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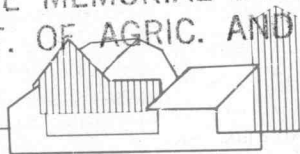
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Milk production turns up

Following 13 consecutive months of decline, U.S. milk production has turned above year-earlier levels. The turnaround came in February, one month before the end of the 15-month milk diversion program. Since then, year-over-year gains have widened rapidly, reaching 4.6 percent in May. In light of the turnaround, the USDA has raised its forecast of 1985 milk production to 139 billion pounds, up 3 percent from last year's output. Despite rising commercial disappearance (use) of milk, the upturn in production reinforces expectations of another cut in the milk support price on July 1. The turnaround in production will also add to the emphasis in the ongoing debate on finding an effective dairy program that will bring production into better balance with commercial market demand.

The upturn in milk production in recent months results from more dairy cows and rising output per cow. Fortified by a huge supply of dairy replacement heifers, dairy cow numbers pulled even with the year-ago level in March. By May, dairy cow numbers, at 11 million head, were up 1.7 percent from the year before and within 1 percent of the cyclical high for that month of two years ago. Milk production per cow, after lagging year-earlier levels throughout 1984, moved above year-ago levels in January. In May, milk per cow was up 2.8 percent from the year-earlier level and at a new high for the month. The upturn in cow numbers and output per cow partly stems from lower feed costs and improved operating margins for dairy farmers. Reflecting this, the milk/feed price ratio in April and May averaged 1.5, up 14 percent from the year before and slightly above the high levels of two and three years earlier.

The more favorable price ratio has prevailed despite the downtrend in milk prices. In mid-May, milk prices received by dairy farmers averaged \$12.70 per hundredweight, down from \$14.00 at the end of 1984 and \$13.00 a year ago (prices for 1984 are not adjusted for the 50 cent per hundredweight assessment.) The decline since December substantially exceeds the 60 cent December-to-May decline of the previous two years, reflecting the uptrend in production and the April 1 cut that lowered the support price for manufacturing grade milk from \$12.60 to \$12.10 a hundredweight.

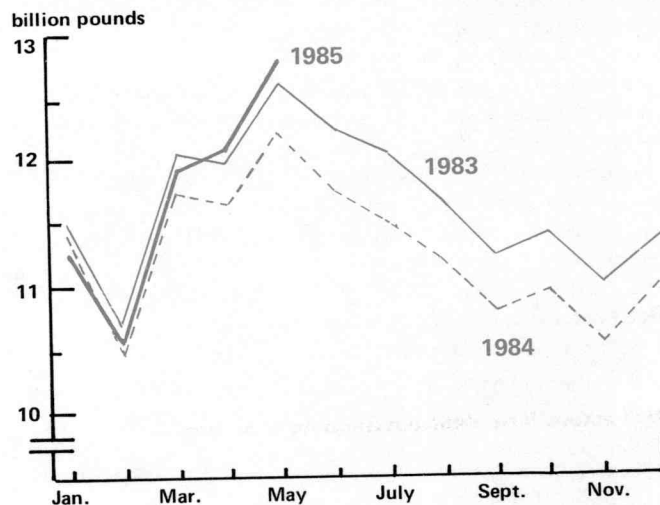
The upturn in milk production further erodes any lasting success that the milk diversion program might have achieved in reducing the surplus milk production and in lowering the costly government support purchases of dairy products. That voluntary program, which began in January 1984, encouraged dairy farmers to cut their milk marketings by up to 30 percent from an earlier base in exchange for a payment of \$10 for every hundredweight of reduced marketings. The bulk of the payments were funded by a 50 cent per

hundredweight assessment that was collected on milk marketed by all dairy farmers. Initial hopes for a successful program were dashed considerably when only 12 percent of the dairy farmers enrolled in the voluntary program, many of whom had already made their contractual production cuts prior to the start of the program. During most of the program, milk cow numbers and output per cow declined. Milk production in all of 1984 declined 3 percent from the year before and—because of a sharp rise in the small amount of milk used on farms—milk marketings declined 3.6 percent.

The cut in marketings and an equally important year-to-year rise of 3.5 percent in commercial disappearance (use) of milk led to a marked decline in the amount of surplus milk production and the related amount of government price support purchases. Reflecting this, net CCC purchases of manufactured dairy products in 1984 removed the equivalent of 8.6 billion pounds of milk from commercial market channels. That was down nearly half from the year-earlier level and equivalent to 6.5 percent of all milk marketed by dairy farmers. In 1983, the much higher level of CCC purchases were equivalent to 12 percent of the milk marketed by dairy farmers. Net government expenditures for the 1984 purchases approximated \$1.5 billion, down more than \$1 billion from the record high of the previous year but still the fourth highest on record.

With the upturn in milk production, CCC support purchases of manufactured dairy products are again on the rise. For the 3 months ending with May, CCC support purchases removed the equivalent of 4.3 billion pounds of milk from commercial market channels, up a third from the declining level of the year before but still down 25 percent from the record pace

Milk production again on the upswing



of two years earlier. The rise has occurred despite continuing gains in commercial disappearance of milk.

For the months ahead, trends seem to point to continued gains in milk production, use, and government support purchases. But there is much uncertainty because changes in the support price of milk are likely. Despite declining milk prices, low feed costs and a high inventory of dairy replacement heifers suggest that milk cow numbers and output per cow will continue above year-ago levels. Current USDA estimates imply that milk production for the last 7 months of this year will exceed the corresponding months of 1984 by 4 percent. But given the widening year-to-year gains through May, it is possible the rise in the months ahead may be somewhat larger.

Commercial disappearance of milk continues on a rise, but at a slower rate than in 1984. During the first quarter, commercial use of milk exceeded the year-earlier pace by 1.7 percent versus a 3.5 percent rise in all of 1984. The rise in commercial use of milk may falter somewhat this quarter as processors attempt to work down their inventories prior to the likely July 1 cut in the support prices of manufactured dairy products. But in general, gains of 1 to 2 percent are expected for the months ahead.

With gains in milk production outstripping commercial disappearance, CCC support purchases of manufactured dairy products will rise this year. The increase will no doubt be substantial but total purchases nevertheless are not likely to return to 1983 levels.

Despite the envisioned trends in milk production, commercial use, and CCC support purchases, major uncertainties remain with respect to the price support level and the reaction of dairy farmers to any changes in the support level. Because of the substantial volume of probable CCC support purchases, the Secretary of Agriculture will undoubtedly use his authority to lower the milk support price another 50 cents per hundredweight on July 1. Because of the surplus in production, such a reduction—if made—would likely translate into a comparable decline in milk prices received by farmers. With lower prices resulting in less favorable operating returns to dairy farmers, the cut in the support price might dampen slightly the growth rate in milk production from recent levels. Another change in the support price of milk could occur on October 1. Present legislation governing the milk support program expires at the end of September. Unless modified by new legislation, existing permanent legislation would boost milk support prices to 75 percent of parity, or to about \$17 per hundredweight. Because of the adverse implications of such a dramatic increase, some new legislation is probable. But reaching an acceptable compromise on dairy legislation will not be easy. The compromise must acknowledge that too high price supports result in excess production and costly government support purchases. At the same time, the sagging fortunes of many dairy farmers makes it politically difficult to rapidly move to the support levels that are probably needed to bring milk production into balance.

Gary L. Benjamin

Farm equipment sales in 6th yearly downturn

After year-to-year gains in the fourth quarter, unit sales of most farm equipment items turned down again in the early months of this year. As a result, it appears that farm machinery and equipment sales have entered a sixth consecutive year of decline. Through April of this year declines from year-ago levels have been recorded in unit sales of all equipment items covered in the Farm and Industrial Equipment Institute (FIEI) report. Inventories of farm machinery and equipment at the end of April, although down sharply in many instances, remain near or above unit sales of the previous twelve months. The financial stress in the farm sector that has contributed to the decline in sales will likely continue to exert downward pressure on farm equipment sales for the remainder of the year.

The weakness in farm equipment sales recorded during the first four months of this year extends the downturn the industry has experienced during the 1980s. Unit retail sales of major farm equipment items have declined precipitously since 1979, the last strong sales year enjoyed by the industry. Relative to the 1979 peak, unit sales of farm equipment in 1984 were down between 50 and 80 percent. Moreover, farmer expenditures for purchases of machinery and equipment have plummeted during the 1980s. At an estimated \$7.4 billion in 1984, total expenditures for farm machinery purchases were almost 40 percent below the 1979 peak. After adjusting for inflation the drop in expenditures is even more pronounced, falling 54 percent over this period.

The sharp decline in purchases of machinery and equipment by farmers during the 1980s reflects the financial stress in the agricultural sector. Several years of low farm income along with the debt servicing problems of highly leveraged farm borrowers have limited the demand for new farm machinery. In addition, financial stress has contributed to a large supply of low-priced used equipment on the market that has competed very effectively with new unit sales.

The downturn in unit sales through the first four months of 1985, although comprehensive, varies considerably across

Unit sales of farm equipment have fallen sharply through the early months of 1985

	January-April			Percent change	
	1979	1984	1985	1984-85	1979-85
Tractors, 40 plus HP					
Two-wheel drive					
40-99 HP	24,104	13,697	11,964	-12.7	-50.4
100-139 HP	17,968	3,719	3,263	-12.3	-81.8
140 HP or more	9,175	5,339	4,089	-23.4	-55.4
Four-wheel drive	3,481	1,672	877	-47.5	-74.8
Total	54,728	24,427	20,193	-17.3	-63.1
Self-propelled combines	5,100	2,467	1,436	-41.8	-71.8
Balers (bales under 200#)	3,208	1,640	1,404	-14.4	-56.2
Forage harvesters	1,154	516	423	-18.0	-63.3
Mower conditioners	4,266	2,700	2,576	-4.6	-39.6
Windrowers	1,234	503	395	-21.5	-68.0
Grinder-mixers	5,901	1,192	923	-22.6	-84.4
Corn heads	2,462	1,429	788	-44.9	-68.0

SOURCE: Farm and Industrial Equipment Institute.

different types of equipment. Unit sales of corn heads and self-propelled combines through April were down 45 and 42 percent, respectively, registering the sharpest year-to-year declines among equipment covered in the FIEI report. Sales of windrowers and combination grinder-mixers were both more than 20 percent below the year-ago pace, while unit sales of forage harvesters were off 18 percent. Small balers (bales under 200 pounds) lagged more than 14 percent behind last year's sales rate through April. Unit sales of mower conditioners, which registered a year-to-year drop over the period of almost 5 percent through the first four months of the year, showed the smallest decline among machinery types.

Sales of farm tractors, which typically peak in April, were well off the year-ago pace through the first four months of the year. Cumulative sales of tractors with 40 or more horsepower through April were more than 17 percent below last year. The largest year-to-year declines in sales were recorded for larger tractors. Two-wheel drive tractors with 140 or more horsepower dropped by more than 23 percent, while four-wheel drive units were little more than half the year-ago level.

Farm equipment sales in District states through April recorded substantial year-to-year declines as well. Tractor sales, including units with less than 40 horsepower, were off the year-ago pace by 14.5 percent (compared to a decline of 6.9 percent nationwide) while unit sales of self-propelled combines were more than a third below last year. Sales of corn heads, small balers and mower conditioners through the first four months of the year were all about 40 percent lower than a year ago. District sales of forage harvesters and windrowers were down 14 and 15.5 percent, respectively, while unit sales of combination grinder-mixers recorded a year-to-year drop of about 30 percent.

Inventories of farm equipment items covered in the FIEI report, although down from the levels of April 1984, remain near or substantially above the unit sales of the previous twelve months. Inventories of farm tractors with 40 or more horsepower were, at the end of April, down more than 6 percent from the year earlier. An 8 percent drop in two-wheel drive tractor inventories accounted for the drop, as inventories of four-wheel drive units were up almost 16 percent from the year-ago level.

Despite the overall drop, inventories of tractors with 40 or more horsepower equaled more than 95 percent of the previous twelve months' domestic and export sales. Two-wheel drive tractors on hand at the end of April exceeded the unit sales for the year-earlier period by more than 6 percent, while inventories of four-wheel drive tractors stood at about 85 percent of sales over the previous twelve month period.

Combine inventories in April, although down almost a third from a year earlier, still represented 88 percent of domestic and export sales during the preceding year. Inventories of corn heads, down 26 percent from a year ago, equaled 114 percent of sales over the year, while a 3 percent drop in small baler inventories held stocks to 122 percent of the previous twelve months' sales. Inventories of windrowers, grinder-mixers, forage harvesters, and mower conditions, showing year-to-year declines at the end of April ranging from 1 to 22

percent, all equaled about 140 percent of domestic and export sales over the preceding year.

Some analysts have expressed concern that the extended downturn in farm equipment sales has affected the dependability of the stock of machinery and equipment on farms and may, therefore, have an adverse effect on crop production. However, others suggest that technological advances over the years have made farm machinery more dependable and have contributed to a longer working life for this equipment. As evidence they point to only a slight increase, after adjusting for inflation, in expenditures for farm machinery and equipment repairs during the early 1980s. Moreover, the availability of good used machinery as financially stressed farmers adjust their balance sheets has competed with new unit sales and has helped reposition farm inventories of machinery to more financially sound operations.

Earlier in the year, USDA forecasts pointed to a stable or slightly rising level of expenditures on farm machinery in 1985. Given the level of sales through April and indications of only marginal improvements from preliminary figures for May, unit sales would have to rise sharply through the remainder of the year to regain 1984 levels. While sales of grain and forage harvesting equipment generally do increase during the second half of the year, continued financial difficulties for many highly leveraged farmers along with expectations that farm income will remain depressed this year suggest that farm machinery and equipment sales in 1985 will again lag the year-ago level.

Peter J. Heffernan

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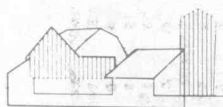
Selected Agricultural Economic Indicators

	Latest period	Value	Percent change from		
			Prior period	Year ago	Two years ago
Receipts from farm marketings (\$ millions)					
Crops	N/A*				
Livestock	N/A*				
Government payments	N/A*				
Real estate farm debt outstanding (\$ billions)					
Commercial banks	March 31	10.3	1.4 [†]	7	22
Federal Land Banks	March 31	49.0	-0.3 [†]	0	2
Life insurance companies	March 31	12.1	-1.0 [†]	-3	-4
Farmers Home Administration	March 31	10.5	1.9 [†]	6	11
Nonreal estate farm debt outstanding (\$ billions)					
Commercial banks	March 31	38.4	-3.4 [†]	-2	5
Production Credit Associations	March 31	16.6	-7.4 [†]	-12	-17
Farmers Home Administration	March 31	16.7	1.7 [†]	8	9
Commodity Credit Corporation	March 31	10.2	14.7 [†]	16	-47
Farm loans made (\$ millions)					
Production Credit Associations	December	2,535	34.7	-13	-22
Federal Land Banks	December	201	1.7	-24	-37
Life insurance companies	March	42	1.8	-55	-43
Interest rates on farm loans (percent)					
7th District agricultural banks					
Operating loans	April 1	13.47	-1.2 [†]	-3	-2
Real estate loans	April 1	13.22	-1.0 [†]	-2	-2
Commodity Credit Corporation	June	8.75	-6.7	-23	0
Agricultural exports (\$ millions)					
Corn (mil. bu.)	April	2,703	-3.5	-15	-9
Soybeans (mil. bu.)	April	169	-1.7	-4	7
Wheat (mil. bu.)	April	65	-3.6	-5	-11
	April	76	18.1	-27	-38
Farm machinery sales^P (units)					
Tractors, over 40 HP	May	5,774	-17.7	-4	-15
40 to 139 HP	May	4,647	-12.6	5	-9
140 HP or more	May	1,127	-33.7	-29	-35
Combines	May	481	62.5	10	33

‡ Monthly data no longer available.

† Prior period is three months earlier.

^P Preliminary



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