



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

FEDERAL RESERVE BANK OF CHICAGO

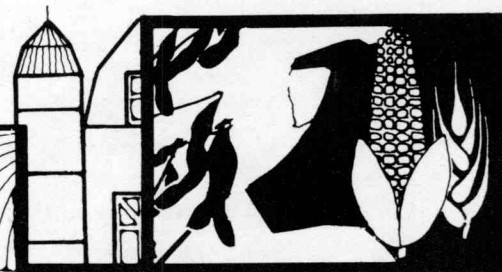
AGRICULTURAL

ISSN 0002 - 1512

November 30, 1979

Number 1513

LETTER



CREDIT CONDITIONS at rural banks were characterized mostly by tight liquidity pressures and rising interest rates in the third quarter, according to a recent survey of 600 district agricultural banks. Evidence of liquidity pressures are reflected in record-high loan-to-deposit ratios and in bankers' assessments of the tight availability of funds for lending. The bankers also reported a slight easing in the strong farm loan demand and prospects for further easing in the current quarter. The overall measure of farm loan repayment rates was little changed from the second quarter, although transportation bottlenecks apparently caused a few more problems in Iowa.

There are many measures of bank liquidity, but the evidence of tightness from the quarterly survey is most apparent in the measure of fund availability and the high loan-to-deposit ratios. The index of fund availability held at a very low level in the third quarter, a situation that has prevailed for the past several quarters. The low measure of fund availability probably reflects bankers' overall assessment of the strength in loan demand, slower deposit growth, and (in recent quarters) the impact of rising interest rates on the incentives and the flexibilities for restructuring asset portfolios to meet loan demands. Evidence from agricultural banks that are members of the Federal Reserve System show third-quarter deposits averaged less than 8 percent higher than a year earlier. That is down from gains of 9 to 10 percent in the two previous years. The rise in interest rates, which has accelerated since early October, also contributed to the low availability of funds. Short-run profit incentives encourage some bankers to increase their investment portfolios rather than extend new loans when interest rates on alternative investments rise faster than rates charged on loans. Simultaneously, the impact of rising rates on security prices discourages the liquidation of securities to accommodate new loan demands.

Another slight increase in the average loan-to-deposit ratio provides further evidence of the con-

tinuing liquidity pressures at rural banks. At the end of the third quarter, the average ratio was 67.6 percent, up nearly 2 percentage points from the high level a year ago and about 10 percentage points above the more typical levels of the mid-1970s. A fourth of the banks reported ratios of 75 percent or higher. Although the proportion of bankers indicating their loan/deposit ratio was higher than desired edged lower in the third quarter, over half of the bankers still hold this view.

Farm loan demand apparently eased somewhat during the third quarter but was still high. Evidence of the continuing strength in farm loan demand is reflected in the lending activities of other institutional lenders. Loans made in the third quarter by production credit associations in district states, for instance, exceeded the year-earlier level by a fifth. Higher input prices, which continue to swell production expenses, underlie the strength in farm loan demand. The index of prices paid by farmers for production inputs in the third quarter averaged 15 percent higher than a year ago, paced by large increases for prices of fuel, feed, and feeder livestock.

Interest rates charged by banks on farm loans continued to trend higher this summer, reflecting the consequences of strong loan demand, higher costs for deposits, and tight liquidity pressures. Average rates on feeder cattle loans and farm operating loans rose more than 80 basis points during the third quarter, reaching about 11.7 percent at the end of the period. A year before, bank rates on such loans had averaged 9.5 percent or less. Rates were lowest in Iowa (about 11 percent) where usury ceilings have become increasingly restrictive with the uptrend in interest rates. Rates were highest in Indiana and Michigan, where the averages ranged from 12¼ to over 13 percent.

Escalating market rates of interest have greatly complicated "loan pricing" problems for rural banks. These problems are probably most evident in intermediate

Selected measures of credit conditions at Seventh District agricultural banks

	Loan demand (index) ²	Fund availability (index) ²	Loan repayment rates (index) ²	Average rate on feeder cattle loans ¹ (percent)	Average loan-to-deposit ratio ¹ (percent)	Banks with loan-to-deposit ratio above desired level ¹ (percent of banks)
1975						
Jan-Mar	134	108	65	8.84	56.4	28
Apr-June	142	120	80	8.76	56.3	22
July-Sept	133	131	105	8.81	57.0	22
Oct-Dec	134	130	100	8.80	56.6	23
1976						
Jan-Mar	142	130	101	8.74	56.2	20
Apr-June	147	134	102	8.79	57.3	24
July-Sept	140	124	93	8.76	59.2	25
Oct-Dec	150	130	81	8.71	58.8	26
1977						
Jan-Mar	161	115	79	8.71	59.4	28
Apr-June	169	103	66	8.74	61.2	38
July-Sept	161	77	52	8.79	63.5	46
Oct-Dec	147	86	59	8.85	62.3	41
1978						
Jan-Mar	152	79	64	8.90	63.7	44
Apr-June	148	73	81	9.12	64.5	46
July-Sept	158	64	84	9.40	65.8	52
Oct-Dec	135	62	93	10.14	65.4	50
1979						
Jan-Mar	156	51	85	10.46	67.3	58
Apr-June	147	62	91	10.82	67.1	55
July-Sept	141	61	89	11.67	67.6	52

¹At end of period.

²Bankers responded to each item by indicating whether conditions during the current quarter were higher, lower, or the same as in the year-earlier period. The index numbers are computed by subtracting the percent of bankers that responded "lower" from the percent that responded "higher" and adding 100.

term lending arrangements that use fixed rate notes. Although many banks use more than one practice, three-fourths of those responding to the recent survey indicated they use fixed rate notes for intermediate-term farm loans (those with maturities longer than one year). Three-fourths also indicated they use annually renewable notes, but only 13 percent use variable rate notes.

The outlook of rural bankers points to a slowing in farm lending, further gains in interest rates on farm loans, and faster deposit growth. The index of bankers projecting an increase in fourth-quarter farm lending at their banks was the lowest in four years, suggesting rural bankers either expect an easing in demand or greater problems in meeting demand. Simultaneously, three-

fifths of the bankers projected an increase in deposit growth over the next three to six months, perhaps reflecting normal post-harvest seasonal patterns. Despite these projections, the proportion of bankers expecting an easing in their liquidity positions was only equal to the proportion expecting a further tightening. And a third of the bankers expected the overall availability of credit to farmers to tighten in the months ahead, while only 9 percent expected credit to ease. Although 30 percent of the bankers felt interest rates on farm loans would stabilize over the next three to six months, most of the others expected further increases.

Gary L. Benjamin
Agricultural Economist

FARM TRACTOR AND EQUIPMENT SALES have been strong this year, but the performance among individual items has been somewhat mixed. According to the Farm and Industrial Equipment Institute (FIEI), unit retail sales of tractors—the major farm equipment expenditure—were 3 percent higher than a year before in the January-August period. Sales of forage harvesters, mower conditioners, and manure spreaders were also higher, while sales of combines, balers, and corn heads were lower. Farm machinery sales this year have no doubt been hindered by rising interest rates and tight liquidity pressures at many agricultural banks. The effects of these tight credit conditions, however, have been at least partially offset by an increase in farm earnings. With net farm income expected to be up more than a tenth in 1979—following the 40 percent year-to-year increase of last year—machinery purchases by farmers will likely continue to average above year-earlier levels into the early months of 1980.

Retail sales of tractors have been paced by the larger units. In the first eight months of the year, farmers bought nearly 7,000 four-wheel drive tractors, 30 percent more than a year before. Similarly, unit sales of the largest two-wheel drive tractors (those with rated horsepower of 160 or more) were up more than 17 percent. By contrast, sales of the smaller two-wheel drive tractors (horsepower ratings of 40 to 159) totaled only 83,000 units, up less than 1 percent from last year.

Purchases of tractors and most equipment items in Seventh District states have paralleled national trends. The exception has been combine purchases, which have risen in contrast to a national decline. January-August combine purchases by farmers in district states were up 1.5 percent due to more sales in Illinois and Iowa. Farm tractor purchases in the five states were up 1 percent from a year before as sharp increases in Iowa and Wisconsin offset marked declines in Illinois, Indiana, and Michigan.

Farm machinery and equipment inventories at the end of August were somewhat higher than a year earlier. Tractor inventories were up nearly 3 percent to 68,000 units, the highest level this year. Inventories of combines were up 4 percent. Despite higher costs of inventory financing, this nominal buildup may have been partially intentional to offset possible supply disruptions during labor negotiations this fall. Strikes that have affected two major farm equipment manufacturers since September (one has since been settled, but the other is now in the fifth week) will likely result in a drawdown in inventories if sales hold strong. Moreover, the terms in the one settlement will probably be reflected in continued large increases in machinery prices next year. Current es-

Four-wheel drive tractors paced retail sales through August 1979

	Units sold Jan.-Aug. 1979		Ending August inventories		Inventory- to-sales ¹ ratio
	Number (thous.)	Change ² (percent)	Number (thous.)	Change ² (percent)	
Two-wheel drive (by horsepower rating)					
40-59	20,837	- 3.0	17,494	16.5	59.6
60-79	15,317	8.9	11,241	- 7.6	51.2
80-99	9,843	- 1.3	5,477	-21.9	37.7
100-119	10,517	2.0	6,980	- 0.8	43.3
120-139	18,425	3.4	10,292	- 2.3	36.7
140-159	7,984	- 8.9	5,035	- 0.5	40.0
160 plus	6,327	17.5	6,002	29.9	61.5
Total	89,250	1.7	62,521	1.8	47.3
Four-wheel drive	6,933	29.6	5,839	11.6	56.5
All farm tractors	96,183	3.3	68,360	2.5	47.9

¹Sales during the September 1978 through August 1979 period.

²From previous year.

SOURCE: Farm and Industrial Equipment Institute.

timates by USDA indicate farm machinery prices will increase 10 percent next year, roughly matching the increase of this year.

Preliminary FIEI data on tractor and equipment sales since August suggest tractor sales have weakened, while sales of most other major machinery items have strengthened. In light of this year's generally favorable farm commodity prices and the likelihood that they will continue into next year, machinery and equipment expenditures by farmers are expected to average above year-earlier levels at least through the early months of 1980. Crop farmers' incentives to buy equipment were enhanced with the recent completion of the record harvest without an accompanying serious weakening in crop prices. The absence of set-aside requirements in next year's farm programs and the prospects for larger plantings could also strengthen demand. Moreover, earnings of dairy farmers have been record large this year and are expected to rise sharply next year.

The cost and availability of credit to farmers over the next several months, however, may have a retarding impact on sales. Moreover, if USDA projections of a one-fifth decline in farm income next year prove accurate, farm equipment purchases may soften appreciably. This, in turn, could prompt manufacturers to try to stimulate sales through the use of such incentives as price discounts, cash rebates, or interest-free loans for specified periods.

Don A. Langford
Agricultural Economist

Selected agricultural economic developments

Subject	Unit	Latest period	Value	Percent change from	
				Prior period	Year ago
Index of prices received by farmers	1967=100	October	236	- 2.1	+ 8
Crops	1967=100	October	222	- 1.3	+10
Livestock	1967=100	October	248	- 2.7	+ 7
Index of prices paid by farmers	1967=100	October	256	+ 0.8	+14
Production items	1967=100	October	255	+ 0.8	+15
Producer price index* (finished goods)	1967=100	October	224	+ 1.5	+12
Foods	1967=100	October	227	- 0.5	+ 7
Processed foods and feeds	1967=100	October	225	- 0.4	+ 8
Agricultural chemicals	1967=100	October	224	+ 2.7	+10
Agricultural machinery and equipment	1967=100	October	239	+ 0.9	+ 9
Consumer price index** (all items)	1967=100	October	225	+ 0.9	+12
Food at home	1967=100	October	235	+ 0.3	+ 9
Cash prices received by farmers					
Corn	dol. per bu.	October	2.42	- 3.6	+23
Soybeans	dol. per bu.	October	6.21	- 8.8	- 8
Wheat	dol. per bu.	October	3.90	+ 0.8	+30
Sorghum	dol. per cwt.	October	4.03	- 5.0	+20
Oats	dol. per bu.	October	1.30	- 0.8	+20
Steers and heifers	dol. per cwt.	October	68.70	- 2.8	+22
Hogs	dol. per cwt.	October	34.00	- 9.3	-33
Milk, all sold to plants	dol. per cwt.	October	12.60	+ 1.6	+12
Broilers	cents per lb.	October	21.1	- 9.8	-14
Eggs	cents per doz.	October	52.2	- 4.7	- 1
Income (seasonally adjusted annual rate)					
Cash receipts from farm marketings	bil. dol.	3rd Quarter	130	- 0.8	+19
Net realized farm income	bil. dol.	3rd Quarter	27	-19.7	+ 8
Nonagricultural personal income	bil. dol.	October	1,930	+ 1.0	+11

*Formerly called wholesale price index.

**For all urban consumers.

**FEDERAL RESERVE BANK
OF CHICAGO**
Public Information Center
P. O. Box 834
Chicago, Illinois 60690
Tel. no. (312) 322-5112



FIRST-CLASS MAIL
U.S. POSTAGE
PAID
Chicago, Ill.
Permit No. 1942

HEAD-DEPT. OF AGRIC. ECON. AGL
INSTITUTE OF AGRICULTURE
UNIVERSITY OF MINNESOTA
ST. PAUL, MINNESOTA 55101