from offsetting the earlier erosion in value, the recent increases have generated substantial improvement in the sector's financial condition. This improvement is reflected in lowered debt-to-asset and debt-to-equity ratios. The current USDA forecast for this year points to further gains in asset values, while equity growth will be tempered somewhat by an increase in farm debt.

The value of all farm assets rose almost 5 percent in 1988, to about \$743 billion at year end, and was about 7.5 percent above the low recorded two years earlier. Compared to the 1981 peak, however, the value of farm assets is still down 25 percent. The gain in assets is largely attributable to increased real estate values, which account for almost three-fourths of all assets of the farm sector. At \$553 billion at the end of 1988, the value of farm real estate was almost 6 percent higher than the previous year. Although up more than 40 billion from the 1986 low and expected to trend higher this year, farm real estate values are still 30 percent below their 1981 peak of \$785 billion.

The value of nonreal estate farm assets rose about 2 percent in 1988. Virtually all of the increase was attributed to an increase in the value of livestock and poultry inventories, which rose almost 6 percent from the year ending 1987 level. Strong prices combined with a stabilization of the cattle herd and continued expansion in poultry and hog production account for the year-to-year increase. Strong crop prices have offset much of the sharp declines in stocks, holding the value of crop inventories at the end of 1988 close to the previous year's level. The value of farm machinery and equipment, after a long decline due to lagging investment, finally stabilized in 1988 as sales of new units began to expand. The value of farmers' financial assets continued to expend slightly in 1988.

Total farm debt recorded a fifth consecutive annual decline in 1988. Excluding Commodity Credit Corporation price support loans and farm household debt, liabilities of the agricultural sector totaled almost \$139 at the end of last year. At that level, farm debt is nearly 3 percent below the previous year and down almost 28 percent from the 1983 peak. Farm real estate debt declined almost 5 percent in 1988 and at year end was almost 27 percent below the 1983 peak. Nonreal estate debt edged slightly lower last year and remained 30 percent below the peak recorded five years earlier.

While the overall level of farm debt has dropped steadily since 1983, there have been very substantial shifts in the distribution of the outstanding debt among different lender groups as well. A near reversal of the shares held by commercial banks and Farm Credit System (FCS) institutions has occurred during

#### Balance sheet of the farm sector

	1985	1986	1987	1988 <sup>f</sup>	
	(billion dollars				
Assets	749.0	691.6	708.9	743	
Real estate	558.6	510.1	522.6	553	
Nonreal estate	190.4	181.5	186.3	190	
Livestock and poultry	46.3	47.6	57.6	61	
Machinery	87.6	80.3	73.9	74	
Stored crops	23.5	19.1	20.5	20	
Financial assets	33.0	34.4	34.3	35	
Liabilities	175.2	155.3	142.7	139	
Real estate debt	97.7	88.5	80.8	77	
Nonreal estate debt	77.5	66.8	61.9	62	
Farm sector equity	573.8	536.3	566.3	604	

Forecast.
SOURCE: USDA.

this period. Farm debt held by banks had slipped below a fourth of total sector debt in the early 1980s, while the share held by the FCS had grown to more than a third. Although the amount of farm debt held by banks at the end of 1988 was below the levels that prevailed in the mid 1980s, banks accounted for almost 31 percent of the total outstanding. Farm debt held by the FCS, however, has dropped precipitously. The level of outstanding debt held by FCS institutions contracted by almost \$28 billion during the five years ending in 1988, eroding the system's share of outstandings from more than a third to about 26 percent.

During the same period the role of the Farmers Home Administration (FmHA) in the farm sector has risen sharply. Until 1988, outstanding debt held by the FmHA accounted for an increasing proportion of the total farm debt. Although down slightly last year, the FmHA still held almost 16 percent of farm debt compared to slightly more than 11 percent at the end of 1983. The share of farm debt held by life insurance companies has remained fairly steady at about 6.5 percent of the total, although the amount has dropped more than a fourth since the early 1980s. The final category of lenders, individuals and others, has accounted for a steadily declining share of farm debt. After accounting for about a fourth of the total when farm debt peaked in 1983, individuals and others (mostly merchants and dealers) accounted for little more than a fifth of the year end 1988 total.

The overall reduction in farm sector debt last year combined with the continued growth in assets boosted total net worth in the sector by 6.7 percent. At \$604 billion, farm sector equity was almost 13 percent above the 1986 low but remains well below the \$829 billion high recorded in 1980. However, after adjusting for the effects of inflation, equity in the sector at the end of 1988 was little more than half of the high recorded in 1979 and in the range of levels that prevailed in the 1950s and 1960s.

The current forecast of the farm sector's balance sheet at the end of this year points to continued improvement in the sector's financial condition. On the asset side of the balance sheet the value of farm real estate is expected to continue to climb, with the mid point of the USDA forecast range suggesting an increase of about 2 percent. Nonreal estate assets of the farm sector are expected to show a similar gain. On the liability side of the balance sheet, farm debt is currently projected to register its first year-to-year increase since 1983. Using mid points of forecast ranges, farm sector debt is expected to increase 2 to 3 percent this year, with both real estate and operating debt expected to show increases from a year ago. Despite the expected increase in debt, farm sector equity is projected to show a moderate increase in 1989, rising 1 to 2 percent from last year's level.

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AGRICULTURAL LETTER (ISSN 0002-1512) is published bi-weekly by the Research Department of the Federal Reserve Bank of Chicago. It is prepared by Gary L. Benjamin, economic adviser and vice-president, Peter J. Heffernan, economist, and members of the Bank's Research Department, and is distributed free of charge by the Bank's Public Information Center. The information used in the preparation of this publication is obtained from sources considered reliable, but its use does not constitute an endorsement of its accuracy or intent by the Federal Reserve Bank of Chicago.

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### Selected Agricultural Economic Indicators

			Percent change from		
	Latest period	Value	Prior period	Year ago	Two years ago
Receipts from farm marketings (\$ millions)	December	13,634	-13.2	-2	-13
Crops*	December	6,965	-15.5	7	-13
Livestock	December	6,201	-10.8	4	9
Government payments	December	468	-8.8	-67	-76
Real estate farm debt outstanding (\$ billions)					
Commercial banks	December 31	14.2	0.4	7	22
Farm Credit System	December 31	28.0	0.4 <sup>†</sup> -2.6 <sup>†</sup> 2.8 <sup>†</sup>	-6 -2	-20
Life insurance companies	December 31	9.01	2.8	-2	-12
Nonreal estate farm debt outstanding (\$ billions)					
Commercial banks	December 31	28.3	-3.1 <sup>†</sup> -5.7 <sup>†</sup>	3 -7	-5
Farm Credit System	December 31	8.64	-5.7	-7	-18
Interest rates on farm loans (percent)					
7th District agricultural banks					
Operating loans	January 1	11.97	2.6	6	8
Real estate loans	January 1	11.27	2.6 <sup>†</sup> 2.2	5	7
Commodity Credit Corporation	April	9.50	4.1	43	58
Agricultural exports (\$ millions)	February	3,470	3.4	10	56
Corn (mil. bu.)	February	158	-10.4	27	59
Soybeans (mil. bu.)	February	57	-14.7	-41	-23
Wheat (mil. bu.)	December	109	11.8	-8	88
Farm machinery sales <sup>p</sup> (units)					
Tractors, over 40 HP	March	5,556	47.1	10	98
40 to 139 HP	March	3,805	54.4	5	64
140 HP or more	March	1,751	33.6	20	269
Combines	March	317	61.7	-45	317

\*Includes net CCC loans.
Prior period is three months earlier.
Preliminary



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