Overview

 Fallout from the developing tariff conflict between the United States and some of its major trading partners has already had a major, negative impact on the price outlook for U.S. dairy farmers. But these tariff actions began in June and have therefore not yet shown up in reported trade and consumption statistics, which have only been reported through May. Data to date show that U.S. dairy exports were mostly higher year-over-year through May. Commercial use of cheese was up over a year ago in the domestic market, while increased exports had the effect of reducing the measured consumption of most other products domestically.

Commercial Use of Dairy Products

Domestic commercial use of milk in all products was down compared to a year earlier on both a milkfat and a skim-solids basis during the March–May period. Large gains in U.S. dairy exports again pulled both fat and skim product volumes from the domestic market during the period. Domestic consumption of cheese continued to expand, however, while U.S. fluid milk sales, which are relatively unaffected by exports, extended their long-running decline. It will bear watching whether the expected drop in exports due to tariff retaliation by Mexico and China, beginning in June, will result in measured gains in domestic consumption or just larger domestic stocks.

U.S. Dairy Trade

U.S. exports of nonfat dry milk, skim milk powder, dry whey, whey protein concentrate and lactose showed both large volume and large percentage increases from a year ago during March–May. These products accounted for about 80 percent of the milk solids exported during the first five months of 2018, and their growth has been primarily responsible for the recent record levels that U.S. dairy exports have reached this year. March–May exports were equivalent to 17.8 percent of U.S. milk solids production, the highest ever such percentage for a rolling three-month period, which just eclipsed the prior record set one month earlier.

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<tbody>
<tr>
<td>Total Fluid Milk Products</td>
<td>11,889</td>
<td>12,130</td>
<td>-241</td>
<td>-2.0%</td>
</tr>
<tr>
<td>Butter</td>
<td>448</td>
<td>463</td>
<td>-15</td>
<td>-3.2%</td>
</tr>
<tr>
<td>American–type Cheese</td>
<td>1,245</td>
<td>1,208</td>
<td>37</td>
<td>3.0%</td>
</tr>
<tr>
<td>All Other Cheese</td>
<td>1,818</td>
<td>1,787</td>
<td>30</td>
<td>1.7%</td>
</tr>
<tr>
<td>Nonfat Dry Milk / Skim Milk Powders</td>
<td>205</td>
<td>280</td>
<td>-76</td>
<td>-27.0%</td>
</tr>
<tr>
<td>All Products (milk equiv., milkfat basis)</td>
<td>51,832</td>
<td>52,753</td>
<td>-921</td>
<td>-1.7%</td>
</tr>
<tr>
<td>All Products (milk equiv., skim solids basis)</td>
<td>44,755</td>
<td>45,898</td>
<td>-1,143</td>
<td>-2.5%</td>
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continued on page 2
There were relatively few large volume changes in dairy imports to the United States during the March–May period, compared to the same period in 2017, except for a drop of over 10 percent in cheese imports from a year ago. On a rolling three-month basis, U.S. cheese imports have been in continuous decline for almost two years. Imports of all products during March–May were equivalent to 3.1 percent of U.S. milk solids production during the period. Although imports as a percent of production have been lower than this on several occasions, three percent of total milk solids production appears to be a de facto soft floor for dairy import volumes.

**Milk Production**

Colorado, Kansas, South Dakota and Kentucky are effectively the only states for which it can be claimed that a robust and accelerating expansion of milk production is currently taking place, based on data from the U.S. Department of Agriculture (USDA). The trend is static or down for virtually all other states, which is resulting in a continuing slowdown nationwide. The national dairy cow herd averaged just 10,000 cows more during March–May than it did a year earlier. Total milk production during this period was less than a single percentage point higher than a year ago. The recent retreat of milk prices will likely keep up the downward pressure on production. Growth in production of milk solids followed that of milk volume production lower, but again at nearly a half percent higher rate during March–May.

**Dairy Products**

Production of all cheese was up over a year ago by 2.1 percent, with total American-types and total Italian-types each up by 1.7 percent during the March–May period. Each of these growth rates...
Dairy Market Report

outpaced the annual increase in total milk solids production, indicating that additional milk continues to flow largely into cheese. During the period, combined production of nonfat dry milk and skim milk powder dropped, while combined production of dry whey and whey protein concentrate broadly matched total cheese production growth.

Dairy Product Inventories

Inventories at the end of May moved above end-of-April levels for most of the basic dairy products, including dry whey. With the exception of nonfat dry milk, stocks were higher in both volume and days of use. This trend is concerning since it has taken place at a time when milk production has been moderating and before the increased tariffs on U.S. dairy exports could be expected to start affecting exports to Mexico and China.

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<tr>
<td><strong>Milk Production</strong></td>
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<tr>
<td>Cows (1,000 head)</td>
<td>9,402</td>
<td>9,392</td>
<td>10</td>
<td>0.1%</td>
</tr>
<tr>
<td>Per Cow (pounds)</td>
<td>6,009</td>
<td>5,965</td>
<td>44</td>
<td>0.7%</td>
</tr>
<tr>
<td>Total Milk (million pounds)</td>
<td>56,495</td>
<td>56,024</td>
<td>471</td>
<td>0.8%</td>
</tr>
<tr>
<td>Total Milk Solids (million pounds)</td>
<td>7,210</td>
<td>7,126</td>
<td>84</td>
<td>1.2%</td>
</tr>
<tr>
<td><strong>Dairy Products Production</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Cheese</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Types</td>
<td>1,329</td>
<td>1,307</td>
<td>22</td>
<td>1.7%</td>
</tr>
<tr>
<td>Cheddar</td>
<td>958</td>
<td>981</td>
<td>-23</td>
<td>-2.4%</td>
</tr>
<tr>
<td>Italian Types</td>
<td>1,394</td>
<td>1,370</td>
<td>23</td>
<td>1.7%</td>
</tr>
<tr>
<td>Mozzarella</td>
<td>1,081</td>
<td>1,059</td>
<td>22</td>
<td>2.1%</td>
</tr>
<tr>
<td>Total Cheese</td>
<td>3,273</td>
<td>3,206</td>
<td>68</td>
<td>2.1%</td>
</tr>
<tr>
<td>Butter</td>
<td>525</td>
<td>502</td>
<td>23</td>
<td>4.6%</td>
</tr>
<tr>
<td><strong>Dry Milk Products</strong></td>
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<tr>
<td>Nonfat Dry Milk</td>
<td>503</td>
<td>502</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Skim Milk Powder</td>
<td>142</td>
<td>154</td>
<td>-12</td>
<td>-7.8%</td>
</tr>
<tr>
<td>Dry Whey</td>
<td>261</td>
<td>254</td>
<td>7</td>
<td>2.8%</td>
</tr>
<tr>
<td>Whey Protein Concentrate</td>
<td>127</td>
<td>126</td>
<td>1</td>
<td>1.1%</td>
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<tbody>
<tr>
<td><strong>Butter</strong></td>
<td>339</td>
<td>307</td>
<td>314</td>
<td>8%</td>
</tr>
<tr>
<td>American Cheese</td>
<td>805</td>
<td>780</td>
<td>816</td>
<td>-1%</td>
</tr>
<tr>
<td>Other Cheese</td>
<td>581</td>
<td>565</td>
<td>493</td>
<td>18%</td>
</tr>
<tr>
<td>Nonfat Dry Milk</td>
<td>271</td>
<td>273</td>
<td>280</td>
<td>-3%</td>
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were lower for cheese by an average of over $0.10/lb from May to June as the effects of the tariff conflict with Mexico and China began to hit the U.S. dairy industry. Increases in the AMS-reported prices of the other three basic dairy products boosted the Class IV price in June and managed to generate a small gain in the June Class III price, while the lagged Class I price mover advanced due to earlier increases in the Class III pricing factors.

Retail prices reported by the U.S. Bureau of Labor Statistics (BLS) for fluid milk and cheese further diverged from each other and from their underlying wholesale costs in June. BLS reported that fluid milk prices were about $0.34/gallon lower that month than a year earlier, while Class I prices were relatively unchanged over the period. By contrast, Cheddar cheese prices were almost $0.40/lb higher at retail over the period, while AMS-reported Cheddar cheese prices were little changed at wholesale.

### Milk and Feed Prices

The monthly margin under the Margin Protection Program (MPP) for May 2018 rose by $0.16/cwt. from April, to $6.78/cwt. This broke a string of five consecutive drops in the MPP monthly margin. May was also was the fourth-straight month for which the margin was between $6.50-$7.00/cwt. The May all-milk price, continued on page 5
$16.20/cwt., was $0.40/cwt. higher than in April. The May MPP feed cost formula calculation was up by $0.24/cwt. from April, with the increase generated almost evenly, on a per-hundred-weight-of-milk basis, by higher reported costs of each of the formula’s three components.

Looking Ahead

USDA dropped its monthly forecast of the U.S. average all-milk price for 2018 by an average of $0.70/cwt. from June to July, after raising it by almost $1.00/cwt. over the prior two months. This was an unusually large adjustment for the department to make more than halfway into a forecast year – and perhaps even more unusual that such a large, late adjustment was unaccompanied by any explanation of the underlying market supply-demand fundamentals that prompted it. It was simply noted that the forecasts for 2018 were also reduced for all four of the AMS-reported basic dairy product prices and for the Class III and Class IV federal order milk prices.

The reductions for all six prices from June to July averaged 5 percent. The drop in USDA’s 2018 all-milk price forecast was consistent with that indicated by the CME dairy futures over the same period. The reaction by the CME futures can be largely attributed to the international response to the U.S. trade conflict with Mexico, China and other countries.