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Dairy Outlook

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OUTLOOK FOR U.S. DAIRY

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The U.S. dairy sector enters 2015 riding on a period of favorable returns, but facing potential pressures as larger supplies of dairy products and weaker exports are expected to pressure prices. Milk prices in 2014 were record high, and prices in 2013 were the third highest on record. Although producers faced relatively high feed prices in 2013, feed prices in 2014 moderated sufficiently to push milk-feed price ratios to their highest levels since the mid-2000's. Producers responded by increasing herds; the dairy sector added 99,300 cows between January 1, 2014 and January 1, 2015. Improvements in producer margins also encouraged productivity gains. In 2014, average milk per cow grew about 2.0 percent on a per day basis, the fastest rate of growth since 2010. The net impact was a 2.4 percent increase in milk production.

Slow growth in production early in the year and strong growth in demand, fueled in part by continued gains in exports in the first half of the year, propelled milk prices to records for almost each month of 2014. However, as the United States has become more integrated in international markets, the impacts of changes in trade weighed more heavily on prices. In the second half of 2014, exports declined in response to increased competition from exporters who had expanded production and then were faced with reduced sales to a number of key countries as well as the increasing strength of the U.S. dollar. Domestic demand remained firm, initially mitigating the potentially price depressing impacts of reduced exports, but as stocks built for a number products, prices began to adjust. Prices for nonfat dry milk (NDM), a very export-oriented product, fell below year-earlier levels in September and cheese followed in December. Likely due to tight stocks and holiday demand, butter prices remained above year-earlier until January.

Outlook for 2015: Gains in Output per Cow Will Drive Production Increases

Milk production in 2015 is forecast to increase to 211.5 billion pounds, just under 2.7 percent higher than 2014. Although concerns about declines in margins in the first part of 2015 will likely dampen the rate of increase, producers are expected to gradually increase cow numbers and despite lower margins than 2014, output per cow is expected to increase at faster than trend rates.

On January 1, 2015, the dairy cow herd was 1 percent higher than 2014 and producers expect to add 1 percent more heifers to the dairy herd in 2015. The number of replacement heifers per 100 cows remains near record, but prices of dairy cows in January remained well above year earlier, likely indicating continued demand for dairy cattle. However, prices for young dairy heifers

have weakened in recent weeks, which may indicate longer term concerns about expansion. Nonetheless, the dairy herd in 2015 is expected to average 9.32 million head, 0.7 percent above 2014.

Output per cow is forecast to increase just under 2 percent in 2015, which although slower than 2014, is above average growth (per day) for the past 5 years. Feed prices are expected to remain moderate through the year and alfalfa hay prices should reflect a return to normal pasture conditions in much of the country. Milk production in California has been affected by drought and to the extent forage supplies are limited, production in that State may be constrained. Lower milk prices in early 2015 may limit some producers' ability to fully take advantage of the lower feed costs.

Domestic Demand will Absorb the Bulk of the Supply Increases.

Strong international demand helped offset weakness in domestic use in the first part of 2014. However, as competing exporters increased production and Russia banned imports from several key exporters and China reduced imports, global supplies of dairy products increased and U.S. exports faced increased competition later in the year. As a result, the domestic market was faced with increased supplies. Led by strong gains in exports, total fat basis use (exports plus domestic use) in 2014 averaged of 3.7 percent above the same period in 2013, but growth slowed to less than 1 percent in the second half as exports declined. On a skim-solids basis, led by growth in exports, total commercial use increased an average of just over 1.4 percent in the first 2 quarters; in the second two quarters, as skim-basis exports declined, total use increased just under 1.4 percent.

With larger milk supplies in 2015, growth in domestic use is expected on both a fat and skim solids basis. The increase will likely be driven largely by two factors, an improved economy and lower prices. Continued economic growth and diminishing unemployment is expected to underpin gains in demand for dairy products. With lower exports forecast for the year, lower prices will balance the markets rather than high prices rationing supplies as occurred in much of 2014. Domestic commercial use on a fat basis is expected to increase almost 3 percent in 2015, but a build up in fat basis stocks is expected. Growth of commercial use on a skim solids basis is expected to increase more rapidly than on a fat basis as prices of NDM and cheese fall more than those for butter, encouraging increased use of those products. Skim basis ending stocks are expected to be only slightly higher than 2014.

International Demand to Strengthen in the Second Half

International markets have become an increasingly important source of demand for U.S. dairy products. In 2005, the United States exported about 2 percent of milk production on a fat basis and about 10 percent on a skim-solids basis. By 2014, the percentages had increased to 6 percent and 19 percent respectively. Exports grew dramatically in 2013 as reduced production in Oceania and a modest increase in EU production limited supplies from those traditional exporters. The tightness in world supplies was compounded by the emergence of China as a

major buyer of milk powders. In the face of limited supplies from traditional exporters, buyers increasingly turned to the U.S. as a source of product. Strength in international demand for U.S. products carried into first-half 2014 despite growth in EU and Oceania production, but in August, Russia banned imports of dairy products from a number of countries including the United States, the EU, and Australia. Also, during that period, China reduced its powder purchases. The result was sharp drop in import demand at the same time world supplies were building. International prices declined, but with relatively tight stocks for a number of products, U.S. prices for cheese, butter, and NDM failed to initially follow international prices lower, and U.S. products became uncompetitive in export markets. Concurrently, a strengthening dollar also made U.S. products less competitive. As a result, exports of most major products declined during the second half of the year. For 2014 in its entirety, butter and milkfat exports were almost 22 percent lower, NDM/SMP exports were 2 percent lower, but cheese exports were almost 17 percent higher as strong exports in the first 3 quarters more than offset a decline in the fourth quarter.

For 2015, the U.S. is expected to face continued headwinds in exporting products. Modest increases in milk production by most major exporting countries may keep competing supplies of exportable product from increasing dramatically. New Zealand is currently facing dry conditions which may limit production growth if they persist. However, limited growth in demand and a strong dollar are expected to keep U.S. exports below year earlier in first-half 2015. Russia's imposition of a one-year ban on imports of dairy products in August 2014 implies increased demand in second half of 2015 when Russia resumes purchases from those countries currently under the ban. To the extent traditional exporters resume shipping to Russia, it is expected that U.S. exports will increase in the second half. Additional support for increased exports is expected to come from generally lower U.S. product prices. For the year, exports on a fat-basis are expected to reach 11.1 billion pounds; about 11 percent below 2014 and on a skim-solids basis, exports are forecast to be about 38.0 billion pounds, 3 percent below 2014.

Fat Basis Commercial Stocks will be Higher; Skim-Solid Stocks Nearly Unchanged

Commercial dairy product stocks were mixed in at the end of 2014. NDM stocks were below year-earlier in first-half 2014, but increased rapidly as exports declined and by the end of the year were 86 percent higher than 2014. Cheese stocks were below 2013 for most of the year, but late in 2014 stocks built as cheese exports fell. Butter stocks were below year-earlier levels during all of 2014. Stocks only increased modestly during the typical stock building period of late-spring and early-summer, leading to below-year-earlier stocks, even as exports dropped during the second half the year. Concerns about availability of butter during the fall when demand built ahead of the holidays resulted in strong prices though November. Given the still relatively tight stocks of butter at the end of the year, on a fat basis, stocks at the end of 2014 were about 1 percent lower at 11.0 billion pounds, milk equivalent. On a skim solids basis, stocks were almost 13 percent higher at just over 13.1 billion pounds largely in light of large stocks of NDM.

Fat basis stock levels in 2015 are expected to increase almost 6 percent from 2014 as demand for cheese and butter is more than offset by increased production. Stocks of NDM are expected to

remain relatively large as first-half exports lag and the domestic market is likely unable to absorb the full increase in supplies. Although increased exports in the second half of the year are expected to draw down stocks, on a skim-solids basis, ending stocks are expected to be 13.2 billion pounds, fractionally above year-earlier levels.

Prices to Average Lower in 2015

Although reported butter, cheese, NDM, and whey prices averaged record levels in 2014, the movement for those products was like that of a roller-coaster, sharp increases in the early part of 2014, followed by declines during either the second or third quarters. Butter prices increased $1.21 between January and September, but gave back 95 cents by December to average $2.14 per pound for the year. Likewise, whey prices increased into the third quarter, increasing 9 cents between January and July, but then declining 10 cents between July and December to average 65 cents for the year. Nonfat dry milk peaked sooner, gaining 6 cents between January and March, but then declining 83 cents by the end of the year to average $1.77 for 2014. Cheese exhibited a bi-modal pattern; increasing from $2.08 in January to $2.35 in April, then declining to $2.04 in June before rebounding to $2.35 in September. Thereafter, cheese prices declined to $1.74 in December, for a 2014 average of $2.16.

As 2015 begins, wholesale product prices are under pressure from larger supplies. For most products, further prices declines are likely during the first quarter. Butter is an exception as stocks were relatively tight coming into the year and the timing of Easter and Passover is expected to support demand in the first quarter. Beyond the first quarter, an improving U.S. economy and increases in exports in the second half of the year should help lift product prices off their lows. Cheese and butter prices are expected to be largely supported by gains domestic demand as the U.S. economy improves. For 2015, cheese prices will average $1.595 to $1.665 per pound and butter will average $1.655 to $1.755 per pound.

Gains in nonfat dry milk prices during the first half are likely to be driven by strength in domestic demand. Gains in cheese and whey prices relative to those for butter and NDM may shift production toward cheese, limiting NDM production and supporting prices. However, higher cheese prices may also encourage increased demand for NDM by cheesemakers. In the second half of the year, increased export demand is expected to provide additional support for NDM prices. NDM prices are forecast to average $1.19 to $1.25 per pound.

Whey prices are forecast to average 56 to 59 cents per pound for 2015. Although stocks at the beginning of the year were below year-earlier, exports of dry whey were weaker. Whey prices will likely decline through the second quarter before increased export demand helps support prices.

In the face of weaker dairy markets, the 2015 all milk price is forecast to decline from its 2014 record of $23.98 per cwt. For 2015 prices are expected to average $17.40-$18.10 per cwt, the lowest price since 2010. Class prices are also likely to decline by $5-7 per cwt although more rapid declines in both butter and NDM prices may result in a larger absolute decline in Class IV prices. The Class III price is forecast to average $16.30-$17.00 per cwt and the Class IV price is

expected to average $15.10-$15.90 per cwt. Data on producer participation in the Margin Protection Program – Dairy indicates that just over 50 percent of licensed dairy operations in 2013 enrolled in the Margin Protection Program for 2015 and of those signing up, 55 percent purchased coverage in excess of $4.00 per cwt. As of mid-February, USDA's Dairy Margin Protection Program Decision Tool points toward several months of margins at or near $8.00 per cwt during the first and second quarters, but then margins increase in the second half.

Dairy retail prices likely will move higher in early-2015 as retail price adjustments tend to lag lower wholesale prices. However, as wholesale prices are forecast remain below 2014, the dairy CPI is expected reflect those declines and average below 2014.

Additional information about the 2015 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
http://www.ers.usda.gov/publications/ldpm-livestock,-dairy,-and-poultry-outlook.aspx

Dairy: World Markets and Trade
http://www.fas.usda.gov/data/dairy-world-markets-and-trade