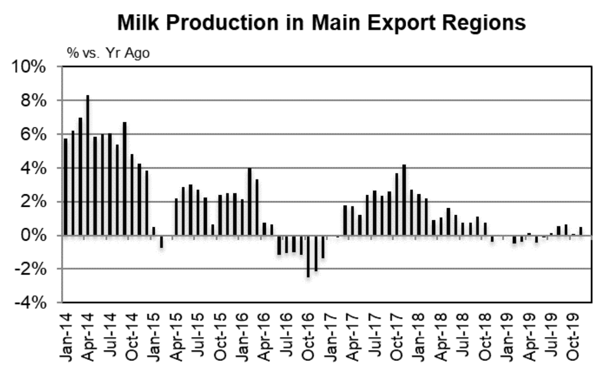
The McCully Report

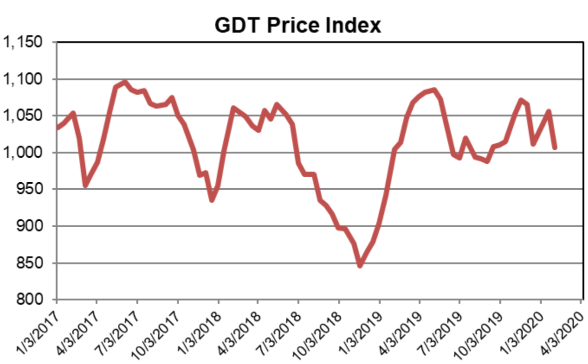
February 2020

Dairy Market Outlook

Going into last week's IDFA Dairy Forum, I was expecting the tone of the discussions on the dairy market to be somewhat bullish, particularly for milk powders. Instead, with cash cheese, butter and NFDM prices moving lower on Monday and Tuesday, talk of a potential recession in 2020, and the coronavirus outbreak creating instability in financial and agricultural markets, the general tone seemed to be more cautious by the end of the Forum. It is not uncommon to see market moves following a large industry conference where market outlooks are shared. It appears the upward momentum going into the Forum could not be sustained, so prices have pulled back from recent highs. I continue to believe Q1 is a transition period for dairy markets coming off high milk prices in Q4, and moving lower into Q2 as milk production and dairy product supplies increase.

The GDT index has been rangebound for 4 months, bouncing within that range since early December. The February 4 Event saw the index drop 4.6% on lower WMP (-6%) and SMP (-4%) prices. Futures were pointing to a lower result given the expectation of less Chinese buying and general uncertainty in the market. The index is near the lowest point since January 2019. The supply environment remains on edge with global milk supply growth under 1% since September 2018, but now the demand outlook is unsettled.





Feed Prices & Dairy Farm Margins

Summary: The uncertainty over Chinese demand for US grain, and a looming record large soybean crop in South America, have pushed grain prices back to near contract lows.

Grain prices were already retreating from highs set in early January following a neutral USDA Crop report on January 10 and lack of details in the US-China phase 1 agreement. The coronavirus outbreak in China creates uncertainty over Chinese demand, as well as the speed of the rebuilding of their hog herd following African Swine Fever. US soybean futures have fallen 9% since the first of the year, while corn prices have been stable, but near contract lows. Brazil is projected to harvest a record large crop of soybeans, so the outlook for grain prices is not bullish.

Using current futures prices, projected dairy farm margins are expected to improve versus 2019, albeit lower than Q4 2019. Dairy farmers are more optimistic this year with fewer signing up for the Dairy Margin Coverage program for 2020. The culling rate has been below year ago levels for most weeks since late October. Large farms will continue to expand while small to mid-size farms rebuild balance sheets.

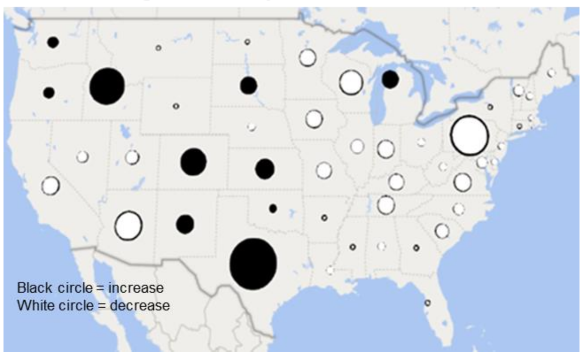
Milk Production

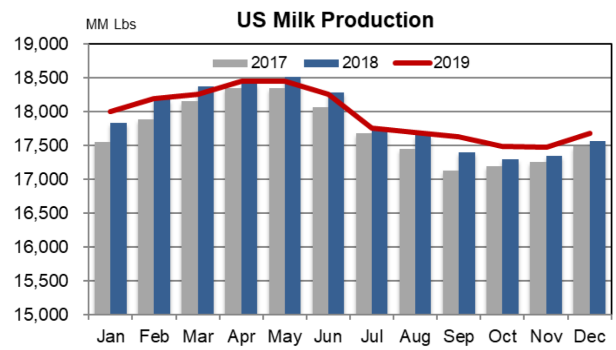
Summary: Milk production in the US and Europe has been less than expected and has kept markets firm. Modest growth is forecast for the year given higher milk prices.

US milk production posted a second straight month of 0.7% growth vs. prior year in December. Cow numbers are up 22,000 head from August and just 14,000 head below year ago levels, the narrowest gap since mid-2018. But additional growth in the herd will be limited given the lower replacement heifer inventory. Last week, USDA reported the number of heifers expected to calve this year was the lowest since 2013 at 2.93 million head, down 2.5% from last year. Replacement heifer prices are up 14% from Q1 2019 given the lower inventory and improved financial outlook for dairy farms.

The US dairy cow inventory fell 19,000 head during 2019. The largest loss was seen in Pennsylvania with a decline of 25,000 cows. The map below shows the continued expansion of dairy herds in the western US (black circles) and continued contraction in the eastern half of the country (white circles). During 2019, the dairy herd grew 35,000 head in Texas and 21,000 head in Idaho. But going forward, additional expansion in most western states will be constrained by the lack of milk processing capacity.

Change in US Dairy Cow Numbers – 2019





The outlook for US milk production points to a return to average growth near 1.5%. As noted in past reports, growth rates have been stronger coming off weak years like 2019. But fewer replacement heifers and poor feed quality in some regions will limit growth. My price outlook is predicated on more milk in the US and Europe. If that doesn't happen, dairy prices could move higher as the year progresses.

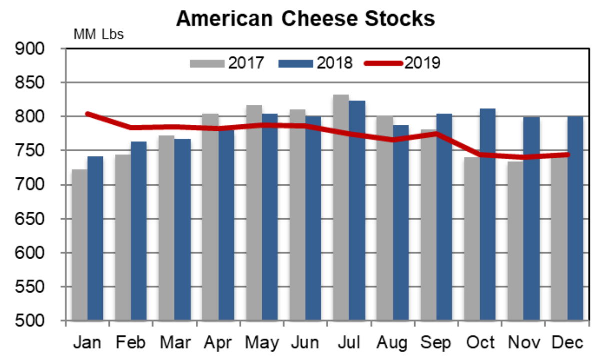
Milk production in Europe is also posting modest gains, but below prior expectations. November output was 0.6% above prior year, the third consecutive month of sub-1% growth. Of the major countries, growth in France, the Netherlands, Poland, and Spain helped offset losses in Ireland (-8.5%), Italy, and the UK. December data representing 40% of production shows milk production up 0.5% vs. prior year, and is likely to finish near 1% when all countries report. To start 2020, French production was up over 1% while Germany production rose 0.5% with more growth expected in the Netherlands. Most estimates for Europe are for growth between 0.5-1.0% this year. Milk prices are moving higher given rising commodity prices, so farmers are seeing an incentive to expand if they can.

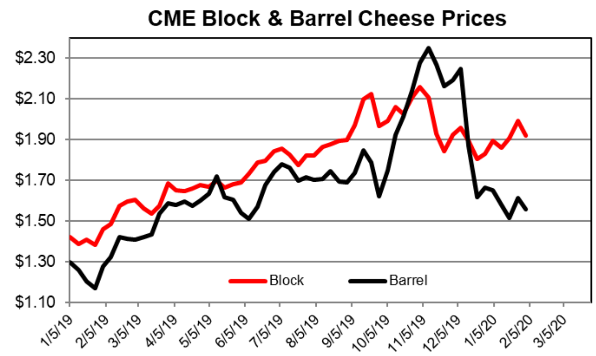
Oceania production continues to disappoint with New Zealand output falling back below zero in December (-0.5%) and well-publicized problems with fires and drought in Australia. While the South Island of NZ has good pasture conditions, dry weather on the North Island has limited pasture growth. The outlook is for cooler, drier weather over the next 2 weeks. Milk production dropped off at the end of last season. If weather cooperates for the next few months, some year-over-year growth is expected as the projected milk pay-out to farmers is quite profitable. But NZ growth will struggle to offset losses in Australia, so total Oceania output will likely see little, if any, increase in supplies, which is supportive to global dairy prices.

Cheese

Summary: February starts with a record-wide block-barrel spread and a narrowing of the gap between US and European prices.

The fundamentals of the US cheese market reflect a tight supply-demand balance. December cheese production posted a tepid 0.2% increase vs. prior year. In a shift from prior months, American (+1.9%) and Cheddar (+1.7%) output grew while Mozzarella production fell 1.6%, a rare drop, and the largest year-over-year decline since early 2009. December 31 total cheese stocks were 2.2% below prior year with American cheese stocks down 7.1%. Reports pointed to more milk moving to non-American styles to start January as cheaper milk would incent production of Parmesan and other styles.





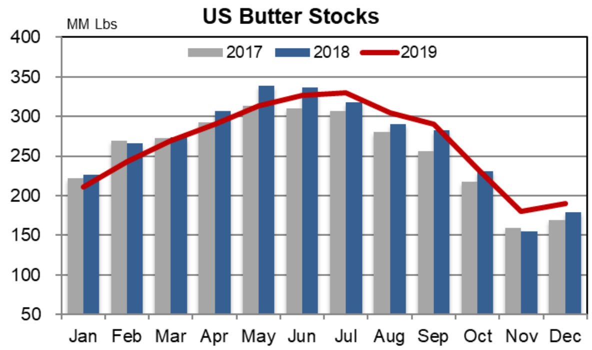
CME cheese prices are trying to find equilibrium. Block cheese prices rallied to $2.00, but barrels slumped to the $1.40's, and the spread widened to a new record. Post-holiday demand and Super Bowl buying kept 40# blocks tight, but 640# blocks and barrels are widely available. The block price is expected to fall soon with $1.80 being a level buyers and sellers indicate they would be happy with for a while. The barrel market is expected to strengthen, but it has yet to show much sign of life despite a drop in processing capacity. My forecast is for lower prices in Q2 as milk and cheese production increase, and stocks get back to year ago levels, with prices then moving higher in the second half of the year. With Q4 2019's highs still fresh in buyers' memories, the psychological impact adds $0.05-0.10 to the forecast. If milk supplies don't increase as forecasted, cheese prices are likely back in a $1.80-2.00+ range for the year.

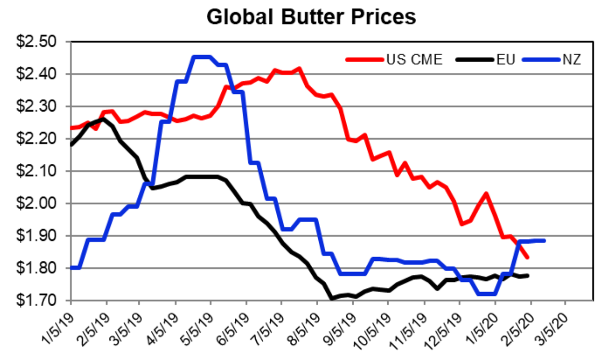
Global cheese prices continued trending higher to start the year with New Zealand (GDT) prices trading at a premium to the US and European prices for the first time since last June. The jump in the most recent GDT Event was more likely due to low supplies rather than strong demand. European prices have advanced $375/MT ($0.17/lb.) since September 2019 and are at the highest level since September 2018. As noted in prior reports, the large increase in Mozzarella cheese production in Europe is bearish to prices, so additional upside seems limited at this point. Cheese demand is growing globally and the major producers are boosting production to keep up.

Butter

Summary: CME butter prices continue the steady downtrend and have converged with global prices. The CME "old crop" phenomenon could create volatility prior to March 1.

US butter production rose 4% vs. prior year in December to 177 million lbs. This was the highest December on record and helped push December 31 stocks to 190 million lbs. With ample cream supplies, and more butter production capacity, stocks are expected to build through the first half of the year. Over the last five years, stocks increased 160 million lbs. from December to next spring's peak. A similar increase in 2020 would put mid-year stocks near 350 million lbs. In past years, that level of stocks would push prices well below where they currently sit. However, demand for butter, and dairy fat in general, is growing and helps offset the growth in supplies. My forecast is for weak prices over the next month and then a recovery to the $2.00-2.20 range for the rest of the year. There appears limited upside at this point, so the more likely scenarios are for prices to stagnate near current levels or move lower.



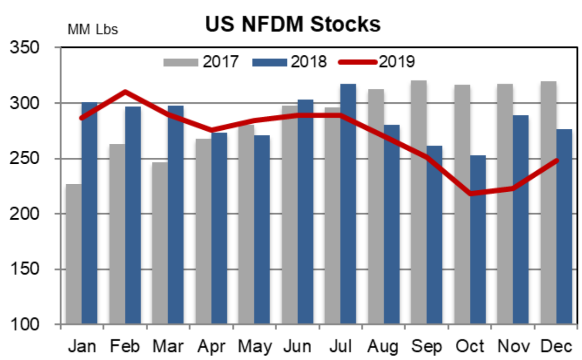


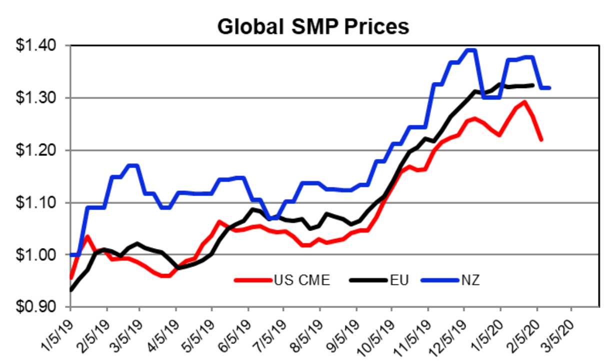
European butter prices have been stable since last summer while NZ prices have jumped 9% over the last month. In Europe, supply and demand remain balanced and the outlook is for more of the same. EEX butter futures range from €3,625-3,850/MT for the year, only a small increase from the current price of €3,640. In New Zealand, the GDT price rose to $4,258/MT, narrowing the gap to AMF at $4,626/MT, which is below the butter price on a fat-adjusted basis. NZ prices are expected to trade at a premium to European and US prices for several months, similar to Q2 2019. The world is long fat and the market may be settling into a new, lower trading range than seen the last four years.

Milk Powders

Summary: The rally in SMP/NFDM prices has come to a halt.

My upside forecast for NFDM has been $1.25 since last spring. While the recent rally felt like it would advance beyond $1.25, the coronavirus outbreak has introduced concerns over milk powder demand. The global supply-demand balance has shifted to deficit after several years of surplus driven by the EU intervention stocks of SMP. Weak global milk output and solid buying pushed prices up 25% from September levels. There is some talk of additional gains up to $1.40 or $1.50. My forecast is less bullish given a more optimistic outlook for milk production and milk powder stocks rebuilding. The downside to prices remains limited, but the uncertainty with Chinese demand, and the potential for a global economic slowdown, make the low-price scenario more likely than last month.





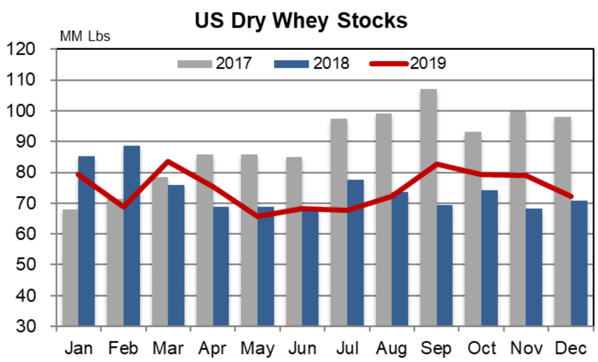
December milk powder production in the US was 12.5% higher than prior year, the largest % increase in over 3 years, and 13% higher than November on a daily basis. Gains were seen in output of both NFDM (+15.3%) and SMP (+4.8%). Stocks on December 31 were 10% below prior year, which was smaller than the 23% gap seen in November. Given the higher production, stocks rose 12% during December. Exports in November fell 5% from October, but were 41% higher than November 2018. Anecdotal reports noted a slow-down in shipments in December as higher prices took hold. Global trade in Q1 has been reportedly better with the US serving as the low-price alternative to Europe and Oceania. US domestic demand is expected to drop as cheese plants shift back to using more condensed skim milk and less NFDM given the price differential. Like last month, until stock levels rebuild to prior year levels both in the US and globally, the market tone will remain firm with the potential for higher prices. I'm expecting prices to chop around the current range until Q2 with future direction driven by the robustness of milk supplies in the US and Europe.

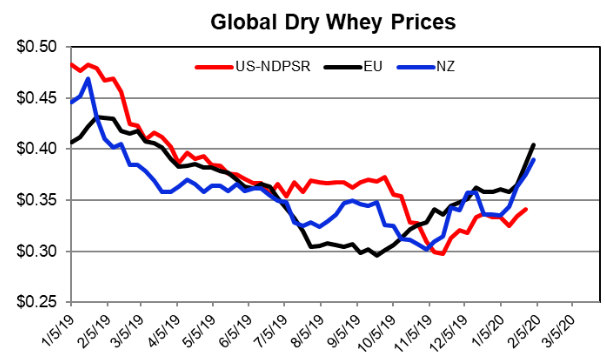
Chinese dairy imports in 2019 were higher for most products except for whey due to African Swine Fever. WMP imports were 29% higher than 2018 and were the second highest after 2014. SMP imports were also higher (+23%) and infant formula imports gained 7% vs. 2018. The outlook for the first half of 2020 is less bullish given higher stocks, higher domestic milk supplies, and now disruption from the coronavirus outbreak. Imports of milk powders are expected to be below the high levels seen in 2019, returning to volumes seen in 2017 and 2018.

<u>Whey Products</u>

Summary: Whey prices have continued to move higher over the last month on good demand.

In the US, dry whey production was up 7% vs. last year in December, and stocks fell 8% during the month, indicating good demand. US dry whey prices are lagging the recent rally in European and NZ prices, both approaching $0.40/lb. Higher SMP prices have boosted dry whey prices as dry whey was a cheaper option than SMP in some applications. Given China's importance to the whey market, the coronavirus outbreak is bearish to whey prices, but the impact so far has been limited. My forecast remains unchanged with mid-upper $0.30's forecast for the year, but with an upside bias.





Production shifted to WPC 80 in December with a gain of 5% vs. prior year and out of WPC 34 (-13%) and WPI (-17%). Even with higher production, WPC 80 stocks fell 5% during December and finished the month just 3% above last year. WPI stocks also dropped 5% in December with the month-end stocks down 30% from prior year, the 16th consecutive month of year-over-year deficits. Prices for both WPC 80 and WPI have firmed since bottoming in Q4, and the outlook is for additional gains through the year. Despite lower production, WPC 34 stocks rose 8% during December and were 6% above prior year on December 31. WPC 34 prices (Dairy Market News) have not kept pace with the increase in SMP/NFDM prices with WPC 34 forecasted prices near $1.00 in the first half of the year. Lactose production dropped 15% below prior year in December for a second month of large declines, likely due to higher whey permeate demand. Lactose prices are forecasted to remain in the low $0.30's, but like dry whey, the bias is to the upside.