



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.*

Milk production turns up

After 13 months of year-over-year declines, milk production in the 21 major dairy states in August rose above the year-earlier level. The turnaround provides further evidence that the excess production capacity in the U.S. dairy sector, while down considerably from a few months ago, continues despite sustained strength in commercial market sales and despite the windup of the herd-liquidation phase of the Milk Termination Program (MTP). For the year ahead, a probable cut in the support price of milk may further reduce the excess capacity. As yet, however, it is difficult to project the amount of the likely price support cut.

The whole-herd Milk Termination Program was authorized by the signing of the Food Security Act in December 1985. It was implemented in April of 1986 after bids from about 14,000 dairy farmers, accounting for 8.7 percent of all milk marketed by dairy farmers in 1985, were accepted for participation in the program. The accepted bids ranged from \$3.40 to \$22.50 per hundredweight of milk base and represented the government compensation rate that participants were willing to accept in exchange for liquidating their dairy herds and staying out of dairy farming for five years. The total government cost of the program over the 5-year period will be \$1.8 billion, with about \$700 million of that funded by special assessments that have been collected on all milk marketings during the first 18 months of the program. The liquidation of participants' dairy herds, through shipments to slaughter markets or for export, was to be completed by September of this year. Overall, some 1.5 million head of dairy cattle were liquidated, including 950,000 cows, or about 8.5 percent of all dairy cows at the start of the program. The Milk Termination Program has contributed to a marked decline in the excess production capacity in the dairy sector. But because of favorable milk-feed price ratios that have led to gains in productivity per cow and cow numbers among nonparticipant dairy farmers, the MTP has not achieved the lasting cuts that many had envisioned.

With the recent upturn, milk production in the 21 major states in August was 1 percent above the year-earlier level and less than 2 percent below two years earlier. (The 21 states account for 85 percent of all U.S. production). The August upturn stemmed from a marked widening in the year-over-year gain in milk per

cow and a further slowing of the decline in cow numbers. Output per cow in August was up 3.4 percent from a year ago, well above the gains (ranging from 1.5 to 2.8 percent) recorded during the first seven months of this year. Milk cow numbers in August were down 2.3 percent from the same month a year ago, less than half the rate of decline recorded during the early part of this year. Moreover, when the 21-state cow number is adjusted to approximate the U.S. total, it would appear dairy cow numbers nationwide are down about 6 percent from the level that prevailed prior to the start of the MTP. Allowing for some modest herd liquidations that might have been completed by MTP participants in September, this would suggest that dairy cow numbers on farms that did not participate in the MTP are up 2 percent or more since the start of the program.

While milk production has now turned up from year-earlier levels, earlier declines point to a slight reduction for all of this year. In September, the USDA projected that milk production in 1987 would approximate 141.7 billion pounds, 1.6 percent less than the record high of last year. But with the upturn in production coming earlier than expected, and with cow numbers among non-MTP participants higher than earlier thought, production this year may exceed the recent estimate.

While the MTP was helping to reduce production over the past several months, the excess production capacity in the U.S. dairy sector was also declining because of further growth in commercial sales of milk (in fluid and dairy product forms). This is reflected in USDA figures on commercial disappearance of milk which show year-over-year gains of 3 percent during the first seven months of this year. Since preliminary evidence shows steady growth into the summer months, USDA analysts are projecting a near 3 percent rise in commercial disappearance for all of this year. If that is the case, it will mark the fourth consecutive year of relatively large annual gains (ranging from 2.6 to 3.3 percent) in commercial disappearance of milk. In comparison, the annual rise in commercial disappearance from 1974 to 1983 averaged about 1 percent and never exceeded 2.3 percent.

Reflecting the cuts in the excess production capacity of the dairy sector, CCC price-support purchases of manufactured dairy products have declined sharply. Through August of this year, net CCC purchases re-

moved the equivalent of 4.5 billion pounds of milk from commercial market channels, down 55 percent from purchases during the same period a year earlier. For all of this year, USDA analysts are projecting net CCC purchases of about 5 billion pounds milk equivalent, the lowest for any year since 1979 and far below the 1983 peak of 16.8 billion pounds. But with milk production now rising, initial USDA projections for next year suggest that a cut in the support price of milk will be needed if CCC price support purchases are to decline further.

Over the past few months, the support price of milk has been \$11.35 per hundredweight for manufacturing grade milk. As of October 1, current legislation requires that the support price be lowered by 25 cents per hundredweight. Simultaneously the 25 cent producer assessment to help fund the MTP will end, leaving the effective support price unchanged at \$11.10 per hundredweight.

With respect to future milk support prices, two critical issues could come into play over the next three months. The most immediate pertains to the targeted federal budget deficit for fiscal 1988 under the revised Gramm-Rudman legislation. Unless in the interim Congress adopts sufficient cuts to meet the target, "across-the-board" spending cuts could be imposed in November. If imposed, an across-the-board cut could be applied directly to the milk support price, or—with special legislation—be accomplished through some other means that would lower the effective support price by a smaller amount. When a similar situation arose in fiscal 1986, Congress avoided having to impose a 4.3 percent direct cut in the support price by instead legislating a special assessment of 12 cents per hundredweight on all milk marketed by dairy farmers during the latter half of that fiscal year. If across-the-board Gramm-Rudman cuts are imposed for fiscal 1988, it is as yet unknown which approach would be taken to apply those cuts to the dairy program. Likewise, the amount of the cut in the effective support price that would occur under either option is unknown at this time.

The second critical issue pertains to existing legislation that mandates a 50 cent per hundredweight cut in the milk support price on January 1 if prevailing conditions foreshadow that net CCC purchases in 1988 would otherwise exceed 5 billion pounds. Alternatively, the support price must be raised 50 cents if CCC purchases in 1988 are expected to drop below 2.5 billion pounds. The final determination on projected 1988 CCC purchases will be made in December when presumably the effects of any interim changes in the effective support price that might arise because of Gramm-Rudman can be included in the analysis. Regardless, it is highly doubtful that a January 1 increase

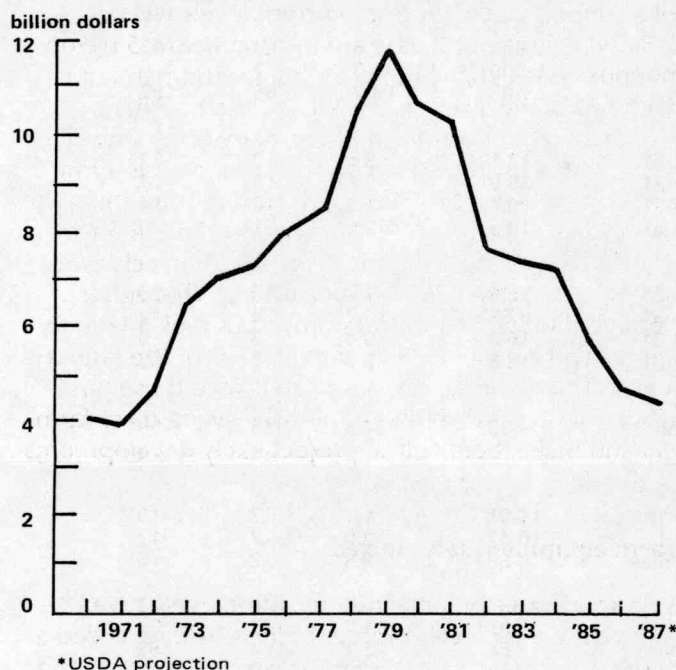
in the support price will be triggered. Alternatively, preliminary USDA calculations suggest that some sort of a support price cut from current levels will be needed if CCC purchases are to drop below 5 billion pounds. As such, whether a Gramm-Rudman cut is imposed in the interim, and—if so—the manner in which it would be applied to the dairy program will be critical issues with respect to the January 1 determination. Several possibilities exist for accomplishing the probable support-price cut needed to reduce purchases below 5 billion pounds. It could be achieved strictly through a Gramm-Rudman cut, through a combination of a Gramm-Rudman cut plus a January 1 cut of 50 cents, or solely on the basis of the January 1 cut. The uncertainties associated with these possibilities add considerably to the risks facing dairy farmers and make it difficult to project likely developments in the dairy sector next year.

Farm equipment sales mixed

Unit retail sales of farm tractors, after lagging well below year-earlier levels during the first half, recorded a surge in July and August. Reports from the Farm and Industrial Equipment Institute show that unit retail sales of farm tractors from January to June were off 12 percent from the pace of the year before. The decline was far more pronounced when sales of tractors with less than 40 horsepower—often considered more typical of garden tractors—are excluded. Among farm tractors with 40 or more horsepower, unit retail sales during the first half were off 23 percent from the year before and off 74 percent from the pace recorded in 1979, the last strong year for farm tractor sales. Since June, however, tractor sales have rebounded sharply. All tractor sales in July and August were up 28 percent from the year before. Moreover, the gain among tractors with 40 or more horsepower was 61 percent, marking the strongest performance for that two-month period since 1983.

The recent upturn in tractor sales has been encouraging for an industry hard hit by the farm sector problems of the 1980s. However, most observers believe that the surge stems primarily from special factors rather than a firming in demand. In particular, some manufacturers offered extraordinary price discounts this summer in an effort to reduce burdensome inventories. Another possible factor pertains to the new federal income tax depreciation allowances that go into effect this year. First-year depreciation allowances are significantly curtailed for taxpayers who concentrate more than 40 percent of their annual capital expenditures in the final 3 months of the year. This new provision may have shifted some normal fourth-quarter sales—historically a seasonally high period for farm equipment sales—into the third quarter.

Capital expenditures for farm machinery and equipment expected to decline again this year



While tractor sales surged this summer, combine sales continued far below year-earlier levels and sales of some haying and forage equipment, which had recorded first-half gains, turned soft. Unit retail sales of self-propelled combines lagged the year-earlier pace by 43 percent during the first half. In July and August, a period of relatively strong combine sales a year ago, the decline narrowed only slightly to 38 percent. That left combines sales through August some 83 percent below the strong 1979 pace. While combine sales have been soft throughout the year, sales of small hay balers (under 200 pound bales), forage harvestors, and mower conditioners turned in gains that ranged from 5 percent to 40 percent during the first half. But during July and August, unit sales of these items were off from the year-earlier pace by 9 to 16 percent.

While recent trends have been mixed, it still seems probable that capital expenditures for farm equipment will register an eighth consecutive annual decline this year. USDA estimates show that farm sector capital expenditures for tractors and other machinery and equipment totaled \$4.7 billion in 1986, down 16 percent from the previous year and off 60 percent from the 1979 peak of \$11.7 billion. For this year, the mid-point of recent USDA projections foreshadow a further decline of more than 6 percent to about \$4.4 billion, the lowest for any year since 1972.

The sharp fall-off in farm machinery and equipment expenditures in the 1980s has led to considerable ag-

ing in the on-farm inventories of machinery and equipment. Reflecting this, a recent USDA report noted that the tractors used in the primary tillage preparations for last year's crops of corn, soybeans, and wheat had an average age of 10 to 11 years. Even among the larger-sized, and typically newer tractors used in primary tillage operations, the average age was 7 to 8 years. Regarding size, the report also noted that tractors with 40 to 119 horsepower were used in the primary tillage operations on 27 percent of last year's corn acreage, 21 percent of the soybean acreage, and 19 percent of the wheat acreage. Tractors with 120 to 159 horsepower were used in the primary tillage on 43 percent of last year's corn acreage, 44 percent of the soybean acreage, and 33 percent of the wheat acreage. Tractors with 160 horsepower or more were used in the primary tillage of the remaining 30 percent of last year's corn acreage, 34 percent of the soybean acreage, and 47 percent of the wheat acreage.

In looking ahead, most industry analysts believe that the downtrend in unit sales of farm machinery and equipment will end this year. But despite several recent developments that historically have been linked to strengthening sales, most are skeptical about a major rebound. Factors supportive of a stronger sales outlook include the recent firming in used equipment prices, record high net cash farm sector earnings, and signs that farmland values are starting to firm. Countering influences include recent increases in interest rates and prospects for further cuts in crop acreage next year. Moreover, farmers remain very cautious with respect to their financial arrangements, with many still preferring to pay down debt as opposed to using new borrowings to help finance major capital expenditures. With these underlying conditions, most analysts are looking for only modest gains in unit retail sales of farm equipment in 1988.

Gary L. Benjamin

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.

To subscribe, please write or telephone:
Public Information Center
Federal Reserve Bank of Chicago
P.O. Box 834
Chicago, IL 60690
Tel.no. (312) 322-5111

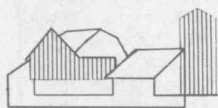
Selected Agricultural Economic Indicators

			Percent change from		
	Latest period	Value	Prior period	Year ago	Two years ago
Receipts from farm marketings (\$ millions)					
Crops*	May	9,571	-8.1	-13	-1
Livestock	May	2,654	12.5	-20	-25
Government payments	May	6,309	-0.3	7	6
	May	608	-64.7	-65	192
Real estate farm debt outstanding (\$ billions)					
Commercial banks	March 31	13.1	3.5 [†]	12	27
Federal Land Banks	March 31	35.9	-5.1 [†]	-18	-27
Life insurance companies	March 31	10.4	-1.3 [†]	-10	-14
Farmers Home Administration	March 31	10.3	-0.8 [†]	-1	0
Nonreal estate farm debt outstanding (\$ billions)					
Commercial banks	March 31	28.8	-7.7 [†]	-15	-25
Production Credit Associations	March 31	9.63	-10.2 [†]	-25	-42
Farmers Home Administration	March 31	16.3	-0.4 [†]	-3	0
Commodity Credit Corporation	March 31	18.8	0.0 [†]	-5	88
Farm loans made (\$ millions)					
Life insurance companies	March	83	-34.3	-45	99
Interest rates on farm loans (percent)					
7th District agricultural banks					
Operating loans	July 1	11.01	1.1 [†]	-7	-15
Real estate loans	July 1	10.47	2.0 [†]	-7	-17
Commodity Credit Corporation	September	6.88	3.8	12	-15
Agricultural exports (\$ millions)					
Corn (mil. bu.)	July	2,386	15.2	40	32
Soybeans (mil. bu.)	July	135	11.7	197	39
Wheat (mil. bu.)	July	54	43.1	104	182
	July	166	32.3	50	139
Farm machinery sales^D (units)					
Tractors, over 40 HP	August	5,251	36.0	95	49
40 to 139 HP	August	3,109	1.6	30	15
140 HP or more	August	2,142	167.4	616	162
Combines	August	741	-2.4	-55	-14

*Includes net CCC loans.

[†]Prior period is three months earlier.

^pPreliminary



AGRICULTURAL LETTER

FEDERAL RESERVE BANK OF CHICAGO
Public Information Center
P.O. Box 834
Chicago, Illinois 60690

(312) 322-5111



AG001
LOUISE LETNES LIBRARIAN
DEPT OF AGRIC & APPLIED ECON
231 CLASSROOM OFFICE BUILDING
1994 BUFORD AVENUE
ST PAUL MN 55108-1012