DAIRY OUTLOOK

PHIL PLOURD • USDA AG OUTLOOK FORUM • FEBRUARY 19, 2021
US dairy markets were among the most volatile in the world in 2020.

CME spot block cheddar and spot butter market volatility ran at nearly double the five-year average rate.

YTD block volatility still running at >40%.
milk production up >3% (again)
remarkable productivity

- Nov and Dec milk per cow per day up by more than 2% year-over-year – something that’s not happened in back-to-back months since 2016
- For the year, milk per cow per day at 65.0 pounds, up 1.4%, most since 2004 and above the five-year average of +1.0%
In December, USDA data put national herd up 100,000 year-over-year

US average for 2020 at 3.95%, up from 3.92% in 2019

December: 4.13% in 2020 versus 4.06% in 2019 -- +36.6 million pounds of fat, enough to make 30+ truckloads of data per day
Spot milk in the Midwest is as abundant and as inexpensive as ever. Six of first seven weeks in 2021 on the “top 10 cheapest” list.

Situation likely to persist for 90 to 120 days as farm volumes increase. Bottom line: Cheese makers will have access to plenty of milk.
• Class III for 2021 at $17.21 per hundredweight compared to $16.10 five-year average.
• Class IV for 2021 at $15.26 per hundredweight compared to $14.79 five-year average
A smaller-than-initially anticipated 2020 crop and solid export demand have combined to drag down USDA domestic ending stocks estimates. What was a 3.3 billion bushel “carryout” in May is now at 1.5 billion. Market will likely be edgy (and elevated) through planting season.
Higher corn and soy prices have DMC feed costs up to near $11 per hundredweight at the peak of the futures curve.

Based on prevailing futures, prospective 2021 margin at $7.70 per hundredweight compared to $9.60 for 2020.
- DRP program covered about 25% of milk volume in 2020
- DMC participation is up for 2021 versus 2020 (70% of farms vs 55%)
- Programs provide some insulation and staying power if milk prices move lower and/or grain prices move higher
key drivers: cheese stocks

- Cheese stocks built rapidly between November and December — up 51 million pounds, the biggest increase on record for the two months.
- Total on hand was up nearly 6% year-over-year in absolute terms, the biggest gain since April.
key drivers: butter stocks

- December stocks at 274 million pounds, most for year-end since 1982
- “Normal” stocks growth would put 2021 peak at something like 435 million pounds
- US cheese pricing is close to competitive, but things seem quiet
- On powder and butter, CME spot and futures prices are well below global values
- Big issue: Containers and shipping are hard to find
logistics issues on multiple fronts

% Containers Waiting 5+ Days @ SoCal Ports

Inbound Container Volume: SoCal Ports

40-Foot Container Shipping Costs

US Truck Freight Rates

Per 40-Foot Container: Drewry World Container Index

USD Per Mile, Monthly Average: DAT

Long Beach & Los Angeles; Pacific Merchant Shipping Association
Great grocery sales – cheese +13%, butter/butter blends +22%, milk +2%, ice cream +10%,

But volume gains not enough to offset losses in food service and institutional segments
farmers to families food boxes: take five

<table>
<thead>
<tr>
<th>Round</th>
<th>Dollars</th>
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<tbody>
<tr>
<td>Round 1: May 15-June 30</td>
<td>$947,000,000</td>
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<tr>
<td>Round 2: July 1-August 31</td>
<td>$1,472,000,000</td>
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<tr>
<td>Round 3: September 1-October 31</td>
<td>$865,222,361</td>
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<tr>
<td>Round 4: November 1-December 31</td>
<td>$485,648,660</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$3,769,871,021</strong></td>
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<tr>
<td>Round 5: January-April 2021 (Allocated)</td>
<td>$1,500,000,000</td>
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- Round 5 will roll out in three waves – one each for February, March and April.
- If USDA is satisfied with contractor performance over the course of wave one, the contract terms will renew for wave two. Same is true for wave three.
- As initially laid out, the three waves add up to ~$1.1 billion and 33.3 million boxes.
- Filling the program will consume a lot of milk over the next few months, but things are a lot different than in previous iterations:
  - Milk production is strong – up 3% year-over-year in December,
  - Food service demand remains soft (it was in recovery mode during Round 1/Round 2),
  - Cheese exports are light (they were rising sharply in May/Jun because of Apr bookings),
  - New cheese plant in Michigan is putting new, extra cheddar into the marketplace.
- Biden Administration already taking steps to boost SNAP funding. While that’s not the same as direct dairy purchases, extra dollars could boost overall demand at retail.
• US Census Bureau data showed “food and drinking place” dollar sales down 19% in 2020

• Nationally, about 55% of business is in dining rooms, with 45% for off-premises consumption (drive through/pickup/delivery)
According to Burbio, 34% of K-12 students are in “virtual only” mode, lowest level since beginning of school year.

USDA data shows poor packaged milk sales through November, with volume down 2.0% versus the same period in 2019.
• American Hospitality and Leisure Association: *The recovery of the travel industry is anticipated to take place in three phases: leisure travel, small and medium events, and group and business travel. While recovery will begin in 2021, full recovery is not expected until 2024.*

• Plus: WFH is going to matter!
• With no need to go to the office, people are taking to the open road
• RV sales up 33% year-over-year for July through December
wall street loves reflation/inflation trade

- US money supply up 67% year-over-year, currency in circulation up 15%
- Beyond money supply, story has “weak USD” and “China!” angles
- Dow Jones commodity index up 19% since end of Q3 2020
- Might create a tailwind for dairy product prices globally?
listen today: the dairy download podcast

www.idfa.org/thedairydownload

Guests

Joe Glauber • Former USDA Chief Economist
Marin Bozic • University of Minnesota
Yin Woon Rani • Milk PEP
Michael Flood • Los Angeles Food Bank
Kurt Epprecht • Great Lakes Cheese
John Newton • American Farm Bureau
Collin Peterson • US Congress/MN
Dee Davis • Center for Rural Strategies
Marshal Cohen • NPD Group
Greg Ferrara • National Grocers Association
Bob Costello • American Trucking Association

Darci Vetter • Former USTR Negotiator
Brooke Markley • Leprino Foods
Mike Brown • Kroger
Jessica Tomlinson • Fleming’s Steakhouse
Ryan Pandya • Perfect Day
Chase Purdy • “Billion Dollar Burger”
Carrie Mess • Dairy Carrie Blog
Donna Berry • Berry on Dairy Blog
Paul Snyder • Tillamook Cooperative Creamery
Boris Munster • Tetra Pak
Patti Smith • Dairy America
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