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MILK PRODUCTION will rise to a new high this year. During the first ten months, milk production exceeded the year-earlier level by about 3 percent. For the entire year, it appears that milk production will rise to 132 billion pounds, surpassing last year's record of 128 billion pounds. Increased production, higher average milk prices and recent declines in feed costs held earnings for dairymen at a fairly high level this year even though the support price for milk has not risen since October of 1980. The outlook for dairy earnings in 1982, however, is somewhat clouded pending the outcome of the prolonged debate over the farm legislation.

Output per cow in the first ten months of 1981 was up 2.4 percent from the same period a year ago. However, the gain in output per cow slowed considerably since spring. Gains in output per cow reflected continued improvement in dairy herd productivity and somewhat heavier feeding of grains and concentrates earlier in the year. Since the spring of 1980, milk cow numbers have exceeded year-earlier levels. The number reported in October of this year—10.9 million—was nearly 1 percent higher than a year ago. An increased number of replacement heifers entering the milking herd has more than offset cullings. In the July inventory of all cattle, the ratio of milk cow replacements—measured as the number of replacement heifers per 100 milk cows—was the largest in recent years.

Milk production is up in all District states. In Wisconsin—which accounts for about a fifth of U.S. milk production—production was up 2.1 percent in the first ten months of this year over year-earlier levels. Increases in the other four District states ranged from 1.2 percent in Michigan to 4.1 percent in Iowa. Iowa's 2 percent gain in milk cow numbers from year-ago levels was the largest increase in the District.

Increased production and higher prices for milk boosted gross earnings of dairymen this year. Through November, milk prices received by dairy farmers averaged 6 percent higher than the year before. For the year milk prices are likely to average $13.75 per hundredweight compared with $13 per hundredweight in 1980. The rise in milk prices along with the higher production means that cash receipts for all of 1981 may approximate $18.0 billion, a 9 percent increase from $16.6 billion in 1980. Net returns to dairy farmers in 1981 may be down slightly from the high year-earlier level. But recent declines in dairy ration costs, which are now a tenth below year-ago levels, have stemmed any erosion in net earnings. Feed accounts for 40 to 50 percent of the production costs in a typical dairy operation.

While milk prices are up, the spread between prices received by dairy farmers this year and last year has narrowed considerably in recent months. The support price for milk, except for a brief period this fall, has not changed in over a year. As a result, the price-depressing impact of an imbalance between production and commercial disappearance has become more apparent. In October of 1980, the support price was raised to the required 80 percent of parity, or $13.10 per hundredweight. The required semi-annual adjustment due in April of 1981 was overridden by the Congress. Upon expiration of the four-year dairy support provisions in September, the support price was temporarily raised to $13.49 per hundred-weight. But special legislation shortly thereafter reestablished the $13.10 support level, which currently represents about 73 percent of parity.

Even though the semi-annual rise in the support price was overridden in April, substantial purchases of manufactured dairy products by the government have still been necessary in light of sluggish commercial disappearance. Commercial disappearance of milk and dairy products in the first three quarters of 1981, at 89.6 billion pounds, was up only 1 percent from year-ago levels. Commercial disappearance lagged year-ago levels in the first quarter but rose above year-earlier levels in the second and third quarters. A 4 percent rise for American and other cheeses accounted for the increase in disappearance. Disappearance of other dairy products lagged year-ago levels during the three quarters.

With production continuing to outstrip commercial disappearance this year, government purchases of manufactured dairy products in the first three quarters of 1981 rose to 11.2 billion pounds milk equivalent, more than 50 percent higher than in the same period a year ago. For the entire 1980/81 milk marketing year that ended in September, it is estimated that net government purchases of dairy products rose to 12.7 billion pounds at a cost of $2 billion. Both measures are new highs in the history of the dairy support program. Net government purchases in the preceding year were 8.2 billion pounds and cost $1.3 billion.

Although the quantity of recent government purchases is not that far out of line with the past history of the dairy support program, the dollar expenditures are unparalleled. Between 1949 and 1980, USDA removals of dairy products varied from a few million pounds a year to over 11 billion pounds. In contrast, USDA expenditures for the dairy support program ran, on average, $340 million during the 1970s, $350 million during the 1960s, and $240 million in the 1950s. As a result, the dairy support program has drawn considerable attention in the debate over pending farm legislation. The Congress has yet to present a farm bill for presidental approval, but it has arrived at a compromise bill that is to be voted on by both Houses of Congress. This compromise would establish minimum dairy support prices in each of the next four fiscal years. For fiscal 1982—the current year—the support price remains at $13.10, but the floors in later years are: $13.25 in fiscal 1983, $14.00 in 1984, and $14.60 in 1985. However, with regard to the high governmental outlays, the compromise will allow higher support prices after 1982 if certain criteria are met. For example, if at the end of fiscal 1982 (September), net government purchases are expected to be less than 4 billion pounds milk equivalent, then the minimum support price would be set at 75 percent of parity. If purchases are expected to exceed 4 billion pounds, but the government's cost is expected to be less than $1 billion, the minimum support price could be set at 70 percent of parity.

The outlook is strongly influenced by these prospective changes in the support price. If the current support price extends through September 1982, then milk prices are likely to hold very near year-earlier levels at least through the first half. Consequently year-to-year gains in milk prices could narrow considerably from this year's 6 percent. With little increase in milk prices, operating returns to dairy farmers could be undermined next year by proportionally larger increases in production costs. However, prospects are strong that feed costs will average lower in 1982 than this year and, in turn, hold the line on the rise in production expenses. As a result, earnings to dairy farmers may remain favorable.

Milk per cow is expected to continue its long-term uptrend in 1982. But the likelihood that milk prices will not change much at least through next year casts some doubt on any faster rise in milk cow numbers—especially toward the second half of next year. Heavier culling of marginally producing cows could result if cull cow prices are higher later next year. But the inventory of replacement heifers is still quite large, and should produce a net gain in cow numbers similar to that experienced this year. Milk production will likely increase in 1982 but the increase may hold near year-earlier levels. With little improvement in milk prices added to the increase in production, this means that receipts to dairy farmers may rise only 3 to 7 percent in 1982.

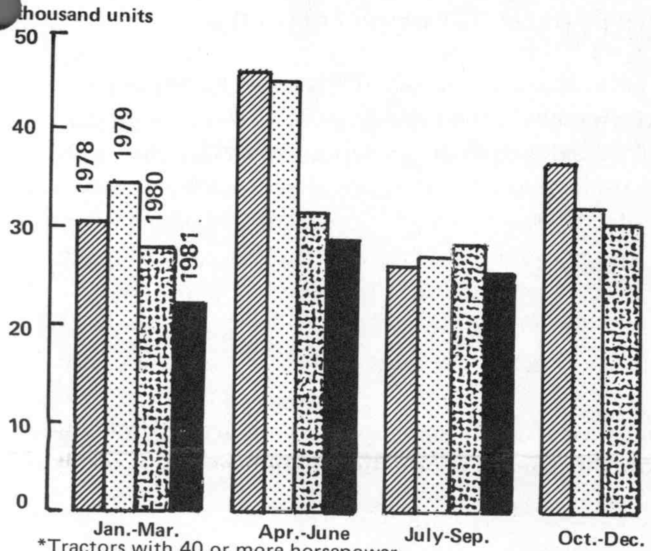
Jeffrey Miller

FARM EQUIPMENT SALES continued soft in recent months, extending a deep slump that began in late 1979. Figures compiled by the Farm and Industrial Equipment Institute show that unit retail sales of farm tractors with 40 or more horsepower in the four months ending in October were down 15 percent from a year earlier. During the same four months, unit sales of self-propelled combines—which had shown signs of recovering through mid-summer—were down 5 percent from the year before. The continuing softness in sales has resulted in abnormally high inventories among dealers and manufacturers and triggered aggressive promotional sales campaigns in recent weeks. While these campaigns may temporarily improve sales, the general sluggishness will likely extend well into next year.

The prolonged sluggishness in farm equipment sales is readily apparent in comparisons with the strong performance in 1979. Tractor sales through October of this year were down 14 percent from a year ago and down 29 percent from the first ten months of 1979. Sales of the large four-wheel drive tractors—which account for nearly a tenth of all tractors with 40 or more horsepower—were not as depressed, but were still down 18 percent from two years ago. Unit sales of combines through October were off 1 percent from last year and off 25 percent from two years ago.

1981 trends in District states vary widely. But overall, the past two-year slide has been somewhat steeper in the five District states than for other states. During the first nine months of this year (October figures are not yet available by states) tractor and combine sales in District states were off 33 and 27 percent, respectively, from the pace two years earlier. Among individual District states, the two-year slide in tractor sales ranged from 16 percent in Michigan to about 40 percent in Indiana and Iowa. Combine sales in Wisconsin, although not as strong as a

Quarterly retail sales of farm tractors*



*Tractors with 40 or more horsepower.
Source: Farm and Industrial Equipment Institute.

year ago, are up 13 percent from the first nine months of 1979. The two-year comparisons of combine sales in the other District states, however, show declines ranging from 18 percent in Iowa to 46 percent in Indiana. District states typically account for a third of annual combine sales and a fourth of annual tractor sales in the United States.

Despite periodic cutbacks in production, the continued sluggishness in sales has resulted in abnormally high inventories of farm equipment. Unit inventories of tractors and combines at dealers and manufacturers in September were about 14 percent higher than the year before. The inventory-to-sales ratio—considering sales in the 12 months ending September—stood at .75 for both tractors and combines. In other words, inventories were equivalent to three fourths of the sales over the past 12 months. A year ago, the inventory-to-sales ratio was .6 and more typically it is about .5 in September. To counter the costly carrying charges associated with the abnormally large inventory, most manufacturers have launched aggressive sales campaigns in recent weeks and have announced extended plant shut-downs and/or curtailed production schedules for the weeks ahead.

The prolonged slump in farm equipment sales stems from several factors. But the overriding factors are the depressed farm earnings and the high interest rates of the past two years. Cash receipts from farm marketings—a variable that frequently correlates well with farm equipment sales—have risen less than 9 percent over the past two years, down sharply from the two-year rise of 37 percent from 1977 to 1979. Production expenses have soared, dropping net farm income a third or more during the past two years. On a per farm basis, the real purchasing power of net farm earnings the past two years has been the lowest since the late 1950s and down nearly 40 percent from the average of the 1970s. Compounding the impact of the distressed earnings on farmers' capital expenditures, interest rates on farm loans the past couple of years have averaged more than 50 percent higher than in 1978-79, greatly escalating the cash required to purchase capital equipment with debt financing.

Other factors have contributed to the slump. The widespread drought in 1980 accentuated the sales slump in the affected areas. And higher equipment prices have compounded the slide. Various measures show farm equipment prices are up more than a tenth from a year ago, although these measures may not accurately reflect the abnormally widespread practices of price discounting and subsidized financing now offered by manufacturers.

The outlook for farm equipment sales depicts little significant improvement over the next few months. Recent price discounting practices and attractive financing alternatives may have cushioned some of the slide in unit sales during the latter part of this year. And farmers' cash-flows have been, or soon will be, enhanced by a substantial movement of grain under CCC loan and by pending deficiency payments to wheat and barley producers. A continuation of the recent declines in market rates of interest and the phasing in of new tax provisions in the year ahead could offer some additional stimulus to farm equipment sales.

Despite these supportive elements, the depressed farm earnings picture will likely remain a dominant factor holding capital expenditures by farmers in check for the next several months. Analysts see little likelihood of higher farm earnings next year and many are anticipating a further decline in earnings. Because the earnings squeeze has prevailed for so long, it is doubtful that the farm equipment picture will improve significantly without concrete evidence of an upturn in farm earnings.

Gary L. Benjamin

Selected agricultural economic developments

Subject	Unit	Latest period	Value	Percent change from: Prior period	Percent change from: Year ago
Farm finance					
Total deposits at agricultural banks†	1972-73=100	November	242	+ 1.0	+ 8
Total loans at agricultural banks†	1972-73=100	November	269	– 0.7	+ 6
Production credit associations					
Loans outstanding					
United States	mil. dol.	October	21,884	– 1.9	+13
Seventh District states	mil. dol.	October	4,590	– 1.1	+14
Loans made					
United States	mil. dol.	October	2,305	+ 5.4	– 4
Seventh District states	mil. dol.	October	434	– 3.4	– 7
Federal land banks					
Loans outstanding					
United States	mil. dol.	October	42,702	+ 1.4	+21
Seventh District states	mil. dol.	October	10,194	+ 1.3	+23
New money loaned					
United States	mil. dol.	October	699	+ 3.5	+39
Seventh District states	mil. dol.	October	148	–10.8	+30
Interest rates					
Feeder cattle loans††	percent	3rd Quarter	18.15	+ 5.9	+29
Farm real estate loans††	percent	3rd Quarter	16.93	+ 6.5	+25
Three-month Treasury bills	percent	12/3-12/9	11.67	+ 1.0	–28
Federal funds rate	percent	12/3-12/9	12.04	–14.1	–36
Government bonds *(long-term)*	percent	12/3-12/9	13.19	– 4.1	+ 5
Agricultural trade					
Agricultural exports	mil. dol.	October	3,925	+22.6	+ 7
Agricultural imports	mil. dol.	October	1,455	+13.8	+ 2
Farm machinery sales[P]					
Farm tractors	units	October	11,607	+60.1	–25
Combines	units	October	5,593	+101.6	– 4
Balers	units	October	1,041	– 6.0	– 8

†Member banks in Seventh District having a large proportion of agricultural loans in towns of less than 15,000 population.

††Average of rates reported by District agricultural banks at beginning and end of quarter.

[P]Preliminary.

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

FEDERAL RESERVE BANK OF CHICAGO
AGRICULTURAL LETTER

MR. PAUL R. HASBARGEN AGL
DEPT. OF AG. & APPLIED ECON.
UNIVERSITY OF MINNESOTA
231 CLASSROOM BLDG.
ST. PAUL, MINNESOTA 55108