



**3<sup>rd</sup> Annual Food Summit**  
**Wednesday, July 29, 2020**



## **3<sup>rd</sup> Annual Food Summit**

**Wednesday, July 29, 2020**

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# 3<sup>rd</sup> Annual Food Summit

## Wednesday, July 29, 2020

### Agenda

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**8:00 – 8:05 am**      **Welcome**

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**8:05 – 8:45 am**      **Keynote Presentation – The Agriculture and Food Economy: Views from USDA's Chief Economist**

Dr. Robert Johansson, Chief Economist at the U.S. Department of Agriculture (USDA) will kick off the 3<sup>rd</sup> Annual Food Summit. Dr. Johansson will provide an overview of key issues in the farm economy, with emphasis on those he manages in USDA's Office of the Chief Economist. Dr. Johansson has been the Chief Economist at USDA since 2015. He received his doctorate in agricultural and applied economics from the University of Minnesota.

**Speaker:**

Dr. Robert Johansson  
Chief Economist  
U.S. Department of Agriculture

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**8:45 – 9:30 am**      **Panel Session -- Managing the Supply Chain**

This panel of speakers will discuss current and pressing supply chain issues and how supply chain agreements are changing to meet the pandemic and new models of business. Our panel will discuss real and practical supply chain challenges and solutions. We will also review strategies for confronting broken supply chain issues in and out of court.

### Speakers:

Nelson Dong, Partner, Dorsey & Whitney  
Monica Johnson, General Counsel, DARIGOLD  
Shevon D.B. Rockett, Partner, Dorsey & Whitney  
Mark Kaster, Partner, Dorsey & Whitney (Moderator)

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### 9:30 am – 10:15 am      **Panel Session -- Directors & Officers and Employment Practices Liability: Implications & Complications of the Pandemic**

These experienced insurance industry experts will discuss the types of D&O and EPL claims being seen in the United States arising in the context of the COVID-19 pandemic; insurers' stated concerns about these type of claims and the economic realities of the pandemic; and the broader implications in the insurance market, including premium, retention/deductible, and coverage considerations, due to the rise of such issue-based claims.

### Speakers:

Michelle Sartain, Management Liability Practice Leader, Marsh  
Kelly Thorig, Employment Practices Liability Coverage Leader, Marsh  
Katie Pfeifer, Of Counsel, Dorsey & Whitney (Moderator)

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### 10:15 – 10:30 am      **Break**

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### 10:30 – 11:15 am      **Panel Session -- The Future of Food**

The food industry is among the most dynamic industries on the planet. Changes in consumer behavior, product innovation, scientific developments, and new distribution channels are accelerating change in the sector. This panel will explore new developments and take a look at the industry's future.

### Speakers:

Dan Altschuler Malek, Managing Partner, Unovis Partners & New Crop Capital  
Alexandria Coari, Capital and Innovation Director, ReFED  
Chip Magid, Partner, Dorsey & Whitney, Moderator

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### 11:15 – 12:00 pm      **Keynote Presentation – The Pandemic's Impact on Rural America and the Farm Economy**

Senator Heitkamp will discuss the unique challenges facing rural America and the farm economy as a result of the COVID-19 pandemic, and how these issues affect the food and

agricultural industries at large. Drawing upon her experience as a member of the Senate Agriculture Committee, Senator Heitkamp will also provide her thoughts on the path forward to address these challenges.

### Keynote Speaker:

Former Senator Heidi Heitkamp



U.S. Senator Heidi Heitkamp served as the first female senator elected from North Dakota from 2013 – 2019.

During her tenure, Senator Heitkamp served as a member of Senate Agriculture Committee where she helped draft, negotiate and ultimately pass two Farm Bills into law, including the landmark 2014 Farm Bill which made historic reforms to the farm safety net. During her six years in the U.S. Senate, Heitkamp quickly became a proven senator who worked across the aisle to fight for North Dakotans. She personally showed that if senators work together, it can lead to real solutions.

Throughout her time in public service, Heitkamp has stood up for Native American children; fought for working families; worked to stop human trafficking; pushed for affordable health care; helped address the detrimental impact exposure to trauma can have on children; helped craft and pass meaningful bank reform; prioritized farmers and ranchers and fought for a true all-of-the-above energy strategy.

Heitkamp previously served as North Dakota's Attorney General, and prior to that post as the state's Tax Commissioner. She serves on numerous boards including the McCain Institute and the Howard Buffett Foundation. She is the founder and Chair of the One Country Project, an organization focused on addressing the needs and concerns of rural America. She is a Senior Fellow in International and Public Affairs at Brown University and serves as a contributor to *CNBC* and *ABC News*.

Twitter: @HeidiHeitkamp

## SPEAKER BIOGRAPHIES



**Dan Altschuler Malek**  
*Managing Partner*  
*Unovis Partners / New Crop*  
*Capital*  
[da@unovis.vc](mailto:da@unovis.vc)  
 646.321.3414

Dan Altschuler Malek is a Managing Partner at Unovis Asset Management / New Crop Capital, a global asset management firm that provides early-stage funding to entrepreneurs developing plant-based and cultivated meat alternatives to foods derived from conventional animal agriculture including beef, chicken, pork, dairy, egg, fish, and shellfish. Through its initial fund, New Crop Capital, the team has invested in more than 37 companies including Beyond Meats, Memphis Meats, BlueNalu, Good Catch, Nova Meats, Alpha Foods, Zero Egg, Aleph Farms, and Miyoko's. As Managing Partner, Dan heads the Firm's activities in North America and Israel, exploring deal-flow, creating strategic opportunities, and working with founders to solve daily challenges and evaluate strategic decisions.

Dan is passionate about food, startups, and sustainability and prior to joining Unovis his endeavors included launching a snack company, heading a logistics firm, opening a restaurant, and managing a creative agency. He received his BA from Mexico's Universidad Iberoamericana and an MBA from Babson College. In addition to his other work, Dan serves as a mentor at Food-X and is a board member of Zero Egg and Alpha Foods.



**Alexandria Coari**  
*Capital and Innovation Director*  
*ReFED*  
[alexandria.coari@refed.com](mailto:alexandria.coari@refed.com)  
 630.640.4074

Alexandria (Alex) serves as ReFED's Capital & Innovation Director, working to catalyze the more than \$18 billion of public, private and philanthropic capital needed into scale solutions to food waste. She brings 10 years of investment banking, sustainable food supply chain, and innovation acceleration experience with startups, for-profits and nonprofits in the U.S. and Latin America, including time at JP Morgan, Fair Trade USA, OLLY, and Agora Partnerships. She is passionate about helping mission-driven companies grow their impact and believes in the power of market-based approaches to solving today's biggest challenges.





**Nelson Dong**

*Partner*

*Dorsey & Whitney LLP*

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Nelson Dong is corporate partner in Dorsey & Whitney's Seattle office and is co-head of its Asia Group and head of its National Security Group. He has advised corporations, cooperatives, banks, universities and independent research organizations for over 40 years in structuring their international business transactions, technology transfers and supply and distribution chains around the world and on related international trade regulation issues such as tariff and non-tariff barriers, trade agreements, economic sanctions and export controls. He has served twice as an export control policy advisor to the U.S. Department of Commerce. Nelson is also frequent author and teacher about international trade, international business transactions and national security and has been an adjunct professor of international law at the Seattle University Law School. He serves on the boards of the National Committee on U.S.-China Relations in New York City and the Washington State China Relations Council in Seattle, and he is an active member of the Council on Foreign Relations. He was a White House Fellow during the Carter Administration and has been a senior official at the U.S. Department of Justice in Washington DC and a federal prosecutor in Boston.



**Mike Droke**

*Partner*

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206.903.8709

Mike Droke is a partner in the Food, Beverage and Agribusiness industry group. Mike started his career as a client, not a lawyer. He represented the same food-related company where he worked in management, thus "walking both sides of the street." As a lawyer, Mike has devoted his practice to practical, results-oriented advice and litigation representation in situations where the law, facts or business risks are ambiguous. His practice is devoted to the areas of agriculture and cooperative law, employment law and in the food and agriculture industries. Resident in Dorsey's Seattle office, Mike is licensed and regularly practices in both California and Washington state. Throughout his career, a substantial part of his practice has been representing agricultural and food-based companies. Mike serves as outside general counsel in that industry, handles corporate governance, and manages complicated domestic and international transactions.



**U.S. Senator Heidi Heitkamp**

U.S. Senator Heidi Heitkamp served as the first female senator elected from North Dakota from 2013 – 2019. During her tenure, Senator Heitkamp served as a member of Senate Agriculture Committee where she helped draft, negotiate and ultimately pass two Farm Bills into law, including the landmark 2014 Farm Bill which made historic reforms to the farm safety net. During her six years in the U.S. Senate, Heitkamp quickly became a proven senator who worked across the aisle to fight for North Dakotans. She personally showed that if senators work together, it can lead to real solutions.

Throughout her time in public service, Heitkamp has stood up for Native American children; fought for working families; worked to stop human trafficking; pushed for affordable health care; helped address the detrimental impact exposure to trauma can have on children; helped craft and pass meaningful bank reform; prioritized farmers and ranchers and fought for a true all-of-the-above energy strategy.

Heitkamp previously served as North Dakota's Attorney General, and prior to that post as the state's Tax Commissioner. She serves on numerous boards including the McCain Institute and the Howard Buffett Foundation. She is the founder and Chair of the One Country Project, an organization focused on addressing the needs and concerns of rural America. She is a Senior Fellow in International and Public Affairs at Brown University and serves as a contributor to *CNBC* and *ABC News*.



**Dr. Robert Johansson**  
*Chief Economist*  
*United States Department of*  
*Agriculture*

Dr. Robert Johansson has been the Department of Agriculture's (USDA) Chief Economist since 2015. As Chief Economist, he is responsible for the Department's agricultural forecasts and projections and for advising the Secretary of Agriculture on economic implications of alternative programs, regulations, and legislative proposals. Dr. Johansson also serves as the Chairman of the Federal Crop Insurance Corporation Board of Directors. Previously he has worked at USDA's Economic Research Service, at the Office of Management and Budget, the Congressional Budget Office, the White House Council of Economic Advisers, and served as USDA's first Acting Deputy Undersecretary of the Farm Production and Conservation mission area in 2017. He received his B.A. in economics from Northwestern University and then served with the U.S. Peace Corps from 1990 to 1995. After returning to his home State of Minnesota, he received his Ph.D. in Agricultural & Applied Economics from the University of Minnesota in 2000. His research has spanned a wide range of issues, including biofuels policy, water quality and quantity policies, regulatory economics, food security, and regional modeling of agricultural systems.





**Monica Johnson**  
*General Counsel & Corporate Secretary*  
*Darigold, Inc.*  
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Monica A. Johnson serves as General Counsel and Corporate Secretary for Darigold, Inc., a \$2.3 billion manufacturer of milk, butter, cheese, milk powder, and whey products sold worldwide. Headquartered in Seattle, Darigold, Inc. is the marketing and processing subsidiary of the Northwest Dairy Association, which is owned by about 450 dairy farm families in Washington, Oregon, Idaho and Montana. She has overall responsibility for the company's legal affairs and activities and serves as Corporate Secretary for the Northwest Dairy Association's Board of Directors. An accomplished attorney and executive, Ms. Johnson has worked with both large and small companies to achieve their business goals. She has experience in a broad range of industries, including foodservice, retail, technology, manufacturing, and supply chain/logistics. Immediately prior to joining Darigold, Ms. Johnson served as General Counsel for Bonduelle Americas, as Assistant General Counsel and Assistant Corporate Secretary at Ventura Foods and also previously served as Senior Counsel at Western Digital. Ms. Johnson also served in the administrations of three California governors. She currently serves as a board member for the ACC Foundation and previously served on the board of the Southern California chapter of the ACC.



**Mark Kaster**  
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Mark is a Partner in the Regulatory Affairs Practice Group and the Food, Beverage & Agriculture Industry Group. He is a nationally recognized lawyer with over 25 years of experience helping clients resolve regulatory compliance matters. Mark's practice emphasizes complex matters involving federal, state and local regulatory agencies. The increasing body of rules and regulations presents enterprise risk concerns to businesses. Mark works with clients and regulatory agencies to find solutions to critical business challenges. He approaches these complex relationships to find creative solutions that help clients meet their business objectives and regulatory obligations.



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Chip is a Partner in the Food, Beverage and Agribusiness Industry Group. For over 30 years, Chip's clients have benefitted from his tenacity, creativity, insight and strategic thinking in handling high-stakes lawsuits. In addition to representing clients in a variety of commercial and technology disputes, Chip represents food and beverage companies in litigation across the country. Chip's interest in food litigation is a natural outgrowth of his love of food (motto: "eat through the wall of pain") and indignation that someone would actually claim to have believed that "Crunchberries" were a real fruit.



**Katie Pfeifer**  
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Katie helps food and agricultural companies identify and transfer risk through contracts and insurance, and to obtain the benefits of those risk transfer mechanisms when trouble arises. She represents clients in all types of complex commercial litigation. In addition to her particular focus on construction and health litigation, Katie provides insurance coverage analysis and advice and represents policyholders in coverage disputes and litigation. Her work includes all types of insurance lines, and ranges from assisting clients with assessing which policies may respond to a claim, tendering claims to insurers, reviewing and responding to insurer positions, negotiating with insurers over defense/reimbursement obligations and choice of counsel, coordinating coverage between different policies, and litigating coverage disputes. She also provides insurance review and analysis for commercial contracts and transactions.



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Shevon defends companies in products liability, consumer fraud, and complex commercial litigation matters. Her practice focuses primarily on the defense of large corporate clients in local, regional and national products liability and commercial litigation, as well as in government investigations and consumer fraud cases. In addition, Shevon conducts litigation risk assessments, establishes and manages e-discovery processes, implements compliance programs, and conducts trainings for in-house counsel and staff. Shevon maintains an active pro bono practice that has included section 1983 prisoner civil rights litigation and the successful obtainment of permanent residence status for immigrants through the Violence Against Women Act. She has also represented homeowners in premises liability matters, and successfully appealed the denial of an assistive technology petition for a disabled client. Shevon has been on the First Judicial District of Pennsylvania's Pro Bono Roll of Honor each year since 2009.



**Michelle A. Sartain**  
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Michelle is the US/Canada Practice Leader for Marsh's Management Liability and Professions practice (FINPRO). Prior to her appointment in September 2019, Michelle was the US sales leader for Marsh. In this capacity, Michelle was responsible for growth, retention, innovation, client service, and guiding sales strategy across the United States. Michelle has more than 23 years of insurance brokering and risk consulting experience with Marsh in a variety of client-facing and leadership roles. Her leadership responsibilities include recruiting and building teams, setting and executing evolving strategies, delivering financial results, leading diverse teams in multiple geographies, and delivering differentiated value to Marsh clients. Pre-COVID, Michelle worked out of Marsh's global headquarters in New York where she began her career in FINPRO in 1997. She resides in Brooklyn, New York, with her husband and two children.



**Kelly B. Thoerig**  
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As Marsh's U.S. Employment Practices Liability and Wage and Hour Coverage Leader, Kelly is primarily responsible for manuscripting EPL and Wage and Hour policies, leading policy and insurer new product reviews, and drafting endorsements in order to deliver the best possible coverage afforded by the insurance markets. In addition, Kelly is a claims advocate for Marsh's FINPRO practice, specializing in complex coverage and claims issues concerning employment practices, wage and hour, directors and officers, professional liability, cyber, crime, and fiduciary liability insurance. Prior to joining Marsh, Kelly was an associate in the Directors & Officers Insurance Practice Group of Troutman Sanders LLP, where she counseled and litigated on behalf of insurer clients in coverage matters nationwide. Kelly represented insurers in complex disputes arising under directors and officers, employment practices, and professional liability insurance. Kelly was also a member of the firm's White Collar & Government Investigations and Antitrust Practice Groups, where she defended antitrust and other commercial litigation matters, as well as criminal investigations and inquiries by securities regulators.

# Food Summit



## The Agriculture and Food Economy: Views from USDA's Chief Economist

**Keynote Speaker:**  
**Dr. Robert Johansson**  
**Chief Economist**  
**U.S. Department of Agriculture**



## Keynote Speaker Dr. Robert Johansson



**Dr. Robert Johansson**  
*Chief Economist*  
*United States Department of Agriculture*



# The Agriculture and Food Economy: What's the new normal?

Robert Johansson  
USDA Chief Economist  
3<sup>rd</sup> Annual Food Summit  
July 29, 2020

Joseph Haerberle / The New York Times

## Summary

1. Economic Outlook
2. U.S. Farm Economy
3. U.S. Crop and Livestock
4. Global Ag and Trade
5. COVID-19 Impacts on Ag

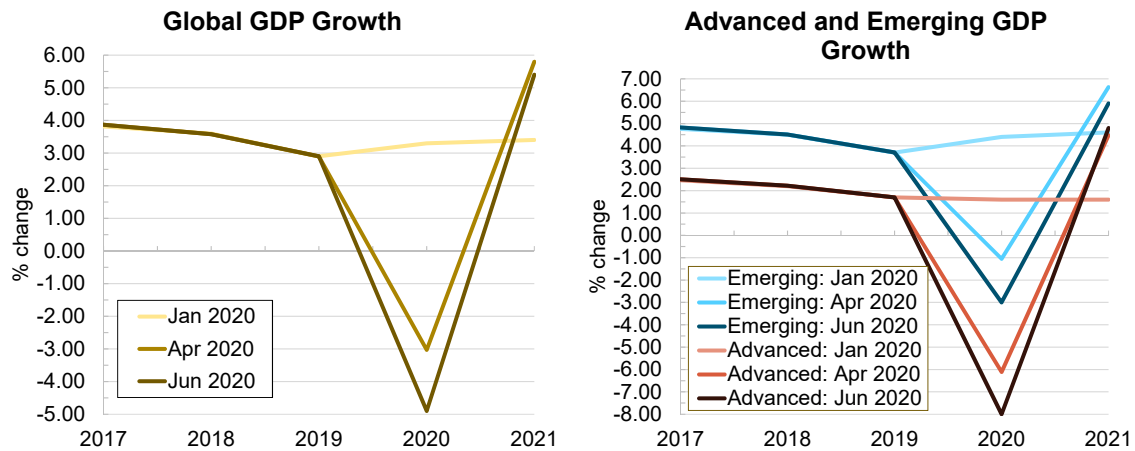


USDA

## Economic Outlook

USDA

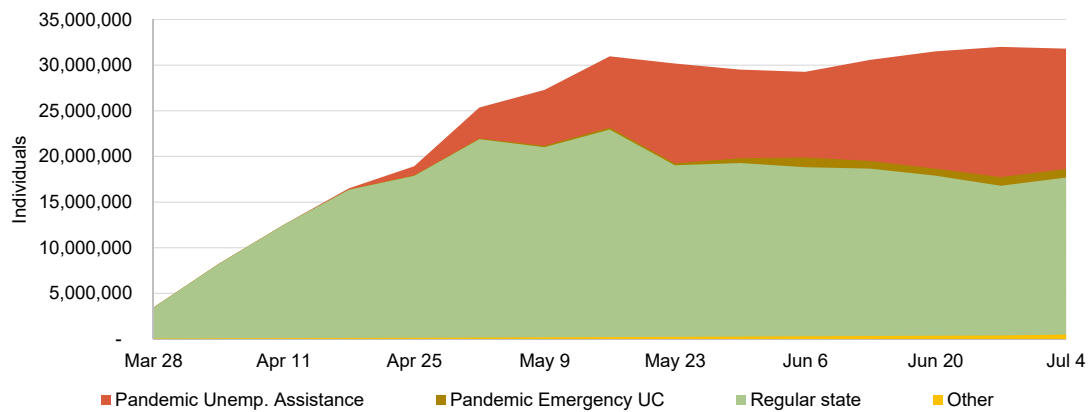
### IMF forecasts continue be revised downward



Data: IMF.



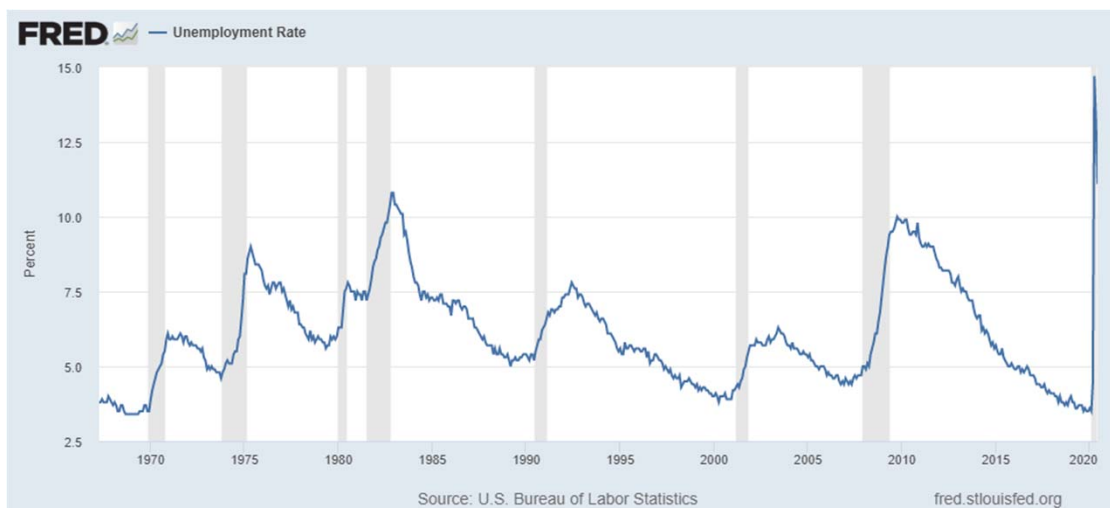
## Unemployment insurance claims, all programs, > 30 million



Data: BLS.

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## June unemployment standing at 11.1%



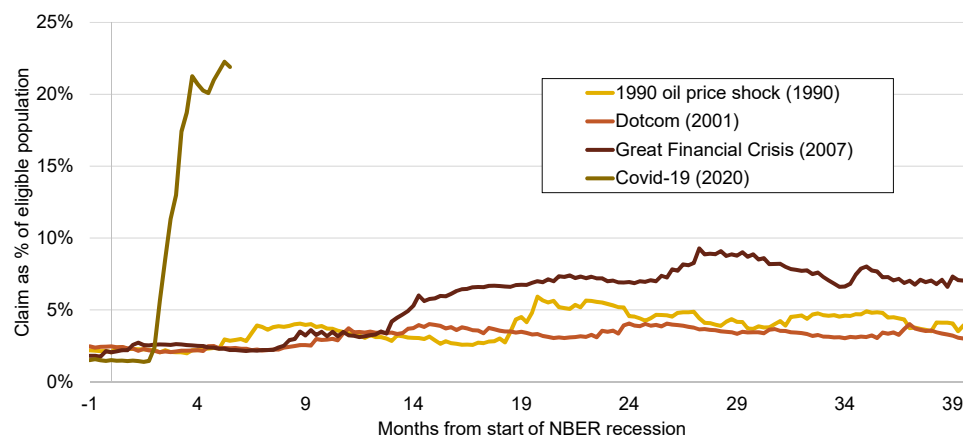
Source: U.S. Bureau of Labor Statistics

fred.stlouisfed.org

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## Unprecedented shock to all economic sectors

Unemployment insurance recipients during recessions

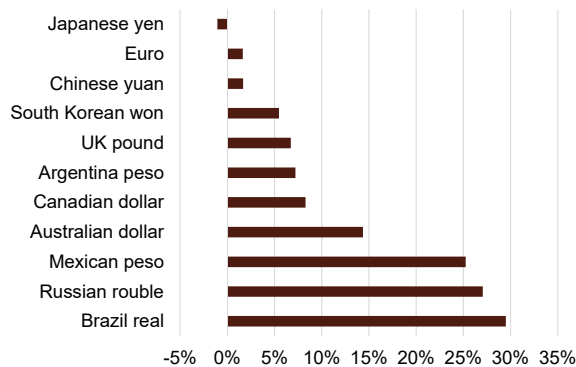


Source: Bureau of Labor Statistics. Values as of July 4<sup>th</sup>, 2020

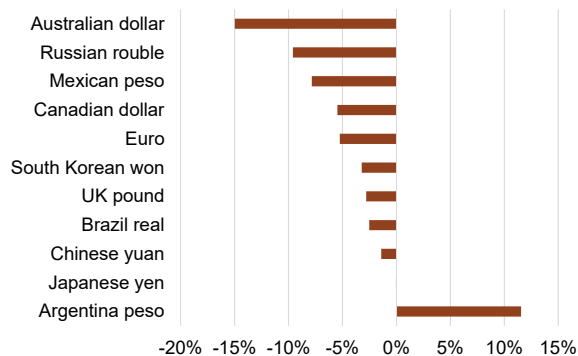
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## US Dollar: Appreciated significantly during the first-quarter but modestly depreciated since

USD Denominated Exchange, Jan-Mar



USD Denominated Exchange Rates, YTD

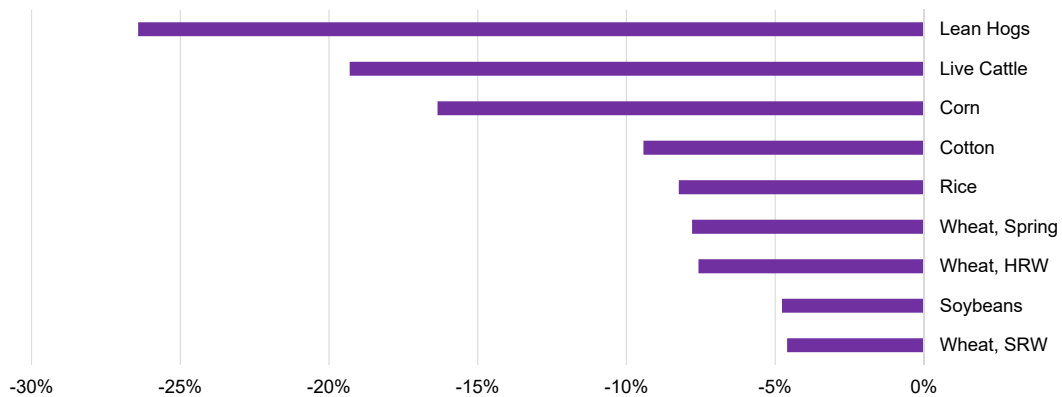


Data: Refinitiv. Percentage changes as of closing July 23<sup>rd</sup>, 2020

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## Agricultural commodities most closely linked to macroeconomic conditions have seen largest declines

Ag. commodity futures prices, YTD



Source: Refinitiv. Percentage changes as of closing July 23<sup>rd</sup>, 2020

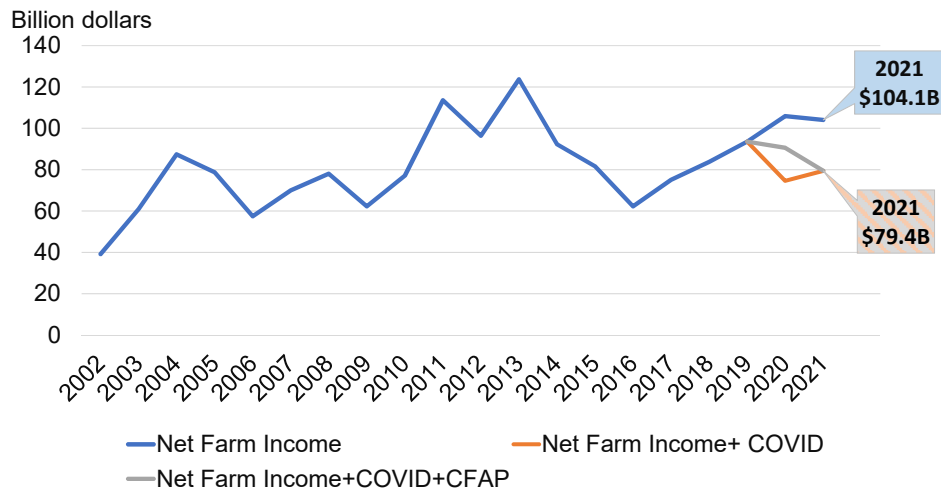
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## U.S. Farm Economy Outlook



USDA

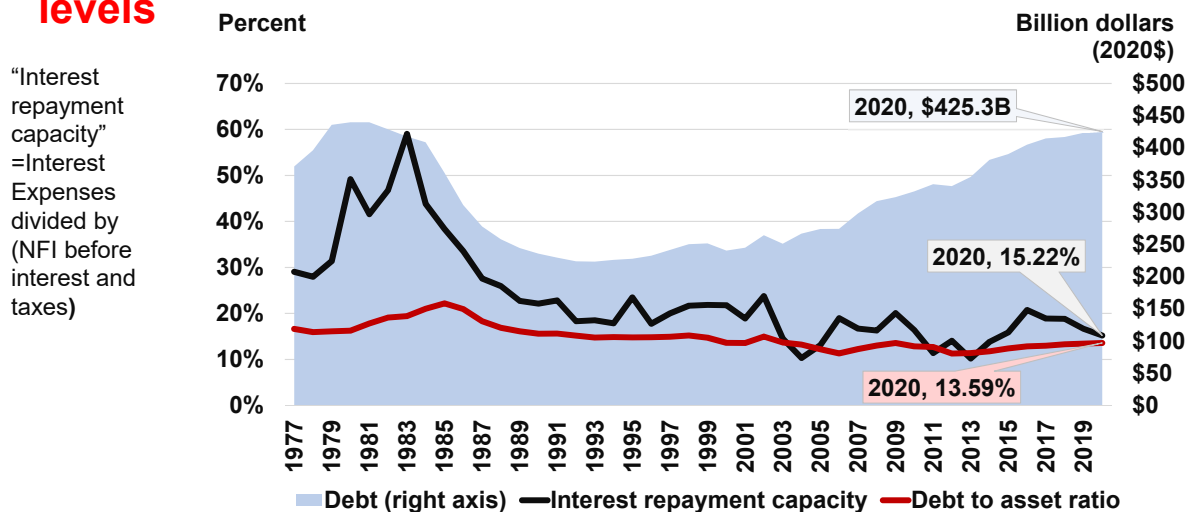
## Net Farm Income: FAPRI Estimates with COVID Impacts and CFAP, assuming no ad-hoc payments in 2021



Source: University of Missouri - FAPRI

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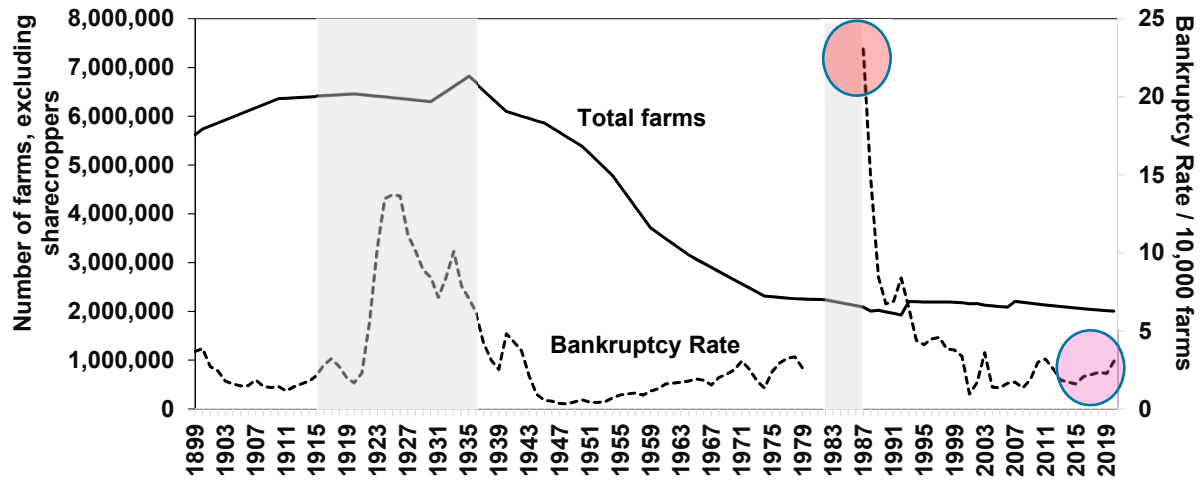
## Debt-to-asset ratio remains low --- 13.59%, and debt financing cost falling despite total debt at historic levels



Data: USDA-ERS

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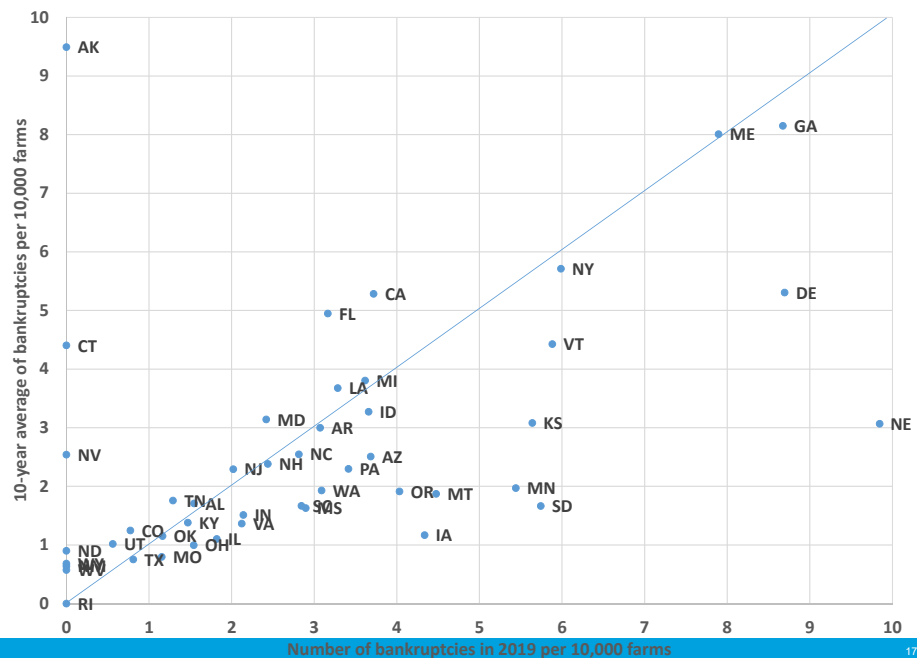
## Farm bankruptcy rates remain historically low



Source: USDA-ERS, U.S. Courts

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## Averages can mask state changes

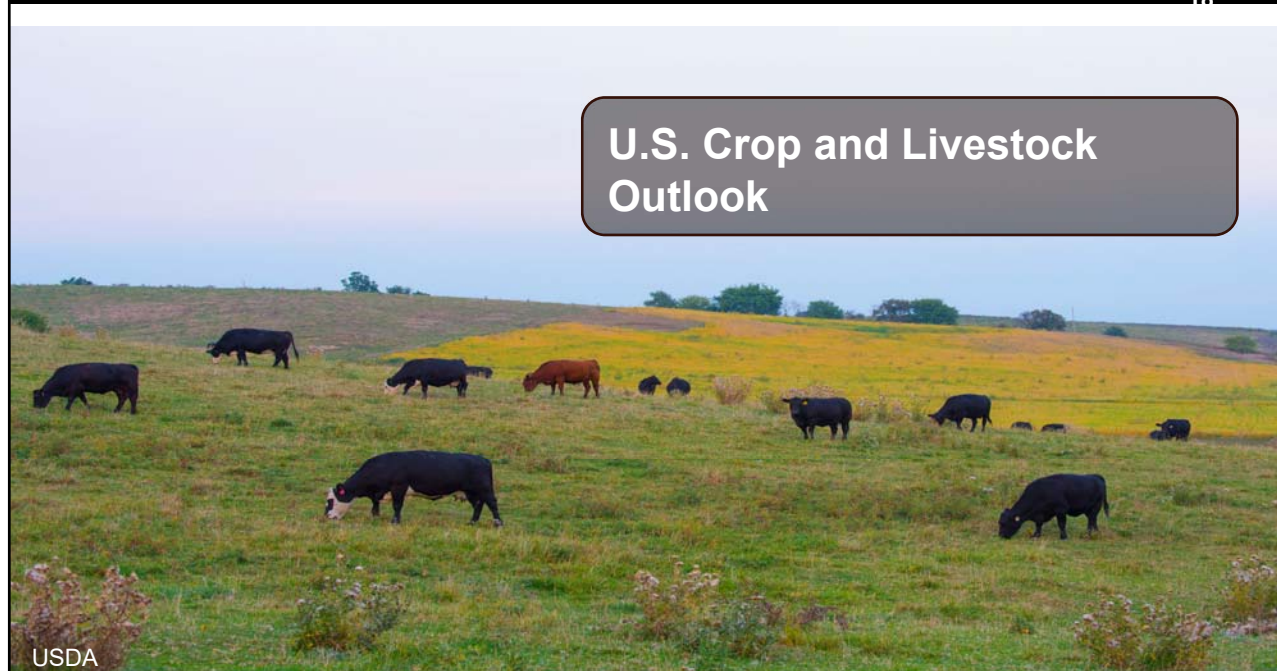


Data: USDA-ERS, U.S. Courts

Number of bankruptcies in 2019 per 10,000 farms

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## U.S. Crop and Livestock Outlook



USDA

### Planted acres expected to be up from prior year

| Crop (mil. acres) | 2016  | 2017  | 2018  | 2019  | 2020  | %Δ   |
|-------------------|-------|-------|-------|-------|-------|------|
| Corn              | 94.0  | 90.2  | 88.9  | 89.7  | 92.0  | 3%   |
| Soybeans          | 83.5  | 90.2  | 89.2  | 76.1  | 83.8  | 10%  |
| Wheat             | 50.1  | 46.1  | 47.8  | 45.2  | 44.3  | -2%  |
| All cotton        | 10.1  | 12.7  | 14.1  | 13.7  | 12.2  | -11% |
| Other feedgrains  | 12.6  | 10.7  | 11.0  | 10.8  | 11.6  | 7%   |
| Rice              | 3.2   | 2.5   | 2.9   | 2.5   | 2.9   | 15%  |
| Total 8 crops     | 253.4 | 252.3 | 253.9 | 238.0 | 246.7 | 4%   |
| CRP               | 23.9  | 23.4  | 22.6  | 22.6  | 22.0  | -3%  |
| 8 crops + CRP     | 277.3 | 275.7 | 276.5 | 260.6 | 268.7 | 3%   |

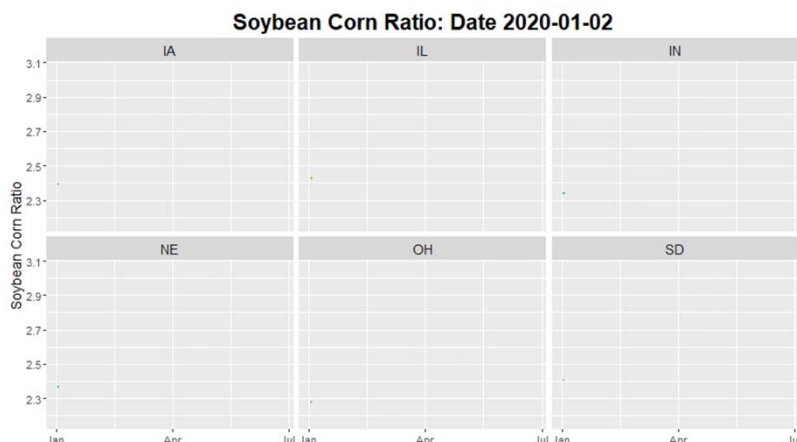
Data: USDA. Area planted. Values in red denote record levels. 2020: Values as of July 2020 WASDE, except for CRP.

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## Shift away from corn planting intentions, but to what?

- Prices shifted during COVID-19 outbreak
- Still being driven by weather conditions
- And price guarantees from crop insurance.



Data: Refinitiv and Geograin.

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## Better planting conditions and lower global demand are anticipated to lower prices

| Crop              | 2016 | 2017 | 2018 | 2019 | 2020 | %Δ  |
|-------------------|------|------|------|------|------|-----|
| Wheat (\$/bu)     | 3.89 | 4.72 | 5.16 | 4.60 | 4.60 | 0%  |
| Corn (\$/bu)      | 3.36 | 3.36 | 3.61 | 3.60 | 3.35 | -7% |
| Soybeans (\$/bu)  | 9.47 | 9.33 | 8.48 | 8.55 | 8.50 | -1% |
| Cotton (cents/lb) | 70.5 | 68.6 | 70.3 | 59.0 | 59.0 | 0%  |
| All Rice (\$/cwt) | 10.4 | 12.9 | 12.6 | 13.1 | 12.7 | -3% |

Data: USDA. Marketing year national average price. Values in red denote record levels. Values as of July 2020 WASDE.

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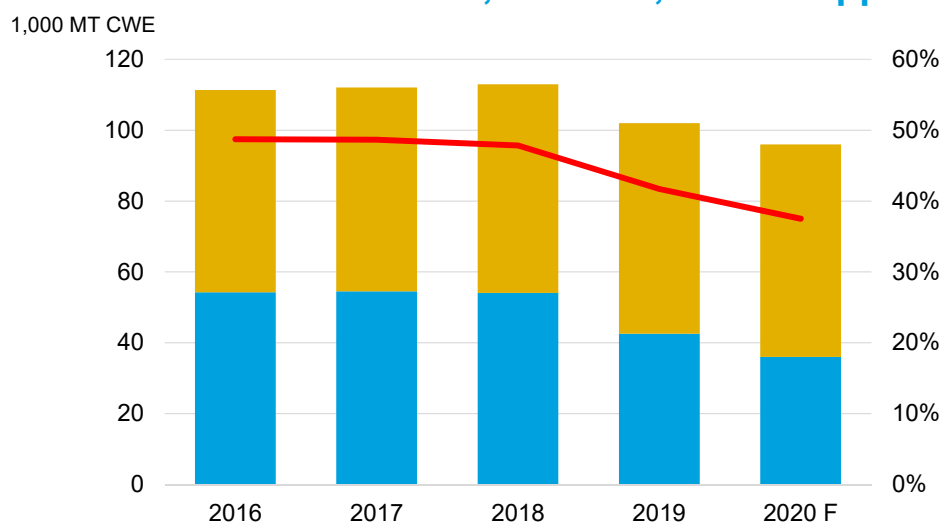
## US meat and dairy production expected to slowdown in 2020 but pickup in 2021

| Item               | 2017  | 2018  | 2019  | 2020  | 2021  | %Δ |
|--------------------|-------|-------|-------|-------|-------|----|
| Billion pounds     |       |       |       |       |       |    |
| Beef               | 26.3  | 26.9  | 27.2  | 26.9  | 27.7  | 3% |
| Pork               | 25.6  | 26.3  | 27.6  | 28.5  | 28.6  | 0% |
| Broilers           | 41.2  | 42.6  | 43.9  | 44.6  | 45.2  | 1% |
| Total <sup>1</sup> | 100.2 | 102.4 | 105.3 | 106.5 | 108.0 | 1% |
| Billion pounds     |       |       |       |       |       |    |
| Milk               | 215.5 | 217.6 | 218.4 | 221.5 | 225.6 | 2% |

Data: USDA. Values in red denote record levels. Values as of July 2020 WASDE. <sup>1</sup>Total includes all red meat and poultry

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## 2020 Global Pork Production Forecast Down 6% due to Continued ASF Issues in China, Vietnam, and Philippines

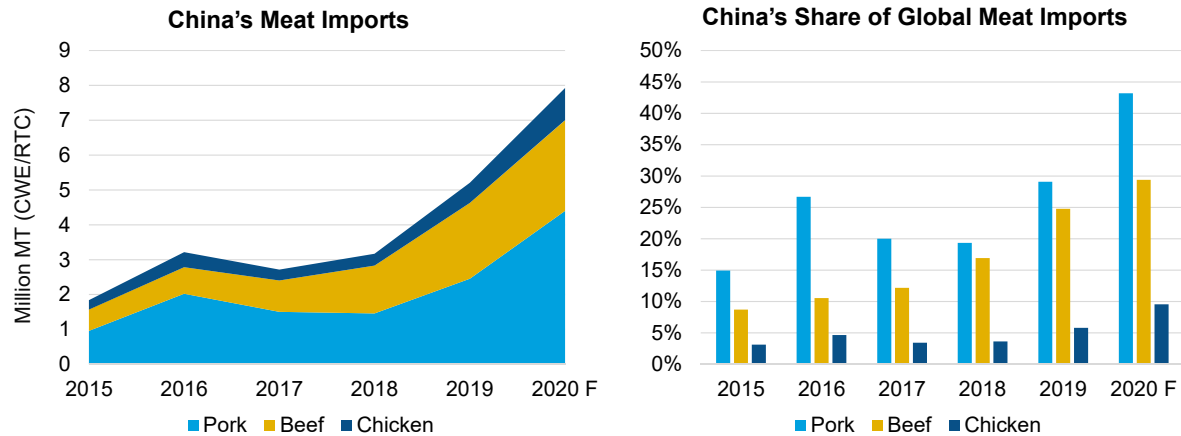


Data: USDA.

China Other China's share

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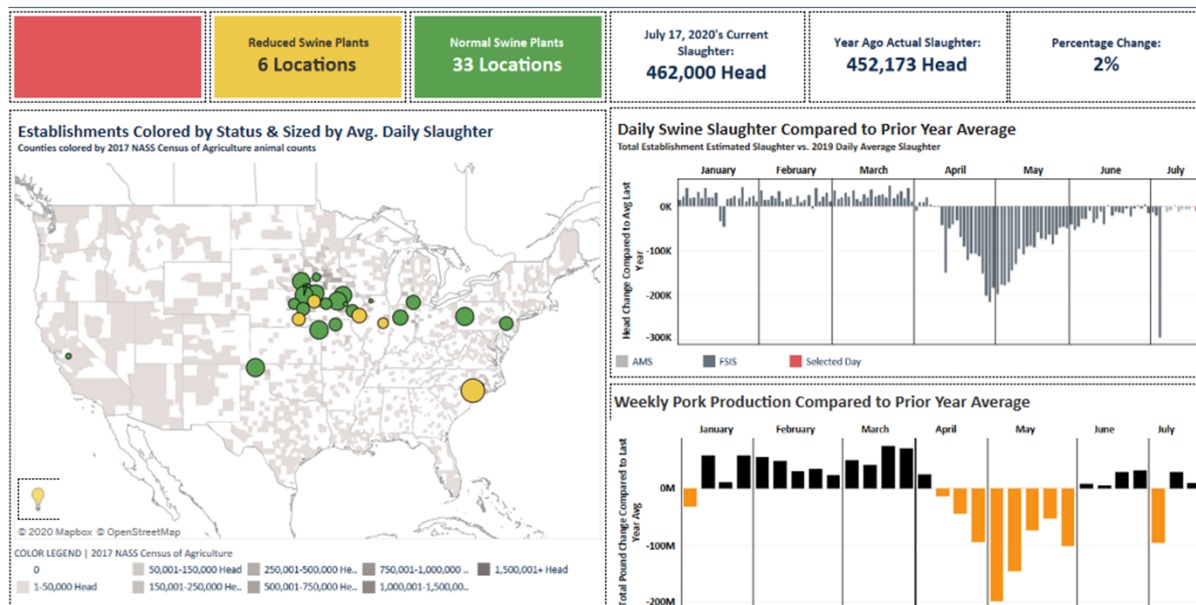
## Growth in Global Meat Imports Driven by China



Data: USDA.

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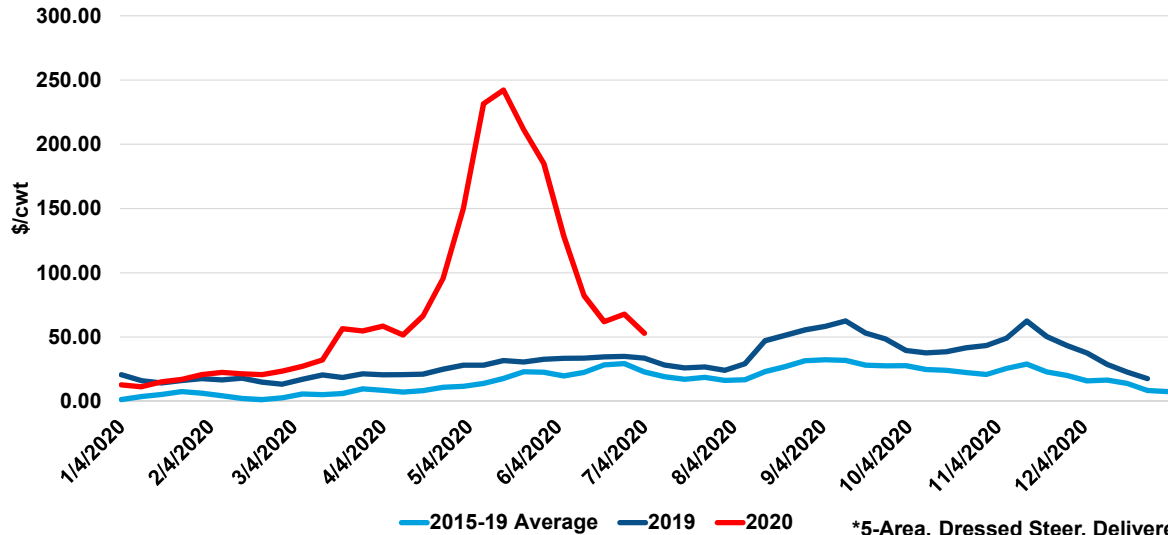
## COVID-19 Pork Plant Closures and Reductions as of 7-17-2020



Source: USDA AMS L&P LPGMN

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### Spread Between Comprehensive Boxed Beef Price and Dressed Steer Price\*



Data: USDA

\*5-Area, Dressed Steer, Delivered – All Grades

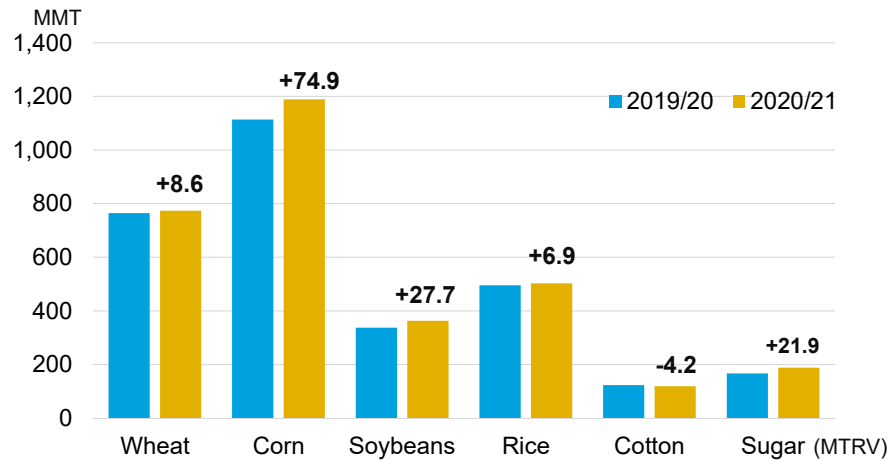
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### Global Ag Market Outlook

Forum News Service/Agweek/Mikkel Pates

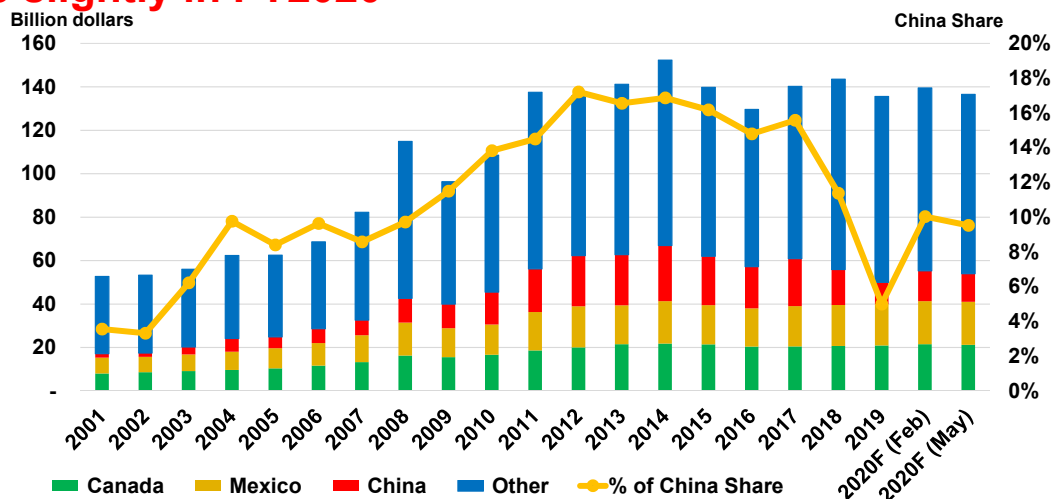
## 2020/21 Global Crop Production Forecast to Increase Except Cotton



Data: USDA. Million metric tons except cotton, which is million bales. Change from 2019/20 in volume.

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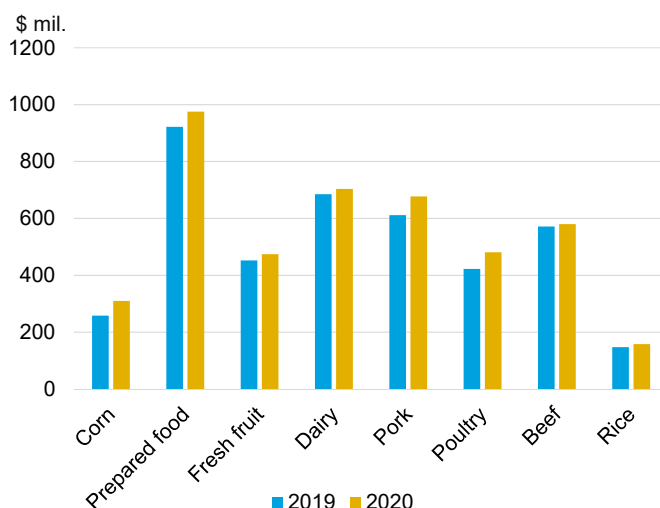
## Agricultural export values, China share, projected to rise slightly in FY2020



Data: USDA

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## U.S. ag and food exports to Canada and Mexico continue to grow in 2020 compared to 2019 (Jan.-Apr.)



### Top Agricultural Exports to Canada and Mexico, 2019

1. Corn (\$3.1 billion)
2. Prepared Food (\$2.8 billion)\*
3. Fresh Vegetables (\$2.2 billion)\*
4. Dairy (\$2.2 billion)
5. Soybeans (\$2.1 billion)
6. Fresh Fruits (\$2.1 billion)
7. Pork & Pork Products (\$2.1 billion)
8. Beef & Beef Products (\$1.8 billion)
9. Snack Foods (\$1.7 billion)\*
10. Poultry Meat (ex. Eggs) (\$1.4 billion)

Data: USDA using U.S. Census data.

\*Record level.

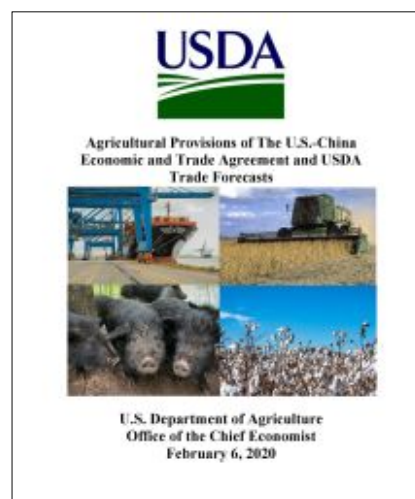
30

## China Phase One Agreement - Agriculture

- Entered into force on February 14, 2020
- Key agricultural provisions include:
  - Established time frames for regulatory actions to facilitate trade for a broad range of products
  - Transparency for TRQs and domestic support and improved TRQ administration
  - Reforms to China's regulatory process for biotechnology and stronger IP protection
  - Purchase commitments

### For more information:

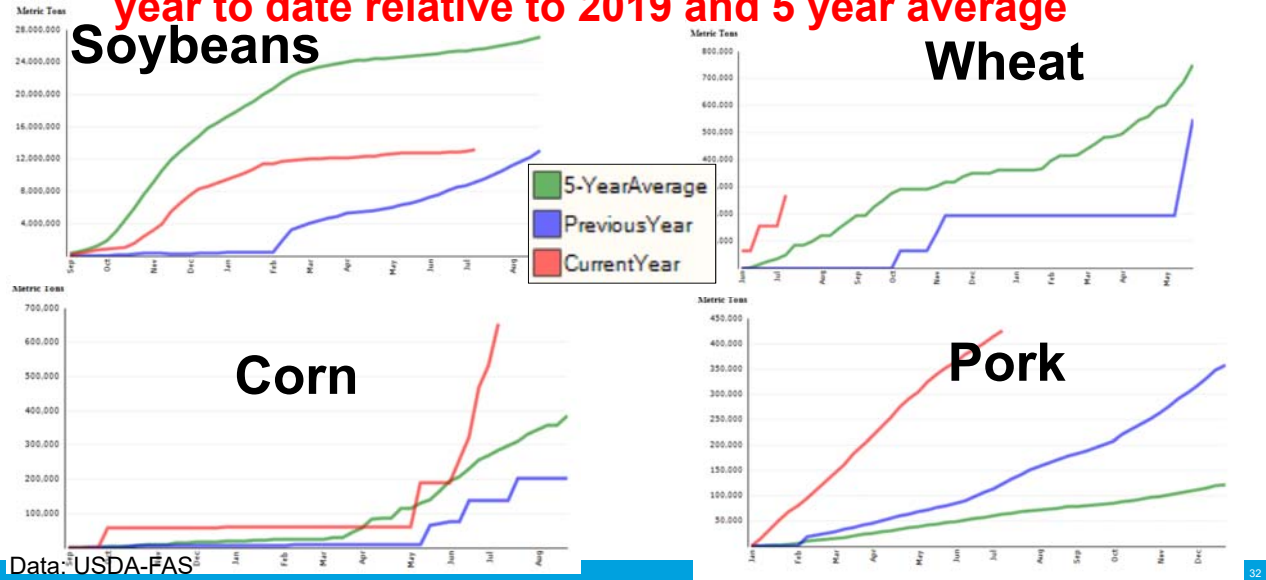
<https://www.usda.gov/oce/commodity/reports/USDATradeForecastsAndUSChinaAgreement.pdf>



31

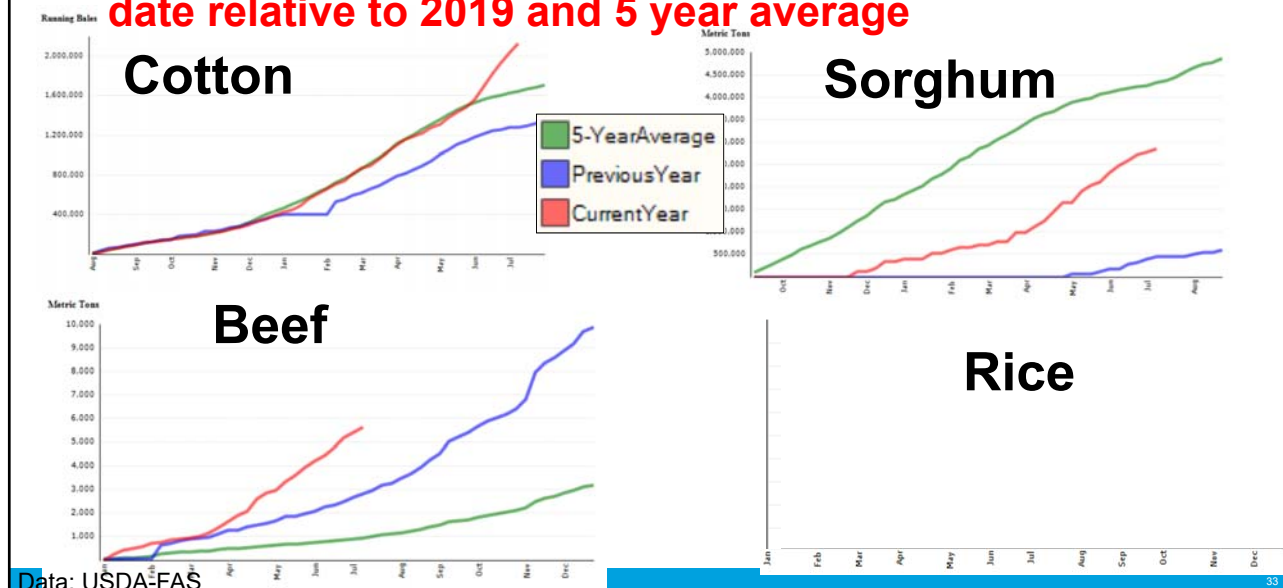


## 2020 U.S. Accumulated Exports to China in MTs year to date relative to 2019 and 5 year average



32

## 2020 U.S. Accumulated Exports to China year to date relative to 2019 and 5 year average



33



## COVID-19 Impacts on Agriculture

USDA

## Specific to COVID-19

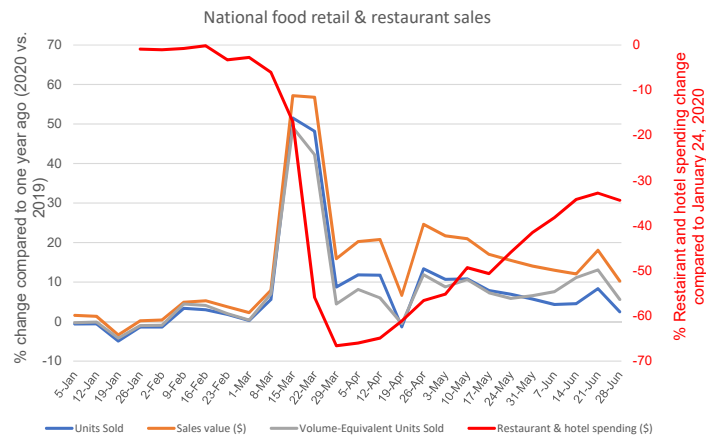
### 1. Short-run impacts

- Supply-chain disruptions
- Higher retail prices and lower farm-gate prices
- Domestic farm and consumer supports

### 2. Medium-run impacts

- Demand loss --- lower economic growth means slower movement of demand to middle-class diets
- Shifts in consumer demand

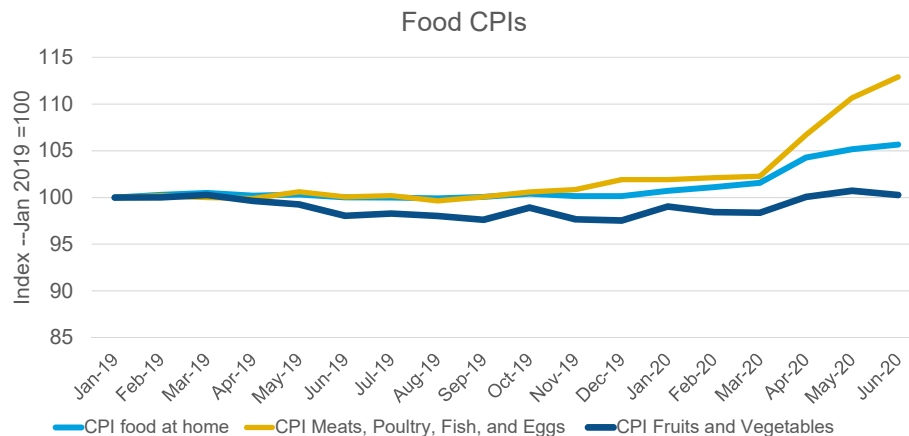
## Food retail sales higher this year after consumers turn away from Food Away from Home



Data: USDA and Tracktheterecovery.org

36

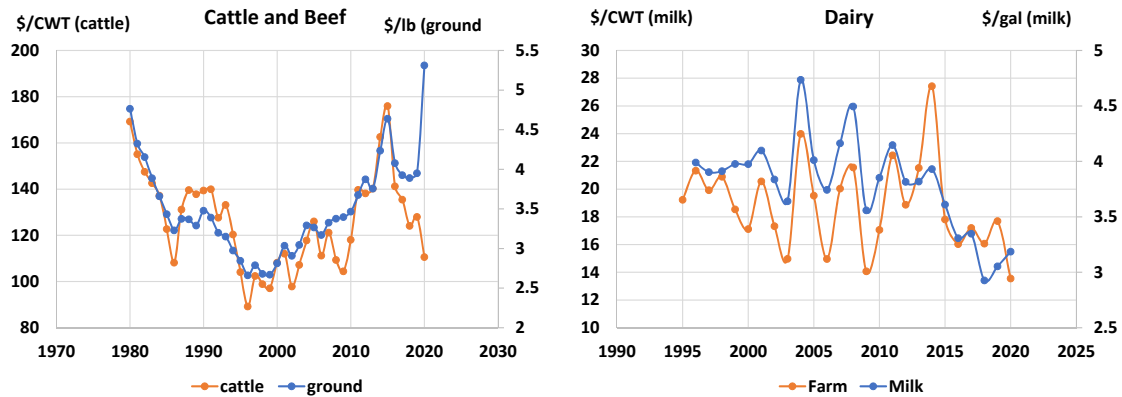
## COVID-19: Food CPIs up sharply from March to May 2020, but slowing or decreasing from May to June



Data: BLS

37

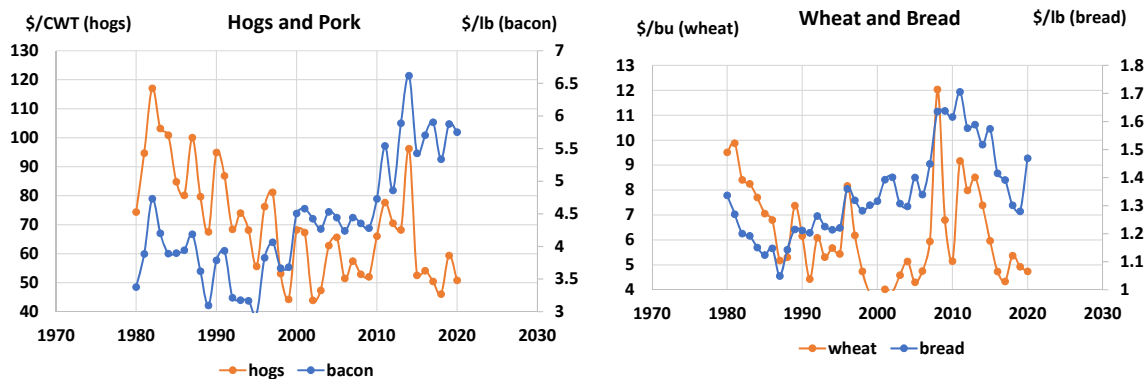
## Prices moving in opposite directions



Data: BLS, USDA

38

## Raising questions about margins



Data: BLS, USDA

39

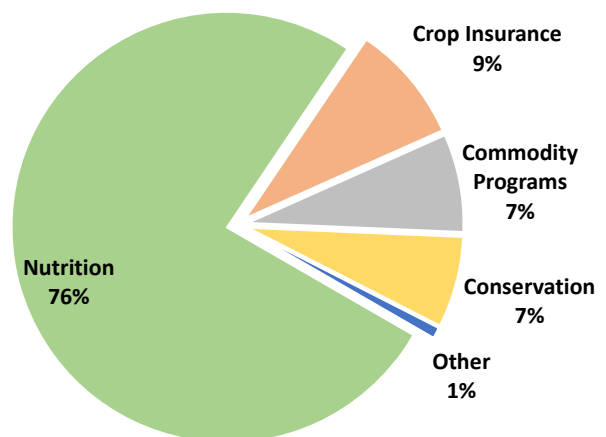


## 2018 Farm Bill: 4 titles dominate projected outlays

**Nutrition (\$326 billion)**  
**Crop Insurance (\$38 billion)**  
**Commodity Policy (\$31.4 billion)**  
**Conservation (\$29.3 billion)**  
**Other (\$3.5 billion)**  
 Trade  
 Credit  
 Rural Development  
 Research, Extension, and Related Matters  
 Forestry  
 Energy  
 Horticulture  
 Miscellaneous

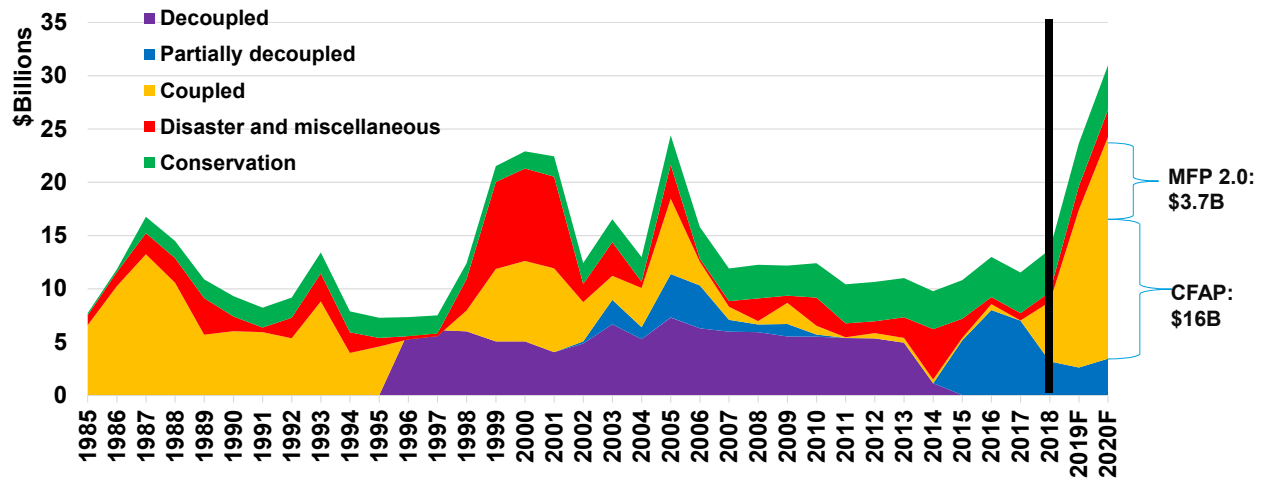
**5-yr total = \$428 billion**

2018 Farm Bill Outlays: 2019-2023



Data: CBO 2018 Farm Bill score.

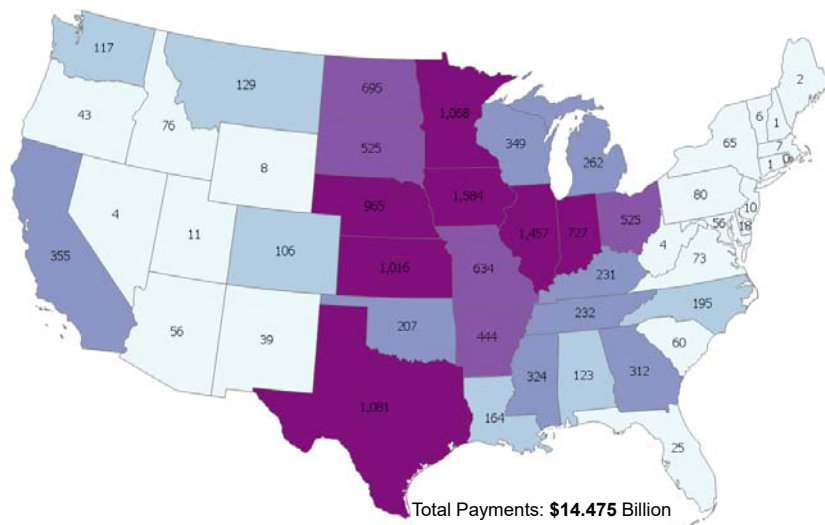
## Characteristics of US direct payments have changed over time



Data: USDA.

42

## MFP 2.0 Payment (million dollars)



Data: USDA.

43

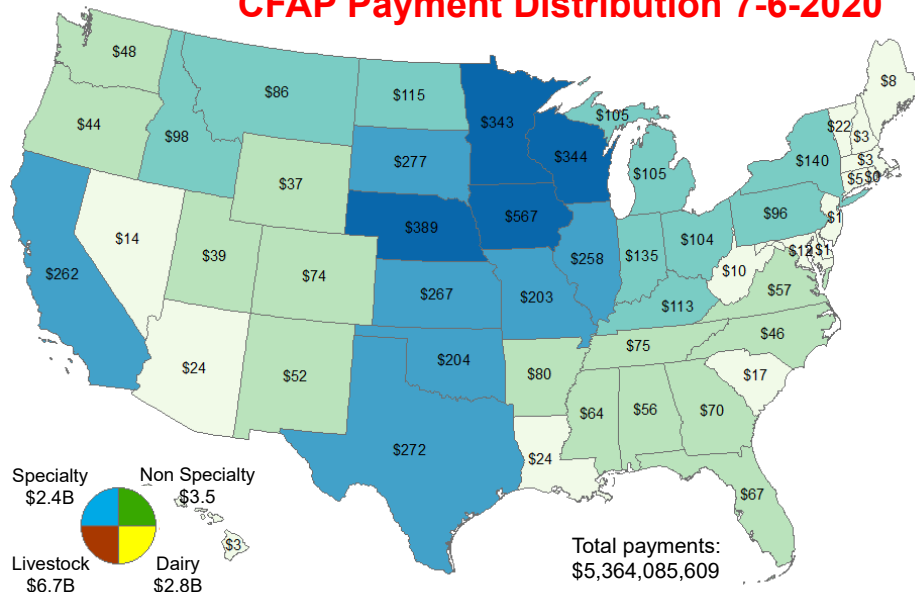


## Coronavirus Food Assistance Program (CFAP) = \$19 billion

- The program will provide \$16 billion in direct support and \$3 billion in purchases.
- Direct assistance to producers of agricultural commodities who either suffered a 5%+ price decline or had losses due to market supply chain disruptions due to COVID-19 and face additional significant marketing costs.
- **Eligibility Commodities**
  - **Livestock and animal products:** cattle, hogs and pigs, lambs and yearlings, dairy, and wool
  - **Row crops:** malting barley, canola, corn, upland cotton, millet, oats, soybeans, sorghum, sunflowers, durum wheat, and hard red spring wheat
  - **Specialty Crops**
- Producers will receive 80 percent of the total payment, up to the payment limit, upon approval of the application, starting May 26, 2020.

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## CFAP Payment Distribution 7-6-2020



Data: USDA.

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Visit the OCE website for the latest USDA commodity reports and Agriculture Outlook Forum information @ [www.usda.gov/oce](http://www.usda.gov/oce)  
Questions? [Robert.Johansson@usda.gov](mailto:Robert.Johansson@usda.gov)

**USDA's 96th Annual Agricultural Outlook Forum**  
*The Innovation Imperative: Shaping the Future of Agriculture*

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**Questions?**

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# Food Summit



## Managing the Supply Chain

### Panelists:

Monica Johnson, General Counsel, Darigold, Inc.

Nelson Dong, Partner, Dorsey & Whitney

Shevon D.B. Rockett, Partner, Dorsey & Whitney

Mark Kaster, Partner, Dorsey & Whitney (Moderator)

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## Managing the Supply Chain - Practical Considerations

- The impacts of the COVID crisis present very real daily challenges to the food industry
  - The failure to honor contracts has consequences that pulse through the supply chain
  - When supply and demand fall out of sync, every link in the supply chain (farms, manufacturers, transporters, retail stores) are impacted
  - The news has been full of stories regarding workplace operations, food sourcing, sanitation concerns, changes in manufacturing priorities, resource management and pricing.
  - The challenge for food companies are an everyday issue – from sourcing to availability of ingredients to shifting consumer demands and geographical demands.
  - The challenge can also have unusual international dimensions.

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## Managing the Supply Chain - Practical Considerations

- The issues follow a progression, starting with:
  - Farms – prices for commodities drop as demand from restaurants, schools and other outlets has increased stockpiles
  - Workers – workers may fall sick or stay home due to lockdowns
  - Plants – may need to shut down or reduce operations
  - Factories that product packaged foods may struggle to meet retail demand, but demand shifts
  - Transportation is a concern where grocery orders don't offset lost orders from restaurants, schools and other venues.

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## Managing the Supply Chain - Practical Considerations

How are companies responding:

### A. Practical Internal Controls

- Transparency
- Inventory management (right sizing)
- Assessing demand (products and geography)
- Optimizing production and distribution capacity
- Securing reliable logistics

### B. Legal Review

- Reviewing Supply and Distribution Agreements
- Assessing Risks and Loss Provisions
- Evaluating Practical Options
- Preserving Legal Rights
- Evaluating Business Loss insurance
- Managing to Federal and State Guidelines (laws, regulations, orders, policies)

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## Disruptions in International Supply Chains

- U.S. food and agricultural companies have become parts of many global supply chains (both imports and exports) over past several decades
  - International markets are now major revenue sources and sources of supply
- International supply chains in food and agriculture have experienced wide range of extrinsic disruptions in recent times:
  - Trade, tariff and counter-tariff disputes
  - Pandemic effects within food and agriculture industry itself
  - Pandemic effects upon global transportation industry
  - Imposition of U.S. economic sanctions and export controls
- Need for careful review of existing supply and distribution agreements to ensure “boilerplate” terms such as logistics, health and safety, “compliance with law” and force majeure provisions are sufficient to cope with such new and growing risks

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## CLE Code

**“We have some lawyers participating today that need a CLE code for verification. The CLE Code for this July 29 session is \_\_\_\_\_.”**

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## Trends in the Litigation Landscape

- **Partners, Employees, and Customers**
  - Upstream & Downstream Contract Obligations
  - Employees
    - *Ferdinand Benjamin v. JBS SA*, 2:20-cv-02594 (EDPA)
    - *Rural Community Worker's Alliance v. Smithfield Foods Inc.*, 5:20-cv-06063 (WDMO)
  - Customer, Consumer, and Public Nuisance Litigation
- **Flattening the Litigation Curve**
  - Shifting Regulatory Standards
  - Statutory Limitations
    - National liability limitations on the horizon?
    - Arizona, Arkansas, Iowa, Kansas, Louisiana, North Carolina, Oklahoma, Utah, and Wyoming
    - Next up: Georgia, Mississippi, and Ohio

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## Trends in the Litigation Landscape

- **Roadblocks Ahead**
  - What's "reasonable"?
  - Causation in the age of contagions
- **Best practices for staying ahead of the litigation curve**
  - Remain vigilant
  - Shift your goal posts
  - Consider waivers
  - Organize, Execute, and Document *Everything*

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## Questions?

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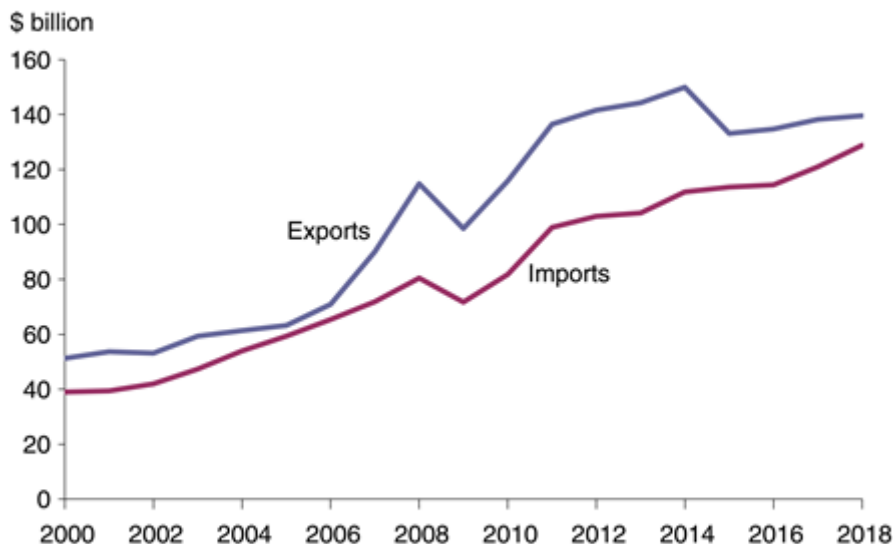
## DISRUPTIONS IN INTERNATIONAL SUPPLY CHAINS & RISK MITIGATION CLAUSES IN AGREEMENTS

Nelson G. Dong, Partner\*  
Dorsey & Whitney LLP, Seattle, Washington  
July 2020

The U.S. food and agriculture industry has increasingly looked beyond the domestic American market. According to the USDA's Economic Research Service, U.S. firms have greatly increased both exports and imports over the past two decades: "U.S. agricultural exports were valued at \$140 billion in 2018, a 1-percent increase relative to 2017. Export growth was hampered by reduced exports to Asia, particularly for soybean exports. Imports grew by 6 percent in 2018 to \$129 billion. Imports have grown at a faster rate than exports since 2016, driven in part by strong domestic economic growth. These shifts in U.S. agricultural trade produced a trade surplus in 2018 of \$10.9 billion, the smallest surplus since 2006."

<https://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/agricultural-trade/> The ERS prepared this telling graph of how these trends and the resulting trade surplus have looked over the period from 2000 through 2018:

**U.S. agricultural trade, 2000-18**



Source: USDA, Economic Research Service using data from U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Database.

However, the past several years have brought multiple severe disruptions in America's agricultural and good trade relations with other nations, most especially China. These major disruptive factors included: (1) the imposition of billions in U.S. punitive tariffs on virtually all goods produced in China under Section 301 of the Trade Act of 1974 and China's imposition of retaliatory punitive tariffs on many goods produced in the United States, coupled with clear "signals" to Chinese state-owned enterprises and even private firms to slow down or even stop buying U.S.

products; (2) the COVID-19 pandemic and its public health effects on worker safety in agriculture and meat processing; (3) the many negative economic consequences in reducing global consumer purchasing and industrial and commercial activity, including the sharp fall-off in most modes of global transportation, especially in international air travel and international shipping; and (4) changing U.S. Government views about doing business with China, and the imposition of new and often-drastic U.S. export control sanctions against Chinese firms that can limit or block exports of U.S. goods to those firms. These kinds of massive macroeconomic factors are well beyond the capacity of any individual U.S. company to avoid, but corporate executives and legal counsel can nonetheless now look more carefully at a number of key “boilerplate” provisions commonly found in their own international supply, sales or purchase agreements and analyze whether such existing contract language is sufficient to allocate and mitigate risks from such issues in future transactions and in supply chain relationships.

**Customs Duties & Tariffs.** It is often hard to recall that, from the adoption of the U.S. Constitution in 1789 to replace the original Articles of Confederation that were too weak for a growing United States, until the mid-1930s, America had relied heavily upon tariffs to block or limit the importation of foreign-made articles. The United States (and many other nations) regularly used such import tariffs to slow down imports and thus to promote and protect domestic producers of such articles. Tariffs also formerly financed much of the U.S. Government’s expenses (sometimes as much as 95% of the federal budget) from 1789 until 1913, when the modern Federal income tax was first adopted. For much of the 19<sup>th</sup> century, Congress actually spent much of its legislative time setting import tariffs on specific goods that ran, on average, in the 20 – 40 percent range. Congress finally legislated itself out of this role in 1934 when it authorized the President to negotiate reciprocal U.S. trade agreements with other nations.

However, in the aftermath of two World Wars in the first half of the 20<sup>th</sup> century, American leaders chose quite intentionally to reduce U.S. reliance upon tariffs and, more importantly, began to advocate to other nations around the world that they do likewise. The broad vision of these U.S. leaders was that, with more closely integrated and interlinked trading economies, everyone would prosper. They believed individual nations would benefit from maximizing their own local competitive advantages to produce goods more efficiently for the rest of the world and, in turn, would gain by obtaining less expensive goods that could be produced more economically elsewhere. They also thought that such closer trade relations would tend to deter the kinds of bitter international rivalries and frictions that had led to those two catastrophic world wars.

These visions led to the negotiation of the Global Agreement on Tariffs and Trade (“GATT”) in 1947 and, eventually, to the creation of the World Trade Organization (“WTO”) in 1994. By early 2018, approximately 70 percent of all foreign-made products imported into the United States entered on a duty-free basis, and the United States had negotiated dozens of free trade agreements with other countries to reduce their tariff barriers against the export of American goods. While a number of developing economies typically still adhered to some regime of protective tariffs to shield their domestic producers, by and large, over the past 70 years, both U.S. importers and U.S. exporters have enjoyed several decades of shrinking concern about the effect of tariffs on imports of foreign-made goods into the U.S. and on exports of U.S. goods into other countries. Most U.S. free trade agreements in that period, whether bilateral or multilateral, consciously sought to reduce both tariff and non-tariff barriers for trade in both directions.

However, the current Administration has focused heavily upon novel applications of existing trade regulation authorization, such as the Section 201 (“Section 201”) and Section 301 of the 1974 Trade Act (“Section 301”) and Section 232 of the 1962 Trade Expansion Act (“Section 232”) and then imposed sharply higher punitive tariffs under these laws. In relatively quick

succession, the Administration imposed Section 201 tariffs of 30 percent on imported solar panels and imported washing machines (that would gradually rise to 50 percent) and then Section 232 tariffs of 25 percent on imported steel and steel products and 10 percent tariffs on imported aluminum and aluminum products. Turning to China in particular, in 2018 and 2019, the Administration then invoked Section 301 to impose punitive tariffs of 25 percent upon US\$34 billion of Chinese-origin goods (“List 1”); 25 percent tariffs upon another US\$16 billion of additional in Chinese-origin goods (“List 2”); and 10 and then 25 percent tariffs upon yet another US\$200 billion of more Chinese-origin goods (“List 3”).

As bilateral trade talks between the U.S. and China stalled, in August 2019, the Administration announced yet more Section 301 tariffs, initially set at 10 percent and then stepped up to 15 percent in September 2019 and potentially subject to a further increase to 25%, upon almost all other Chinese-origin goods, encompassing about another US\$300 billion in imports (List 4A and List 4B). The so-called Phase One trade deal reached in January 2020 between the U.S. and China temporarily rolled back the List 4A Section 301 tariffs by one-half to 7.5 percent and suspended the imposition of the List 4B tariffs. However, as of July 2020, the whole situation remains tenuous and uncertain because no one knows if China will (or even will be able to) fulfill all of its commodity purchase commitments under the Phase One agreement, especially due to the slowing Chinese economy after the COVID-19 epidemic first broke out there.

The Chinese government, of course, could not simply accept all these punitive U.S. tariffs without retaliation, so it has piled on its own counter-tariffs upon U.S.-origin goods and has targeted those tariffs particularly upon the U.S. food and agriculture sector. U.S. exports of such key crops as soybeans and corn abruptly nosedived, and, on top of such counter-tariffs, China’s “command economy” structure, in which state-owned enterprises (“SOEs”) account for over 50 percent of that nation’s Gross Domestic Product, allowed the Chinese Communist Party to cause many major food-importing SOEs and even more purely private firms in that sector to slow down their orders for U.S.-origin food and agricultural goods.

The contractual caution about such risks for U.S. exporters or importers is thus to review any clauses relating to the imposition of new or different tariffs or counter-tariffs (or equally effective non-tariff barriers) that may suddenly and materially change the economic viability of any specific supply chain or goods purchase or supply relationship. The point of such a review is to ensure that the U.S. party is not going to have to absorb such unplanned tariffs by being locked into performance under terms and conditions that are no longer practical and realistic.

If the U.S. company is in the “buy” mode, it may want to allocate the risks of such abrupt and expensive changes in applicable tariffs to “share the pain” or at least to place a “collar” upon the financial risk in order to keep the overall deal in place or to create a complete “out” for the more severely affected party. Conversely, if the U.S. company is in the “sell” mode, it may want to “lock in” the other party notwithstanding such shifts and to allocate the cost of such tariff increases. Both parties should focus on and discuss what is the fairest and most reasonable mechanism to cope with these kinds of abrupt and even shocking tariffs and counter-tariffs and what can then be done to preserve as much of the original deal as may be practical in the circumstances.

**Pandemic Risks.** The U.S. and its trading partners have experienced past international epidemics (called “pandemics” when so declared by the World Health Organization (“WHO”), an agency of the United Nations based in Geneva, Switzerland). In recent years, those have included the 2002-2004 severe acute respiratory syndrome (“SARS”) outbreak, the 2009 Avian flu pandemic, the 2012 Middle East respiratory syndrome coronavirus (“MERS-CoV”), the 2013-

2016 Ebola virus epidemic and the 2015-2016 Zika virus epidemic. Now most of the world, but most especially the United States, is battling the pandemic of the coronavirus SARS-CoV-2 that leads to the disease the whole world has come to know as COVID-19.

As has been seen distinctly around the world in the past six months, an outbreak of a serious disease involving a deadly coronavirus can break down many different aspects of a food or agricultural international supply chain. That may involve the supplier being unable to plant, harvest or process the product at issue, or it could be equally upsetting to the customer being able to receive, distribute or sell the product at issue. Such a deadly disease can strike at any humans involved in each successive link of the affected supply chain – whether it is farm workers planting, nurturing or harvesting the crops in the field or packing them for distribution or other workers who may be raising, herding or processing large animals such as hogs for pork or cattle for beef, and so on. Many U.S. chicken, pork or beef processing plants have had severe outbreaks of COVID-19 that have often sickened dozens or even hundreds of critical workers who must work in close proximity to each other, and similar community transmission has occurred in meat processing in other industrialized nations such as Germany. In the Pacific Northwest, in recent months, many of the largest ocean-going trawlers and factory ships for commercial fishing of halibut, salmon and other food fishes have faced severe COVID-19 infection problems, even with multi-day quarantines of trawler and factory ship crews before they go to sea.

In the area of pandemics, COVID-19 has demonstrated that virtually any human link in an international supply chain can become a potential weak link that can be damaged or broken, causing significant economic consequences for the different parties within that chain. Most international supply or distribution agreements will contain some form of a *force majeure* clause, and many such generic clauses refer to natural disasters or severe incidents such as earthquakes, floods, storms, fire and the like or large disruptive events such as war and civil disturbance. However, typically, few, if any, mention by name “pandemic” or “epidemic,” leaving undue room for doubt and dispute on whether the contractual relief normally intended by a *force majeure* clause will or will not be available due to situations such as the COVID-19 crisis.

Moreover, such a generic clause may not deal adequately with some of the unique problems associated with food supplies and infectious diseases such as COVID-19. For example, what should happen if a supplier delivers a frozen or processed food product and the customer accepts that product and begins its domestic distribution only to discover several of the supplier’s workers who handled that product before shipment were seriously ill with an infectious disease? Should a *force majeure* clause protect and insulate that supplier from liability? Should such a clause allow a customer to reject all the shipments of the product from that supplier, even those produced by workers who were not ill? Most international supply or distribution agreements with a simple “on/off” *force majeure* clause will not provide much illumination or satisfaction to such complex supply chain questions.

Parties to international supply or distribution agreements should therefore reexamine their *force majeure* clauses, both to ensure greater clarity of contract language and, in light of recent “real world” experiences, reconsider if the “one-size-fits-all” binary relief in such clauses will be sufficient or if the contractual relief mechanism needs to be revised and made more specific to such unique risks arising in the context of food supplies and infectious diseases. Each party may need to “role play” a number of foreseeable scenarios and then try to work out some reasonable accommodations as such new agreements are being negotiated.

**Transportation Disruptions.** One of the most profound aspects of the post-World War II expansion of global trade has been the massive technological changes in the international

transportation of goods. That period of economic history included the invention and adoption in the 1950s and 1960s of the modern shipping container for inter-modal transport of goods by land and sea; the development and use of jet passenger aircraft and then modern jet cargo planes such as the Boeing 747; the widespread commercial acceptance of frozen meats, fish and vegetables and other food products; and the spread of modern inter-modal container terminals at major sea ports and airports around the world.

Although shippers and customers around the world had come to rely on this vast transportation system for the fast, safe and orderly delivery of goods, especially food and agricultural goods, including many seasonal and perishable food items, the COVID-19 pandemic has revealed that such supply chains have their own uniquely vulnerable links. Almost all the major airlines of the world suffered roughly a 90 percent drop in air passenger traffic, which has threatened the very financial survival of many leading U.S. airlines such as American, Delta and United and other leading flag carriers such as British Airways, Air France, Japan Air, KLM, Lufthansa and others around the world. Cargo flights have continued, and, in some cases, the actual growth of cargo flights has helped to sustain some of these carriers through their worst months. However, the long-term ability of such air carriers to sustain such cargo flights will ultimately depend on passenger traffic returning.

Moreover, COVID-19's apparent capacity for rapid community transmission has greatly enhanced the health risks for flight crews and maritime personnel who must operate cargo aircraft and maritime shipping. Nations concerned about the global spread of the disease need to adopt unique safety and quarantine measures for arriving and departing flight and maritime personnel to prevent imported or exported infections of the coronavirus because such personnel may be conscious or unconscious vectors of the disease even while ensuring their necessary mobility. Indeed, this one pandemic may only be a preview of other, equally infectious and deadly coronaviruses yet to come. Such deadly diseases and the public health measures that governments must adopt, sometimes overnight, to combat such diseases, will inevitably create shortages of transportation resources and can induce sudden and sharp cost increases for the remaining available transportation assets to move goods globally from Point A to Point B. These factors will create transportation delays and risks, especially involving perishable food items such as fresh fruits and vegetables and fresh fish, meat or dairy products.

Consequently, parties to international supply or distribution agreements may now need to consider more carefully the logistics and freight handling provisions of those agreements to cope with all these new and unprecedented kinds of transportation risk factors. While such parties may still continue to rely upon such conventions as INCOTERMS, they may also need to review whether such conventional shipping terms for food and agricultural goods will have enough nuance and flexibility to cover these particular kinds of contingencies in global supply chains.

**Sanctions Risks.** In recent decades, most Administrations have come to rely more and more upon the imposition of economic sanctions against other countries in lieu of overt military action. For example, the United States has long imposed trade embargoes upon adversary nations such as Cuba, Iran, North Korea, and Syria. In more recent times, more such sanctions have been added against other countries such as Venezuela. However, both Congress and various Presidents have also sought at times to exempt the U.S. export of food and agricultural items and medical supplies from such otherwise all-encompassing U.S. trade sanctions. See, e.g., "Exempting Food and Agriculture Products from U.S. Economic Sanctions: Status and Implementation," Congressional Research Service (Report No. RL 33499, June 29, 2006). One of the most important pieces of legislation in this area was the Trade Sanctions Reform and Export Enhancement Act of 2000 ("TSRA"), Title IX of Public Law 106-387, which has created an entire

regulatory mechanism that allows U.S. food and agriculture companies to export their products even to countries under stiff U.S. economic sanctions.

International supply and distribution agreements in the food and agricultural products sector often do not expressly address the issue of economic sanctions or only do so in the context of a generic *force majeure* clause that may refer in passing to “government regulation or orders.” While U.S. trade sanctions have typically been aimed in the past only at smaller nations such as Cuba or Iran that have had less upon U.S. trade and there has less direct need for such relief mechanisms due to laws such as TSRA, the Administration has begun to apply trade sanctions much more regularly against companies and entities in China. Some of these measures are tied to trying to punish Chinese businesses and banks for their alleged illicit ties to North Korea or Iran and evasions of U.S. sanctions against those countries; some are linked to allegations of theft of U.S. intellectual property or violation of U.S. export control laws; and, more recently, some are tied to allegations of profound human rights abuses and the use of the forced labor of Uighur or other Muslim minority workers in Xinjiang, the province in the far northwest of China, which is the source of about 90% of the cotton crop grown in that country.

The parties to international supply and distribution agreements may now need to contain more provisions for due diligence or representations and warranties to help shelter some transactions from the reach of new sanctions legislation such as the proposed Uyghur Forced Labor Prevention Act now being debated in Congress as S. 3471 introduced by U.S. Senator Marco Rubio and as H.R. 6210 by U.S. Representative James McGovern. In principle, the Administration’s authority to bar U.S. companies from supplying U.S.-origin goods to a Chinese technology company such as Huawei might lead one day to a similar bar on U.S. exports to a Chinese food processing or textile production company that imports from the United States. In short, U.S. government intervention or disruption of other types of global supply chains in the realms of technology or manufactured goods now appear to be capable of happening to food and agricultural supply chains as well, and so international agreements in the food and agricultural sectors should be reviewed and modified accordingly.

**Conclusion.** This paper highlights how much U.S. companies involved in food and agriculture have become parts of vast global supply chains in recent decades and rely more upon both imports and exports as intrinsic parts of their business models. However, extrinsic factors such as geopolitical and trade disputes among nations, especially with large trading partners such as China, and events such as pandemics can disturb and disrupt such supply chains. Accordingly, this paper suggests that U.S. companies would be prudent now to reexamine their international supply or distribution agreements to be sure their provisions are adequate to deal with such evolving and growing risks as punitive tariffs or counter-tariffs, transportation disruptions and delays, pandemics and related public health crises, and new trade sanctions and export controls. However, the precise extent and type of contract modifications needed will likely vary depending on whether the U.S. company is on the “sell” or “buy” side of such agreements.

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\*Nelson Dong is a partner in the Seattle office of Dorsey & Whitney LLP and is head of its National Security Group and co-head of its Asia Group. He has been an international business attorney for over 35 years with substantial experience in helping to negotiate and structure global supply chains across many different industries, including food and agriculture products. His email address is [dong.nelson@dorsey.com](mailto:dong.nelson@dorsey.com).



# Food Summit



## Directors & Officers and Employment Practices Liability: Implications & Complications of the Pandemic

### Speakers:

Michelle Sartain, Management Liability Practice Leader,  
Marsh JLT Specialty

Kelly Thoerig, Employment Practices Liability Coverage  
Leader, Marsh JLT Specialty

Katie Pfeifer, Of Counsel, Dorsey & Whitney

## Session 2 Panelists:



**Michelle A. Sartain**  
FINPRO Practice Leader,  
US/Canada, Marsh  
[michelle.a.sartain@marsh.com](mailto:michelle.a.sartain@marsh.com)  
Mobile +1 917.648.4552



**Kelly B. Thoerig**  
Employment Practice  
Liability Leader  
Marsh  
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804.344.8975 (office)  
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**Katie Pfeifer**  
Of Counsel  
Dorsey & Whitney LLP  
[pfeifer.katie@dorsey.com](mailto:pfeifer.katie@dorsey.com)  
612.492.6947

## Speaker Bios

- **Michelle Sartain**
  - Marsh's Management Liability Practice Leader
  - Responsible for growth, retention, innovation, client service, and guiding sales strategy across the US
  - More than 23 years of insurance brokering and risk consulting experience
- **Kelly Thorig**
  - Marsh's Employment Practice Liability Leader
  - Responsible for manuscripting EPL and Wage and Hour policies, leading policy and insurer new product reviews, and drafting endorsements to deliver the best possible coverage
  - More than 14 years of insurance experience (first as an attorney and then as a broker)
- **Katie Pfeifer**
  - Of Counsel, Dorsey
  - Helps clients identify and transfer risks through contract and insurance and obtain benefits of insurance products when claims arise
  - More than 17 years of insurance experience

60

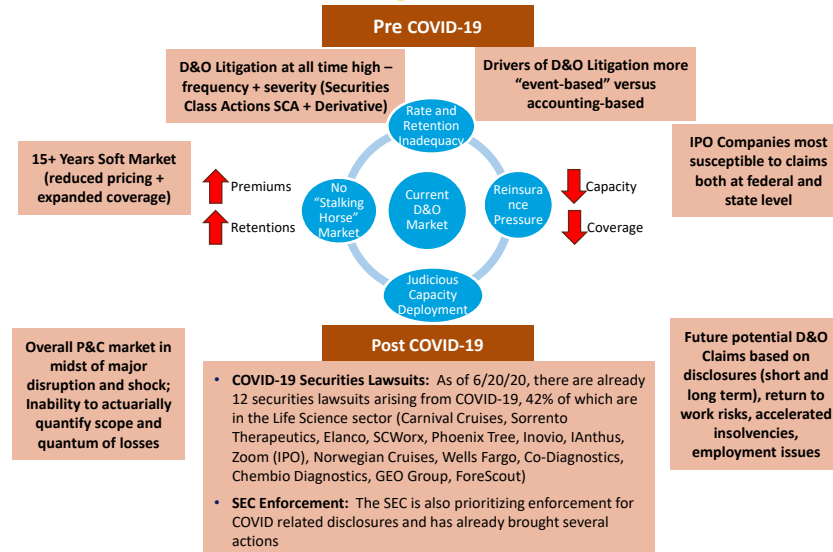
## D&O Liability and COVID-19: An Overview

- **What do D&O policies cover and what don't they cover**
- **Securities suits arising out of COVID-19 issues have been filed**
  - At least 12 at this point
  - Targets thus far:
    - Cruise ship lines (Norwegian Cruise Lines, Carnival Corporation)
    - Life Sciences (Inovio Pharmaceuticals, SCWorx, Sorrento Therapeutics)
    - Privacy concerns (Zoom Video Telecommunications)
    - Business impact of the pandemic on a companies' financial performance or business operations (iAnthus Capital Holdings, Elanco Animal Health, Forescout Technologies)
  - With economic issues, more cases will come
- **Coverage considerations**
- **Difference in coverage available under public vs. private D&O policies**

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## D&O – Navigating the Turbulent D&O Market

### Continued Macro Challenges



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## D&O Liability – COVID-19

### Sample Questions from Underwriters



#### SEC Reporting

- Has the company requested an extension from the SEC to file audited financials?
- Has the company amended its insider trading policies?
- Will corporate guidance be impacted?



#### Resilience

- Does the company have an Enterprise Risk Management process? Is it cross departmental?
- Has the ERM team completed an analysis of the exposure of the virus? If so, what was the analysis?
- If the company's supply sources are expected to be impacted, what is the assessment of the current inventory levels available and your ability to meet demand?



#### Financial Health

- How much cash does the company have and how long will it last?
- Does the company have access to additional liquidity through credit facilities or other sources?
- What percentage of revenues have been impacted by the crisis? What additional revenue impacts are expected over the next 90-120 days?
- What is the company doing to preserve capital while meeting short term obligations?
- Did the company have money earmarked for long term capital investment that they are able to use to help weather the crisis?
- Is the company in jeopardy of breaching any debt covenants?
- What is the company doing to preserve cash?

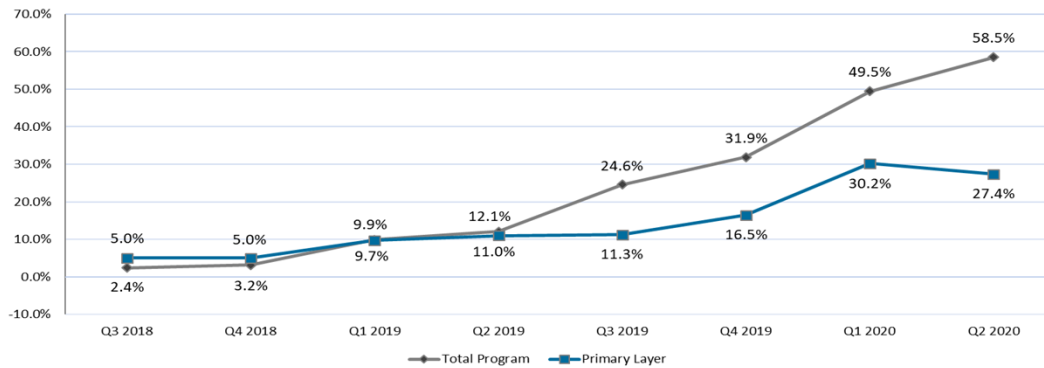
63

## D&O Liability – Quarterly D&O Rate Change Public Company D&O Rate Trends (All Industries)

PUBLIC COMPANY QUARTERLY D&O Rate Trends – JANUARY - MARCH, 2020

D&O and Side A-Only programs

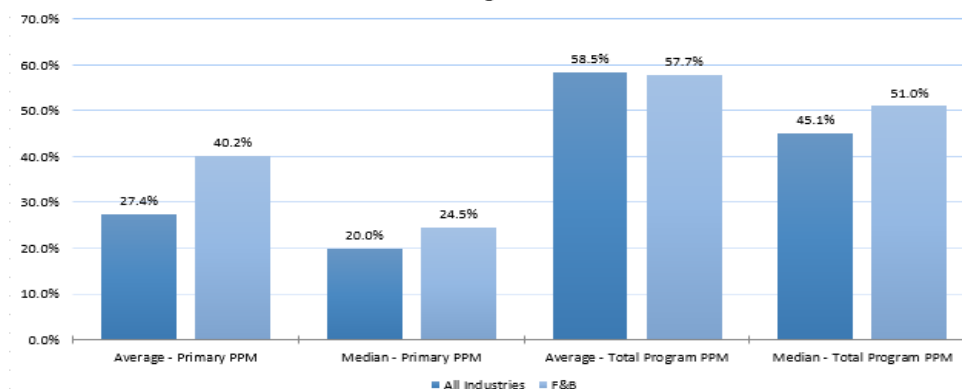
US PUBLICLY TRADED CLIENTS - AVERAGE HISTORICAL RATE (PRICE PER MILLION) CHANGES  
D&O and Side A-Only programs



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## Rate Data – Food & Beverage (Publicly Traded only) Rate Ranges – Year to Date as of June 30, 2020

US PUBLICLY TRADED CLIENTS - D&O (PRICE PER MILLION) CHANGES  
Food & Beverage vs. All Industries

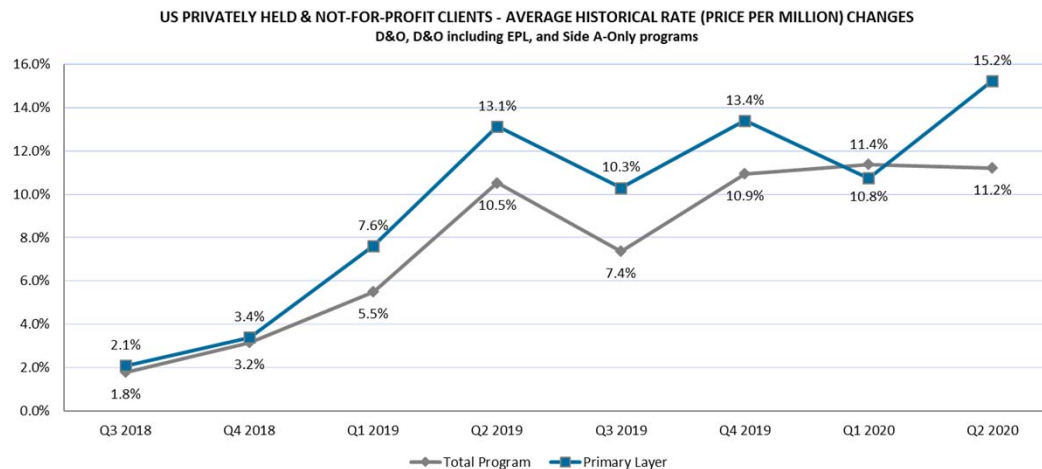


- Notably, our F&B clients saw an average increase of ~56% in Q1
- Year to date, 48.1% of Food & Beverage accounts renewed with a retention increase of greater than 50%

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## D&O Liability – June 2020

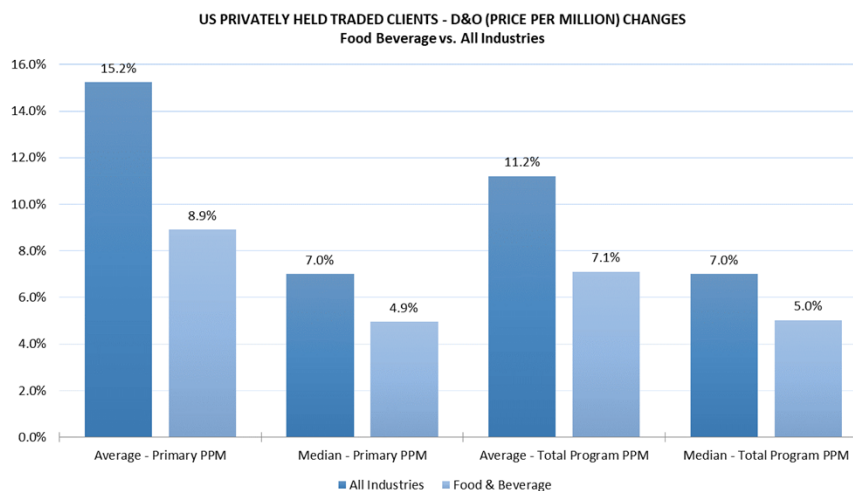
### Private Company D&O Rate Trends



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## Rate Data – Food & Beverage (Privately Held only)

### Rate Ranges – Year to Date as of June 30, 2020



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## Employment Practice Liability and COVID-19: An Overview

- What do EPL policies cover and what don't they cover
  - Again, generally no coverage for bodily injury type claims involving COVID-19
- Case count continuing to rise
  - Quickly evolving legislation and unprecedented public directives
  - Employers forced to make hurried (and sometimes hasty) decisions regarding their workforce
  - Unemployment numbers massively increasing, along with fears of economic security and \$600/week CARES Act unemployment supplement expires this week
  - Statute of limitations suspended and some courts not currently accepting new filings – litigation will blossom when restrictions are lifted
  - Similarly, EEOC stopped issuing Notices of Right to Sue unless specifically requested

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## Employment Practice Liability and COVID-19: What History Can Teach Us

- EPL claims tend to spike during a recession or economic downturn
  - Total EEOC charge filings during the “recession era” (2008-2013) were 21% higher during the ten years prior (an average of 96,948 charges, as compared to an average of 80,218)
  - Wrongful discharge claims increased 21% during the last recession when compared to prior years
  - 2008 saw the highest number of age discrimination charge filings with the EEOC over the past 20 years

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## EPL – COVID 19

### Potential Workplace Litigation Claims

- Violations of the **FMLA**, the **ADA** and newer laws like **Families First Coronavirus Response Act**
- **Discrimination** claims based on disability, and associated with RIFs arising in connection with layoffs, furloughs and recalls; as well as failure to rehire
- **Hostile work environment** on the basis of COVID-19 diagnosis or race/national origin
- Class claims under **WARN**, **COBRA**, and **OSHA**, as well as related Wage & Hour claims under the FLSA and state laws
- **Retaliation / whistleblower** claims stemming from employees' exercise of rights under OSHA and various other laws:
  - Engaging in protected activity (i.e., taking leave)
  - Complaints regarding employer's failure to keep workplace safe or violating Executive Orders
  - Retaliation claims, often alleged with other charges, can be hard to defend due to timing coincidence
- **Remote workforce related** claims in connection with "loosening" of workplace formality, more casual approach to employee interactions, use of video, and less visible HR presence
- **Privacy / Biometric related** claims regarding confidentiality of medical information; and new technologies such as use of facial recognition as a contactless alternative to timekeeping or building security

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## EPL – COVID-19

### Coverage Issues

- Named perils vs. all risk
  - Where is the coverage "home" for Families First and other leave law violations?
- "Or any other protected class"
  - Discrimination is discrimination is discrimination
- Breach of employment contract issues
  - Triggering wrongful act
  - Contract exclusion will apply (but carve back for defense expenses, or liability that would have attached in the absence of contract)
- Severance not "Loss"?
- Typical "workplace statute" exclusions – OSHA, WARN, COBRA, NLRA, FLSA
  - Consider other lines of coverage – W&H, D&O, Cyber, Fiduciary Liability, G/L, Work Comp
- Impact of Bodily Injury exclusion
  - "For" versus "based upon, arising out of..."

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## EPL – COVID-19

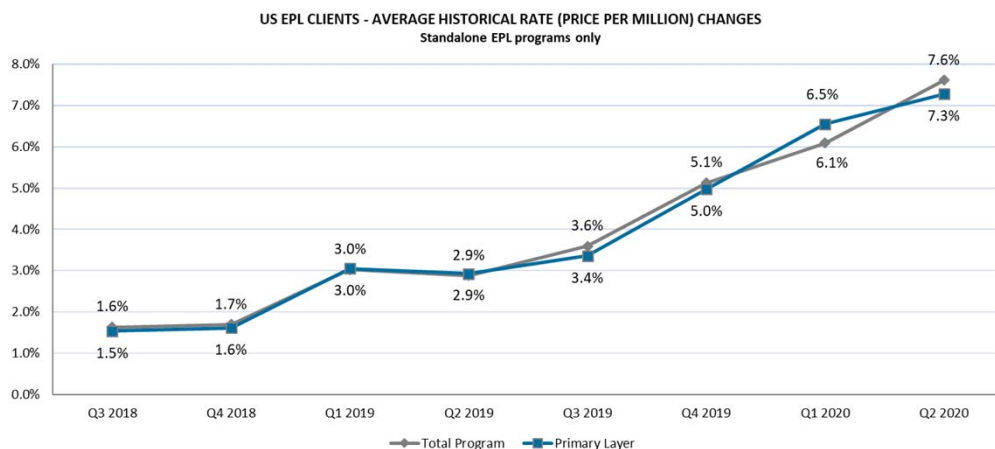
### Sample Questions from Underwriters

- How is the company managing the COVID-19 impact on business?
- Are RIFs, layoffs, furloughs, or closure of business locations being considered at this time and is there an estimate of # of employees to be affected?
- What is the process surrounding employee selection and are disparate impact studies being conducted?
  - Are outside legal counsel assisting with such decisions and protocols?
- Is the company planning any increased hiring in light of the crisis? If so, what positions are being filled and what is the expected increase in headcount?
- Confirm that the management of employee's health information is being done in compliance with HIPAA and similar state laws
- For employees that may become ill or exposed:
  - What procedures are in place for employee protection and compliance with OSHA?
  - How is the company handling accommodation requests from employees that may be covered under the ADA?
- Is temperature testing or any physical exams being required for employees at this time?
- What is the paid sick leave policy and are any changes are being considered?
- In light of the increase in remote working, have there been any changes to the company's timekeeping and W&H policies and procedures for non-exempt employees? How are training and policies/procedures being adapted?

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## EPL – Q2 EPL Rate Change

### EPL Rate Trends (All Companies)



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## CLE Code

**“We have some lawyers participating today that need a CLE code for verification. The CLE Code for this July 29 session is \_\_\_\_\_.”**

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## D&O and EPL – COVID-19





### What's Next?

- What to do if you receive a claim?
  - Tender considerations
  - Counsel considerations
  - Cooperation

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## D&O and EPL – COVID-19

### Preparing for a Challenging Renewal

- 1  Start Early
- 2  Educate yourself on what's happening
- 3  Know your priorities
- 4  Prepare for your underwriter meetings in advance; be prepared to answer COVID-19 related questions and differentiate your risk.

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## Questions?

**Michelle A. Sartain, Management Liability Practice Leader**  
Marsh JLT Specialty  
[Michelle.A.Sartain@marsh.com](mailto:Michelle.A.Sartain@marsh.com)

**Kelly Thoerig, Employment Practices Liability Coverage Leader**  
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**Katie Pfeifer, Of Counsel**  
Dorsey & Whitney LLP  
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# Food Summit



## The Future of Food

### Speakers:

Alexandria Coari, Capital & Innovation Director, ReFED

Dan Altschuler Malek, Managing Partner, Unovis Partners / New Crop Capital

Chip Magid, Partner, Dorsey & Whitney (Moderator)



## Session 3 Panelists:



**Dan Altschuler Malek**  
Managing Partner  
Unovis Partners / New  
Crop Capital  
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646.321.3414



**Alexandria Coari**  
Capital and Innovation Director  
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630.640.4074



**Chip Magid**  
Partner  
Dorsey & Whitney LLP  
[magid.chip@dorsey.com](mailto:magid.chip@dorsey.com)  
202.442.3555

## World Population

- **7.8 billion            2020**
- **8.5 billion            2030**
- **9.7 billion            2050**
- **11.2 billion          2100**

Source: United Nations

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## Worldwide Food Insecurity

- **9.2% of world population (700+ million people) were exposed to severe levels of food insecurity in 2018**
- **17.2% of world population (1.3 billion people) experienced moderate food insecurity (did not have regular access to nutritious and sufficient food) in 2018**
- **In total, 26.4% of humans (roughly 2 billion people) suffer food insecurity**

Source: Food and Agriculture Organization of the United Nations, *The State of Food Security and Nutrition in the World 2019*

4



## Environmental Impacts

|                | Greenhouse Gas Emissions<br>kg of CO2 equivalent per 100 g protein | Freshwater Withdrawals<br>liters per 100g protein |
|----------------|--|---|
| <b>Beef</b>    | <b>49.89</b>   | <b>1375</b>                                       |
| <b>Pork</b>    | <b>7.61</b>  | <b>1110</b>                                       |
| <b>Chicken</b> | <b>5.7</b>   | <b>1904</b>                                       |
| <b>Soy</b>     | <b>1.98</b>  |   |
| <b>Peas</b>    | <b>0.44</b>  | <b>178</b>  |

Source: H. Ritchie & M. Roser, Our World in Data (2020)

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## Health Concerns

**“[A]n accumulated body of evidence shows a clear link between high intake of red and processed meats and a higher risk for heart disease, cancer, diabetes, and premature death.”**

Source: *What's the beef with red meat?*, Harvard Health Publishing (Feb. 2020)

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## Animal Welfare Concerns



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## Sales of Plant-Based Foods Have Taken Off

**2019 Plant-Based Food Market By Category**

| Category  | 2017 Sales<br>(values in 000's) | 2018 Sales<br>(values in 000's) | 2019 Sales<br>(values in 000's) | \$ Sales Growth<br>(2018-2019) | \$ Sales Growth<br>(2017-2019) |
|---|---------------------------------|---------------------------------|---------------------------------|--------------------------------|--------------------------------|
| Plant-based milk  | \$1,765,971                     | \$1,920,579                     | \$2,016,540                     | 5.0%                           | 14.2%                          |
| Plant-based meat  | \$681,763                       | \$799,614                       | \$939,459                       | 18.4%                          | 37.8%                          |
| Plant-based meals                                       | \$300,464                       | \$346,102                       | \$376,972                       | 8.3%                           | 25.3%                          |
| Plant-based ice cream and frozen novelty                | \$280,513                       | \$317,575                       | \$335,549                       | 5.7%                           | 33.9%                          |
| Plant-based creamer                                     | \$146,809                       | \$211,381                       | \$286,662                       | 34.3%                          | 92.6%                          |
| Plant-based yogurt                                      | \$144,906                       | \$215,156                       | \$282,502                       | 31.3%                          | 95.0%                          |
| Plant-based butter                                      | \$173,053                       | \$183,070                       | \$198,359                       | 8.4%                           | 14.6%                          |
| Plant-based cheese                                      | \$125,377                       | \$159,783                       | \$189,099                       | 18.3%                          | 50.8%                          |
| Tofu and tempeh   | \$111,823                       | \$118,807                       | \$127,856                       | 7.8%                           | 14.6%                          |
| Plant-based ready-to-drink beverages                    | \$87,862                        | \$103,242                       | \$122,276                       | 18.4%                          | 39.2%                          |
| Plant-based condiments, dressings, and mayo             | \$62,841                        | \$71,465                        | \$63,696                        | -10.9%                         | 1.4%                           |
| Plant-based dairy spreads, dips, sour cream, and sauces | \$12,543                        | \$19,206                        | \$29,513                        | 53.7%                          | 135.3%                         |
| Plant-based eggs  | \$3,001                         | \$3,377                         | \$9,851                         | 191.7%                         | 228.2%                         |
| <b>Grand Total</b>                                      | <b>\$3,868,925</b>              | <b>\$4,467,358</b>              | <b>\$4,978,587</b>              | <b>11.4%</b>                   | <b>28.7%</b>                   |

Source: SPINScan Natural and Specialty Gourmet (proprietary), SPINScan Conventional Multi-Outlet (powered by IRI), 104 weeks ending 12-29-2019. © 2020 The Good Food Institute, Inc.  

Figure 4. Plant-based category dollar sales (detailed), SPINScan Natural and Specialty Gourmet (proprietary), SPINScan Conventional Multi-Outlet (powered by IRI), 104 weeks ending 2019-Dec-29.

**Source: The Good Food Institute**

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**ABBOT'S**  
HUTCH BUTCHER

Plant-Based Meat

**ALEPH FARMS**  
MEAT GROWERS

Cultivated Meat

**alpha**  
FOODS

Plant-Based Foods

**ALPINE ROADS**  
Ingredients

Ingredients

**ARTEMYS FOODS**

Cultivated Meat

**Atlas**  
FOOD CO.

Plant-Based Meat

**benji**  
VEGAN BUTTER

Plant-Based Meat

**BEYOND MEAT**

Plant-Based Meat

**BLACK SHEEP**  
FOODS

Plant-Based Meat

**BlueNalu**

Cultivated Seafood

**DF**  
DAO FOODS

Strategic Partner

**emergy**

Fermentation

**EVOLUTION**

Plant-Based Meat

**Far & Butter**

Plant-Based Butter

**GELTOR**

Plant-Based Collagen

**GOOD CATCH**

Plant-Based Seafood

**good**  
dai

Plant-Based Meals

**heura**

Plant-Based Meat

**kitehill**  
The Good Dairy

Plant-Based Dairy

**LIGHTER**

Meal Planning App

**M** MEMPHIS  
MEATS

Cultivated Meat

**MIYOKO'S**  
CREAMERY

Plant-Based Dairy

**mosa meat**

Cultivated Meat

**NEW WAVE**  
plant-based delicatessen

Plant-Based Seafood

**neXtfoods**

Distribution

**NOVA**  
MEAT

3D Printing

**NUMU**

Plant-Based Cheese

**OCEAN HUGGER**  
FOODS

Plant-Based Seafood

**Outstanding**  
FOODS

Plant-Based Meat

**PURPLE CARROT**

Prepared Meal Delivery

**STARFIELD**  
星期零

Plant-Based Meat

**Sunfed**

Plant-Based Meat

**SuperMeat**

Cultivated Meat

**THE PROTEIN**  
PREMIER

Fermentation

**WICKED**  
FOODS

Plant-Based Meat

**ZERO**  
EGG.

Plant-Based Egg

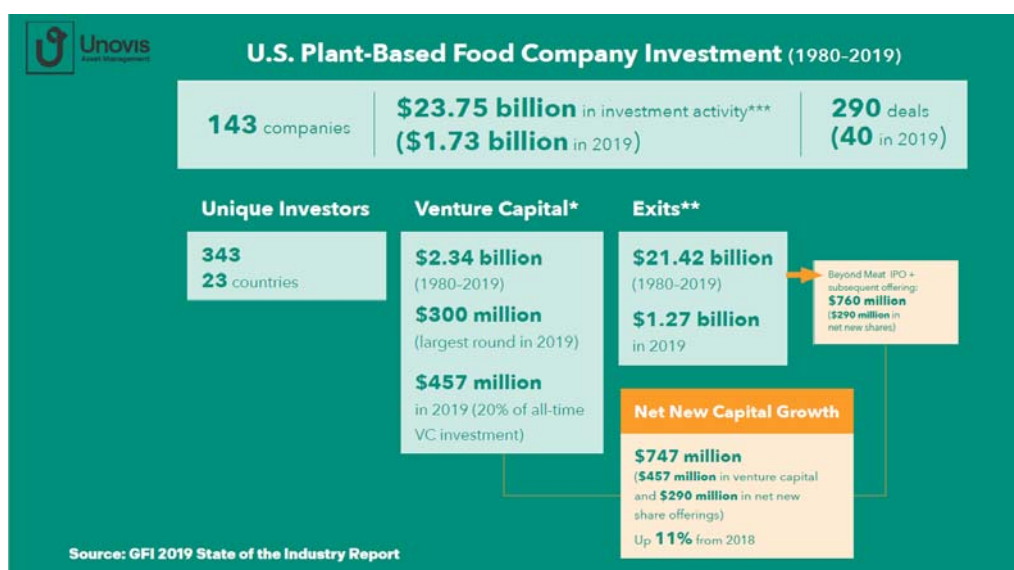
10

## Plant-Based Food Sales

| Category          | 2019 Sales<br>(in 000s) | YOY\$ Sales Growth<br>(2018-2019) | 2 Yr \$Sales Growth<br>(2017-2019) |
|-------------------|-------------------------|-----------------------------------|------------------------------------|
| Plant-based milk  | \$2,016,540             | 5.0%                              | 14.2%                              |
| Plant-based meat  | \$939,459               | 18.4%                             | 37.8%                              |
| Plant-based meals | \$376,972               | 8.3%                              | 25.5%                              |
| Tofu and tempeh   | \$127,856               | 7.8%                              | 14.6%                              |
| Plant-based eggs  | \$9,851                 | 191.7%                            | 228.2%                             |

Source: The Good Food Institute, *Plant-Based Market Overview* (2020)

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**O ZERO  
EGG.**



## The Egg for Everyone

Amazingly made from plants!



[www.zeroeggfood.com](http://www.zeroeggfood.com)

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**Black Sheep  
FOODS**



**DAMN  
GOOD.**



[www.blacksheepfoods.com](http://www.blacksheepfoods.com)

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Photo: Novameat

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## CLE Code

**“We have some lawyers participating today that need a CLE code for verification. The CLE Code for this July 29 session is \_\_\_\_\_.”**

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## About ReFED

ReFED is a national nonprofit with a holistic view of the food system, working to advance solutions to reduce the amount of food wasted in the US.

We leverage data, insights, and innovation to identify inefficiencies throughout the food supply chain and highlight economic opportunities to reduce food waste.

*Advancing  
data-driven  
solutions*

## COVID-19



- **40%** of all food grown in the United States never gets eaten, yet over **40 million** Americans face food insecurity
- **Single largest** material type in landfill
- **8%** of global GHG emissions
- **\$74 billion** cost to American businesses



# FOOD WASTED BY WEIGHT — 63 MILLION TONS



## CONSUMER-FACING BUSINESSES INCLUDE



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## Reducing Food Waste is a Means to Multiple Positive Ends



Project Drawdown's 2020 report identified reduction of food waste as the **#1 solution to address climate change**

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## ReFED Identifies Scalable and Effective Solutions to Food Waste

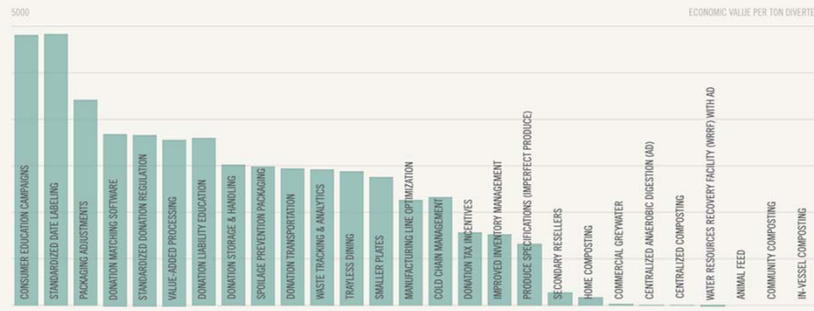
### 27 SOLUTIONS TO FOOD WASTE

The benefits of each of these solutions outweigh the costs.

Choose a filter button or bar to see the impacts of each solution.

FINANCIAL BENEFIT WASTE DIVERTED EMISSIONS REDUCED WATER SAVED JOBS CREATED MEALS RECOVERED

The aggregate financial benefit to society (consumers, businesses, governments, and other stakeholders) minus all investment and costs per ton of food waste diverted. It shows the amount of benefit received per ton of reduction and is calculated as the Economic Value per Ton.



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## Sample of Food Waste Solution Categories

- **Tracking & Analytics** - LeanPath, Wasteless
- **Produce Specifications** - Imperfect Produce, Misfits Market
- **Spoilage Prevention** - Apeel, Hazel Tech, Mori
- **AI-Enabled Forecasting** - Afresh, BlueYonder
- **Online Sales Platforms** - Forager, BlueCart, Spoiler Alert
- **Upcycled Food Products** - ReGrained, Barnana, Matriark
- **Bioprocessing** - Full Cycle Bioplastics, Atlas Organics, Divert

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## Wide-Scale Adoption of These Solutions Requires Billions in Financing

- Public, private, and philanthropic capital is required, especially catalytic capital<sup>1</sup> which plays an important role in de-risking and unlocking more traditional financing
- Food businesses act as core customers of food waste solutions; requiring human capital and corporate finance



<sup>1</sup> Financing that has a multiplier effect in stimulating larger amounts of future financing and waste reduction by overcoming system-level barriers.

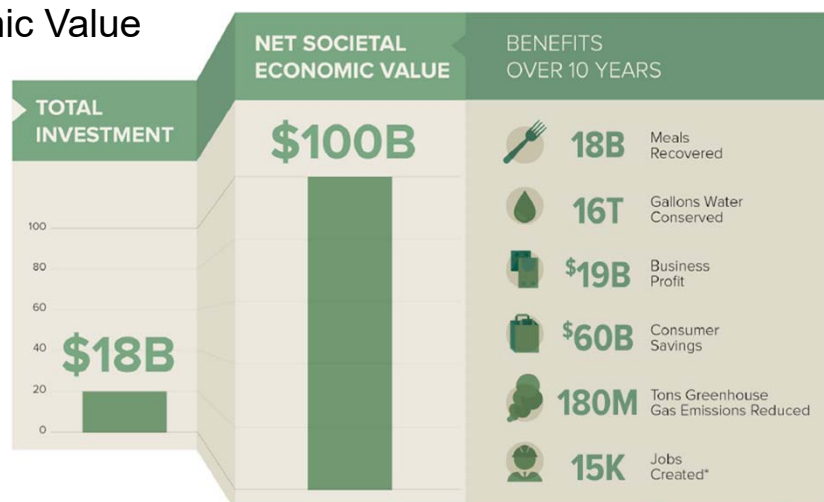
<sup>2</sup> Impact Investments currently defined as investments that seek a financial return, but are willing to accept more risk or potentially lower returns in pursuit of measurable social or environmental impact. Examples include low- or no-interest loans, loan guarantees, variable payment options, PRIs, MRIs, etc.

<sup>3</sup> Spending by for-profit corporations with the intent to return cost of capital (can be viewed from the lens of revenue of solution providers). CSR and marketing type spending (non-foundation spending) would be considered part of this category.

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## \$18B of Investment Could Lead to \$100 Billion in Societal Economic Value



\*Jobs created is a total number, not annual new jobs.  
Jobs and environmental benefits not included in \$100b calculation.

## The COVID-19 Crisis is Shining a Spotlight on Supply Chain Weaknesses

- In the short-term, we need to do everything we can to rescue the spike in surplus food on farms and expand the ways food is delivered to the most vulnerable communities
- However, these same solutions and more will need continued and substantial investment over the next 10 years if we are to achieve a 50% reduction of food waste by 2030
- Now is the moment to invest in and accelerate solutions that will add resiliency to the food system

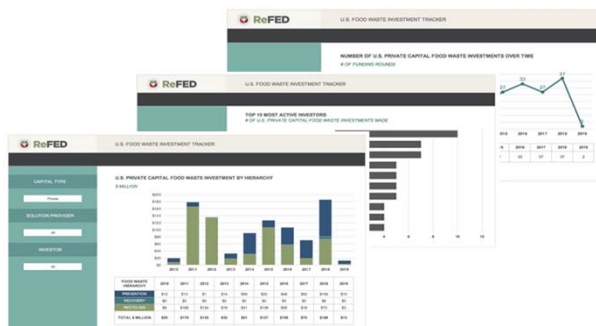


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## Ways To Get Involved

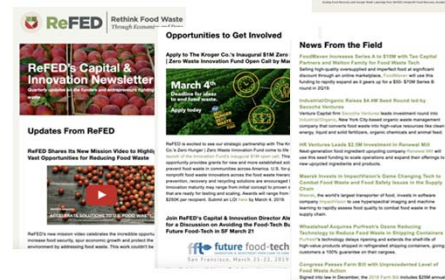
### Knowledge Sharing

- Collect and develop data, insights, and tools via our Insights Engine to contextualize and prioritize action
- Form solutions list and Solution Fact Sheets
- Create reports, newsletters, and webinars



Investment Tracker

### Scaling Food Recovery and Hunger Relief: Best Practices Report



Investment and Innovation Newsletter

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## Ways To Get Involved

# Network Connections

- Build relationships with key stakeholders
- Convene the "Big Tent"
- Form connections between food businesses, solution providers, and capital providers

## ACCELERATOR EXPERT NETWORK



## SF Food Waste Funder Initiative



## Innovation Workshop



## Imperfect Foods Field Trip



## Boston Food Waste Funder Initiative



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## Ways To Get Involved

## Capital Deployment

- Model costs and analyze sources of capital
- Advise funding strategies
- Manage direct funding programs (in-house and externally)

**\$3.5 M COVID-19 Food Waste Solutions Fund**

**With US\$3+ Million in Grants, ReFED's COVID-19 Fund is Saving Food Waste and Feeding People**



### Overview of the Awarded Grantees



**Strategic Advisor and Open Call Program Manager  
for The Kroger Co. ZHFW Fdn**



## Strategic Advisory to DoorDash's In-Kind Food Recovery Grants Program



## Powering the logistics of social good

Announcing an open call for in-kind grants in partnership with ReFED, the leading food waste think tank

## \$1M Open Call Program Management for The Wonderful Company



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## Questions?

Dan Altschuler Malek  
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ReFED  
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For additional information regarding ReFED, please refer to these online resources:

1. A Roadmap to Reduce Food Waste by 20%; ReFED, 2016  
[https://www.refed.com/downloads/ReFED\\_Report\\_2016.pdf](https://www.refed.com/downloads/ReFED_Report_2016.pdf)
2. New ReFED Report Offers Organizations Across the Food System a Guide for Scaling Food Recovery and Hunger Relief Efforts; Published July 20, 2020  
<https://www.refed.com/content-hub/new-refed-report-offers-organizations-across-the-food-system-a-guide-for-scaling-food-recovery-and-hunger-relief-efforts/>
3. With US\$3+ Million in Grants, ReFED's COVID-19 Fund is Saving Food Waste and Feeding People; *foodtank, the Think Tank for Food*, July 2020  
<https://foodtank.com/news/2020/07/with-us3-million-in-grants-refeds-covid-19-fund-is-saving-food-waste-and-feeding-people/>
4. Scaling Food Recovery and Hunger Relief – Learnings from ReFED's Nonprofit Food Recovery Accelerator; ReFED, Published July 20, 2020  
<https://www.refed.com/downloads/ReFED-BestPractices-Report-Final.pdf>



## **THE FUTURE OF FOOD**

**Erica F. Andrews  
Nora Cooke  
Dorsey & Whitney LLP**

The food and beverage industry is in the midst of dramatic change. Cutting-edge technology, changing consumer tastes, new channels of sales and distribution, an influx of capital, and a growing population to feed have resulted in tremendous innovation, including entirely new foods and new ways of farming. This article looks at a few of the transformational developments in the industry.

### **Direct-to-Consumer Food Sales**

Prior to the rise of director-to-consumer sales (“DTC”), the top brands in more than 10 categories went unchanged from 1923 to 1983.<sup>1</sup> The rise of the internet lowered the cost of market entry, and companies offering DTC sales emerged.<sup>2</sup> In recent years, the DTC market has become saturated with competition and companies must spend large portions of their budget on marketing to generate sales.<sup>3</sup>

The food industry has been a laggard in embracing DTC sales, with 98 percent of food sales made through traditional grocery stores and the majority of the rest to third parties such as Amazon.<sup>4</sup> DTC sales offers consumer packaged goods (“CPG”) companies an opportunity to grow and challenge the competition they face from retailer and digitally native brands.<sup>5</sup> This growth is necessary as e-commerce is expected to comprise 14 percent of all sales by 2021.<sup>6</sup>

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<sup>1</sup> Len Schlesinger *et al.*, *Reinventing the Direct-to-Consumer Business Model*, HARV. BUS. REV. (March 21, 2020), <https://hbr.org/2020/03/reinventing-the-direct-to-consumer-business-model>.

<sup>2</sup> *Id.*

<sup>3</sup> Caroline Jansen, *Retail Dive, DTC brands struggled with profitability prior to COVID-19. Now what?* (July 6, 2020), <https://www.retaildive.com/news/dtc-brands-struggled-with-profitability-prior-to-covid-19-now-what/580689/>.

<sup>4</sup> Ben McKean, *Why Food Brands Don’t Sell Direct-to-Consumer, and What That Means for You*, MEDIUM, (Oct. 7, 2019), <https://medium.com/@benjaminmckean/why-food-brands-dont-sell-direct-to-consumer-and-what-that-means-for-you-36bf73a26084>.

<sup>5</sup> Victoria Campisi, *Food Companies Pivoting to Direct-to-Consumers Models*, FOOD INST. (May 15, 2020), <https://www.foodinstitute.com/focus/pivoting-to-dtc>.

<sup>6</sup> *Id.*

An issue for entering the DTC market that many food brands face is their lack of product offerings.<sup>7</sup> Online customers are driven by convenience and often want to purchase from one store, which can be difficult for a food brand that sells a single product.<sup>8</sup>

Benefits of embracing DTC sales for food brands include greater control over their business and increased understanding of their customer base.<sup>9</sup> A constraint of traditional selling is the inability to innovate and test out new products, as the company is held to what distributors or retailers decide to purchase.<sup>10</sup> For example, grocery stores have profit margins of approximately 1-3 percent and limited shelf space; this makes the stores risk adverse and more likely to allocate limited shelf space to established and low-risk products.<sup>11</sup> DTC marketing allows innovative companies to circumvent this roadblock. DTC sales also provide companies the ability to collect customer data that can be used to personalize the customer experience and to monetize that relationship – information that would not be available about a customer buying in-store.<sup>12</sup>

Consumer responses to COVID-19 have accelerated the DTC trend. As consumers shift to online shopping, either due to fears of contracting the virus or out of necessity due to empty or inadequately stocked store shelves, big names like PepsiCo, Nestle, and Kraft Heinz have moved aggressively to launch direct-to-consumer services.<sup>13</sup> PepsiCo, which launched two direct-to-consumer websites in May 2020, announced that it would be reallocating money from other channels to e-commerce long term, with the expectation that some consumers will be changing their spending patterns for the foreseeable future.<sup>14</sup>

Alcohol sales have been especially impacted by coronavirus restaurant closures and capacity limits. On-premise wine sales were down by 69% from June 2019 and are expected to remain low for the rest of the year. However, off-premise wine sales increased by almost 18% from 2019 and direct-to-consumer wine shipments increased by 30%. Emerging alcohol brands faced with difficulties launching during the pandemic have echoed the traditional reasons driving direct-to-consumer sales: the ability to control the brand's positioning and message, not having to compete for shelf space, the ability to use strong digital content to connect with consumers directly, and the opportunities that exist for companies that are willing to invest in an optimized

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<sup>7</sup> McKean, *supra* note 4.

<sup>8</sup> *Id.*

<sup>9</sup> Kevin McGirl, *Direct-to-Consumer Sales: How Does it Affect Food Manufacturers?*, FOOD LOGISTICS (Sep. 12, 2018), <https://www.foodlogistics.com/warehousing/blog/21020332/directtoconsumer-sales-how-does-it-affect-food-manufacturers>.

<sup>10</sup> McKean, *supra* note 4.

<sup>11</sup> *Id.*

<sup>12</sup> Campisi, *supra* note 5.

<sup>13</sup> Campisi, *supra* note 5.

<sup>14</sup> *Id.*

online shopping experience, a rarity among alcohol brands.<sup>15</sup> Similarly, distributors that traditionally have served the restaurant or institutional markets have repurposed themselves to sell directly to consumers.<sup>16</sup>

Some emerging and natural food brands that would normally be fighting for shelf space in grocery stores are also finding that direct-to-consumer is a lifeline due to the difficulties in developing new business as a result of COVID-19 restrictions. Due to the virus, trade shows and sales meetings with retailers have been cancelled outright or are only occurring virtually, a less than ideal platform for developing vital business relationships. Several brands have found that by focusing on DTC sales, they can connect with consumers in a meaningful way and thus continue to build their businesses during this difficult time.<sup>17</sup>

### **Cultivated Meat**

Cultivated or “cell-based” meat – meat that is grown in a laboratory, without the animal – first debuted to the public in 2013, through a cell-based burger grown in a lab at Maastricht University in the Netherlands for an estimated cost of \$1.2 million dollars a pound.<sup>18</sup> Cultured meat is created by taking stem cells from the muscle of an animal, usually with a small biopsy under anesthesia.<sup>19</sup> The cells are then combined with nutrients, salts, pH buffers, and growth factor and left to multiply.<sup>20</sup> Cultured meat is genuine animal meat grown from cells outside of an animal; it is not imitation or synthetic meat.<sup>21</sup>

Since 2013, advancements in engineering and regenerative medicine have enabled cell-based meat startups to produce a variety of cultured meat, including pork, chicken, beef, and

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<sup>15</sup> Thomas Pellechia, *Direct-to-Consumer 2020 Wine Shipments Try to Even Out On-Premise Sales Loss*, FORBES (Jul. 19, 2020 10:51 AM), <https://www.forbes.com/sites/thomaspellechia/2020/07/19/direct-to-consumer-2020-wine-shipments-even-out-on-premise-sales-loss/#a2d35d65662d>.

<sup>16</sup> Amelia Lucas, *Spend \$250, Get an Ounce of Caviar: Restaurant Suppliers Get Creative to Survive*, CNBC (Mar. 27, 2020 12:53 PM), <https://www.cnbc.com/2020/03/27/restaurant-suppliers-pivot-to-grocery-direct-sales-during-coronavirus-pandemic.html>; Christopher Doering, *Consumers and Manufacturers Rethink DTC's Promise as Pandemic Alters Shopping Habits*, Food Dive (May 26, 2020), <https://www.fooddive.com/news/consumers-and-manufacturers-rethink-dtcs-promise-as-pandemic-alters-shoppi/577737/>.

<sup>17</sup> Elizabeth Crawford, *Emerging Brands Go Direct-to-Consumer as Retailers Pause Demos, Resets Amid Coronavirus*, FOOD NAVIGATOR USA (Mar. 30, 2020), <https://www.foodnavigator-usa.com/Article/2020/03/30/Emerging-brands-go-direct-to-consumer-as-retailers-pause-demos-resets-amid-coronavirus>.

<sup>18</sup> Laura Reiley, *From lab to table: Will cell-cultured meat win over Americans?*, Wash. Post, May 3, 2019, <https://www.washingtonpost.com/business/2019/05/03/lab-table-will-cell-based-meat-win-over-americans/>.

<sup>19</sup> Brian Kateman, *Will Cultured Meat Soon Be A Common Sight In Supermarkets Across The Globe?*, FORBES, Feb 17, 2020, <https://www.forbes.com/sites/briankateman/2020/02/17/will-cultured-meat-soon-be-a-common-sight-in-supermarkets-across-the-globe/#6fd3063b7c66>.

<sup>20</sup> *Id.*

<sup>21</sup> Brianna Cameron et al., *State of the Industry Report: Cell-based Meat*, THE GOOD FOOD INST., June 2019, <https://www.gfi.org/non-cms-pages/splash-sites/soi-reports/files/SOI-Report-Cell-Based.pdf>.

duck.<sup>22</sup> As of 2019, there were 26 companies creating cell-based meat worldwide, nine of which are U.S. based.<sup>23</sup> As of 2019, the cost of producing one cultivated burger is now down to approximately \$100, compared to more than \$278,000 per burger in 2013.<sup>24</sup> No cultivated meat company yet has a facility capable of producing the product on a commercial scale.<sup>25</sup>

Cultivated meat provides benefits to the environment, human health and animal welfare. Cultivated meat avoids livestock antibiotic use, which contributes to worsening antibiotic resistance in humans.<sup>26</sup> Because cell-based meat is created in a sterile laboratory, it eliminates the risk of pathogens associated with livestock farming, such as salmonella, *E. coli*, mad cow disease, and avian and swine flus.<sup>27</sup> Additionally, since the animal cells are extracted humanely and are grown in a facility, cell-based meat has the potential to eliminate livestock suffering.<sup>28</sup>

The greatest benefit to cell-based meat may be environmental. Cultivated meat requires significantly less energy, land and less greenhouse emissions than livestock farming.<sup>29</sup> Four percent of greenhouse gases in the U.S. result from livestock agriculture; this amount increases to 15 percent globally.<sup>30</sup> Industrial farming comprises between 14 percent and 18 percent of greenhouse gas emissions linked to climate change.<sup>31</sup> A 2011 Oxford study estimated that cell-based meat production could involve 96 percent lower global greenhouse emissions, 98 percent less land use and up to half as much energy as traditionally produced meat.<sup>32</sup>

Many start-ups in the cultured meat industry are aiming to get these products on the market in the next three years. Challenges remain, however. Bringing cultivated meat to the commercial market on a large scale requires perfecting the technology and reducing production costs to make the product cost-competitive.<sup>33</sup> Memphis Meats is building a pilot plant to produce, at scale, cell-based beef, chicken and duck that it has previously grown in a lab.<sup>34</sup> Future Meat Technologies, which is building a full-scale production facility, has reduced its

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<sup>22</sup> Sam Danley, Jan. 27, 2020, *Cell-based meats approaching scalability*, FOOD. BUS. NEWS, <https://www.foodbusinessnews.net/articles/15286-cell-based-meats-approaching-scalability>.

<sup>23</sup> Reiley, *supra* note 18.

<sup>24</sup> Danley, *supra* note 22.

<sup>25</sup> Megan Molteni, *The Race to Bring Meat Alternatives to Scale*, WIRED, Nov. 8, 2011, <https://www.wired.com/story/uma-valeti-memphis-meats-wired25/>.

<sup>26</sup> Kateman, *supra* note 19.

<sup>27</sup> Molteni, *supra* note 25.

<sup>28</sup> Kateman, *supra*, note 19.

<sup>29</sup> See Cameron et al., *supra* note 21, at 2.

<sup>30</sup> Molteni, *supra* note 25.

<sup>31</sup> Jonathan Shieber, *Dutch startup Meatable is developing lab-grown pork and has \$10 million in new financing to do it*, TECH CRUNCH, Dec. 6, 2019, <https://techcrunch.com/2019/12/06/dutch-startup-meatable-is-developing-lab-grown-pork-and-has-10-million-in-new-financing-to-do-it/>.

<sup>32</sup> *Lab-grown meat would 'cut emissions and save energy'*, OXFORD UNIV., June 21, 2011, <https://www.ox.ac.uk/news/2011-06-21-lab-grown-meat-would-cut-emissions-and-save-energy#>

<sup>33</sup> Kateman, *supra* note 19.

<sup>34</sup> Molteni, *supra* note 25.

manufacturing time to two weeks, and says that its method also allows for higher production yields of cell-based beef.<sup>35</sup> Future Meat Technologies is aiming to produce hybrid products combining plant-based protein with cell-based meat as early as 2021, and aims to offer 100 percent cell-based meat in 2022.<sup>36</sup> An Israeli-based company, Aleph Farms, said it has reduced the cost of cell-based hamburger to \$100 per pound, and some in the industry suggest that American companies are close to reducing the cost to \$50 per pound.<sup>37</sup>

Government regulation is a challenge to the commercialization of cell-based meat, as the product has not yet been approved for consumption in any jurisdiction and there have not been any large-scale consumer safety tests.<sup>38</sup> In March 2019, the U.S. Department of Agriculture and the Federal Drug Administration announced a formal agreement to jointly oversee the production of cell-based meat to ensure its safety and accurate labeling.<sup>39</sup> Five U.S. cell-based meat companies -- BlueNalu, Memphis Meats, JUST, Finless Foods and Fork & Goode – formed a coalition, The Alliance for Meat, Poultry & Seafood Innovation (“AMPS Innovation”) to represent the interests of the companies and to work with government regulators and help determine what regulation and labeling will look like once cell-based meat reaches the commercial market.<sup>40</sup>

Cultivated meat startups have received an influx of venture capital that continues to increase. Investments in cell-based meat companies increased more than 120% between 2018 and 2019.<sup>41</sup> Several cell-based meat companies, including BlueNalu, Future Meat Technologies, Finless Goods, Wild Type, Aleph Farms each raised more than \$10 million dollars in 2019.<sup>42</sup> In January 2020, Memphis Meats raised \$161 million in venture capital; prior to this, the total amount raised by cell-based meat companies since 2015 had been approximately \$155 million.<sup>43</sup> Internationally, the cell-based meat industry is predicted to be worth \$15.5 million by 2021 and \$20 million by 2027, and one report estimates that 35% of all meat will be cultured by 2040.<sup>44</sup> Additionally, many companies have started to partner with established companies in the life science and conventional meat industries. For example, Tyson Foods’ venture capital arm,

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<sup>35</sup> Kateman, *supra* note 19.

<sup>36</sup> Danley, *supra* note 22.

<sup>37</sup> Reiley, *supra* note 18.

<sup>38</sup> *Id.*

<sup>39</sup> Federal Drug Admin., *USDA and FDA Announce a Formal Agreement to Regulate Cell-Cultured Food Products from Cell Lines of Livestock and Poultry*, March 7, 2019, <https://www.fda.gov/news-events/press-announcements/usda-and-fda-announce-formal-agreement-regulate-cell-cultured-food-products-cell-lines-livestock-and>.

<sup>40</sup> Ariella Simke, *5 Cell-Based Meat Companies Create Coalition To Inform New Regulations*, FORBES, Feb. 23, 2020, <https://www.forbes.com/sites/ariellasimke/2020/02/23/5-cell-based-meat-companies-create-coalition-to-inform-new-regulations/#1462fc1a6b9e>.

<sup>41</sup> Danley, *supra* note 22.

<sup>42</sup> *Id.*

<sup>43</sup> *Id.*

<sup>44</sup> Kateman, *supra* note 19.

Tyson Ventures, has invested in two cell-based meat companies, Memphis Meats and Future Meat Technologies.<sup>45</sup> To date, however, the cell-based meat industry remains a very small portion of the total investments in the FoodTech sector, with investment equal to six percent of the total investment in plant-based foods and 0.2% of investment in the cannabis industry.<sup>46</sup>

### **Vertical Farming**

Vertical farming involves growing crops indoors in stacked systems with controlled water, lighting, and nutrient sources. Globally, this market is expected to reach \$12.77 billion by 2026<sup>47</sup>, with the highest rate of growth expected to occur in Europe.<sup>48</sup> This growth is primarily driven by several key factors: the demand for organic foods, concerns about climate change and its impact on the ability to grow crops in many areas of the world, and concerns over the waste that accompanies traditional farming methods.

Because pesticides are unnecessary in the controlled indoor environment,<sup>49</sup> vertical farming aligns well with the continually increasing demand for organic foods that North America and Europe have seen for the past decade.<sup>50</sup> In North America, 5% of the overall food sales in 2016 in America were attributed to organic foods.<sup>51</sup>

Another large driver for vertical farming is climate change. Climate change will continue to alter where and at what times of year crops can be grown, both due to regional weather pattern changes and decreased water availability.<sup>52</sup> Vertical farming eliminates these issues, as the indoor space is resilient to climate impacts year-round.<sup>53</sup> Additionally, since one acre of indoor vertical farming is equivalent to 4–6 outdoor acres, and since current buildings can be repurposed for use as vertical farms, vertical farming requires less land than traditional farming operations. Vertical farms also offer the potential to provide healthy food to communities in “food deserts” while simultaneously making use of existing infrastructure and providing jobs to cities that are in desperate need of them. For example, a former Target location in South

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<sup>45</sup> Cameron et al., *supra* note 21, at 10.

<sup>46</sup> *Id.*

<sup>47</sup> Allied Market Research, Vertical Farming Market Outlook – 2026, <https://www.alliedmarketresearch.com/vertical-farming-market#:~:text=The%20global%20vertical%20farming%20market,24.6%25%20from%202019%20to%202026.&text=The%20demand%20for%20vertical%20farming,in%20popularity%20of%20organic%20food>.

<sup>48</sup> *Id.*

<sup>49</sup> Rebecca King, *Jersey City May Have the U.S.’s First Municipal Vertical Farm*, NORTHJERSEY.COM (Jun. 26, 2020) <https://www.northjersey.com/story/news/hudson/2020/06/26/jersey-city-vertical-farming-project-success-experts/3259198001/>.

<sup>50</sup> Allied Market Research, Vertical Farming Market Outlook – 2026.

<sup>51</sup> *Id.*

<sup>52</sup> *Vertical Farming Could Help Agriculture Meet Food Supply Needs*, APPLIED SCIENCES (Jul.15, 2020), <https://www.technologynetworks.com/applied-sciences/news/vertical-farming-could-help-agriculture-meet-food-supply-needs-337416>.

<sup>53</sup> *Id.*

Chicago that sat empty for five years is now being turned into a large vertical farm that will also sell greens to the community and feature a community education center; the farm is creating about 80 jobs despite the use of robotics in the facility.<sup>54</sup> This repurposing of otherwise unused or unproductive space is another way in which vertical farming is being used to reduce waste while adding value to communities.

The desire of growers to reduce human labor and to easily monitor crops is another factor pushing growth. For example, in July of this year, SANANBIO introduced its unmanned vertical farming technology system, UPLIFT, which completely automates seeding, transplanting, harvesting, plant transporting and system cleaning.<sup>55</sup> Robotic systems that eliminate or drastically reduce human labor are one of the largest developments driving the industry currently.<sup>56</sup>

Despite the projected growth and the many benefits offered by vertical farming, there are some obstacles that this sector will continue to encounter. Mainly, the high initial investment costs required by the indoor infrastructure and the fact that the technologies involved are still quite new.<sup>57</sup> Also, vertical farming is an extremely energy-intensive endeavor, and this is not easily offset.<sup>58</sup> Trump administration rollbacks on energy efficiency standards have threatened a premise that many in the industry had factored into their profitability models: that LED lighting would continue to become both brighter and cheaper.<sup>59</sup> Vertical farming is also potentially limited in the type of plants that can be grown: lightweight, leafy greens are a good match, but larger and heavier plants are not cost-effective due to the amount of artificial light and nutrients they require.<sup>60</sup>

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<sup>54</sup> Jennifer Marston, *Wilder Fields Turns an Abandoned Target in Chicago Into a Vertical Farm*, THE SPOON (Jul. 17, 2020), <https://thespoon.tech/wilder-fields-turns-an-abandoned-target-in-chicago-into-a-vertical-farm/>.

<sup>55</sup> *SANANBIO Announces the Availability of its Unmanned Vertical Farming System*, <https://www.prnewswire.com/news-releases/sananbio-announces-the-availability-of-its-unmanned-vertical-farming-system-uplift-to-global-growers-301094582.html>.

<sup>56</sup> *See, e.g.,* Donald Marvin, *Can Cutting Costs Via Robotics Unlock Vertical Farming Profits?*, Forbes (Oct. 15, 2019), <https://forbes.com/sites/donaldmarvin/2019/10/15/can-cost-cutting-via-robotics-unlock-vertical-farming-profits/#2616267773e1>.

<sup>57</sup> Allied Market Research, *Vertical Farming Market Outlook – 2026*.

<sup>58</sup> *Jersey City May Have the U.S.'s First Municipal Vertical Farm*, note 3.

<sup>59</sup> Laura Reiley, *Indoor Farming Looks Like It Could Be the Answer to Feeding a Hot and Hungry Planet. It's not that Easy*, WASHINGTON POST (Nov. 19, 2019 2:24PM), <https://www.washingtonpost.com/business/2019/11/19/indoor-farming-is-one-decades-hottest-trends-regulations-make-success-elusive/>.

<sup>60</sup> *Jersey City May Have the U.S.'s First Municipal Vertical Farm*, note 3.



# Food Summit



## The Pandemic's Impact on Rural America and the Farm Economy

**Keynote Speaker:**  
**Senator Heidi Heitkamp**



### Senator Heidi Heitkamp

Heidi Heitkamp represented North Dakota in the United States Senate from 2013 – 2019, and is the first and only female Senator elected to represent her state. During her tenure, Senator Heitkamp served as a member of Senate Agriculture Committee where she helped draft, negotiate, and ultimately pass two Farm Bills into law, including the landmark 2014 Farm Bill which made historic reforms to the farm safety net. Heitkamp previously served as North Dakota's Attorney General, and prior to that served as the state's Tax Commissioner. She currently serves on numerous boards including the McCain Institute and the Howard Buffett Foundation. She is the founder and chair of the One Country Project, an organization focused on addressing the needs and concerns of rural America. She is a Senior Fellow in International and Public Affairs at Brown University and serves as a contributor to *CNBC* and *ABC News*.

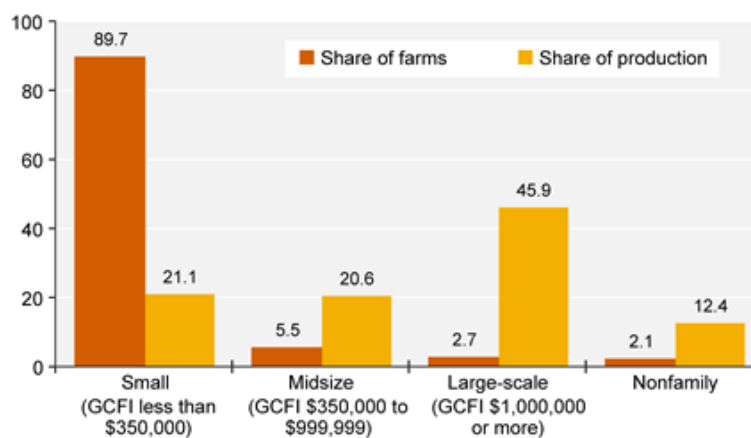
## Farm Economy

### American Agriculture at the Crossroads



**Farms and their value of production by ERS farm type, 2018**

Percent of U.S. farms or production

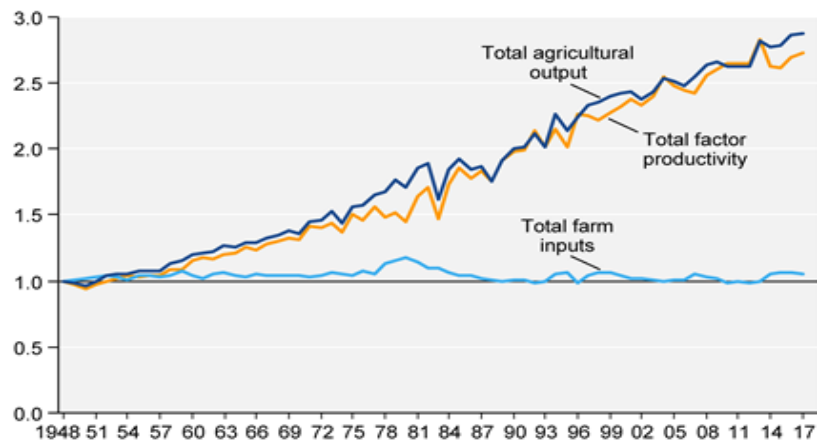


Note: GCFI refers to annual gross cash farm income before expenses; ERS refers to Economic Research Service. Nonfamily farms are those where the principal operator and their relatives do not own a majority of the business.

Source: USDA, Economic Research Service and National Agricultural Statistics Service, Agricultural Resource Management Survey. Data as of November 27, 2019.

### U.S. agricultural output, inputs, and total factor productivity

Index, 1948=1

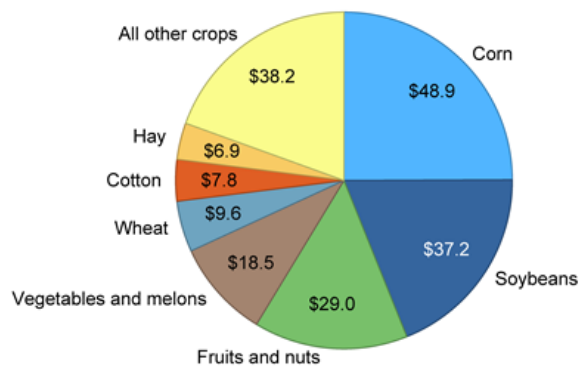


Source: USDA, Economic Research Service, *Agricultural Productivity in the U.S.* data series. Data as of January 2020.

5

### 2018 crop cash receipts (\$ billion)

\$196.2 billion total receipts



Note: Components may not sum to total because of rounding. Data as of February 5, 2020.  
Source: USDA, Economic Research Service, *Farm Income and Wealth Statistics*.

6

Cost-of-production forecasts for U.S. major field crops, 2020F-2021F

| Item  | Corn   |        | Soybeans |        | Wheat  |        | Cotton |        | Rice    |         | Peanuts |        | Sorghum |        | Oats   |        | Barley |        |
|---|--------|--------|----------|--------|--------|--------|--------|--------|---------|---------|---------|--------|---------|--------|--------|--------|--------|--------|
|   | 2020F  | 2021F  | 2020F    | 2021F  | 2020F  | 2021F  | 2020F  | 2021F  | 2020F   | 2021F   | 2020F   | 2021F  | 2020F   | 2021F  | 2020F  | 2021F  | 2020F  | 2021F  |
| <i>Dollars per planted acre</i>             |        |        |          |        |        |        |        |        |         |         |         |        |         |        |        |        |        |        |
| Operating costs:                            |        |        |          |        |        |        |        |        |         |         |         |        |         |        |        |        |        |        |
| Seed  | 93.92  | 94.28  | 56.36    | 56.58  | 14.90  | 14.96  | 67.98  | 68.24  | 99.75   | 100.13  | 118.87  | 119.32 | 14.29   | 14.34  | 18.88  | 18.95  | 22.27  | 22.36  |
| Fertilizer 1/                               | 105.21 | 108.20 | 23.42    | 24.09  | 40.21  | 41.35  | 54.13  | 55.67  | 87.69   | 90.18   | 62.28   | 64.04  | 30.68   | 31.55  | 36.29  | 37.32  | 39.25  | 40.36  |
| Chemicals                                   | 33.97  | 33.63  | 26.06    | 25.80  | 16.74  | 16.57  | 64.61  | 63.97  | 95.94   | 94.98   | 128.02  | 126.75 | 23.06   | 22.83  | 7.26   | 7.19   | 19.52  | 19.33  |
| Custom operations 2/                        | 23.71  | 24.24  | 11.04    | 11.25  | 14.20  | 14.47  | 137.70 | 144.77 | 100.64  | 102.59  | 69.35   | 70.69  | 14.78   | 15.06  | 10.53  | 10.73  | 14.86  | 15.15  |
| Fuel, lube, and electricity                 | 31.19  | 32.02  | 14.98    | 15.32  | 11.53  | 12.20  | 46.69  | 47.74  | 77.25   | 78.98   | 51.41   | 52.56  | 16.36   | 16.73  | 20.42  | 20.88  | 24.64  | 25.19  |
| Repairs                                     | 35.54  | 36.20  | 25.18    | 25.84  | 26.05  | 26.74  | 53.12  | 54.92  | 51.82   | 53.18   | 61.40   | 63.02  | 24.42   | 25.06  | 27.51  | 28.23  | 35.05  | 35.88  |
| Other variable expenses 3/                  | 0.31   | 0.31   | 0.07     | 0.07   | 0.78   | 0.79   | 2.99   | 3.05   | 16.19   | 16.50   | 0.76    | 0.77   | 0.17    | 0.18   | 2.22   | 2.26   | 7.05   | 7.19   |
| Interest on operating capital               | 1.46   | 0.82   | 0.71     | 0.40   | 0.56   | 0.32   | 1.52   | 1.09   | 2.38    | 1.34    | 2.21    | 1.24   | 0.56    | 0.31   | 0.55   | 0.31   | 0.73   | 0.41   |
| Total, operating costs                      | 325.31 | 329.70 | 157.83   | 159.36 | 125.36 | 127.39 | 429.15 | 439.05 | 531.65  | 537.89  | 494.30  | 498.40 | 124.32  | 126.08 | 123.66 | 125.88 | 163.38 | 165.97 |
| Allocated overhead:                         |        |        |          |        |        |        |        |        |         |         |         |        |         |        |        |        |        |        |
| Hired labor                                 | 5.42   | 5.30   | 3.62     | 3.54   | 4.16   | 4.07   | 19.51  | 19.07  | 34.38   | 33.60   | 21.86   | 21.36  | 4.53    | 4.43   | 2.44   | 2.38   | 10.10  | 9.87   |
| Opportunity cost of unpaid labor            | 30.64  | 29.95  | 22.31    | 21.80  | 17.68  | 17.27  | 43.57  | 42.58  | 86.51   | 84.54   | 69.47   | 68.12  | 21.39   | 20.91  | 61.22  | 59.82  | 34.25  | 33.47  |
| Capital recovery of machinery and equipment | 131.63 | 134.53 | 98.42    | 100.59 | 101.38 | 103.62 | 166.96 | 170.64 | 143.60  | 146.77  | 162.01  | 166.03 | 92.99   | 95.04  | 113.77 | 116.28 | 127.29 | 130.10 |
| Opportunity cost of land (rental rate)      | 161.44 | 162.29 | 150.38   | 151.17 | 60.56  | 60.90  | 78.10  | 78.51  | 159.14  | 159.98  | 99.41   | 99.94  | 58.41   | 58.72  | 101.53 | 102.07 | 64.89  | 65.34  |
| Taxes and insurance                         | 12.46  | 12.71  | 11.27    | 11.49  | 6.75   | 6.88   | 11.61  | 11.85  | 19.13   | 19.51   | 26.60   | 27.14  | 6.24    | 6.36   | 6.85   | 6.99   | 10.60  | 10.82  |
| General farm overhead                       | 19.77  | 20.29  | 19.95    | 20.48  | 9.64   | 9.89   | 15.49  | 15.90  | 28.90   | 29.66   | 50.06   | 51.38  | 13.01   | 13.35  | 14.11  | 14.49  | 19.57  | 20.09  |
| Total, allocated costs                      | 361.36 | 365.07 | 305.95   | 309.08 | 200.19 | 202.64 | 335.24 | 338.55 | 471.65  | 474.07  | 439.42  | 443.97 | 196.56  | 198.80 | 299.92 | 302.03 | 286.70 | 289.68 |
| Total costs listed                          | 686.66 | 694.77 | 463.78   | 468.44 | 325.55 | 330.03 | 764.39 | 777.60 | 1003.31 | 1011.95 | 933.71  | 942.37 | 320.88  | 324.88 | 423.58 | 427.91 | 450.08 | 455.65 |

F = Forecasts as of June 2020. Projected costs are based on 2019 production costs and projected changes in 2020 and 2021 indexes of prices paid for farm inputs.

1/ Commercial fertilizer, soil conditioners, and manure.

2/ Custom operations, technical services, and commercial drying.

3/ Purchased irrigation water, cotton ginning, and baling straw.

Note: Production cost forecasts are updated and released twice a year.

Source: Compiled by USDA, Economic Research Service using Agricultural Resource Management Survey data and other sources.

Contact: Jeffrey Gillespie, USDA, Economic Research Service

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# Reexamining of the Resilience of the Current Crop Insurance-Based Farm Program

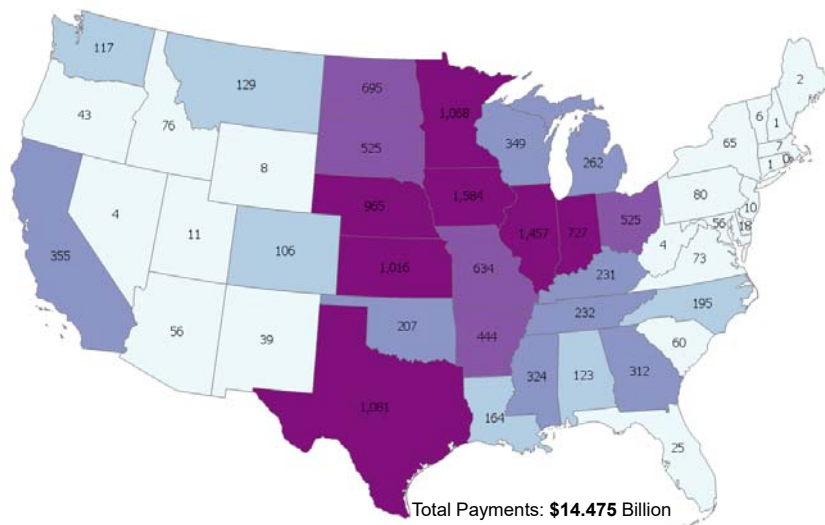
8

# Critics on all sides

Heritage Foundation to the  
Environmental Working Group

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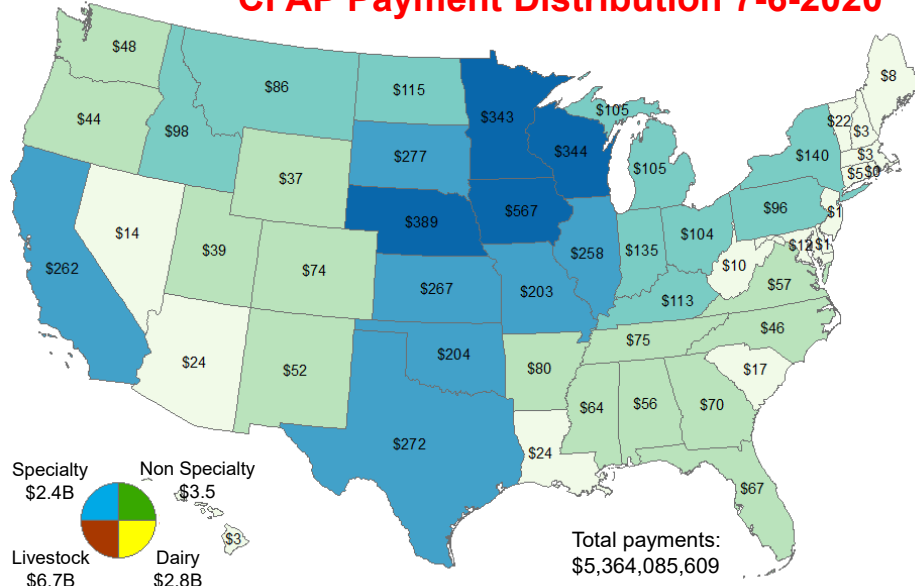
## MFP 2.0 Payment (million dollars)



Data: USDA.

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## CFAP Payment Distribution 7-6-2020



Data: USDA.

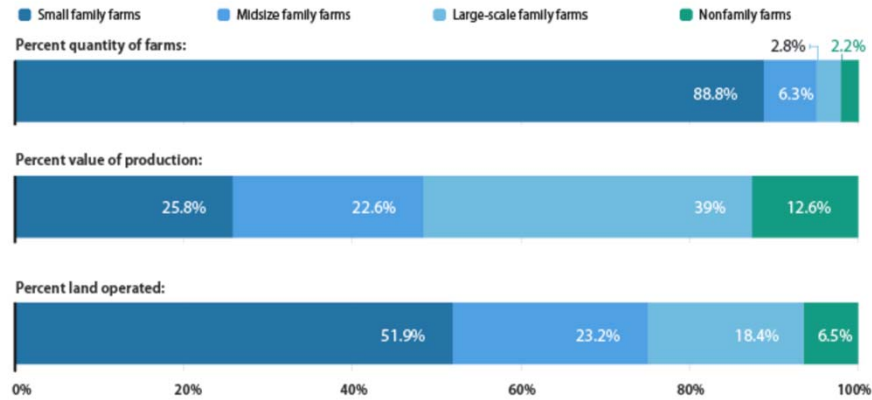
11

# The Waning Political Clout of American Agriculture

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## America's farms are still relatively decentralized

Role of family farms in the agricultural supply chain compared with nonfamily farms

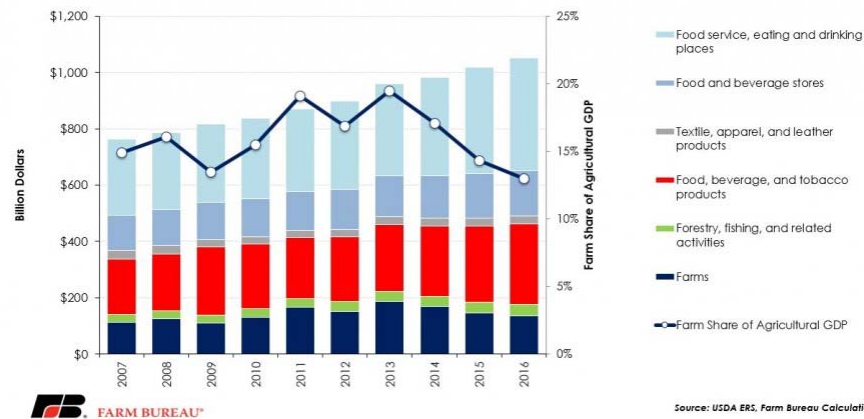


Note: Small family farms are farms that earn less than \$350,000 gross cash farm income (GCFI); midsize family farms earn between \$350,000 and \$999,999 GCFI; large-scale family farms earn \$1,000,000 or more GCFI; nonfamily farms are majority-owned by someone other than the operator. Source: Economic Research Service, "ARMS Farm Financial and Crop Production Practices," available at <https://www.ers.usda.gov/data-products/arms-farm-financial-and-crop-production-practices/?modal=17882> (last accessed February 2019).



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**Figure 1. Agricultural Contribution to GDP by Farm Sector and Farm Share of Agricultural GDP**



**FARM BUREAU**

Source: USDA ERS, Farm Bureau Calculations

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Agriculture, food, and related industries contributed \$1.053 trillion to U.S. gross domestic product (GDP) in 2017, a 5.4-percent share. **The output of America's farms contributed \$132.8 billion of this sum—about 1 percent of GDP.** The overall contribution of the agriculture sector to GDP is larger than this because sectors related to agriculture—forestry, fishing, and related activities; food, beverages, and tobacco products; textiles, apparel, and leather products; food and beverage stores; and food service, eating and drinking places—rely on agricultural inputs in order to contribute added value to the economy.

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## TRANSITIONS AND COVID-19

- Eat at home resulting in supply chain disruptions
- Move to eat less sugar: will sugar become the new tobacco?
- Eating more plant-based protein
- Organic to non-GMO
- Farm to Table
- Environmentally sensitive consumers
- Animal rights activism

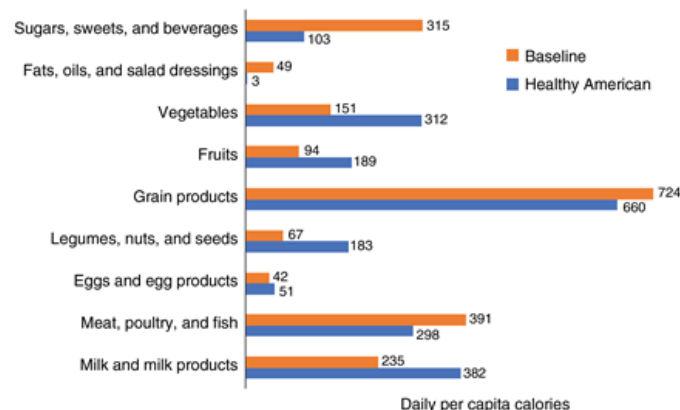
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About 40 percent of adults in the U.S. have at least one underlying health condition that would put them at risk for severe complications of COVID-19, according to a report published Thursday by the [Centers for Disease Control and Prevention](#).

Certain [chronic health problems](#), such as obesity, Type 2 diabetes, kidney disease and cardiovascular disease, are known to be more prevalent among COVID-19 patients sick enough to be hospitalized. A [study](#) published in April found that among people hospitalized with COVID-19 in New York City, 57 percent had high blood pressure, 41 percent were obese and just over a third had diabetes.

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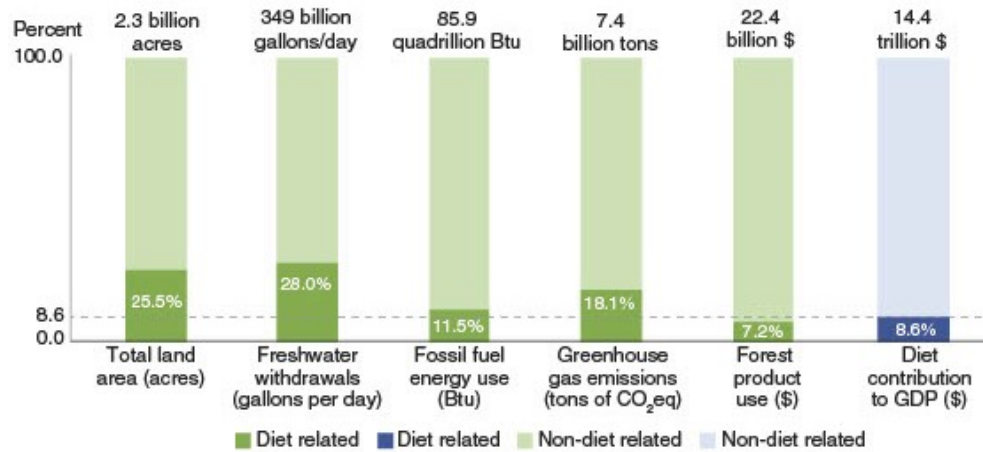
Calories from food groups vary between the Baseline and Healthy American diets



Source: USDA, Economic Research Service using data from the 2007-08 National Health and Nutrition Examination Survey.

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### Estimated diet-related share of total resource use across five categories, 2007



Notes: Btu = British thermal units. GDP = gross domestic product.

Source: USDA Economic Research Service



## What's Your Plan B?

CHANGE COURSE?  
GROW HEMP?  
START TRUCKING?  
TRY NICHE FARMING?  
CUT COSTS?  
GO ORGANIC?  
START OVER?  
P. 34

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Find a Deal on Used Machines p. 32

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