

Agriculture

AN EIGHTH DISTRICT PERSPECTIVE

SPRING 1988

Agricultural Banks Recover After Farm Recession

After two years of abundant harvests and high farm income, the depression in the farm sector appears to have bottomed out and the recovery to have begun. Farm lenders were profoundly affected by the farm crisis and, in turn, are showing the effects of the recent improvement in the farm sector.

Agricultural banks are a major source of commercial credit for agriculture.¹ This article documents the decline of agricultural banks during the farm crisis and the improvement in operating results caused by the recent upturn in farm financial conditions in the nation and the Eighth District.²

The farm crisis of the 1980s had its roots in the boom years of the 1970s when farm exports, farm incomes and farmland values all rose sharply. Expectations that food scarcity would remain a long-term world problem drove farmland values to ever higher values. By the early 1980s, however, it became evident that the growth of farm exports and farm income would fall short of earlier expectations. Commodity prices tumbled and farmland values fell by more than 50 percent in some regions to reflect the new, lower income expectations. Farmers' ability to repay loans was hampered by lower income and lower cash flow; as a result, the condition of agricultural banks deteriorated.

Agricultural Bank Profitability

The primary indicator of bank performance is profitability. Table 1 indicates that profitability (for agricultural banks) trended downward between 1980 and 1986. From 1980 to 1986, the return on assets declined from 1.27 percent to 0.43 percent

¹Agricultural banks are banks with a ratio of farm loans to total loans greater than the national average. The national average ratio was 15.7 percent at the end of 1987.

²The Eighth Federal Reserve District includes Arkansas and portions of Illinois, Indiana, Kentucky, Mississippi, Missouri and Tennessee.

Table 1

Agricultural Banks Return on Assets

	1987	1986	1985	1984	1983	1982	1981	1980
United States	.69%	.43%	.50%	.70%	.97%	1.12%	1.22%	1.27%
Eighth District	.83	.71	.80	.80	.95	1.09	1.05	1.15
Arkansas	.94	.82	.82	.82	1.02	1.01	1.04	1.16
Illinois	.78	.63	.63	.86	1.07	1.05	1.06	1.11
Indiana	.81	.70	.65	.77	.75	.70	.89	1.10
Kentucky	1.03	1.03	1.10	.94	.98	.95	1.20	1.34
Mississippi	.42	.69	.90	.78	1.08	1.11	1.16	1.21
Missouri	.74	.42	.26	.53	.82	1.18	1.19	1.20
Tennessee	1.14	1.24	1.10	.73	.84	.94	.89	1.06

in the nation and from 1.15 percent to 0.71 percent in the District.

Although declining bank profitability can be attributed to farmers' inability to repay loans, slumping farmland values also had an important influence on bank earnings. Farmland often is pledged as collateral for farm loans, even for non-real estate purposes such as farm machinery. When loan concessions to farmers were not offered or were not effective, many lenders repossessed the farmland collateral to recover the unpaid balance of the loan. Banks often incurred losses when they attempted to sell the repossessed land and discovered that the farmland's new value was less than the outstanding loan balance.

Another effect of the farm crisis was the reduction in farm loan demand. When commodity prices and farm income fell, farmers reduced debt by lowering their use of inputs such as new machinery, fertilizers and seeds. Less debt was needed for farm real estate purchases because of lower farmland prices. Furthermore, government price support programs mandated acreage



Table 2
Farm Loan Delinquency Rate

	(Percent of farm loans)			
	1987	1986	1985	1984
United States	4.0%	6.4%	8.1%	3.7%
District	3.5	5.4	6.6	3.4
Arkansas	1.7	3.5	5.4	3.4
Illinois	3.6	5.5	6.5	2.5
Indiana	3.7	5.1	6.0	3.1
Kentucky	2.5	2.9	4.1	2.2
Mississippi	4.6	5.0	4.1	4.2
Missouri	4.3	6.9	11.4	4.0
Tennessee	1.4	2.1	3.8	4.1

reductions, thereby reducing farmers' expenses and credit needs. The volume of debt owed by farmers in 1987 was 26 percent lower than in 1982. Debt owed to banks decreased by 2 percent over the same period. In contrast, total farm debt grew by 71 percent from 1977 to 1982; bank debt expanded by 33 percent over that period.

The current farm recovery began in 1986 when relatively high livestock prices, record crop yields and high levels of direct government payments boosted farm income beyond expectations. Although farmland values continued to decline in 1986, they did so at a slower rate than in previous years. In 1987, returns to livestock producers and government payments remained high while farmland values increased for the first time in more than five years. Adjusted for inflation, net farm income in 1986 and 1987 returned to the levels that prevailed before the boom years of the 1970s.

Farmers used the improved cash flow to repay debt. Many loans that lenders previously had judged as risky were repaid. Loan losses at agricultural banks in the nation declined from 2.2 percent of loans in 1985 to 1.2 percent in 1987. As a result, agricultural bank profitability in 1987 increased for the first time since 1980, as shown in table 1.

Other indicators also point to improved performance at agricultural banks recently. Table 2 presents the farm loan delinquency rates of the past four years for the nation, the District and the states. The delinquency rate includes farm loans that are considered past-due or in nonaccrual status expressed as a percentage of all farm loans outstanding. Loan

Table 3
Agricultural Banks with Negative Earnings and Problem Agricultural Banks

	(number of banks)							
	1987	1986	1985	1984	1983	1982	1981	1980
Negative Earnings								
U.S.	615	983	942	682	404	210	119	65
District	39	73	62	62	48	35	29	24
Problem Agricultural Banks								
U.S.	149	291	338	251	141	99		
District	6	11	18	15	18	14		

performance improved in all District states.

Table 3 provides data on the number of agricultural banks with negative earnings and the number of problem agricultural banks. Nationwide, there were 983 agricultural banks with losses in 1986; this fell to 615 in 1987. In the District, the number of agricultural banks with losses fell from 73 in 1986 to 39 in 1987. Similarly, the number of problem banks, defined as agricultural banks with delinquent loans in excess of the bank's primary capital, has fallen in the nation and the District during each of the last two years.

The farm sector recovery has led to improved performance at agricultural banks; however, most indicators of banks' financial health remain below the levels that prevailed before the farm sector recession of the early 1980s. Continued recovery in the farm sector would be needed for agricultural bank performance to return to the levels of the 1970s.

— Kenneth C. Carraro

Agriculture—An Eighth District Perspective is a quarterly summary of agricultural conditions in the area served by the Federal Reserve Bank of St. Louis. Single subscriptions are available free of charge by writing: Research and Public Information Department, Federal Reserve Bank of St. Louis, P.O. Box 442, St. Louis, Missouri 63166. Views expressed are not necessarily official positions of the Federal Reserve System.

EIGHTH DISTRICT AGRICULTURAL DATA

<u>Prices and Costs¹</u>	Dec. 1987	Jan. 1988	Feb. 1988	Average for 1987	Percent Change	
					Year-To-Date 1988 ²	Same Month Year Ago
CONSUMER PRICE INDEX (% change)						
Nonfood	0.1%	0.4%	0.3%	0.4%	0.7%	4.1%
Food	0.4	0.3	-0.3	0.3	0.0	2.9
PRODUCTION COSTS FOR FARMERS (% change)						
Agricultural machinery and equipment	0.8	0.3	0.5	0.0	0.7	0.8
Fertilizer Materials	0.1	3.8	1.2	0.9	5.1	12.7
Agricultural chemicals and chemical products	0.2	2.1	0.7	0.6	2.8	9.0
Gasoline	-6.3	-5.6	0.0	1.7	-5.6	-2.4
PRICES RECEIVED BY FARMERS (% change)						
All products	-3.8	3.2	-0.8	0.4	2.4	6.6
Livestock	-1.4	4.3	2.0	0.0	6.4	4.2
Crops	-5.8	1.8	-4.4	1.2	-2.7	11.1
FEEDER CATTLE						
Wholesale price - Kansas City (\$/cwt.)	\$78.90	\$85.00	\$83.53	\$75.36	5.9	17.0
FEEDER PIGS						
Wholesale price - So. Missouri (\$/head)	\$31.74	\$37.47	\$46.97	\$46.69	48.0	-13.0
BROILERS						
Wholesale price - 12-city (¢/lb.)	39.80¢	43.90¢	N.A.	47.43¢	10.3	-15.2
TURKEYS						
Wholesale price - New York, 8-16 lb. young hens (¢/lb.)	65.30¢	52.70¢	47.10¢	57.71¢	-27.9	-19.5
CORN						
Wholesale price - No. 2, yellow - St. Louis (\$/bu.)	\$ 1.97	\$ 2.05	\$ 2.07	\$ 1.76	5.1	31.9
SOYBEANS						
Wholesale price - No. 1, yellow - Central Illinois (\$/bu.)	\$ 5.94	\$ 6.17	\$ 6.21	\$ 5.33	4.6	27.0
WHEAT						
Wholesale price - No. 1, hard winter - Kansas City (\$/bu.)	\$ 3.10	\$ 3.20	\$ 3.30	\$ 2.83	6.5	17.9
LONG-GRAIN RICE						
Wholesale price - Arkansas (\$/cwt.)	\$20.20	\$21.20	\$24.00	\$13.89	18.8	102.0
COTTON						
Average price received by U.S. farmers (¢/lb.)	64.20¢	66.60¢	N.A.	61.07¢	3.74	30.6

<u>U.S. Exports</u>	Dec. 1987	Jan. 1988	Feb. 1988	Average for 1987	Percent Change	
					Year-To-Date 1988 ²	Same Period Year Ago
Corn (mil. bu.)	149.0	134.0	N.A.	134.9	-10.1%	27.6%
Soybeans (mil. bu.)	76.7	77.0	N.A.	65.0	0.4	8.0
Wheat (mil. bu.)	118.5	147.6	N.A.	99.9	24.6	103.3
Rice (rough equivalent, mil. cwt.)	4.5	N.A.	N.A.	6.3	N.A.	N.A.
Cotton (thou. bales)	721.0	733.0	N.A.	547.8	1.7	-1.9

Non-Real-Estate Farm Debt Outstanding

	<u>Banks</u>			<u>PCAs³</u>		
	<u>Outstanding (\$ millions)</u>	<u>Percent Change</u>		<u>Outstanding (\$ millions)</u>	<u>Percent Change</u>	
		<u>12/86 - 12/87</u>	<u>12/85 - 12/87</u>		<u>12/86 - 12/87</u>	<u>12/85 - 12/87</u>
United States	\$29,088	- 6.7%	- 18.1%	\$9,927	- 11.2%	- 30.3%
Eighth District ⁴	1,980	- 14.3	- 20.2	NA	NA	NA
Arkansas	393	- 2.0	- 3.1	157	- 15.1	- 35.9
Kentucky	379	- 32.6	- 35.3	166	- 17.1	- 38.5
Missouri	959	- 10.1	- 21.8	103	- 45.5	- 62.0
Tennessee	242	- 14.0	- 25.4	197	- 6.6	- 23.8

Agricultural Bank Loan Performance⁵

	<u>Percent of Farm Loans Overdue at Agricultural Banks</u>			<u>Percent of Net Loan Losses at Agricultural Banks</u>		
	<u>12/87</u>	<u>12/86</u>	<u>12/85</u>	<u>12/87</u>	<u>12/86</u>	<u>12/85</u>
United States	2.1%	3.4%	4.2%	1.33%	2.51%	2.48%
Eighth District ⁴	2.3	4.5	5.5	1.14	1.82	1.98
Arkansas	1.4	1.7	5.3	1.00	1.41	1.36
Kentucky	3.7	4.0	4.7	.76	1.34	.96
Missouri	2.3	4.5	6.7	1.27	2.38	3.01
Tennessee	1.0	2.8	6.0	1.34	1.73	1.65

Agricultural Production Loan Interest Rate⁶

	<u>Banks</u>		<u>PCAs</u>	
	<u>2/88</u>	<u>2/87</u>	<u>9/87</u>	<u>9/86</u>
Eighth District Average	10.4%	10.0%	11.1%	11.1%

¹ The consumer price index components are seasonally adjusted. All other data are not seasonally adjusted.

² Percent change from December of previous year, based on the most recent month available.

³ Source: Farm Credit Banks of Louisville and St. Louis, Farm Credit Administration.

⁴ Includes all of AR and parts of IL, IN, KY, MO, MS and TN.

⁵ Agricultural banks are defined as those with more than 25 percent of total loans in agricultural loans.

⁶ Interest rate data are for different dates. PCA rates are weighted averages for Arkansas and Missouri, not adjusted for stock purchase requirements.
Source: Farm Credit Banks of St. Louis.