



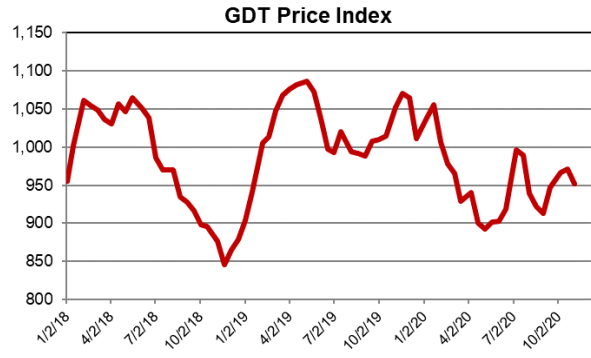
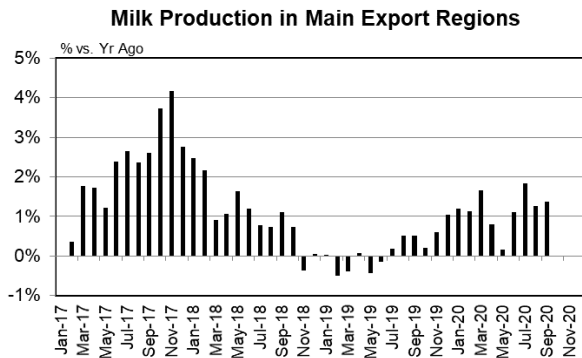
The McCully Report

November 2020

Dairy Market Outlook

Despite concerns over the next wave of COVID, countries locking down businesses once again, volatile stock markets, and the US election, dairy markets have been relatively quiet over the last month, except for US cheese. Since mid-year, I have thought Q2 was the disruption quarter, Q3 would be the transition quarter, and Q4 would be when markets would level off after finding a new equilibrium. It has mostly played out like that asides from much higher cheese prices in the US than initially forecasted. Year-end demand for holiday buying should support prices to some extent, but with building supplies and an uncertain demand outlook, dairy prices have room to move lower in the first half of 2021.

Global milk production is projected to post a modest increase in September. The US led the way with a 2.3% increase over last year. With not quite half of production accounted for, Europe looks to see a small improvement vs. August's 0.3% growth. Oceania output is up vs. last year although dryness on the North Island of New Zealand is a watch-out. My outlook is for 1.0-1.5% milk supply growth to continue into Q1, which will keep demand satisfied. Prices are forecasted to generally remain range bound with some products having weaker outlooks than others.



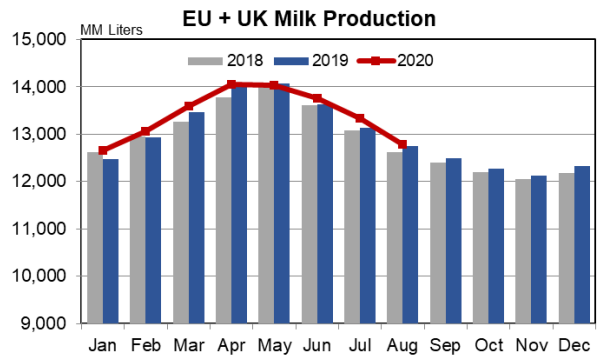
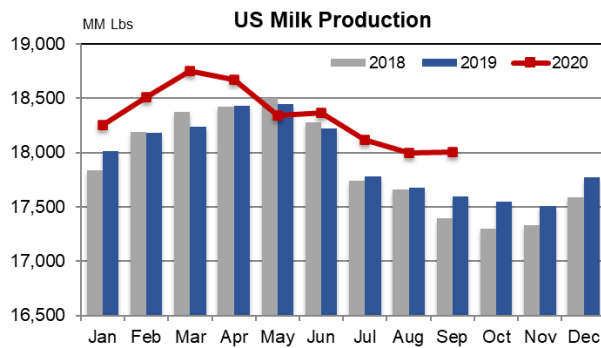
Milk Production

Summary: Global milk production grew 1.3% vs. year ago in August – a slow-down from July given lower output in several European countries due to hot weather.

The growth rate of US milk production returned to pre-COVID levels in September, increasing 2.3% vs. last year, the largest increase since March. Over half of the growth came from 3 states – CA (+3.2%), TX (+6.5%), and ID (+2.9%) – with the largest % increase coming from SD (+12.3%). Milk per cow posted a solid 2.0% increase and the number of cows grew by 5,000 head from August. Milk production could exceed 1.5% growth in Q4, and is forecasted to maintain that momentum into 2021. However, several factors could limit gains including higher feed prices, the reimposition of milk supply controls, and a drop in margins by next spring. For the full year of 2021, using current futures prices, the projected DMC milk-feed margin is slightly above the 5-year average, which should support near average growth in milk supplies. The main watch-out is grain/feed prices with potential for higher prices given strong Chinese demand and weather concerns in South America from La Nina. Milk prices will be profitable for most farms over the next few months given very high class 3 prices. However, farm pay prices could slip to \$13-15/cwt in the first half, a level that would curtail milk growth by mid-year.

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European milk production growth slowed in August as hot weather hit several key dairy regions. Total output was up only 0.3% vs. a strong comparable last August. Losses were seen in Germany, France, and the Netherlands, but were offset by gains in Ireland and Poland along with Sweden and Greece, two countries not normally mentioned in discussions about milk production. With over 40% of milk production reported for September, output was up modestly at +0.5% led by strong growth in Poland (+3%), Czech Republic (+4%), and Ireland (+1%). With moderating weather and favorable margins, milk production is expected to return to near 1% growth into early 2021.

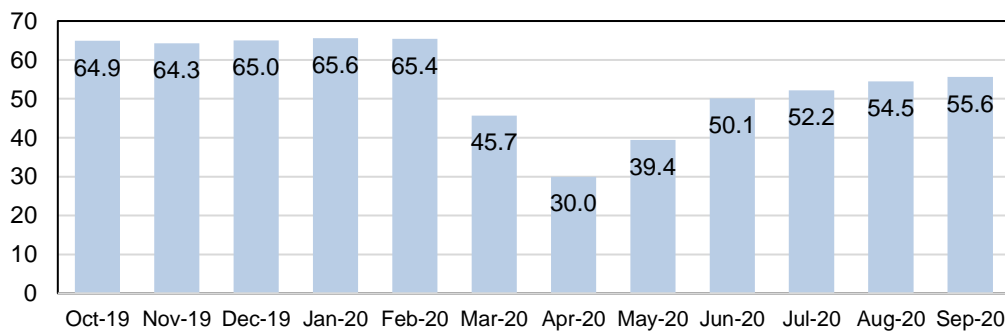
Oceania milk production continues to see positive growth vs. last season, although La Nina conditions bear watching. September production in NZ was up 1.7% vs. last year with 3.5% growth in Australia for August. The latest forecast from NIWA in NZ noted the La Nina event this summer will bring higher humidity and temperatures. Rainfall predictions are mixed with wetter conditions expected for northern and eastern areas of the country, but drier in the south and west. Weather in NZ will remain a watch-out over the next several months.

US Restaurant Sales

As the COVID pandemic has shown, foodservice sales are vitally important to the dairy industry, particularly in the US with a larger share of dairy eaten away from home vs. other countries. In the US, the restaurant industry market researcher Technomic, Inc. recently reported the restaurant industry will lose between \$250 billion to \$300 billion in sales during 2020 compared to 2019, a similar outlook as the National Restaurant Association (NRA), the major foodservice trade group. Segments under the greatest pressure include full-service restaurants, bars, business and industry, travel and leisure, and schools. Data released by the NRA in mid-September showed nearly 1 in 7 restaurants, representing about 100,000 establishments, have closed permanently or long term. As the graph below shows, total restaurant sales have recovered from the lows in April and May, but remain around 15% below pre-COVID levels. For dairy, the impacts vary by product with cheese faring better due to large volumes in pizza and QSR (burgers and sandwiches). However, sales are lower for butter due to lower sales at mid-tier and upper-end restaurants, and for fluid milk due to less sales into school lunch programs.

Total Eating & Drinking Place Sales

US Census Bureau - in billions of dollars



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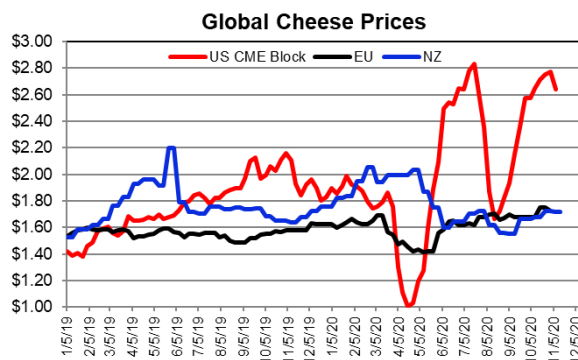
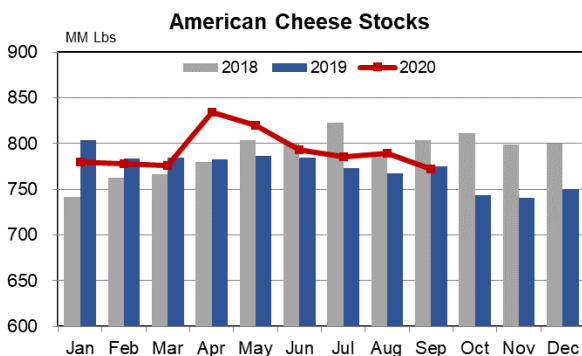
Cheese

Summary: While prices in Europe and New Zealand remain stable, US cheese prices continue to surprise with a strong rally in CME blocks in recent weeks topping out near \$2.80 only to be in free-fall to start November.

In the past month, CME block cheese prices climbed further into the \$2.70's with larger gains made by barrels, making new highs last week. The story continues to be a shortage of 4-30-day old Cheddar cheese to trade at the CME due to an unexpected fourth round of USDA purchases and strong retail demand. Just last month, the Secretary of Agriculture said the Food Box program was ending only to see another round announced several weeks later. Future rounds are less likely after the election with more money shifting to SNAP (food stamps). Price strength is also attributed to companies buying off the prior month average. With a \$2.71 CME block average for October being used for November purchases, buyers likely loaded up on \$2.33 cheese (September average) during October. As November 1 hit, buyers appear to have backed off with prices falling sharply this week on the CME. This pricing dynamic has been a factor in cheese market volatility over the last few months.

The latest data from USDA support higher cheese prices, albeit not at record highs. September 30 stocks of total cheese were down 1% vs. last year, the first year-over-year decline since March, with both American and other natural cheese stocks below last year. The drawdown in stocks during September was more than average, not surprising given reports of solid demand. Cheese exports were 63MM lbs. in September, down 8% from August, but up 4% vs. last year. After a 2.6% drop in August, September cheese production rose 1.1% vs. last year. Cheddar output saw the biggest growth (+7.7%) while Mozzarella remains weak (-2.6%). The new plant in Michigan began production in October and is ramping up through next spring. So, cheese production growth will post larger numbers in the coming months.

My cheese price forecast from last month got pushed out 30-45 days with the latest USDA purchase announcement. The pace of retail cheese sales slowed in October, and current orders for the holiday season are reported to be less than normal. Block prices are falling fast, but there will likely be a brief period of buying at a couple points – maybe \$2.25 and then again near \$2.00. CME block prices are forecasted to drop under \$2.00 in December, or maybe sooner given the speed of this week's decline. By Q1, additional cheese supplies and seasonally lower demand are expected to put downward pressure on prices into the \$1.60-1.70's (block), possibly lower depending on foodservice sales. A slowdown in milk supply growth is forecasted to support higher prices in the second half of the year with COVID impacts being a significant unknown.



Cheese prices in Europe and New Zealand moved up modestly in the last month, both gaining about \$0.05/lb. (\$100/MT). Prices in both regions remain in a narrow range seen for the last 6 months. As noted last month, with mostly balanced supply and demand conditions, global prices are expected to continue to be rangebound with US prices falling over the next few months, closing the gap to global prices.

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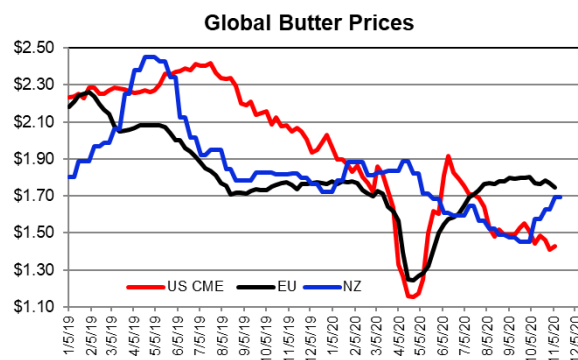
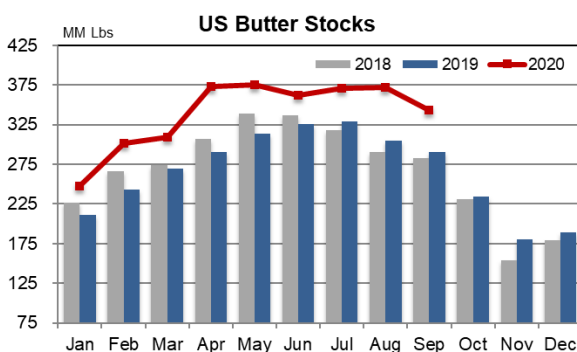
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Butter

Summary: US butter prices find themselves in an unusual spot trading at a sizeable discount to European and New Zealand prices, but the outlook is bearish given high stocks and weak demand.

With over 25% of butter sold for holiday demand, there is usually some strength in butter prices in October and November, but not this year. Butter stocks fell a little more than average during September, but end of month stocks still stood 18% above last year. Year-end stocks are projected to be above 200MM lbs., and with a normal build, will approach 400MM lbs. next spring, above this year's peak of 375MM lbs. Butter production continues to run well ahead of last year with a 5.4% increase in September. This included a nearly 10% gain in California and an 8% increase in the Central states. With weaker demand for some high-fat products, cheap cream will keep heading to the butter churn.

Last month's report noted that if butter prices couldn't reach \$1.60 during the peak holiday demand period, the butter market was in trouble and prices could dip to \$1.25 after the holidays. Instead of moving higher, butter prices dropped below \$1.40 over the past few weeks. While there is still time for a short rally, the calendar and the amount of "old" butter trading works against any sustained price strength. My forecast has been lowered for 2021 with prices bottoming out in February at \$1.25. Given the heavy stocks and "old crop" butter that needs to trade before the end of February, it is possible to see prices plummet to this spring's lows of \$1.10, at least for a short period of time.



Butter prices in Europe have eased lower in recent weeks while New Zealand prices have rallied 16% (\$540/MT) since mid-September. The increase in the NZ GDT price is partly a function of lower offer volumes as buyers pay up to secure product. However, with European prices showing some weakness, and US prices well below prevailing global prices, additional upside is limited at this point. EEX futures prices point to steady to slightly lower prices through mid-2021 while NZX futures trade at a slight discount to the current cash price. Restaurant closures, limited travel, and nervousness over large holiday gatherings are all bearish for butter demand, so prices are forecasted to remain under pressure.

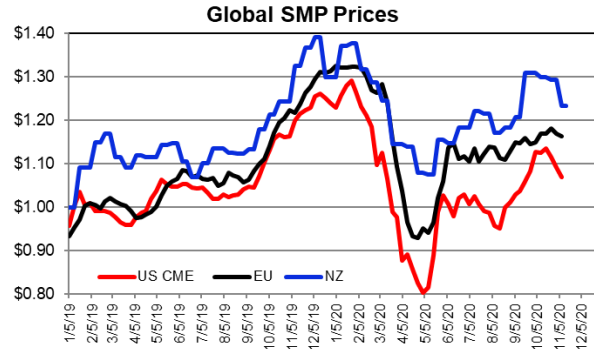
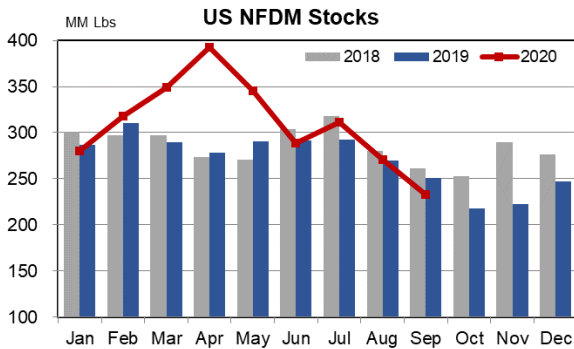
Milk Powders

Summary: Milk powder prices have retreated from 8-month highs.

After trading at a large discount to European prices, US NFDM prices closed the gap last month, but then fell back as demand eased while production is strong. September milk powder production was 11.4% above last year with growth in both NFDM (+5.5%) and SMP (+23.3%). At 72.5MM lbs., that was the highest monthly total since the USDA started tracking SMP production in January 2005. While exports in September were down 6% vs. last year and were 16MM lbs. (-11%) lower than August, the large production figure for September indicates stronger exports for October. This fits with anecdotal reports over the last month of strong demand. However, despite relatively low US prices, exports have been falling each month since May. Shipments to Mexico were down 33% vs. last year while stronger demand from SE Asia helped offset the loss of sales to Mexico. NFDM stocks dropped 14% during September and ended the month 7% below last year, in part due to solid domestic demand (e.g. cheese plants).

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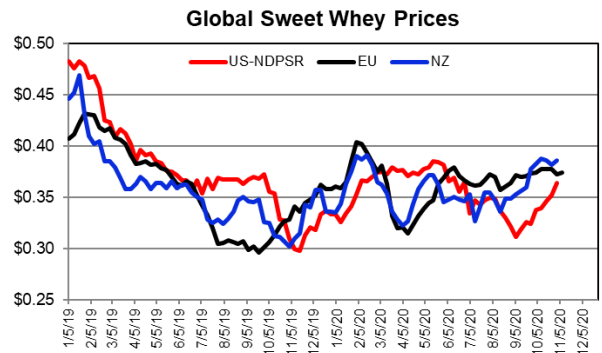
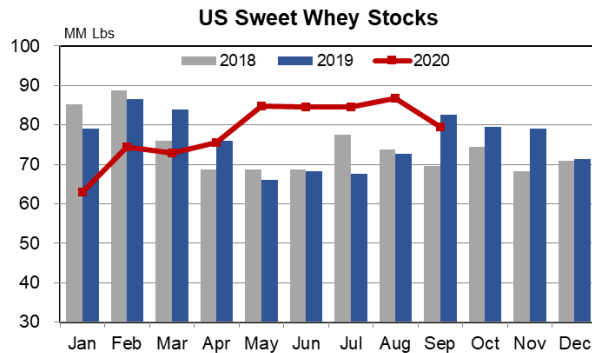
Global SMP prices have been firm with strong demand from China. In September, Chinese WMP imports were up 7% vs. last year and SMP imports were up nearly 29%. Recent strength in the Chinese currency, the yuan, increases the buying power of Chinese importers, which is bullish for continued Chinese demand of dairy products. A bearish watch-out is a new export subsidy in India that started November 1. For 6 months, the state of Gujarat will offer a US\$680/MT subsidy for SMP exports. Amul has plans to export 50,000 MT (110MM lbs.), up from 12,000 MT last year. Excess stocks are reportedly 90,000 MT or nearly 200MM lbs. This has the potential to push prices lower in the first half of 2021.

New Zealand SMP prices on GDT jumped 8% on September 15, but have given back most of those gains by this week, settling at \$2,722/MT (average) on November 3. The weakness in the GDT prices caused a slight downtick in European prices this week along with a more noticeable drop in US prices. Both NZX and EEX futures prices for SMP have a flat structure into Q2, so the market is not paying to store product nor is concerned about supply problems over the next 6 months or so. As milk supplies from the major exporting regions grow, milk powder prices could slump from current levels, but the downside is limited.

Whey Products

Summary: Sweet whey powder prices have moved higher in recent weeks while high protein products continue to struggle with weak demand.

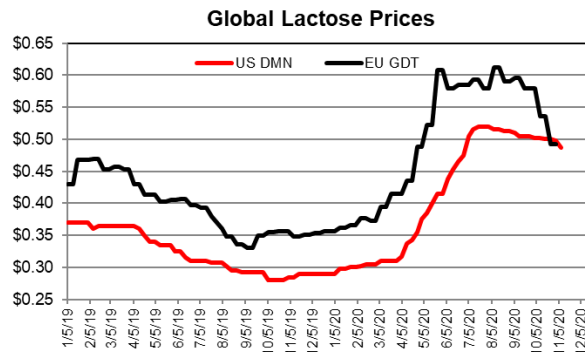
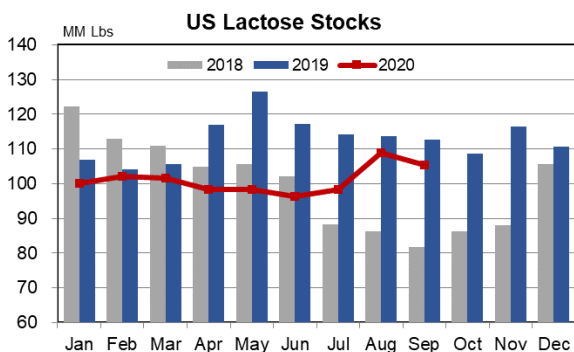
The sweet whey and whey permeate market continues to be about China. In September, China imported 122MM lbs. of sweet whey powder, 39% more than last year. For the first 9 months of the year, Chinese whey imports were 35% above prior year due to a recovery in demand for pig feed as the country rebuilds their hog herd. The new farms being built are modern, commercial-scale operations where large amounts of prepared feeds will be needed. This is expected to continue, which is supportive to sweet whey and whey permeate prices into 2021.



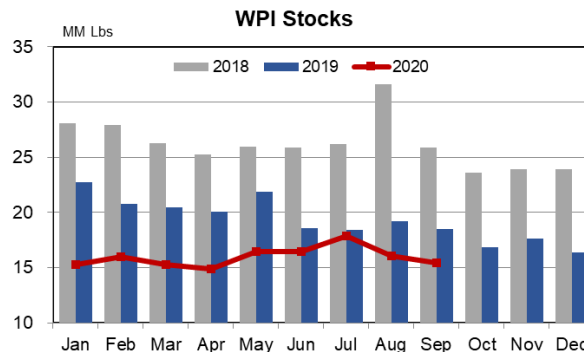
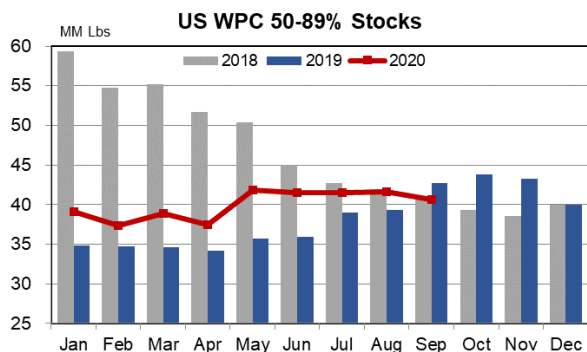
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The sweet whey powder market is firm with the CME and USDA AOM prices at the highest point since early 2019. While the NDPSR price is lagging, it is up 17% in 2 months to over \$0.36, closing the gap to prices in Europe and New Zealand. September production of sweet whey powder in the US was 17% below last year and the lowest since March 2019. Exports have recovered in recent months with September shipments up 52% from last year, but down 11% from August. Sales to China represented nearly half the total, but fell 21% from August's large volume. Stocks dropped 8% during September, finishing the month 3.8% below last year. The price outlook is dependent on Chinese demand. Global prices have likely peaked for now and are forecasted to trade in the mid-upper \$0.30's.



Global lactose prices are falling, but at different speeds. The more dramatic decline has been seen in the GDT Europe price with an 18% drop since mid-September. There was no trading in this week's Event as the US and European prices have converged, at least for now. However, this week's USDA AOM price fell 1 cent to \$0.4875, the lowest price since late June. Production was up 1.7% vs. year ago in September while stocks remain slightly below last year's level. Spot prices are reportedly in the mid-\$0.40's with more downside expected after the first of the year. Sweet whey prices in the mid-upper \$0.30's are forecasted to keep lactose near \$0.40 next year given solid lactose demand.



While the carbohydrate portion of the whey complex is experiencing good demand and prices, the protein side of the complex continues to struggle with weak demand. Production of low protein WPC was 14% below last September, but gains were seen in high protein WPC (+5%) and WPI (+4% and a 4-month high). Stocks are not burdensome: WPC 25-49% is only 2% above last year while WPC 50-89% is down 5% and WPI is 16% below last year. WPC 80% and WPI exports have been tracking well above last year's levels for the last year, but the market tone has been bearish. WPC 80% prices continue to see a wide range with \$1.60-1.65 being a good average, but with spot prices reported as low as \$1.30, and higher-end product near \$2.00. For WPI, prices have been near \$2.50 with a steady outlook in Q4. Manufacturers believe, or hope, the next move is higher, but with additional supply coming on the market, and shaky demand, prices might remain near current levels through mid-2021.

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