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OUTLOOK FOR U.S. DAIRY

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The U.S. dairy sector enters 2007 with significantly higher milk prices, but continued pressure on profitability. Two years of good returns in 2004 and 2005 fueled a significant expansion in both cow numbers and milk per cow in 2005 and 2006. Milk prices in 2005, while below 2004's record remained at levels rarely seen before, with milk-feed price ratios in 2005 generally higher than 2004. Milk cow numbers climbed steadily in 2005, with most of the growth in cow numbers in the west and in some Midwestern states, while good returns limited declines in cow numbers in the upper Midwest and the Northeast. Production was also boosted by a recovery in milk per cow, with gains aided by a resumption of availability of rBST, favorable weather, and adequate supplies of alfalfa hay. Above average production increases continued in 2006 and pressured milk prices lower. The all milk price fell by over \$2 per cwt and reduced milk-feed price ratios.

The milk production increase during 2006 was more modest than in 2005, but was still relatively large. However, the resulting price decline was much steeper. Stocks increased in both 2005 and 2006, resulting in a larger supply increase (fat basis) in 2006, even with the more modest milk production increase. Supply outpaced demand and product prices weakened to clear the markets. Increased energy prices contributed to lower demand growth for dairy products domestically and the all milk price in 2006 averaged \$12.90 per cwt, down \$2.24 per cwt from 2005. Although changes in cold storage reporting between 2005 and 2006 have impacted commercial use estimates, commercial disappearance on a fat solids basis increased over 2 percent. Disappearance of American cheese increased more than 5 percent, butter increased about 6 percent, and other cheese use increased 2 percent. Commercial disappearance on a skim solids basis increased less rapidly than for fats as higher cheese use was offset by slower export growth for skim solids products in 2006, compared to 2005. Supplies of dairy products (skim solids basis) also outpaced demand growth early in 2006 and stocks, measured on a skim solids basis, were above 2005.

Outlook for 2007: Squeezed Returns Bring Slower Production Growth

Milk production is forecast to increase close to the long term average of between 1 and 2 percent in 2007. The expansion will come from continued growth in output per cow because cow numbers are expected to decline during the year. The herd is expected to move below year earlier during the second quarter.

The relatively low milk prices in spring and summer 2006, coupled with high energy costs brought month to month decreases in cow numbers for July through September. Returns in 2006 were well below 2005, but the decline in the number of dairy farms in 2006 was well below its five year average and only slightly above the rate in 2005. Returns in 2007 are forecast to decline and the pace of dairy farm exits probably will increase. The Cooperatives Working Together (CWT) buyout in March will likely encourage the exit of some of the most vulnerable operations.

Herd expansion, under way since late 2004, began to slow in mid 2006 but the U.S. dairy cow herd increased nearly 1 percent during 2006. However, the January 1, 2007, *Cattle* report indicated that producers expect 2 percent fewer heifers to calve and enter the dairy herd in 2007 than a year earlier, indicating possible herd contraction. Prices for replacement dairy cows fell during 2006, declining from \$1840 last January to \$1660 in January of this year. Price declines flattened out late in 2006. With expected herd declines through much of 2007, replacement prices are expected to be weak and further declines are possible if herd contraction accelerates.

Output per cow is forecast to increase 1.7 percent in 2007. Although less than the growth rate in 2006, it more closely follows historical rates of growth. Milk per cow increased nearly 2 percent in 2006, with a 4 percent rate in the first quarter reflecting a return to full rBST allocations. Alfalfa prices have increased from their early 2006 lows and are expected to remain above a year earlier in the first half of 2007. Stocks of all hay on December 1 were below a year earlier, which will keep supplies tight in the spring. In the absence of weather related disruptions, supplies should be sufficient to keep alfalfa prices near last year on average.

Will Demand Keep Up with Supply Increases?

Demand for dairy products has been strong over the past 2 years. Commercial use increased over 2 percent in 2005 and 2006 on a fat basis while skim solids use increased about 4 and 2 percent respectively. However, as production of butter and cheese rose, lower prices were needed to clear markets. On the other hand, strong international demand strengthened nonfat dry milk (NDM) and whey prices despite more production. Stocks returned to levels of the recent past, increasing slightly in 2005 and 2006 on both a fat and skim solids basis. Higher low-fat fluid milk sales more than offset declines in sales of whole milk resulting in total fluid milk consumption increasing slightly on a per capita basis.

The prospects for continued increases in product use in 2007 are favorable. Demand is expected to be strong enough to increase commercial use more than in 2006, even at higher dairy product prices. Economic growth is forecast to remain robust although energy price shocks or interest rate increases could result in a reallocation of discretionary spending by consumers. Nonetheless, restaurant sales have been reportedly firm and the trends toward continued away from home meal consumption and prepared meal consumption are expected to benefit the dairy sector. Commercial use on a fat basis is expected to increase nearly 3 percent in 2007, which should result in smaller than year-earlier stocks by the end of the year. However, growth of commercial use on a skim solids basis may lag fat basis use a bit, but no sales to the CCC are expected.

International Markets Remain Firm

U.S. milk producers benefited in 2006 from tight world supplies of dairy products and a U.S. dollar that remained relatively weak. Lower NDM production in Australia and the European Union limited export supplies and international NDM prices in 2006 averaged about \$2400 per ton, or 5 percent above 2005. With robust demand and international powder prices above domestic prices, the United States was able to expand commercial powder exports. Lower U.S. butter and cheese prices, coupled with relatively high world prices, largely eliminated the incentive to ship over-TRQ levels of these dairy products to the United States. Total imports of dairy products fell slightly during 2006, primarily reflecting a virtual halt in over-quota (high-tier) imports of butter and American-type cheese.

Good global economic growth is expected to help maintain international demand for butter and dry milk powders. Milk production is expected to increase 2 percent in the major milk producing countries in 2007. Although milk production in the European Union and New Zealand is forecast to increase slightly during 2007, Australia and Canada production likely will decline. Poor weather conditions are affecting milk flows in Australia. As global demand for dairy products has remained firm, international prices thus far in 2007 have increased. U.S. prices should remain relatively competitive and exports strong. Some weakening in prices is likely as global supplies increase, but U.S. commercial exports of skim milk powders and whey are expected to remain relatively strong.

Commercial Stocks Steady

After their sharp drawdown in 2004, commercial dairy product stocks increased in 2005 and 2006. Excluding the additional cold storage facilities reporting in 2006, total cheese stocks ended 2006 up about 4 percent from a year ago and butter stocks were 58 percent higher. However, adjusting for the added facilities, end of year stocks were even higher with total cheese up about 7 percent and butter 85 percent higher. On a skim-solids basis, total stocks were 1 percent higher at 9.1 billion pounds.

Government stocks remained quite small in 2006 because previously purchased product was utilized and only 64 million pounds of NDM was purchased under the Milk Price Support Program. There has been no buying activity for NDM since July 2006. A small amount of cheese was purchased and utilized during 2006.

Stock levels in 2007 are expected to decline a bit from 2006. The buildup of 2006 stocks is expected to dissipate in the second half of 2007. Although domestic demand is expected to absorb increased supplies of fat basis products, continued strength of international markets will be a key determinant of whether there will be significant growth in skim solids basis commercial stocks or removals. Milk Price Support Program dairy product purchases are not expected during 2007.

Prices to Increase in 2007

Wholesale dairy prices weakened for all dairy products except whey in 2006 because supply growth outpaced growth in demand. Monthly average cheddar cheese prices bottomed in March 2006 and were about 34 cents per pound below 2005. By the end of the year they averaged about 3 cents below December 2005 and February 2007 prices are above a year ago. Likewise, April butter prices averaged about 39 cents below April 2005, but in December averaged only 13 cents below the previous year. On the other hand, a strong whey market generated prices which were above a year-earlier throughout 2006. NDM prices started the year relatively strong, weakened through June, then recovered to new annual highs by November. Strong export sales of products containing skim milk solids and whey played the most significant role in strengthening prices.

As 2007 begins, butter prices are under pressure from larger supplies. Relatively steady to increasing prices are expected after spring for all dairy products. Average prices in 2007 will be above 2006. For 2007, cheese prices will average \$1.32 to \$1.39 per pound and butter will average \$1.235 to \$1.335 per pound.

NDM prices are expected to increase steadily through mid-year then soften slightly as global supplies increase. International demand will continue to generate commercial exports and determine U.S. prices. NDM prices are forecast to average \$1.05 to \$1.11 per pound, about 20 cents above the 2006 average. Whey prices are forecast to be a record high, 45.5 to 48.5 cents per pound, because continued strong domestic use and export demand is supporting prices.

Strong dairy markets result in a 2007 all milk price forecast average of \$14.35 to \$15.05 per cwt, compared to \$12.90 in 2006. Class prices in the Federal Milk Marketing Orders are also likely to increase by \$1 to \$2 per cwt. The Class III price is forecast to average \$13.20 to \$13.90 per cwt and the Class IV price is expected to average \$12.45 to \$13.25 per cwt.

Dairy retail prices likely will move higher as milk and wholesale dairy product prices increase. In 2006, prices fell 1 percent as the spread between farm and retail prices widened modestly. Although retail dairy prices are expected to increase, the farm-retail spread likely will again widen a bit.

Additional information about the 2007 dairy forecasts is available at:

World Agricultural Supply and Demand Estimates

<http://www.usda.gov/oce/commodity/wasde/index.htm>

Livestock, Dairy, and Poultry Situation and Outlook

www.ers.usda.gov/publications/ldp/

Dairy: World Markets and Trade

www.fas.usda.gov/dlp/dlp.html