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AgLetter

MILK PRODUCTION UP THIS YEAR

Milk production has exceeded year-earlier levels since last fall, recovering from the 1 percent decline that occurred in the 1995/96 dairy marketing year. The gains in milk production widened considerably during the spring and summer months as milk per cow recorded large increases relative to the depressed levels of the year before. The inventory of milk cows on farms still lags the year-ago level, with the decline especially apparent among states comprising the Seventh Federal Reserve District. Milk prices, although trending upward this summer, fluctuated widely over the past year. Nevertheless, the $13 per hundredweight average price estimated for September was far short of the all time record high of $16.50 recorded one year earlier. The resulting squeeze on earnings and forthcoming changes in the dairy support program are no doubt causing many dairy farmers to exit the industry.

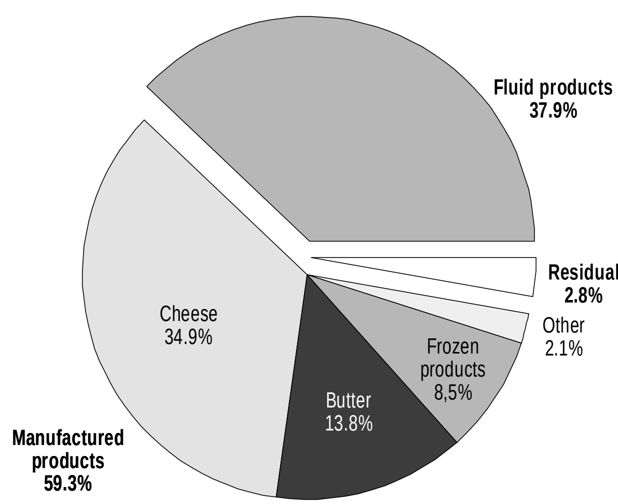
September marked the twelfth consecutive month in which milk production (daily average basis) in major dairy states exceeded the year-earlier level. During that span, which coincides with the 1996/97 dairy marketing year, milk production nationwide reached 156.5 billion pounds. That marked a 1.6 percent rise from the previous marketing year and was 0.6 percent above the former high set two years ago. The year-over-year rise was especially large during the summer months—averaging 3.6 percent from June through September—as milk per cow recovered to more typical, trend-adjusted levels. A combination of high feed costs and poor quality hay and forage triggered a rare downturn in milk per cow during the spring and summer quarters of last year. Largely because of that downturn, the year-over-year rise in milk per cow averaged more than 4 percent during the last two quarters.

Milk cow numbers continue to trend below year-ago levels. Among the 20 major dairy states tracked monthly by the U.S. Department of Agriculture, the number of milk cows in September was estimated to be down 0.7 percent from a year ago and down 1.6 percent from two years ago. Stable-to-declining dairy cow numbers characterize a large majority of the major states, including the five states—Illinois, Indiana, Iowa, Michigan, and Wisconsin—that comprise the Seventh Federal Reserve District. The inventory of dairy cows in District states in September was down more than 3 percent from a year ago and down 6 percent from two years ago.

The decline in dairy cow numbers evident in most states is partially countered by an uptrend in a handful of other states. Among the major dairy states, gains in cow numbers this year are occurring in Arizona, California, Florida, Idaho, and New Mexico. Among those five "growth states", the inventory of dairy cows in September was up nearly 4 percent from a year ago and up 6 percent from two years ago.

Other comparisons between the five District states and the five growth states provide a reminder of the Midwest's problems in maintaining its share of milk production while the industry continues to go through a major restructuring. For example, the inventory of milk cows in District states in September was 7 percent more than that for the growth states. Yet milk production in District states in September was 11 percent less than in the growth states. Those differences translate into 20 percent more milk per cow in the five growth states as compared to the five District states. The added output per cow reflects the greater production efficiencies typically associated with larger dairy herds which are more prevalent in the growth states. The average dairy farm in District states last year had about 55 cows. In comparison, the average dairy farm in the growth states had nearly 340 cows. The ongoing restructuring in

Utilization of U.S. milk supply, 1996
(154.5 billion lbs.)



Source: U.S. Department of Agriculture.

the dairy sector is reflected in USDA estimates showing the number of dairy farms declined by half over the last ten years while the number of dairy cows retreated by a more modest 13 percent. As the structure of the industry shifted toward larger dairy farms, the share of U.S. milk production coming from farms in District states declined from 27 percent a decade ago to 23 percent so far this year. During the same period, the share of milk produced in the five growth states increased from 17 percent to nearly 27 percent so far this year.

The upturn in milk production this year accommodated a modest recovery in commercial disappearance of milk. It also led to a rebuilding of stocks and triggered renewed price support purchases of manufactured dairy products by the Commodity Credit Corporation (CCC). Continued economic growth has helped to under-pin consumer demand for dairy products. However, high retail prices during the early part of this year may have trimmed the recovery in the amount of milk absorbed through commercial market channels. Despite fluctuations in the monthly year-over-year trends, commercial disappearance of milk in all forms (milkfat basis) during the first seven months of this year was up about 1 percent. In terms of production of manufactured dairy products, the pattern has been somewhat mixed. Production of selected frozen dairy products through August was down slightly, both from the year before and from two years ago. Butter production, after falling considerably last year, continued to lag year-earlier levels during the winter months. But subsequent gains pulled butter production through August about even with the lower year-ago level. On the other hand, nonfat dry milk production (for human use) through August was up about 16 percent from the year-earlier pace but still short of two years ago. With continuing growth from new plants, total cheese production through August was up about 2 percent from last year's pace and nearly 8 percent above the same 8-month period in 1995.

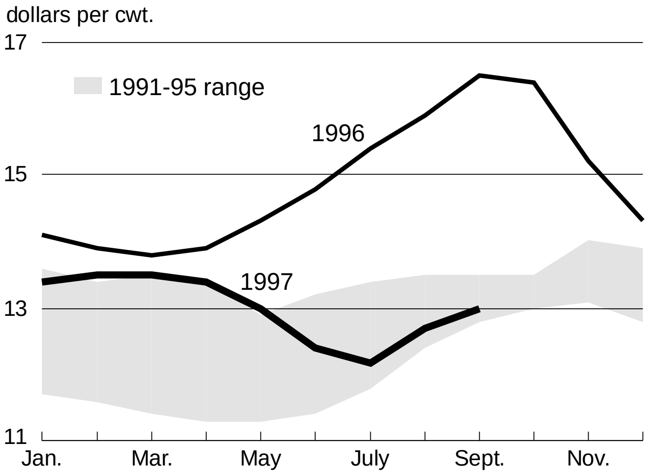
With milk production rebounding more than commercial disappearance, stocks of most manufactured dairy stocks turned up this year. Commercial stocks of American cheese as of the end of August were a fifth higher than last year and more than a fourth above the last five year average. Similarly, stocks of nonfat dry milk were 2.3 times the very low level of last year and about a third above the prior four year average for August. The rebuilding in stocks has weighed on prices of some components within the dairy complex, triggering larger government price support purchases. Last year, CCC net removals of milk from commercial market channels through purchases of manufactured dairy products fell to almost inconsequential levels as reduced milk supplies led to tight product markets. Net removals turned up early this year but remained very low relative to historical standards through the first half. However, removals continued to rise somewhat contra-seasonally during the summer quarter, reaching a ten-year high on a milk equivalent skim solids basis and a five-year high on a milkfat basis.

The upturn in government price support purchases adds to the debate on the likely consequences when the current dairy price support program expires in the year 2000. The Farm Bill legislation enacted last year required a scaling down in the support price of milk used for manufactured products from the then prevailing $10.35 per hundredweight to $10.20 this year, $10.05 in 1998, and $9.90 in 1999. Thereafter, the CCC's current practice of purchasing dairy products to maintain the support price during periods of excess production will be replaced by a loan program designed to help processors carry an inventory of dairy products. The loan rates (the amount of loan funds the CCC will extend per unit of dairy product) will be set in a manner that will reflect an equivalent $9.90 support price for milk. However, the new support program is not likely to be as effective as the current program. Although the loan will offer a subsidized interest rate, the processor—unlike under the current program—must cover all charges associated with carrying the inventory. Moreover, the maturity of the loan, unless granted an extension of up to one year, may not extend beyond the end of the fiscal year in which the loan was made. More importantly, the new CCC dairy loan program will only offer full recourse loans which require repayment in full plus interest. (Non-recourse loans, which are used by the CCC to support grain prices, give the borrower the option of transferring the commodity collateralizing the loan to the CCC as payment in full). For these reasons, the forthcoming CCC dairy loan program is not likely to be as successful as the current purchase program in making the support price for milk an effective floor price during periods of excess production.

The developments of the past year or so left many dairy farmers with some difficult decisions. The tight conditions that led to record-high milk prices a year ago were short-lived. The subsequent decline in milk prices proved steeper than many observers had expected and it coincided with continued high feed costs and tight supplies of good quality hay and forage. The resulting downturn in dairy sector earnings hit many dairy farmers hard. Yet milk production rebounded, paced by continued growth in a few states. Clearly, some producers were willing to expand despite what proved to be disappointing dairy markets for many producers.

The changing market conditions of the past year, the downscaling in the support price of milk through 1999, and the likelihood the new dairy support program starting in 2000 will be less effective in maintaining the support price during periods of surplus production add to the ongoing

Milk pices received by farmers



Source: U.S. Department of Agriculture.

restructuring in the dairy industry. Many, typically smaller, dairy farmers continue to exit the industry while a few others are expanding in hopes of achieving lower per unit costs of production. This restructuring continues in an environment where the growth in milk per cow historically has exceeded the growth in market demand for milk, resulting in a steady decline in the number of dairy cows. A domestic market whose needs can be met with fewer dairy cows held by lower-cost producers implies the restructuring process will continue, at least until export markets open up more and the U.S. is able to establish a foothold as a low-cost producer for world dairy markets.

TRACTOR AND COMBINE SALES STILL RISING

Reports from the Equipment Manufacturers Institute show the uptrend in unit retail sales of farm tractors and combines gained momentum this summer. Paced by especially large gains in both July and September, unit retail sales of farm tractors (40 or more horsepower) in the third quarter were up 22 percent from the same period a year ago. The strong third-quarter performance pulled the year-to-date gain for farm tractors up to 14 percent. The rise is especially noteworthy for the large, four-wheel drive tractors which recorded a year-to-date gain of more than a third through September.

Unit sales of self-propelled combines also surged this summer, more than reversing a slight first-half decline. During the seasonal upturn this summer, unit retail sales of combines exceeded the year-earlier pace by 30 percent. The large summer increase boosted year-to-date combine sales 10 percent above last year's performance.

The strong summer gains increase the likelihood that 1997 will mark the fifth consecutive year of an upturn in tractor and combine sales. And based on the rise in combined tractor and combine sales through September, this year's rise may be larger than any of the previous four. Several factors no doubt contribute to the prolonged upturn. In particular, farm sector earnings last year rose to a new high, with crop farmers capturing most of the rise. The latest estimates from the U.S. Department of Agriculture indicate that net cash farm income in 1996 reached $59.9 billion, up from $51.2 billion the year before and the 1990-94 annual average of $53.6 billion. Most of last year's rise in net cash farm income came from a surge in cash receipts from crop sales, reflecting the tight world grain markets and the record-high feed grain prices that characterized much of last year. And unlike in some past years, the fixed government price support program transition payments enacted with last year's Farm Bill held total government payments to farmers in 1996 at a fairly high level despite the strong rise in crop receipts. Together, crop receipts and government payments to farmers totaled $116.7 billion last year, up from $108.0 billion the previous year and the 1990-94 average of $95.3 billion.

Other factors helping to sustain and strengthen the rise in farm tractor and combine sales include the second consecutive year of expanded crop plantings and, in most areas, expectations of above average harvest prospects. Nationwide, the acreage devoted to principal crops in 1997 is estimated to be 334 million acres, unchanged from last year but up 5 percent from two years ago. In addition to the large acreage base, crop prospects during most of the 1997 growing season held up reasonably well, providing some added incentives for farmers to upgrade their harvesting equipment. A bumper winter wheat harvest in the Southern Plains probably helped firm combine sales in that region. The same is likely true with respect to the record soybean harvest now drawing to a close here in the Midwest.

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SELECTED AGRICULTURAL ECONOMIC INDICATORS

	Latest period	Value	Percent change from: Prior period	Year ago	Two years ago
Prices received by farmers *(index, 1990–92=100)*	September	108	0.0	–7	3
Crops *(index, 1990–92=100)*	September	115	–1.7	–8	0
Corn *($ per bu.)*	September	2.47	–1.2	–30	–8
Hay *($ per ton)*	September	101.00	0.0	10	25
Soybeans *($ per bu.)*	September	7.02	–3.2	–10	17
Wheat *($ per bu.)*	September	3.62	1.7	–17	–20
Livestock and products *(index, 1990–92=100)*	September	99	0.0	–6	6
Barrows and gilts *($ per cwt.)*	September	51.70	–7.5	–6	5
Steers and heifers *($ per cwt.)*	September	66.90	0.5	–1	8
Milk *($ per cwt.)*	September	13.00	2.4	–21	2
Eggs *(¢ per doz.)*	September	69.6	9.6	–8	5
Consumer prices *(index, 1982–84=100)*	September	161	0.2	2	5
Food	September	158	0.2	2	6
Production or stocks					
Corn stocks *(mil. bu.)*	September 1	884	N.A.	108	–43
Soybean stocks *(mil. bu.)*	September 1	132	N.A.	–28	–61
Wheat stocks *(mil. bu.)*	September 1	2,073	N.A.	20	10
Beef production *(bil. lb.)*	August	2.22	–1.5	–2	–4
Pork production *(bil. lb.)*	August	1.35	–0.1	–3	–10
Milk production* *(bil. lb.)*	September	10.8	–4.2	3	2
Receipts from farm marketings *(mil. dol.)*	June	13,382	0.8	–10	1
Crops**	June	5,738	0.2	–11	–8
Livestock	June	7,618	1.2	1	10
Government payments	June	26	30.0	–97	–84
Agricultural exports *(mil. dol.)*	July	3,998	–3.2	–10	1
Corn *(mil. bu.)*	July	97	–13.9	–34	–49
Soybeans *(mil. bu.)*	July	23	–28.0	–50	–44
Wheat *(mil. bu.)*	July	95	41.3	–14	2
Farm machinery sales *(units)*					
Tractors, over 40 HP	September	6,337	30.0	33	39
40 to 100 HP	September	4,084	14.9	25	27
100 HP or more	September	2,253	70.7	51	69
Combines	September	1,177	82.2	31	34

N.A. Not applicable
*20 selected states.
**Includes net CCC loans.

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