

Nurturing the Seeds of Innovation

Steve Welker • February 8, 2023 • Kansas City





Agtech - VC
Data & Drivers

Lewis &
Clark
Agrifood

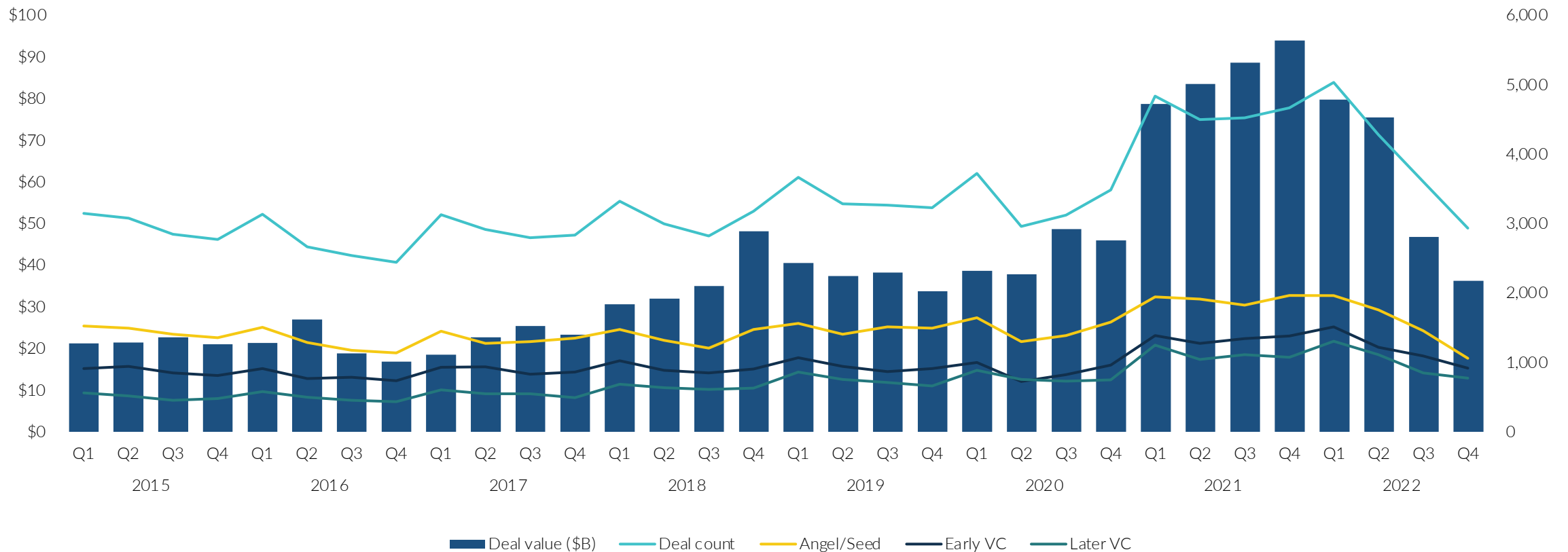
Key
Trends

Venture Capital Deal Activity

VC deal activity continues to decline with a 37% decrease in deal count over the past year



US VC Deal Activity by Quarter (\$B)



[Source] PitchBook Q4 2022 Venture Monitor
[Note] As of 12/31/22



2023: A Great Year to Invest in Ag-tech

Convergence of macro-economic factors will lead to exciting opportunities across ag-tech



Market conditions in 2022...

- Ag-tech and food-tech investment activity decreased from the peak of 2020 and 2021 but was more stable than the broader market.
- Ag-tech and food-tech valuations decreased with the most significant decline in late-stage venture.
- M&A ag-tech exit activity remained high with 32 ag-tech acquisitions in 2022, according to CropLife.

... are leading to strong investment opportunities in 2023

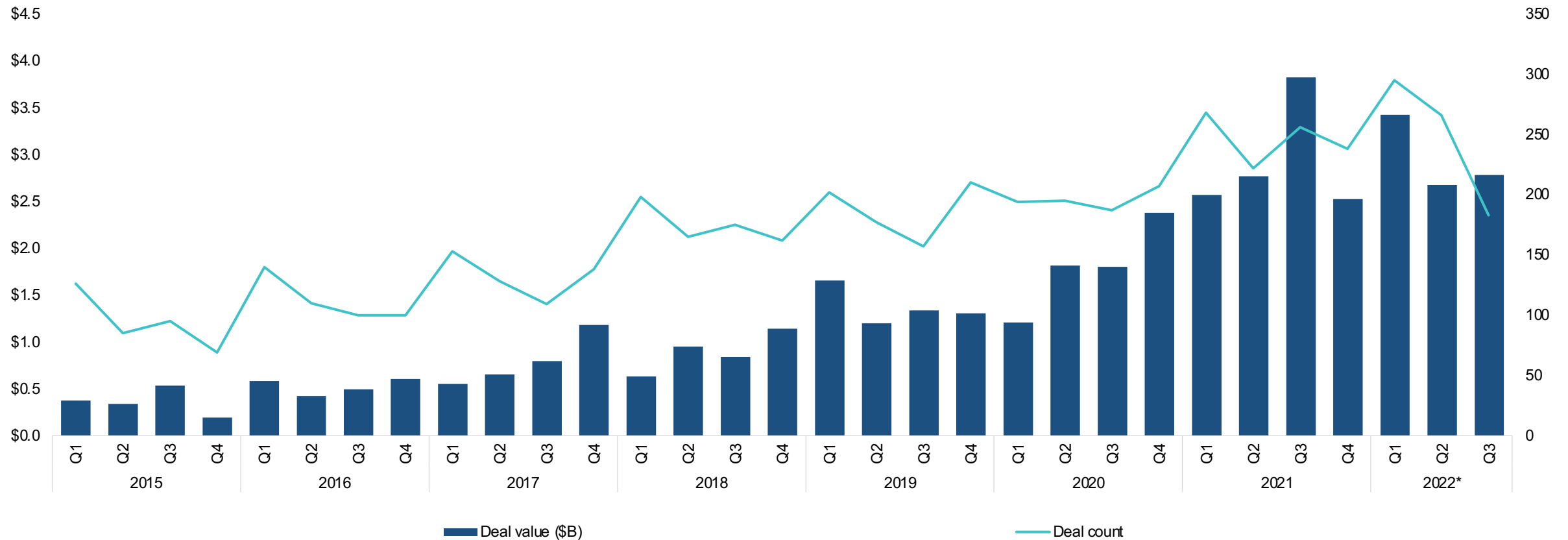
- In 2023, we will likely see the continuation of declining valuations.
- Investing activity will likely **increase** from the lull in 2022 as investors take advantage of the more favorable deal economics.

Ag-tech Venture Deal Activity

Ag-tech deal activity is declining slightly



Ag-tech VC Deal Activity by Quarter (\$B)



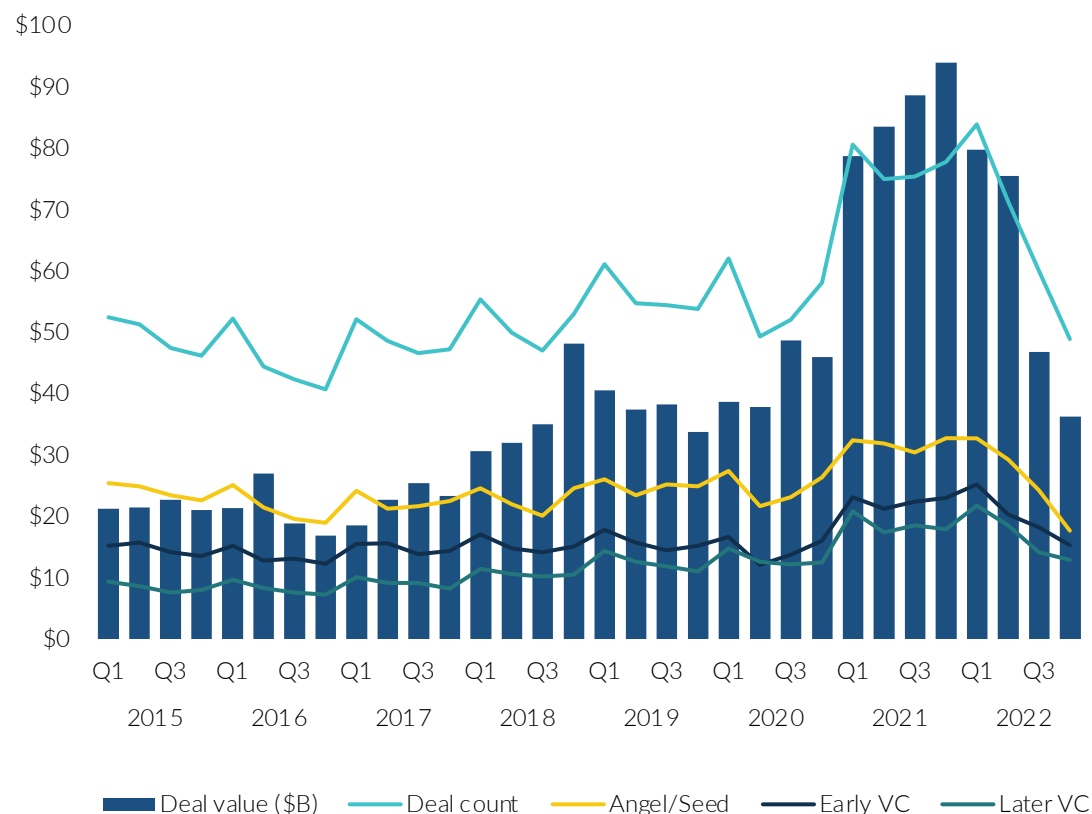
[Source] PitchBook Q3 2022 Agtech Report
[Note] As of 9/30/22

Comparing Ag-tech to Overall Venture Activity

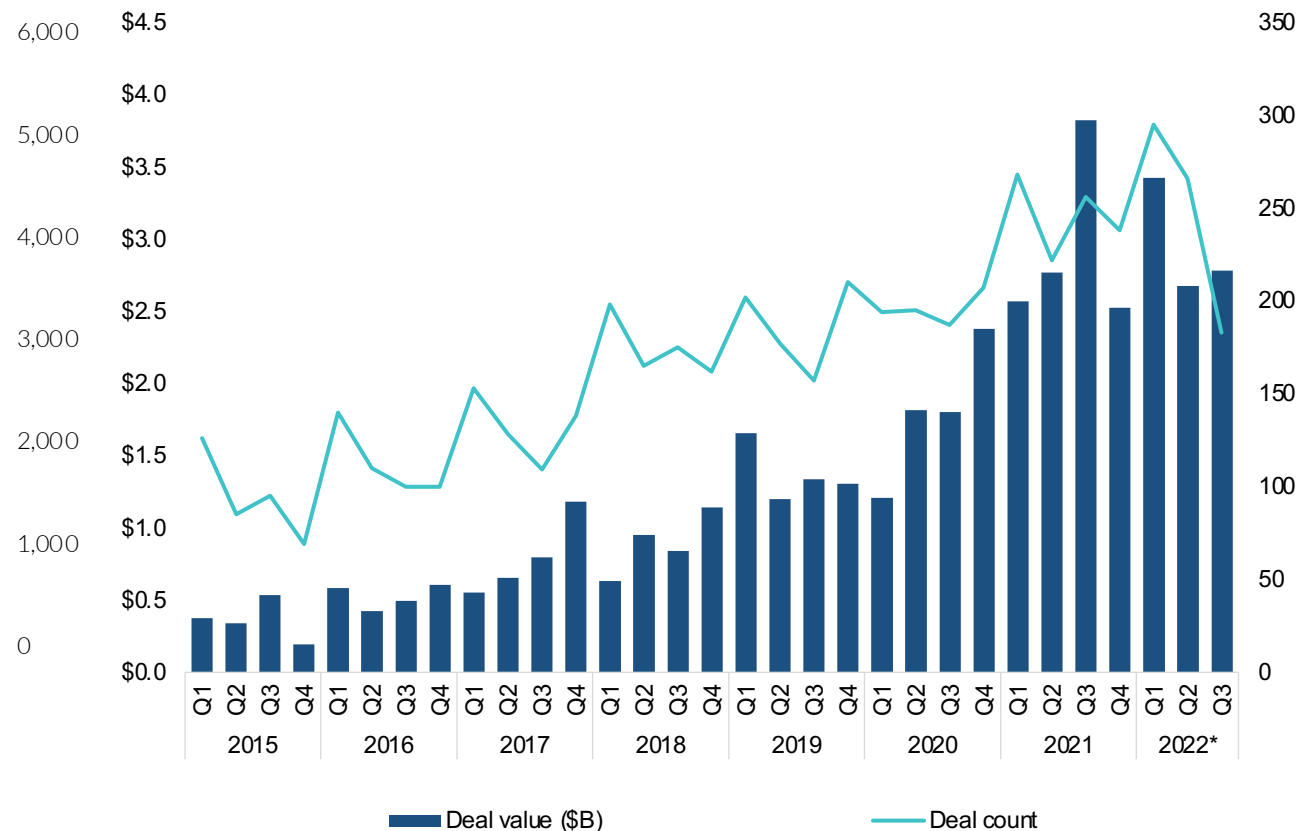
Ag-tech deal activity is declining but less than the overall market



US VC Deal Activity by Quarter (\$B)



Ag-tech VC Deal Activity by Quarter (\$B)



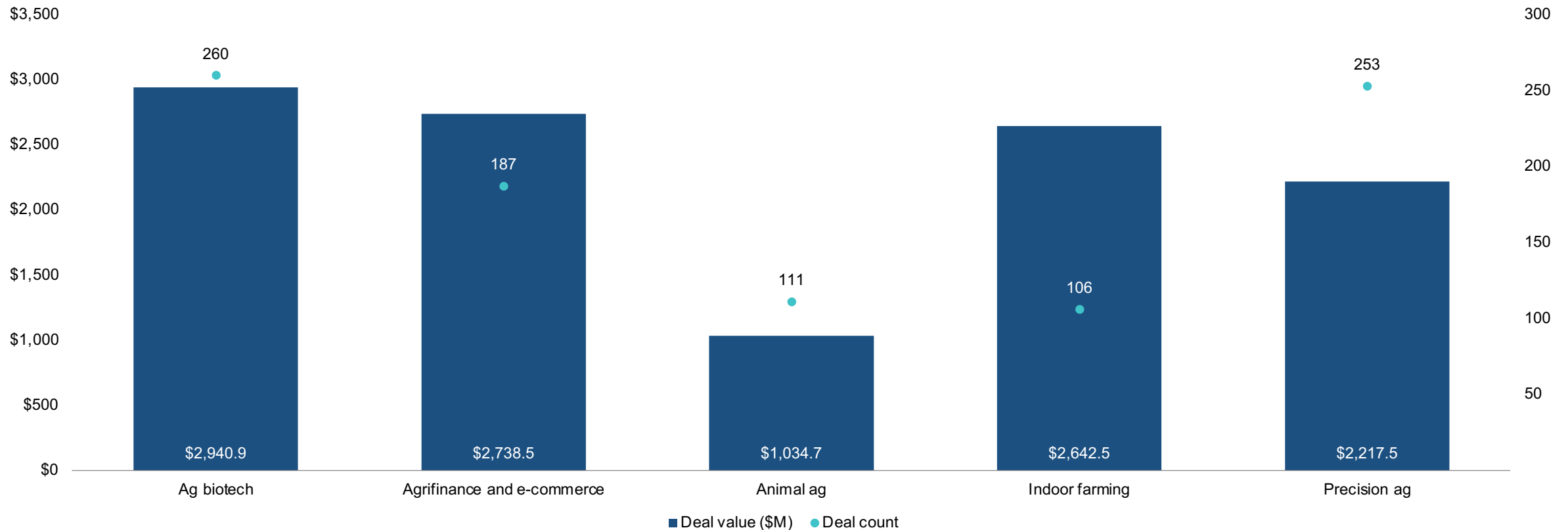
[Source] PitchBook
[Note] US VC as of 9/30/22; Global Ag-tech as of 9/30/22

Ag-Tech Investing by Sector

Investing activity is strong across ag-tech sectors



Previous Year (4Q21 – 3Q22) Ag-tech VC Deal Activity by Segment (\$M)



[Source] PitchBook Q3 2022 Agtech Report
[Note] As of 9/30/22



Drivers in Ag-tech



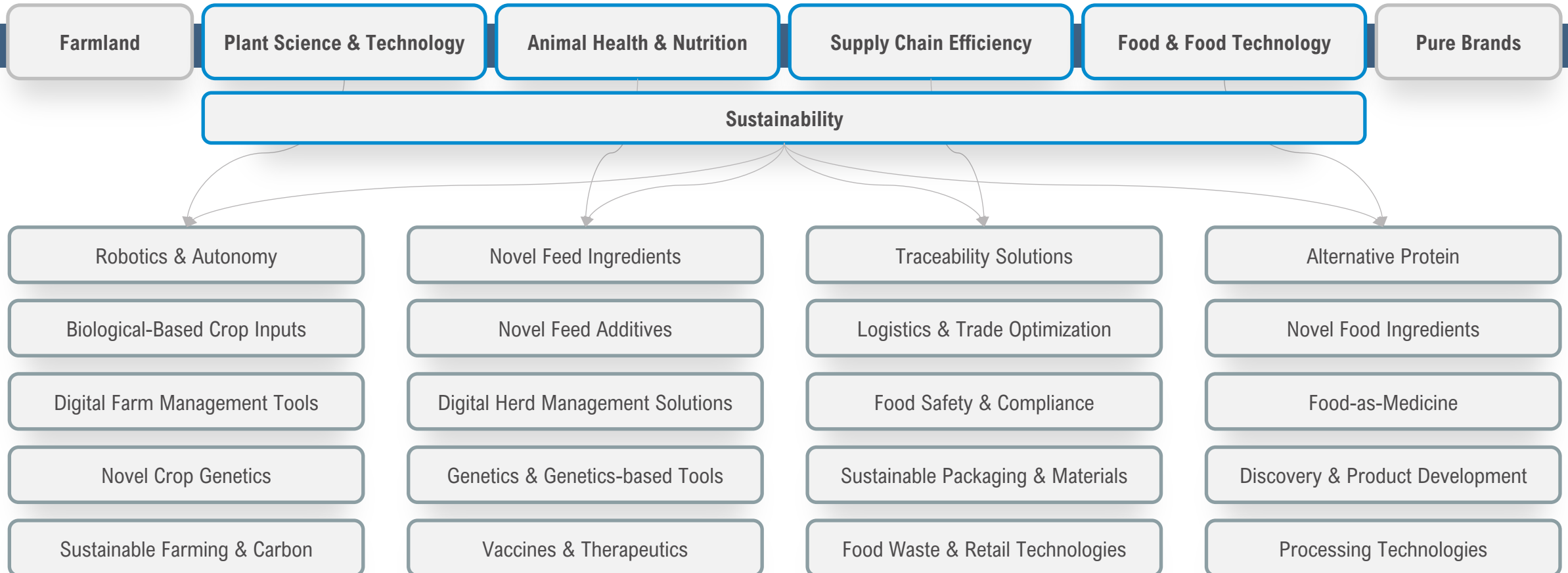
- Everyone is investing in ag-tech
 - Venture Capital – 105 ag VC firms, 38% founded after 2015
 - Corporate Venture Capital – ag (Bayer, FMC) & non-ag corporations (Goldman Sachs, more)
 - & More: Google, Microsoft, Walmart, including non-traditional ag investors
- Macroeconomic, Global factors – population growth, global conflict, climate change, pandemics, supply chain ...
- "New" ag-tech companies – Google (Mineral), Microsoft, Amazon, Chevron, more
- Data, Data, Data
 - "Mineral has already surveyed and analyzed 10% of the world's farmland and it says it will increase the number of data points pulled and analyzed from any one farm by more than 20 times by 2050, from an average of 190,000 data points per day in 2014."*
- Attitudes & Interest – "Where did my food come from?"



INVESTING FOR IMPACT

Technology Enables Value Creation

Lewis & Clark focuses on technologies and trends that create value across the supply chain



[Note] List is not exhaustive

Key Trends in AgriFood



- 1 Automation – Labor & Expertise Shortage**
- 2 Green(er) Inputs**
- 3 Convergence of Technology and Talent**
- 4 Healthier & More Sustainable Foods**



Trend 1: Automation – Labor & Expertise Shortage



Key Dynamics

- Ag is long on work and short on labor
- Decline in workforce availability – demographics, shrinking piece of labor force
- Continued increase in hourly wages
- Expertise is important

Example Technologies & Companies

- Robot picking fruits and vegetables – Tortuga, Muddy Machines
- Autonomous vehicles - Sabanto, Monarch (tractors), EarthSense, Future Acres (wheelbarrows)
- Drones – Rantizo, Agrispray
- Weeding – Aigen
- Labor marketplaces – SESO, HeavyConnect, AgButler



Trend 2: Green(er) Inputs



Key Dynamics

- Biologicals – replace or reduce synthetic chemicals, reduce nitrogen, improve nutrient use efficiency
- New, greener chemistries
- GMO & gene edited crops – less water, disease and pest resistance
- See and Act technologies

Example Technologies & Companies

- Soybeans - Benson Hill
- Biologicals - Sound Ag, Pivot Bio, Plant Response
- New chemistry modes of action - Enko
- Seed traits - Plastomics, Innerplant
- Natural products - Stony Creek Colors
- Fertilizer production – Nitricity
- See and Act – John Deere, Innerplant



August 8, 2022 | Strategic Partnership to Serve Growing Demand for **Alternative Protein** by Leveraging **Benson Hill's** Proprietary Ultra-High Protein Soybeans and **ADM's** World-Class Production and Commercial Capabilities

Trend 3: Convergence of Technology & Talent



Key Dynamics

- No single solution to many problems
- Complex Problems Require Multiple Technologies Working Together
- Collaboration among companies – large and small
- Mixing of technologies - New skills
- Convergence of plant, human and animal health
- Interdisciplinary– data scientists, engineers, statisticians, molecular biologists ...

Example Technologies & Companies

- Digital ag - Climate Corp, Granular
- Human vaccines & plant health – Greenlight Biosciences
- Enzyme development, sustainable chemicals – Arzeda, DMC Biotechnologies, Ginkgo
- Digital tools for ag - Microsoft + Bayer Partnership
- New crops - CoverCress



August 1, 2022 | Bayer expands existing investment to acquire majority share in sustainable lower carbon oilseed producer CoverCress Inc.

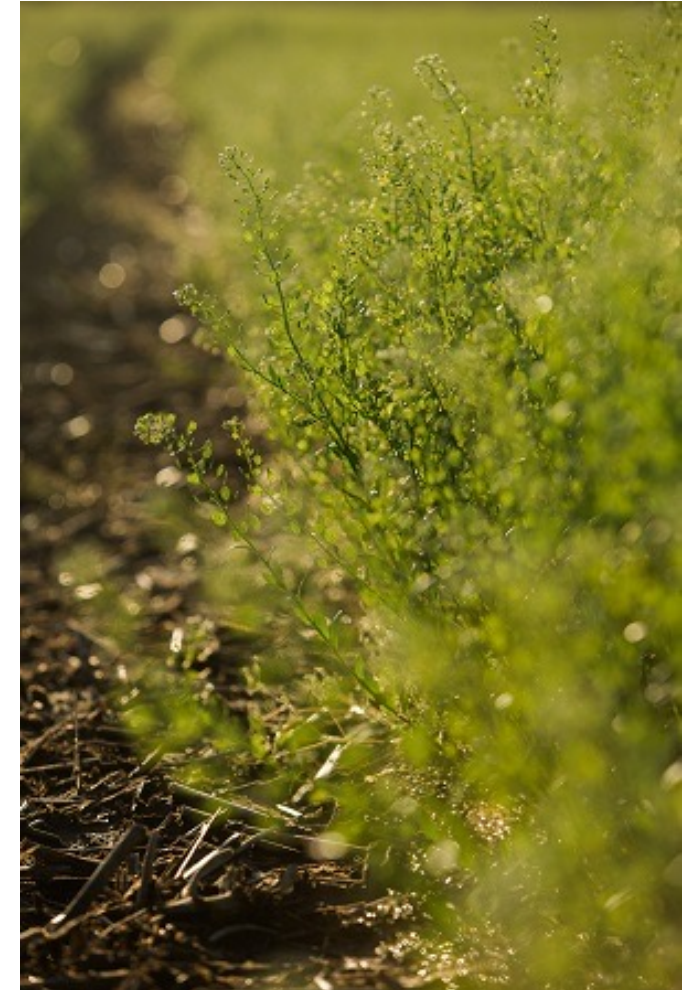
“Bayer has increased its stake to a 65 percent majority holding in CoverCress Inc. (CCI), a winter oilseed producer. The remaining 35 percent of the company will remain under the joint control of Bunge and Chevron.”

A Great Example from Missouri - CoverCress



Benefits of CoverCress

- Transforming a common weed into a novel rotational cash crop
- New crop, here in MO (& IL, IN, OH)
- Enables Midwest farmers to grow **three crops in two seasons** → more value from existing farmland and equipment
- New revenue for farmers +
 - Builds soil health...
 - And holds soil and nutrients in place over winter as a cover crop



[Source] CoverCress Website

Trend 4: Healthier & More Sustainable Foods



Key Dynamics

- Plant based products
- Cellular meat and seafood
- Natural ingredients sourced from plants
- "Designed foods" – enzymes & proteins

Example Technologies & Companies

- Plant based – Impossible, Upside Foods, Meati
- Cellular based – Blue Nalu, Air Protein, Wlldtype
- Natural Ingredients - Brightseed
- Designed Foods – DouxMatok, Joywell Foods
- Purple Tomatoes – Norfolk Plant Sciences



**The Future in
Ag is Bright!**



Thank you!

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