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Outlook on the Economy and Dairy



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Grain/Farm Supply/Ethanol Outlook



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Animal Protein Outlook



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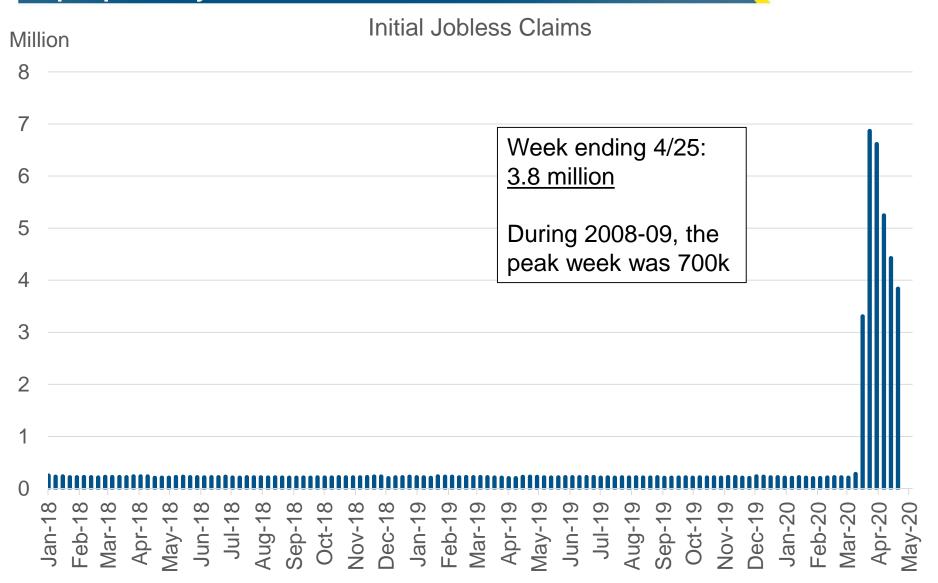


Global & U.S. Economies

Dan Kowalski

Unemployed total tops 30 million. Roughly 1 in 5 American workers unemployed. Unemployment rate for April probably 14-16%.



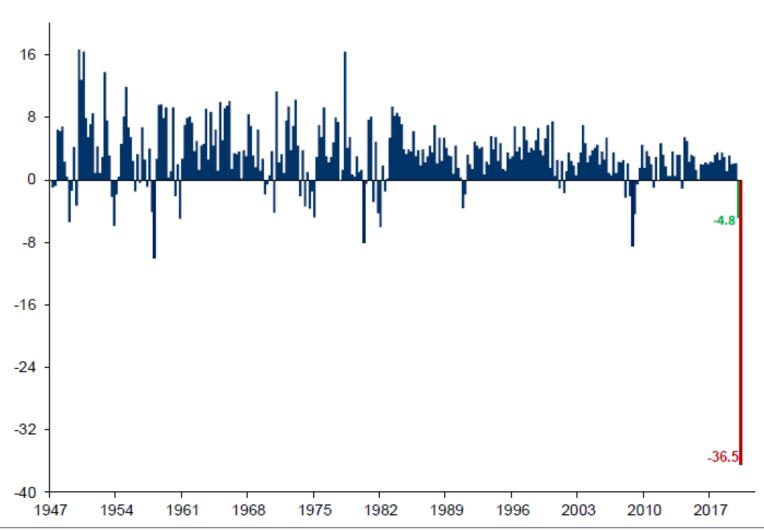


U.S. GDP in Q1 worse than expected, but Q2 will be on a different scale



US: Real GI™ growth

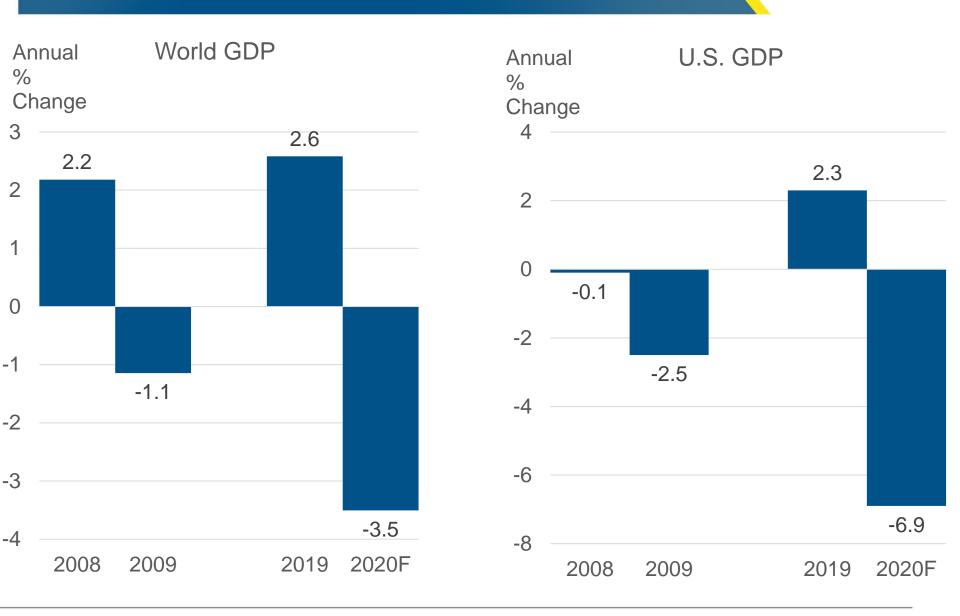
Percent change, q/q annualized



Source: Oxford Economics

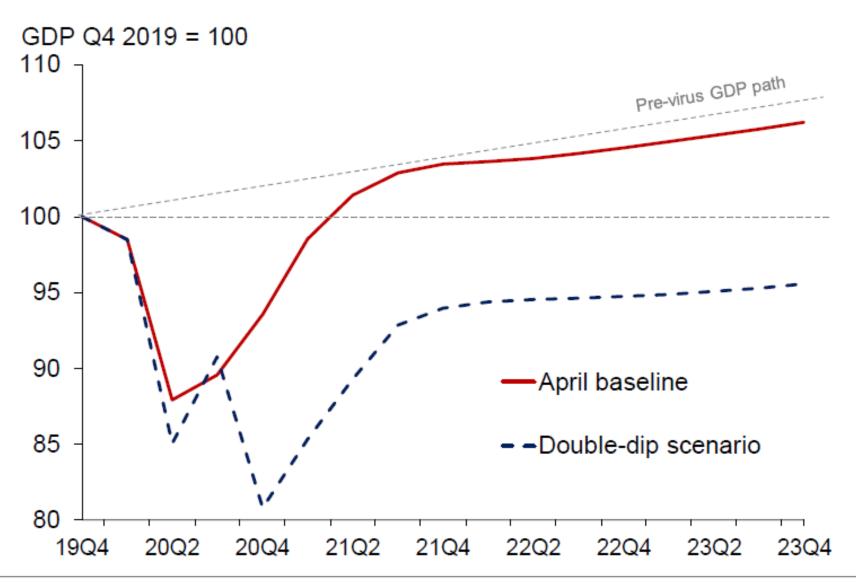
The U.S. and world economies will contract more in 2020 than in 2009





Baseline forecast: GDP is back to Q4 2019 levels by Q2 2021. But a second contagion wave in fall or winter could change that





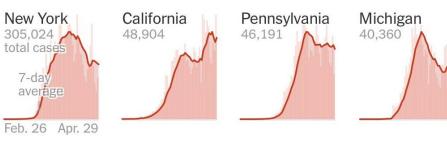
U.S. COVID cases are falling, but very slowly

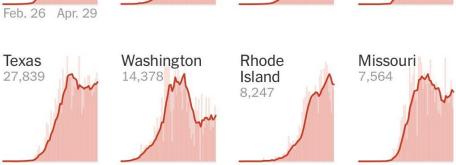


Where new cases are decreasing

New Jersey Florida Louisiana Connecticut 27,660 116,264 33,185 26,767 total cases 7-day average Feb. 26 Apr. 29 Ohio South Idaho Georgia Dakota 1.984 24,300 17,303 2.375

Where new cases are mostly the same





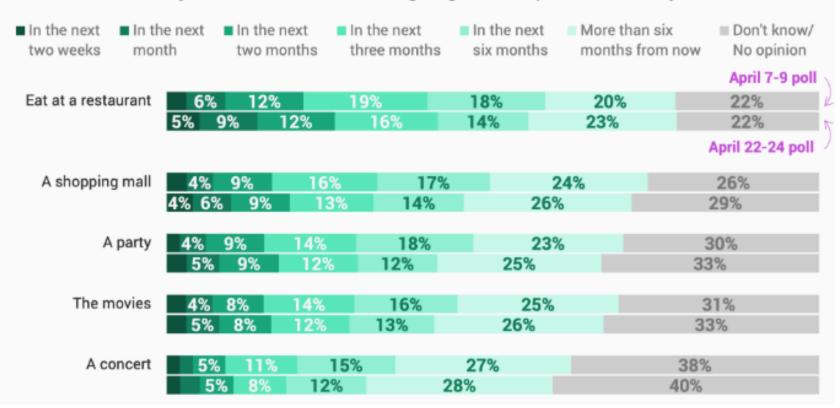
Source: NY Times

Most Americans not ready for the re-opening



Comfort With Resuming Activities: Two-Week Trend Data Shows Consumers Still Aren't Sure

Based on what they knew about the coronavirus, share who said when they would feel comfortable going to each place or activity:



Source: Morning Consult

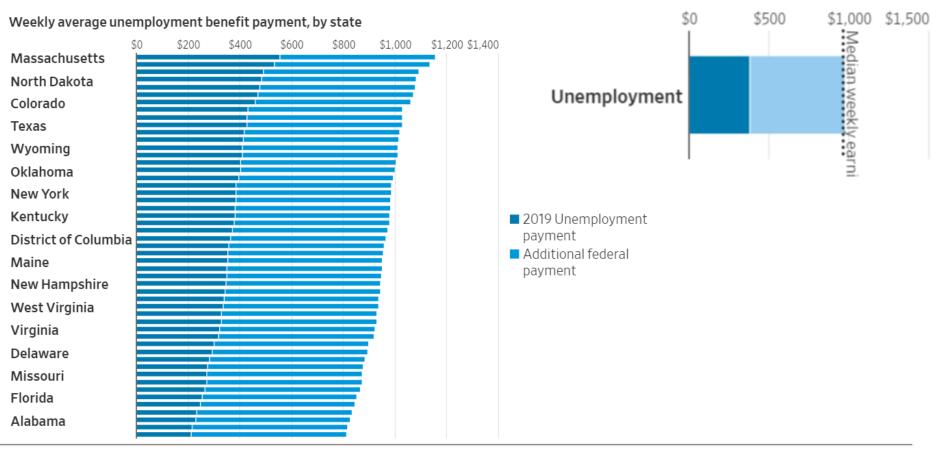
Half of U.S. workers stand to earn more in unemployment than they did at their jobs before the shutdown. The unemployment \$ boost lasts through July



When businesses reopen, will workers return?

Median weekly earnings for full-time workers vs. average unemployment payments





Source: WSJ

Grain / Ethanol / Farm Supply Outlook

Kenneth Scott Zuckerberg

The Question



What is the impact of COVID-19 and the economic slowdown on the U.S. Grain, Ethanol and Farm Supply sectors?

The Answer



Short Term Outlook

Ethanol

- Impact on Corn = Lower Demand
- Shelter in Place → Reduced Gasoline Usage → Ethanol Demand Destruction → Plant Closures and Production Cuts → shortages of Distiller's Grains Carbon Dioxide and other co-products → Lower Corn Demand

Negative

Grain

- Mixed but exports encouraging
- Corn prices and basis have come under significant pressure amidst ethanol demand destruction, reduced feed demand and lower exports.
- Soybean and Wheat have held up better due to exports and consumer staple usage.

Neutral to Negative

Farm Supply

- Minimal impact from COVID impact thus far
- lowa and Illinois corn and soybeans doing very well with 35% to 40% planted
- Weather has been favorable and forward one month outlook very good; current agronomic inventories are adequate. <u>Supply chain in focus for 3Q 2020</u>

Stable*

* Although grower financial health is coming under increasing pressure



Observation #1: A recession was inevitable; the "forced" global shutdown to contain COVID19 was a Black Swan

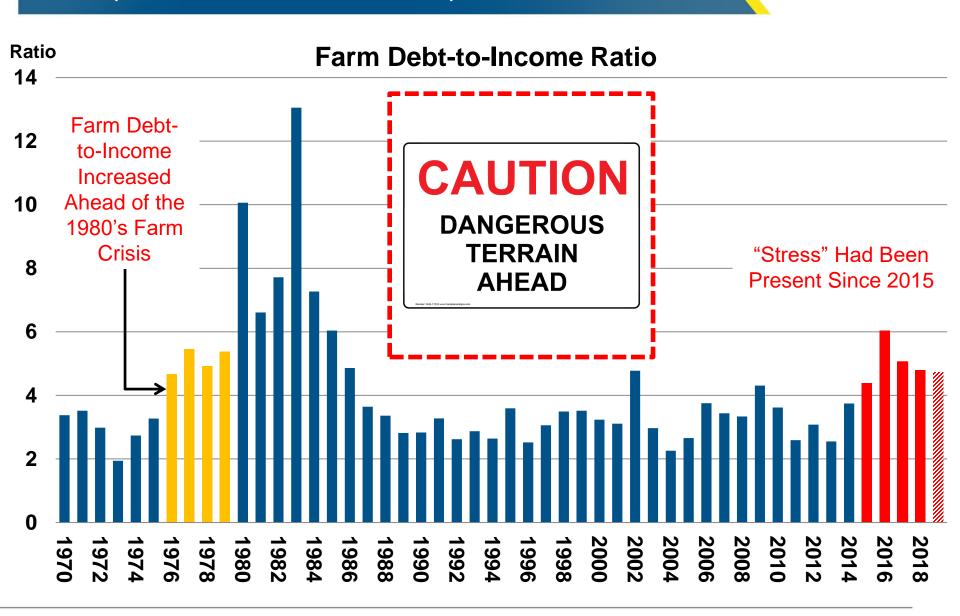


"Typical" Economic Growth Cycles

	Rising GDP	→ Falling GDP		
ıflation	Stage 1	Stage 4		
Falling Inflation	Economic Recovery	RECESSION		
	Begins	March 2020		
1	2009, 2010			
Rising Inflation	Stage 2 Accelerating Economic Growth 2011 to 2017	Stage 3 Stable and then Declining Mature Economic Growth 2018 to 2019		

Observation #2: US. farmer financial health was already under pressure in 2020; additional pain is inevitable





Observation #3: Grain exports are mixed but Soybean and Wheat volume are encouraging!



Accumulated Exports by Marketing Year	Corn	Soybeans	Wheat
Volumes Change (Total)			
Current Period - April 2020 (1,000 metric tons)	21,650	31,696	21,419
Year Ago - April 2019 (1,000 metric tons)	33,497	33,175	20,095
Percentage Change::			
China	n/m	+123%	n/m
Mexico	-17%	-10%	+31%
Canada	n/m	n/m	n/m
Japan	-38%	-4%	0%
Total	-35%	+5%	+7%

Notes:

Russia has suspended grain exports until July 1st. Chinese bought 2.1 MMT soybeans from Brazil in March, a 25% decrease YoY due to harvest delays (February rain), helping boost US. Soybean exports to 1.7MMT during the month.

Observation #4: However, USD strength vs. Brazil and Russia makes exports more expensive / less competitive

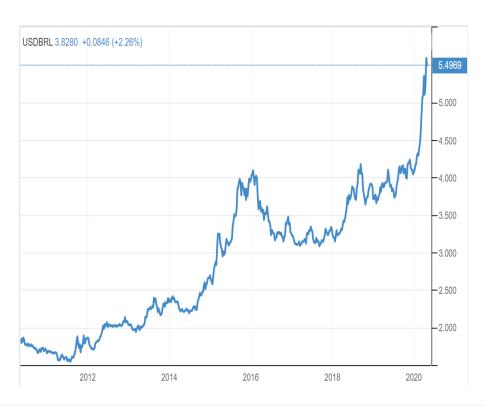


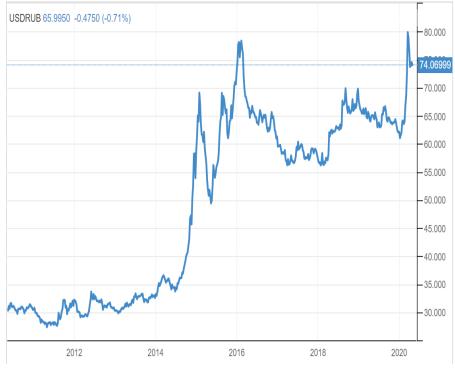
Brazilian Real

"The Real has reached a fresh record historical low against the USD, reflecting concerns over a deep economic recession due to coronavirus pandemic, political uncertainty and despite stimulus from the government and central bank."

Russian Ruble

"The Russian continues to appreciate at benchmark Brent Crude Oil rebounded above \$20 a barrel. On April 24th, the Bank of Russia slashed interest rates to its lowest in six years and kept the door open to further cuts."



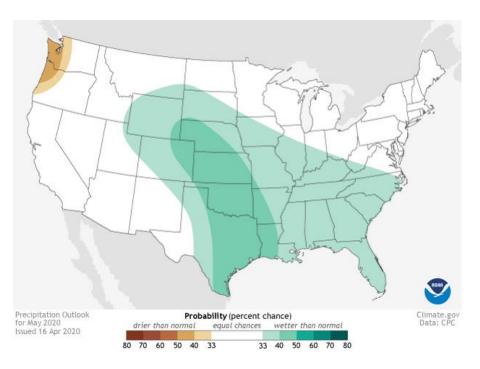


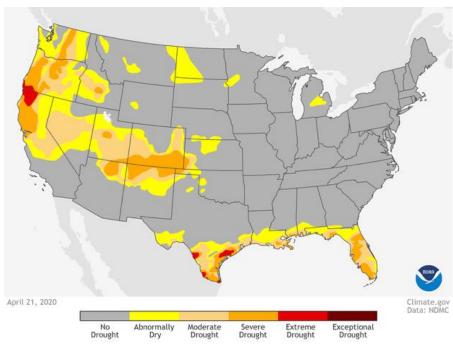
Observation #5: Crop progress continues, weather outlook remains favorable: "Here Comes The Sun!"



Monthly Precipitation Outlook

Drought Monitor





Source: NOAA Climate.gov April 28, 2020

Source: NOAA Climate.gov



Long-Term Outlooks



Don't let a good crisis go to waste! Economic chaos calls attention to things that needed to change but lacked a catalyst. We now have that catalyst, opportunities lie ahead



ETHANOL

Excess supply needs to be rationalized

The exit of weak players will be positive for top tier producers.

Growth opportunities exist via consolidation, exports to China and expansion of coproducts



GRAIN

Exports are actually showing momentum recently in corn, soy and wheat.

Resolution of trade agreements (China, USMCA, Japan paying dividends.) US has an opportunity to reduce production costs and regain an export edge via digitalization of agriculture



FARM SUPPLY

Input source (from outside USA) could be an issue post COVID19, Co-op model has long needed to evolve anyway to capture greater value. Opportunity exists to shift from commission sales on inputs and free agronomic advice to Field Diagnostics / Advice as a Service

Animal Protein Outlook Will Sawyer

Recent Developments in U.S. Animal Protein



Retail food and meat sales growth has slowed and restaurant sales are showing signs of improvement, albeit still significantly below year ago levels

Instances of COVID-19 in the mostly rural communities around meat plants have surpassed the U.S. national average

Meat and poultry production continues to contract with pork and beef capacity utilization contracting to multi-decade lows

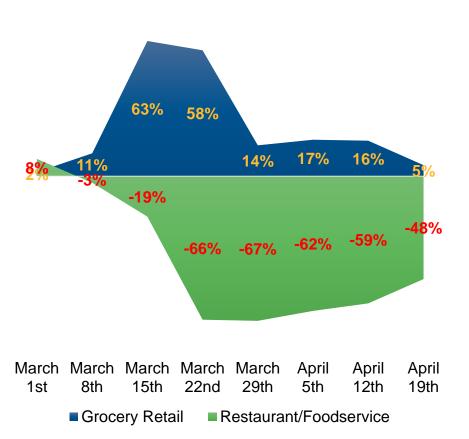
Livestock producer margins remain significantly unprofitable and in most cases have declined in the last two weeks

President Trump has signed an Executive Order keeping meat and poultry plants open

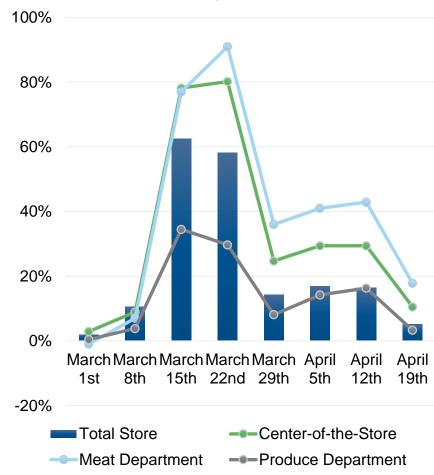
Food Stockpiling by Consumers in March, Consumption "Normalizing" in April



Food Sales Growth At-Home vs Away-from-Home

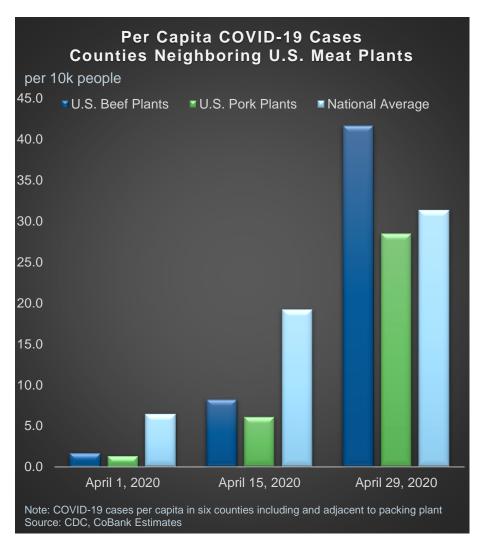


Retail Grocery Sales Growth



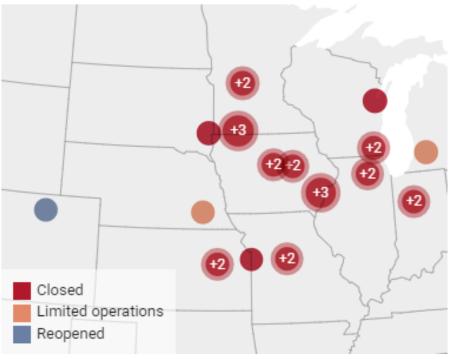
The Spread of COVID-19 in U.S. Meat Plants and Rural America





Temporary meat plant closures

Updated April 29

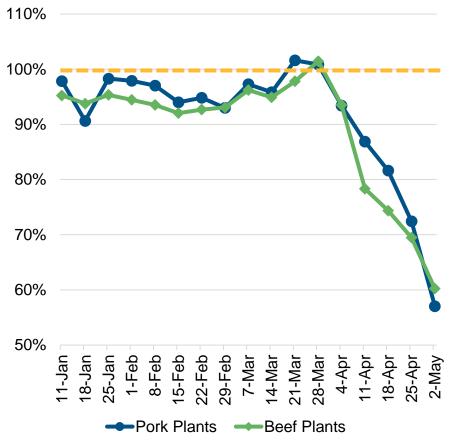


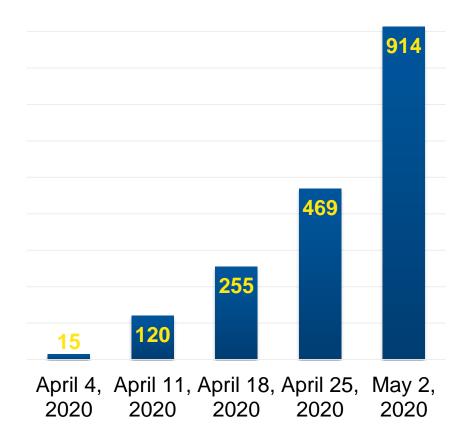
Meat Plant Capacity Has Declined ~40% in April





Weekly "Under Processed" Hog Supplies (000s head)

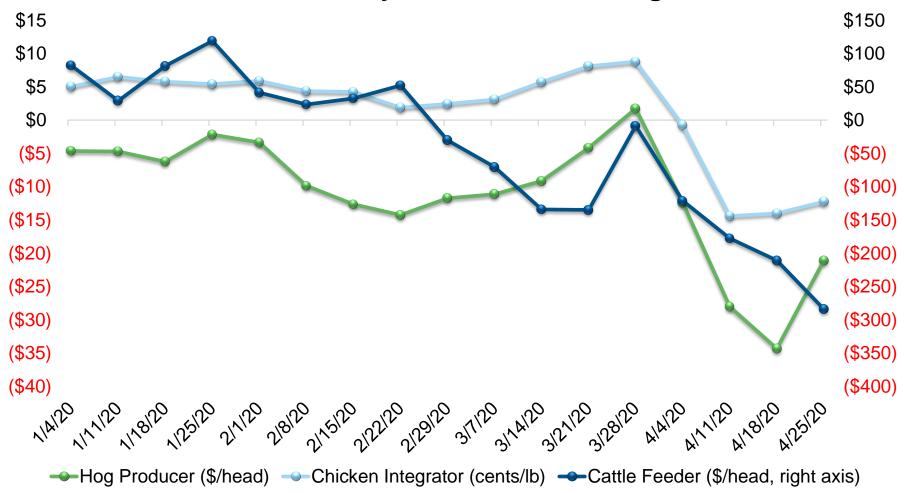




Weak Industry Profitability in Q1 Has Declined Further in April



U.S. Meat and Poultry Producer Cash Margin in 2020



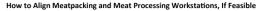
U.S. Government Announcing New Initiatives to Get Meat and Poultry Plants Open Again



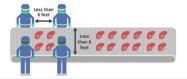






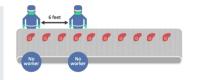


Bad: Workers are within six feet of one another, including at side-by-side or facing workstations.



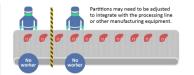
Good:

Workers are spaced at least six feet apart, not facing one another. Other configurations may be used to achieve similar distancing between workers.



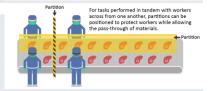
Good:

Physical barriers, such as partitions, separate workers from each other.



Good:

Physical barriers, such as partitions, separate workers from each other, including where workers need to perform tasks in tandem across from one











Animal Protein Sector Outlook





attle - Beef

- Robust retail demand but rising unemployment to pressure more expensive cuts
- Highest exposure to foodservice, especially the full-service restaurant sector
- Labor shortages especially challenging for packers due to low levels of automation and large market share of individual plants
- Strong cash margins of packers being offset by weak capacity utilization and declining foodservice demand
- Cattle feeders getting pressured by weak leverage with packer and sharp declines in fed prices
- Producers have flexibility with generally positive grazing conditions stretching the supply chain



Hog - Pork

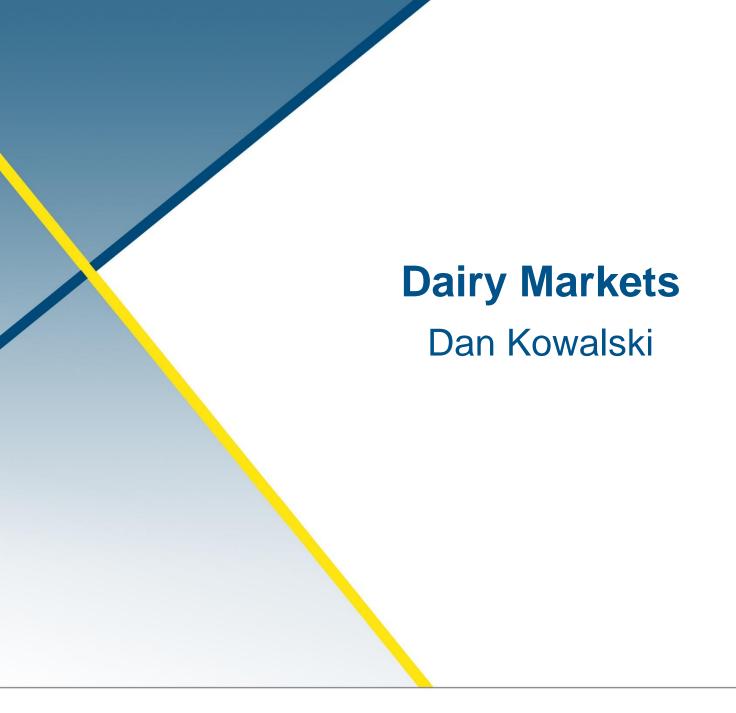
- Lowest exposure to foodservice of U.S. animal proteins but still seeing negative price impacts in bacon and ham
- Exports continue to climb helping to offset supply growth in Q1 but will face increased competition due to the strong dollar and weak economies in Canada and the EU
- Packing plants in U.S. Mid-Atlantic in areas with heightened COVID-19 risks following shutdown of large South Dakota facility
- Production has already started to contract with liquidation of some small independent hog producers and supply shrinking by 14% in last two weeks



Chicken

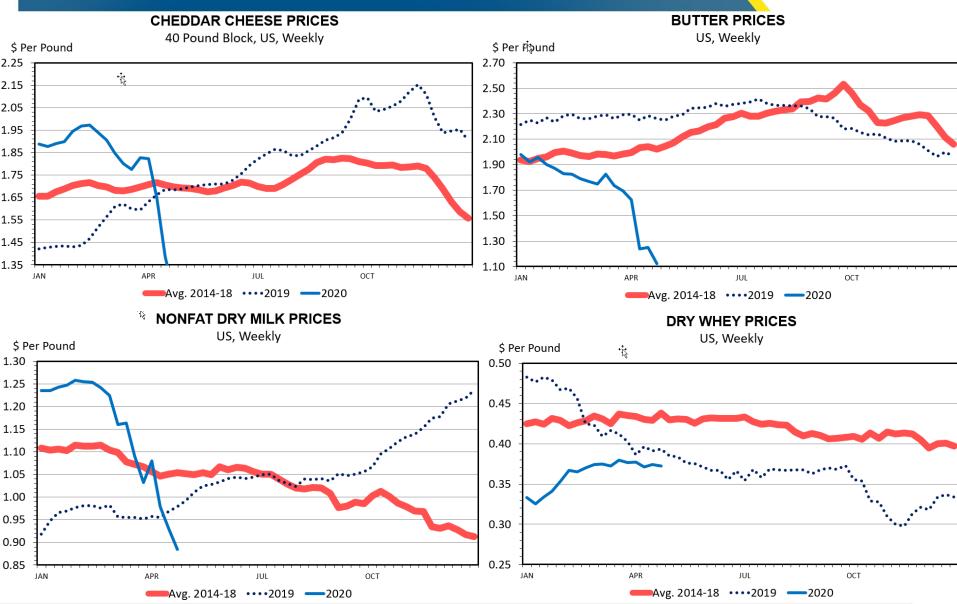
- Despite 40% of chicken's domestic sales being in foodservice, increased exposure to limited-service restaurants and lower price point helping it weather the foodservice slowdown
- Big bird producers with increased foodservice exposure experiencing the bulk of the margin pressure
- New capacity of 2019 making it a challenge to reduce production more quickly
- Chick placements and bird weights reflecting lower production this summer
- Production growth flattening and will turn negative in the back-half of Q2 and Q3
- Industry could experience the largest loss in nearly a decade

Source: CoBank



Dairy industry is producing 10-15% more milk than is being consumed







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