



# Food Value Chain Report

Q3 2021 Market Valuation and Capital Markets Commentary

NOVEMBER 2021

## About Capital Alliance

Oaklins member Capital Alliance is a 46-year-old private investment banking firm that specializes in mergers and acquisitions advisory services for middle-market businesses with enterprise values between \$10-\$300 million.

We combine our market knowledge with professional discipline and time-tested processes. Our team of professional and experienced industry specialists grasp the value of an enterprise from an operations perspective. Although we serve several industries, we have a Food Value Chain focus on agriculture, food and technology industries linked together by the sustainability trends and initiatives which are the basis for this report.

The broad range of deal valuations that we take to market gives us a unique perspective on the motivations and subtleties of buyer/seller behavior. We have demonstrated the ability to shift the acquisition focus and change the dynamics of a negotiation to support a compelling transaction for both sides, earning us a reputation for offering unique perspectives and “outside the box thinking” in complex deals.

Capital Alliance is a member of Oaklins, the world’s most experienced mid-market M&A advisor, with over 850 professionals and dedicated industry teams in more than 45 countries, having closed 1,700 transactions in the past five years. We leverage specialists with deep local connections to provide the best results for our clients stateside and abroad.





# The Report

This report was intended to refocus on the food side of the agri-food tech spectrum, but we were fortunate to field a timely interview with Steve Meller, PhD, the passionate and purpose-driven CEO of **CH4 Global Inc.**, a company devoted to reducing methane emissions from ruminant livestock. In September, **CH4 Global** raised \$13M in Series “A” capital to fund the infrastructure and product development necessary to bring its animal feed supplement to market. **CH4 Global’s** product is derived from *Asparagopsis*, the red seaweed indigenous to New Zealand and Australia which will be commercially farmed by aquaculturists in those regions. Steve outlines the importance of methane reduction in meeting GHG mandates on a shorter and potentially more impactful manner relative to the row crop carbon farming initiatives we have discussed in prior reports. A special thank you to Steve and the team at **CH4 Global** for sharing their views and story.

We do address food in this report and, specifically, we highlight the ingredients sector since its group valuation metrics command premium valuations relative to other food sectors. This is primarily due to ingredient companies’ roles (frequently proprietary) in innovative growth product categories such as plant-based foods, probiotics, healthy foods and supplements, clean labels, reduced sugar, etc. Ingredients companies solve problems encompassing taste, texture and visibility (sheen, shape & form) for food companies seeking to bring better products to demanding customers who increasingly seek sustainable, healthier and ESG-friendly food products. This includes better-for-you, free from, healthy alternatives, grab-and-go convenient and on-

line product categories which continued to grow throughout the COVID-19 pandemic period.

We extend our deepest dive into the reduced sugar category of the free from clean label ingredients subsector. Natural, organic, pesticide free, non-GMO, gluten free and lactose free label claims have been around for years and were the basis of much prior new product development. Today, “no added sugar/ low sugar” label claim products are accelerating in new product introductions across numerous product categories including baked goods, chocolates, jams and spreads, cereal bars, ice cream, condiments and, of course, beverages. We give particular attention to companies sourcing and using stevia plant-based sweeteners.



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# Alternative Sweetener Market Overview with Focus on Clean Label, Reduced Sugar and Plant-Based Stevia Subsectors

The COVID-19 pandemic has sharpened consumer focus on health and wellness. Within the food and beverage (F&B) industry there is enhanced consumer interest in healthier clean label, reduced sugar and plant-based products. Consumer awareness about high levels of obesity and diabetes in developed economies and popular diets like Keto and Paleo have led consumers and F&B companies to seek and develop products with reduced sugar claims. These trends are noted in new product introductions in F&B categories including soft drinks, baked goods, chocolates, cereal and energy bars, ice cream, condiments and yogurts.

We sat in on a recent webinar hosted by **Innova Market Insights** and ingredient company, **CP Kelco** which focused on trends within the (very specific) plant-based spoonable yogurt market. In that presentation, the Innova representative stated that the “no sugar added” ingredient claim has grown by a 60% CAGR in new product introductions between 2016 and 2020, while the “low in sugar” claim has grown at a 43% CAGR. These growth rates exceeded those for most other claim categories such as gluten free (48%), lactose free (34.5%), high protein (23.8%), organic (22%) and no additives (19%). In the Q&A session of that webinar, a participant asked what was likely the next big thing in the category and the immediate response from the **Innova** rep was “sugar reduction.” When asked about other prevalent trends, the sponsors identified sustainability at the top of the list.

We participated in a second webinar hosted by **CNS Media B.V.** (dated October 28, 2021) titled “A Step Forward in Plant-Based Indulgence with Protein Hydrolysates.” The webinar featured speakers from **Innova** and **Kerry Group** and key takeaways were: (1) a noticeable increase in new product development activity containing both plant-based and reduced sugar claims in indulgence product categories such as marshmallows, gummy candies, nougats, smoothies and flavored waters, (2) food companies need the know-how required to incorporate plant-based ingredients into traditional indulgent product categories (due to grainy textures and solubility properties), and (3) despite challenges, ingredients companies like **Kerry** are able to assist food companies as they incorporate plant-based substitutes into indulgent products.

Consider this – ingredients and solutions are available today for food manufacturers to produce completely vegan candy bars with plant-based chocolate, nougat, aerated filling and with high intensity, natural, non-caloric sweeteners (reduced sugar solutions) free from traditional animal proteins, dairy and egg ingredients and, also, free from traditional sugar sources. That should soon give new meaning to the saying “trick or treat” – (forgive our Halloween pun). Similarly, consider the increased market potential for numerous sweets and other products (dietary supplements, for instance) that could be served up in gummy form factors utilizing plant-based protein hydrolysates instead of traditional animal-sourced gelatins.

## The Consumer Trend to Reduced Sugar:

Clearly, a reduced sugar trend is in focus and accelerating in the food and beverage industry due to customer concerns and demands. We have aggregated market and survey data from various sources which highlights consumer attitudes on this subject.

- 84% of American consumers actively limit sugar intake.<sup>(1)</sup>
- 45% of American consumers check the number of grams of sugar before purchasing a product.<sup>(2)</sup>
- 85% of consumers reduce sugar for health reasons.<sup>(2)</sup>
- 55% of consumers reduce sugar for weight concerns.<sup>(2)</sup>
- 33% of consumers link sugar with weight gain.<sup>(3)</sup>
- 46% of consumers want to reduce their sugar intake.<sup>(3)</sup>
- 65% of consumers perceive cakes & pastries contain too much sugar.<sup>(3)</sup>
- 50% of worldwide sugar in food is consumed in baking.<sup>(4)</sup>

Sources: <sup>(1)</sup> Mintel; <sup>(2)</sup> IRI; <sup>(3)</sup> Kerry 2018 White Paper; <sup>(4)</sup> Euromonitor.

## The Global Market Size for Reduced Sugar Sweeteners:

**Whole Earth Brands (Nasdaq:FREE)** is a major participant in the fragmented alternative sweetener market and a publicly traded de-SPAC merger company outlined in our prior reports. We extracted market size information from a **Whole Earth Brands** Investor Presentation delivered at a September 2020 investor conference and from **Whole Earth's** November 10, 2020 presentation detailing its acquisition of stevia-based product company **Swerve™**.

In the September 2020 presentation, **Whole Earth** identified the worldwide sweetener market and penetration of reduced sugar sweeteners as follows:

Category	Total Addressable Market (\$Billions)	Penetration of Reduced Sugar	Growth of Reduced Sugar 2019 vs. 2108
Chocolates	50	2%	7.7%
Jams & Sweet Spreads	5	18%	3.9%
Cereal Bars	11	2%	5.9%
Breakfast Cereals	19	2%	3.2%
Sweet Biscuits	37	2%	8.1%
Ice Cream	41	4%	4.1%

Sources: Allied Market Research and Euro Monitor

In the same presentation, **Whole Earth** identified a global clean label food product market of \$20B projected to grow at a CAGR of 7% from 2019-2024 and a global free from market of \$30B projected to grow at a CAGR of 8%. The free from market was broken down by category as follows:

	Retail Value Sales (\$Billions)	CAGR
Sugar Free	13	5%
Dairy Free	3	9%
Low Carb	5	10%
Gluten Free	1	10%
Plant-Based	1	24%

Related to product categories it served at that time, **Whole Earth** identified the market size for branded shelf stable sweeteners to be \$3.6B and the market size for shelf stable baking mix & ingredients to be \$6.0B (Source: SPINS data for categories 10/2019).

Regarding global geographic penetration of reduced sugar sweeteners, **Whole Earth** identified the following: North America 13%; Europe 12%; Latin America 4%; Asia Pacific 2%; Africa 1% with an average global penetration of just 3%, indicating a significant category expansion opportunity.

### The Global Alternative Sweeteners Market:

In March of 2021, the global Food & Beverage team members at **Oaklins Germany** published a report, "[The Alternative Sweetener Market – Market Overview and M&A Activity, March 2021](#)," which provided the following broad takeaways:

- Global alternative sweetener market is expected to grow at a 5.7% CAGR between 2020 and 2024 from a market value of \$13.9B in 2020 to \$17.3B in 2024.
- Market size by region in 2020: \$4.9B North America, \$4.1B Europe, \$3.0B Asia Pacific, \$1.1B Latin America and \$0.8B Africa & Middle East.
- Revenue split by product type in 2019: high-intensity sweetener 41%, low-intensity sweetener 27.8% and high-fructose syrup 31.2%.
- High-intensity sweeteners should grow from \$5.6B in 2020 to \$6.9B in 2024.
- Breakdown of alternative sweetener end use: 54.5% in beverage and 45.5% in food.
- Global market for alternative sweeteners is highly fragmented with 2018 market share as follows: Ingredion – 16.7%, Dupont – 3.7%, Cargill – 2.5% and Ajinomoto – 2.1% with others including, ADM, Tate & Lyle, Amai Proteins, Miraculix, Sugarlogix, Stevia One, etc.

### M&A Activity in Alternative Sweeteners Market:

Also, from the **Oaklins** March 2021 report:

- Activity increasing 2017-2020 with 60% cross-border and 40% domestic activity.
- Primary activity from strategic players seeking know-how and product extensions in pursuit of market share.
- Transaction multiples steady or slowly growing in prior years.
- Median EV/Sales multiple values at 0.9x on 10 transactions since 2017 with median EV/EBITDA multiple of 11x on nine transactions over the last four years.

For more information contact [Oliver Marquardt](#), Director and head of the Food & Beverage team at Oaklins Germany.

### Capital Alliance Corporation Focus Deal:

We further highlight the specific acquisition of **Swerve** by **Whole Earth Brands** in November 2020.

Summary: **Whole Earth** expanded its position in the natural and free from sugar sweeteners market in North America, elevating its branded North American net sales to \$100M. **Swerve** had a four-year revenue CAGR of 150% between 2016-2019 with 2018 revenues of \$18M, 2019 revenues of \$31.4M and projected 2020 revenues of \$36M. **Swerve** had an adjusted EBITDA margin of approximately 15% at the time of the deal and the companies anticipated achieving \$2.5-3.0M in cost reduction synergies (annualized).

Terms: \$80M purchase price representing 2.25x 2020 estimated net revenues, 15.0x 2020 estimated operating income and 14.8x estimated adjusted EBITDA.



## Growth Drivers and Tailwinds for Reduced Sugar Sweeteners:

We identify the following drivers of future growth in the reduced sugar sweeteners category.

- Growing global populations and increased personal income in developing country economies.
- Renewed individual interest in healthy diet and exercise during and following the COVID-19-pandemic.
- Increasing global government and NGO attention related to obesity and diabetes healthcare costs.
- Continuing governmental and NGO initiatives to reduce sugar consumption (particularly by children) which includes sugar taxes on certain products (such as soft drinks), increasing labelling requirements and advertising restrictions. Such initiatives are currently active in over 40 countries.
- Improved technology and know-how emerging to enable substitution of reduced sugar solutions without sacrificing the taste and holistic product experience of the consumer.
- Increasing global awareness of sustainably sourced plant-based food ingredients (such as reduced sugar sweeteners from natural stevia and monk fruit sources).
- Growth in combined food claims such as plant-based and reduced sugar from food manufacturers reformulating old products or introducing new products to meet consumer demands.

- Increasing ESG mandates from institutional and retail investors globally seeking more sustainable food solutions with benefits to both individual and planetary health.



# Capital Markets Commentary Across the Food Value Chain

## Public Valuations for Food Ingredients Companies vs. North American Branded CPG Food Companies

### Ingredients Group Multiples are Higher Due to Better Margin Characteristics

### Ingredients Group Multiples Have Been Steadier than Branded Plant-Based Food Company Multiples

Since initiating our Capital Alliance Food Value Chain universe of companies a year ago, we have noted the attractive premium valuation metrics bestowed upon the group of ingredients companies relative to the branded CPG companies we monitor. The ingredients group exhibits steadier growth and higher operating margins than the branded CPG group leading to such premiums. **Exhibit 1** shows the margin and multiple dominance of the ingredients group vs. the branded CPG group at four points in time over the trailing 12-month period.

As our report introduction summarized, the ingredients group is at the forefront of all food innovation and new product development activity. This group of companies is in the driver's seat to benefit from major food trends including plant-based foods, alternative proteins, healthier foods, cleaner labels, free from categories, grab-and-go convenience, online merchandising, third party manufacturing, etc. In many cases, ingredient companies have proprietary products, processes and know-how required by innovative food product companies that seek to replicate the taste and texture of traditional foods while offering better products and more sustainable solutions.

**Exhibit 1** indicates that public investors are factoring this into valuations as the difference in valuation multiples has widened noticeably over the most recent 12-month period. The difference in multiples between ingredients companies and their branded CPG customers grew from 1.4x turns greater on revenues and 3.4x turns greater on EBITDA in November 2020 to 1.9x and 5.3x turns greater, respectively as of 10/29/2021.

During the same period, valuations of publicly traded branded plant-based food companies have been declining from extreme EV/Revenue multiples as profits have failed to materialize on schedule to meet investor expectations. See our prior Q2 Food Value Chain report (linked later in this report) where we identified that decline. We have updated that data in **Exhibit 2** and we note that the trend has continued over the past 45 days.

We believe investors are settling into the ingredients sector as a preferred risk/return investment strategy to benefit from the plant-based food movement. This investment strategy may miss the home run effect of owning a single category winning branded product company, yet it facilitates across-the-board participation in a potential megatrend.



## Private Company Valuation Considerations:

As within other industry groups, private valuations for innovative ingredients and branded foods companies are discounted relative to publicly traded peers.

This summer we performed an analysis for one client engagement which reviewed multiples for private ingredient company acquisitions over a trailing three-year period. We found multiples to be lower than the public multiples found in **Exhibit 1**, but significantly higher than the single digit EV/EBITDA multiples sought by many traditional private equity food company investors.

In a September 2021 report on plant-based proteins published by our European team members at **Oaklins** (available [here](#)), six private M&A deals in the plant-based protein sector since 2016 showed a mean EV/Revenue multiple of 1.6x with a mean EV/EBITDA multiple of 11.5x (identified from a subset of three deals).

In the prior section discussing the reduced sugar sweetener sector of ingredients, we highlighted the November 2020 acquisition of Swerve™ by **Whole Earth Brands, Inc.** which transacted at 2.25x Revenues and 14.5x Adjusted EBITDA.

### Takeaway:

Our single biggest takeaway for private equity and strategic buyers is to expect higher than traditional food company multiples when seeking to invest in or acquire majority positions in today's lower middle market food ingredient companies, especially in light of the numerous trends (i.e. personal health & wellness, global food sustainability and ESG investment mandates, for instance) that should provide multi-year tailwinds for these companies.



# Exhibit 1: Trailing Twelve Month Valuation Premiums

## Public Food Ingredient Companies vs. North American Branded CPG Companies

CAC Report	Date of Data Feed	Sector / Group	Mean LTM EBITDA Margin%	Mean LTM Net Inc. Margin%	Mean EV/Revenue Multiple	Mean EV/EBITDA Multiple
Q3/Q4 2020	11/30/2020	Food Ingredients (FI)	18.6%	8.6%	3.6	17.7
		Branded CPG	14.8%	6.1%	2.2	14.3
		Premium for FI	3.8%	2.5%	1.4	3.4
Q1 2021	5/26/2021	Food Ingredients (FI)	19.1%	8.6%	4.3	20.7
		Branded CPG	15.4%	6.9%	2.4	15.5
		Premium for FI	3.7%	1.7%	1.9	5.2
Q2 2021	8/31/2021	Food Ingredients (FI)	18.8%	9.0%	4.3	20.9
		Branded CPG	15.4%	7.0%	2.3	14.8
		Premium for FI	3.4%	2.0%	2.0	6.1
Q3 2021	10/29/2021	Food Ingredients (FI)	18.8%	9.1%	4.2	20.5
		Branded CPG	15.2%	7.1%	2.3	15.2
		Premium for FI	3.6%	2.0%	1.9	5.3

## Exhibit 2: Performance of Select Food Companies YTD Segmented by Profitability and Size vs. Indices and Industry Segments for Select Recent IPOs, De-SPAC Mergers, Recent Uplist and Select Plant-Based & Alternative Protein in Companies (as of October 29, 2021)

Category	YTD % Oct 29th	YTD % Sept 15th	Change Delta
<b>Indices:</b>			
S&P 500	22.6%	18.7%	3.9%
NASDAQ	20.3%	17.3%	3.0%
DJIA	17.0%	13.1%	3.9%
Russell 2000	17.9%	12.8%	5.1%
<b>ETFs:</b>			
IPO <sup>1</sup>	6.3%	6.8%	-0.5%
SPAK <sup>2</sup>	-14.4%	-18.8%	4.4%

<sup>1</sup> Denotes Renaissance IPO ETF

<sup>2</sup> Denotes Defiance Next Gen SPAC Derived ETF

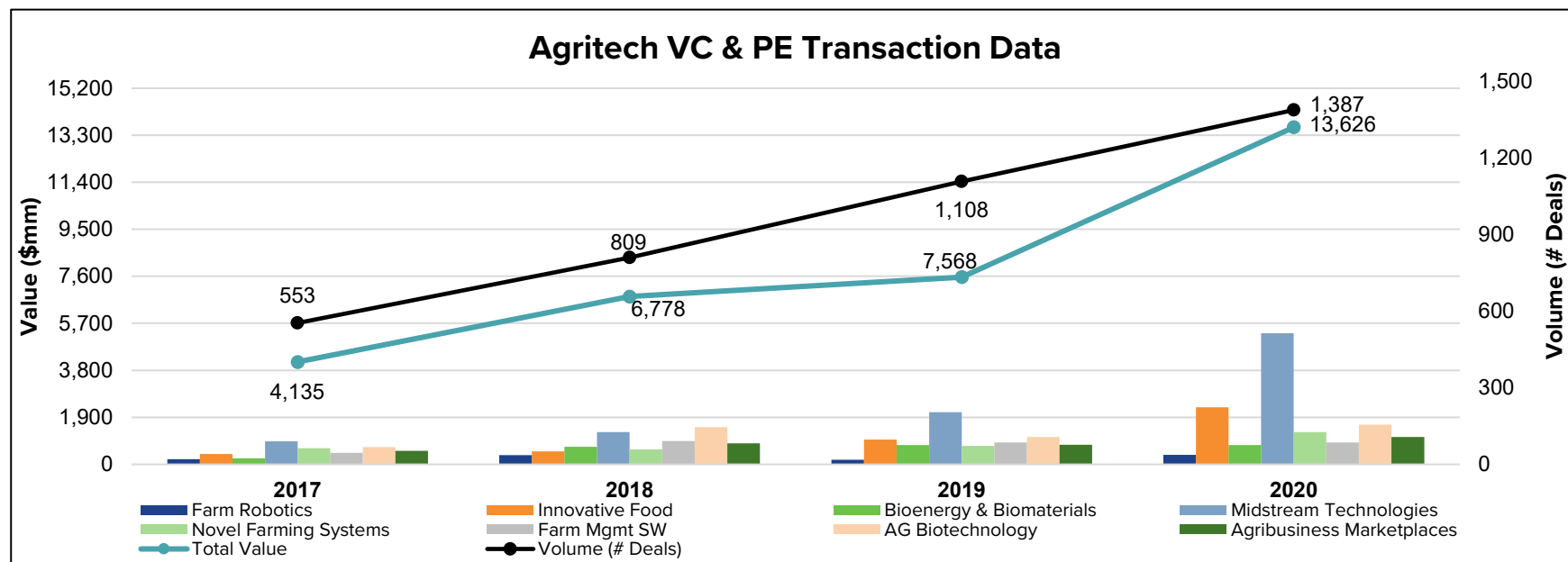
Capital Alliance Food Company Universe:	Share Price YTD %	Median EV/LTM Revs	Median EV/LTM EBITDA
Food Ingredients (9 Global Companies)	13.2%	4.3	20.3
Packaged Food CPGs (31 North American Companies)	4.1%	2.2	12.2
Food Distributors (9 North American Companies)	33.7%	0.5	15.8
Food Retailers (9 North American Companies)	19.4%	0.8	10.5

Company	Symbol	Price/Sh Oct 29th	YTD %	EV (U\$ Million)	EV/LTM Revs	EV/LTM EBITDA
<b>Profitable Companies Over \$500M Enterprise Value:</b>						
The Duckhorn Portfolio	NAPA	19.34	-5.7%	2,592.1	7.8	28.7
Utz Brands	UTZ	19.33	-29.3%	2,820.0	2.7	31.8
Dole, Plc	DOLE	14.7	-8.8%	1,897.0	0.4	10.8
Mission Produce, Inc.	AVO	20.58	26.2%	1,524.1	1.8	16.6
Vintage Wine Estates	VWE	11.3	1.3%	807.9	3.9	34.7
Whole Earth Brands, Inc.	FREE	12.34	11.3%	852.1	1.7	10.2
<b>Average</b>			<b>-0.8%</b>		<b>3.1</b>	<b>22.1</b>
<b>Profitable Companies Under \$500M Enterprise Value:</b>						
MamaMancini's Holdings	MMMB	2.69	10.8%	88.7	2.11	21.4
Lifeway Foods, Inc.	LWAY	5.44	0.5%	82.9	0.8	7.5
<b>Average</b>			<b>5.7%</b>		<b>1.5</b>	<b>14.5</b>
<b>Profitable Company Average YTD</b>			<b>0.8%</b>		<b>3.1</b>	<b>20.2</b>

Company	Symbol	Price/Sh Oct 29th	YTD %	EV (U\$ Million)	EV/LTM Revs	EV/LTM EBITDA
<b>Unprofitable Companies Over \$500M Enterprise Value:</b>						
Oatly Group AB	OTLY	12.89	-31.9%	7,038.9	13.3	NM
Beyond Meat, Inc.	BYND	98.98	-20.8%	6,317.8	13.9	NM
Tattooed Chef, Inc.	TTCF	17.97	-21.5%	1,338.8	7.3	NM
AppHarvest, Inc.	APPH	6.02	-67.9%	374.8	68.9	NM
<b>Average</b>			<b>-35.5%</b>		<b>25.9</b>	
<b>Unprofitable Companies Under \$500M Enterprise Value:</b>						
The Very Good Food Co., Inc.	VGFC	1.69	-64.7%	212.1	30.4	NM
Laird Superfood, Inc.	LSF	17.46	-63.1%	119.3	3.8	NM
Stryve Foods, Inc.	SNAX	5.07	-49.3%	113.0	3.5	NM
<b>Average</b>			<b>-59.0%</b>		<b>12.6</b>	
<b>Unprofitable Company Average YTD</b>			<b>-45.9%</b>		<b>20.2</b>	



# Agritech VC & PE Transaction Data (as of February 2021)



Agritech VC & PE Transaction Data									
Value (\$mm)	2017	2018	2019	2020	Volume (# Deals)	2017	2018	2019	2020
Farm Robotics	209	368	179	375	Farm Robotics	89	167	66	103
Innovative Food	411	516	1000	2300	Innovative Food	67	119	158	260
Bioenergy & Biomaterials	238	701	771	772	Bioenergy & Biomaterials	49	70	95	131
Midstream Technologies	924	1300	2100	5300	Midstream Technologies	134	177	283	338
Novel Farming Systems	652	596	745	1300	Novel Farming Systems	49	69	75	99
Farm Mgmt SW	464	945	887	879	Farm Mgmt SW	49	70	205	188
AG Biotechnology	696	1500	1100	1600	AG Biotechnology	57	54	122	179
Agribusiness Marketplaces	541	852	786	1100	Agribusiness Marketplaces	59	83	104	89
<b>Total Value</b>	<b>4135</b>	<b>6778</b>	<b>7568</b>	<b>13626</b>	<b>Total Volume</b>	<b>553</b>	<b>809</b>	<b>1108</b>	<b>1387</b>

Data sourced from annual AgFunder AgriFoodTech Investing Reports from 2017 through February 2021. AgFunder is an online investment platform for food and agriculture technology.

# Special Situation Presentation: CH4 Global Inc. & Global Methane Reduction

## Asparagopsis Seaweed – An Aquaculture Solution to Reduce Methane Emissions from Cows An Interview with CH4 Global Inc. CEO, Steve Meller, PhD

CH4Global Inc. is a development stage company with an urgent mission to create a sustainable global aquaculture ecosystem based upon commercially farmed and harvested *Asparagopsis* seaweed to reduce methane emissions from ruminant livestock (most notably from burping cows). The company seeks to positively and dramatically impact climate change by processing the *Asparagopsis* crop into feed supplements and introducing those supplements into the traditional livestock feeds markets. Studies have shown that seaweed containing bromoform can reduce methane emissions in cows by over 90%.



### About *Asparagopsis*

*Asparagopsis taxiforma* and *Asparagopsis armata* are reddish brown seaweed species native to Australia and New Zealand which contain concentrated levels of bromoform. Bromoform is critical to achieving methane reduction as high as 90% in ruminant livestock and is unique to these seaweed species and locations.

### About this Report

This report subject builds on our prior interview with Immucell Corporation (Nasdaq:ICCC) about its antibiotic-free mastitis treatment for dairy herds (see Q3 2020 report [here](#)) and our Q2 2021 Food Value Chain report ([here](#)) which discussed carbon credit programs for row crop farmers.

We believe it will take many companies and solutions to meet global food demand by 2050, just as it will take many participants to reduce GHG emissions over the same timeframe. We appreciate the CH4 Global approach as it improves on existing agriculture industry practices.

A year ago, we first discussed the **CH4 Global** opportunity with CEO Steve Meller. In October 2021, **CH4 Global** announced it had completed its \$13M Series “A” venture financing led by DCVC and DCVC Bio and others to execute on its business plan. On a recent Friday morning, we had the opportunity to congratulate the **CH4 Global** team on its capital raise and to ask Steve Meller a few questions about GHG issues, the company and its mission.

*Q1. Good morning Steve. We have known your passion for the CH4 business purpose for over a year now and it includes a definite sense of urgency when it comes to GHG issues. Can you briefly lay out the CH4 mission in a top-down manner in the context of GHG?*

Answer: “Climate change is simply the greatest threat facing mankind today. And in the past couple of months the role of methane has been abundantly called out. Over 20 years, methane is 86 times more potent than CO<sub>2</sub> at warming the atmosphere. So methane emissions have an outsized impact on global warming AND reducing emissions can have an outsized impact on helping us solve this crisis. To read more about methane click [here](#).

Cows burp methane. Today the 1.5 billion cows on the planet produce 150 million tons of methane per year which is the largest single source of methane globally. If you do the math, that is the equivalent of 12.9 billion (or GT) of CO<sub>2</sub> per year – that’s more GHG output than from the US, the EU and India combined and globally, is the second largest sector emissions behind only the energy sector.

At CH4 we are on an urgent mission to create a scalable Asparagopsis ecosystem to significantly and urgently impact climate change. Adding less than 0.5% of this natural feed additive can reduce the methane output of those 1.5 billion cows in excess of 90%. Click [here](#) to see studies completed in the US and Australia.”

*Q2. Across agriculture, we are noticing tremendous attention and popularity on carbon credit programs aimed at North American row crop farmers. Can you compare and contrast the benefits and potential timing of your methane reduction solutions vs. these carbon credit programs?*

Answer: “One of our company tenets is to support farmers. We believe it is critical to make this technology easy for farmers to adopt both practically and financially. Specifically, for an Asparagopsis product, dairy and beef farmers will generate value (i.e., make money) by using the product through a combination of: (1) carbon credits for the reduction in methane; (2) improvements in feed efficiencies which means cost savings in less feed for the same level of productivity (or more product for the same level of feed); and (3) increases in the value (price at farm gate) of the milk and beef from a low carbon cow. There may also be savings from potential reductions in the need for supplements for micronutrients. As such our Asparagopsis products will offer the farmer value and benefits beyond just those from carbon credits and will not involve reductions in herds.”



*Q3. Given your opportunity at CH4, can you elaborate on what you will be doing with the capital and how soon you can scale the opportunity to have a meaningful impact?*

Answer: “We have three key objectives in the next 12-15 months.

- **Final blueprints in place for the first EcoPark.** Think of it like an *Asparagopsis* farm and processing plant in a box that would allow anyone to scale this technology in partnership with us starting immediately.
- **Blue chip POs in place for 10,000 cows (minimum).** Demonstrate demand for the products we are creating.
- **Product formulation (for Beef feedlot cattle) for bromoform stabilization with patents filed.** This is critical to ensuring efficacy for farmers and for the planet. We will follow this with formulations for dairy cows and then pasture cattle.”

*Q4. It seems like this is an execution and time to market opportunity more so than an intellectual or proprietary opportunity. What can you tell us about the team you have assembled at CH4 to carry out the mission?*

Answer: “Actually this is both an execution and time to market opportunity and a proprietary opportunity as we will be patenting the specific formulations for different cattle sectors. We have also amassed trade secrets in how to trigger spore release (to create a

supply of baby *Asparagopsis*) and in how to process the harvested seaweed to minimize the loss of bromoform.

The team we have to drive this has over 200 years of experience in creating new products and thinking through technical, customer, regulatory and manufacturing challenges. Among them, they have successfully launched a myriad of new products around the world in a range of categories, both existing and new to the world.”

*Q5. Who are the other stakeholders in the emerging Asparagopsis aquaculture ecosystem and how do you interact and rely on them?*

Answer: “Another of our core company tenets is partnerships. We believe partnerships are a way to accelerate our ability to scale the *Asparagopsis* ecosystem. We are especially focused on how to partner with **First Nations**, to enable regenerative economic, social and environmental benefits with the traditional keepers of the land and sea.”

*Q6. Who will be your primary customers and distribution partners and how do you envision a roll out to global markets?*

Answer: “Our primary customers will be farmers. How we get our products to them will depend on the market and potential partnerships. We can work through distribution partners or direct with consumer facing, vertically integrated organizations.”

*Q7. Do you foresee competition? We note fermentation technologies already at work in other algae and alternative protein segments. Can your solution be factory replicated?*

Answer: “There are a number of companies who see the promise of methane mitigation and there are at least a dozen platforms and approaches that are being explored. What we know, at least as of today, is that all of them, with the exception of Asparagopsis, show benefits of 30% or less. 30% is still a great and meaningful benefit. For Asparagopsis with a 90% or so reduction benefit, we believe we are the only company who has developed know-how from hatchery to formulated products designed to fit the practices of farmers today.

Having said that, the bottom line is that the needs and markets are massive. There are 1.5 billion cows in the world today and Asparagopsis supplement could help mitigate the methane emissions from each and every cow as well as other ruminants like sheep and goats. We believe that the market has the room and the need for comparable companies, and we welcome the united effort to help impact climate change from other companies.

Nature has created a marvelous solution to package bromoform and other ingredients and enable it to be delivered to the guts of cattle. Today Asparagopsis is a unique and complex solution.”



Steve Meller, PhD  
President, CEO & Founder, Member of the Board at CH4 Global Inc.

**“What we do with methane reduction is FAR more impactful (on climate change) and in a shorter timeframe (than carbon sequestration).”**

*Q8. It has been satisfying to see you funded and we are excited about your business and its mission. What final thoughts would you like to share with our readers to focus their attention and resources within the field of regenerative and sustainable agriculture?*

Answer: “It is going to take the whole world to ensure the future of our planet. Everyone is going to be impacted and everyone needs to do their part. Pushing your elected representatives to make this a priority and to support farmers as they adapt will be critical.”

*Thanks Steve, and good luck to you and your team.*

Disclaimer: This interview is for informational purposes only and does not constitute investment research. Capital Alliance and the author have not received compensation for this report. CH4 Global is not an investment banking client of Capital Alliance. Neither Capital Alliance nor the author have an investment opinion on CH4 Global.

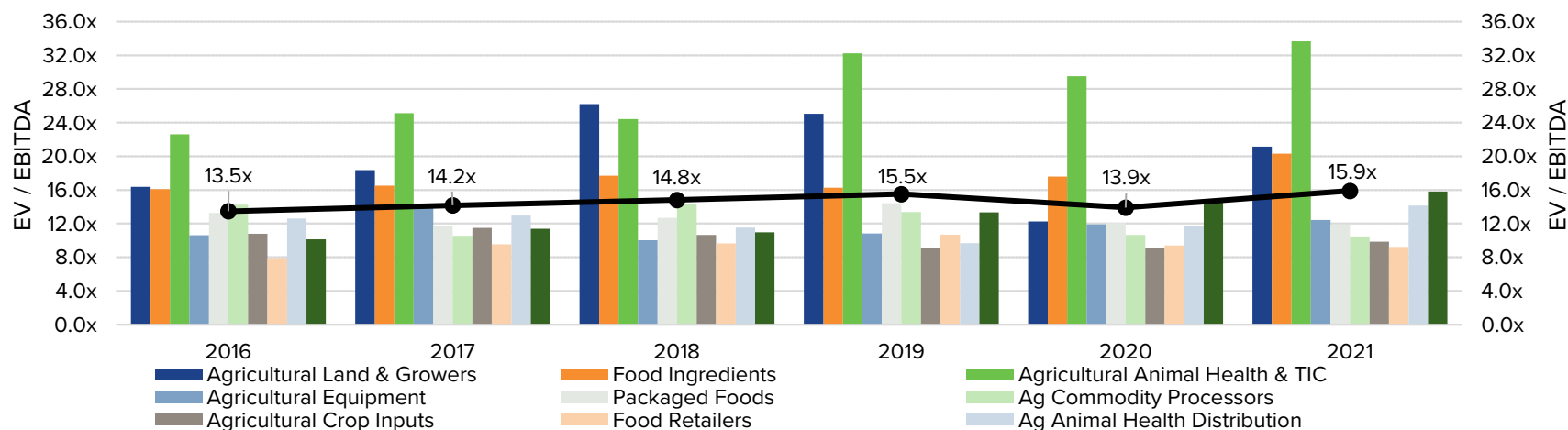
# Capital Alliance Food Value Chain Companies

(US dollars in Billions)

## Public Trading Valuation Data Summary

Segment	Aggregate Market Cap	Aggregate Enterprise Value	Aggregate LTM Revenue	Aggregate LTM EBITDA	Median EV/LTM EBITDA
Food Ingredients	141.1	167.9	35.8	7.0	20.3x
Packaged Foods	359.7	475.0	191.0	32.9	11.9x
Food Distributors	63.8	87.4	149.7	4.9	15.8x
Food Retailers	825.9	920.9	1,109.9	72.7	9.2x
Ag Commodity Processors	73.6	117.2	204.9	11.0	10.5x
Agricultural Land & Growers	6.6	12.0	4.9	0.7	21.2x
Agricultural Crop Inputs	160.0	200.0	115.2	17.4	9.8x
Agricultural Equipment	355.7	458.1	200.1	31.6	12.4x
Agricultural Animal Health & TIC	195.7	205.8	18.5	5.6	33.7x
Ag Animal Health Distribution	52.5	62.7	235.8	5.2	14.1x
Mean				18.9	15.9x
Min				0.7	9.2x
Max				72.7	33.7x
Standard deviation				20.8	7.1x

## Historical Valuations (as of October 29 of respective year)

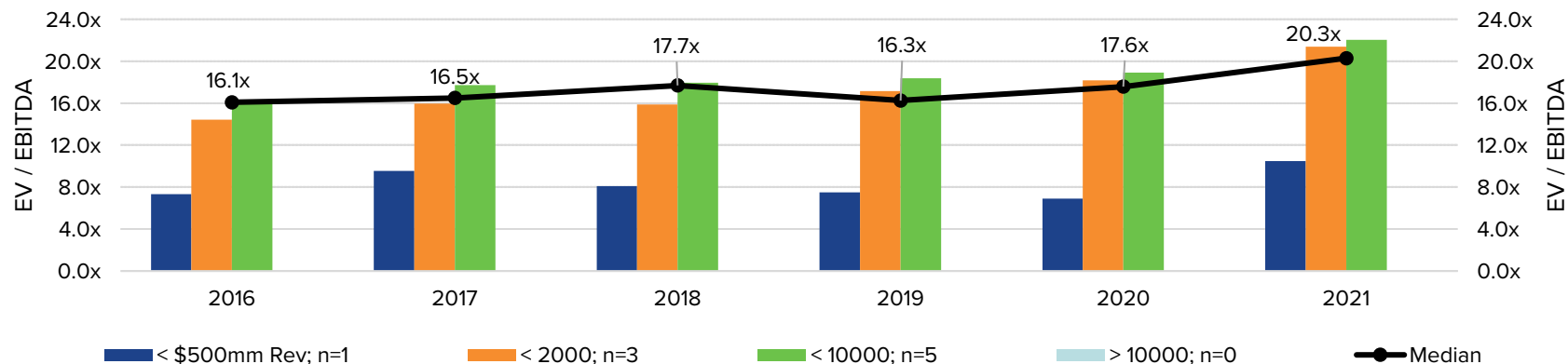




# Capital Alliance Food Value Chain Segments

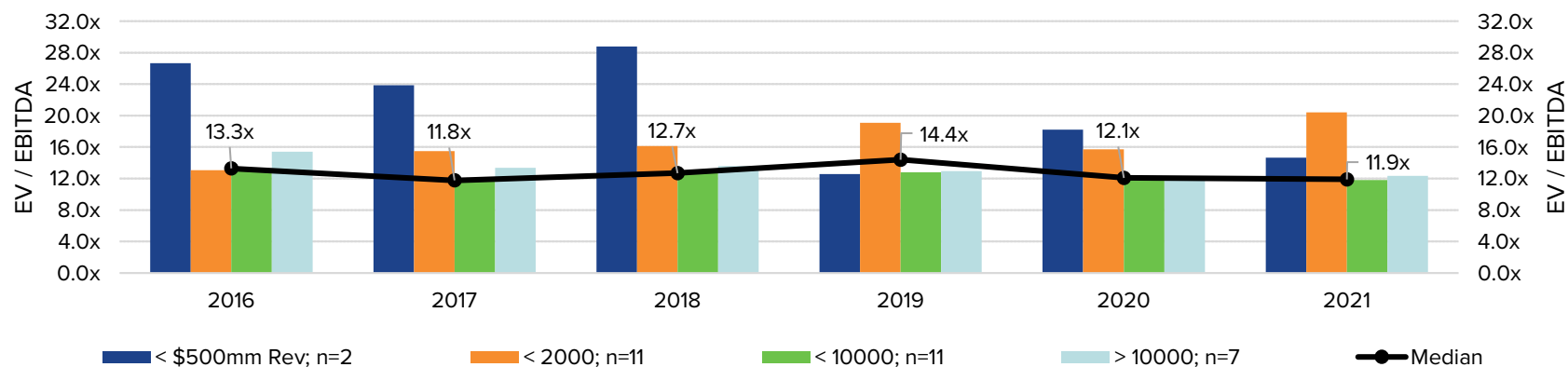
## Food Ingredients

Historical Valuations (as of October 29 of respective year)



## Packaged Foods

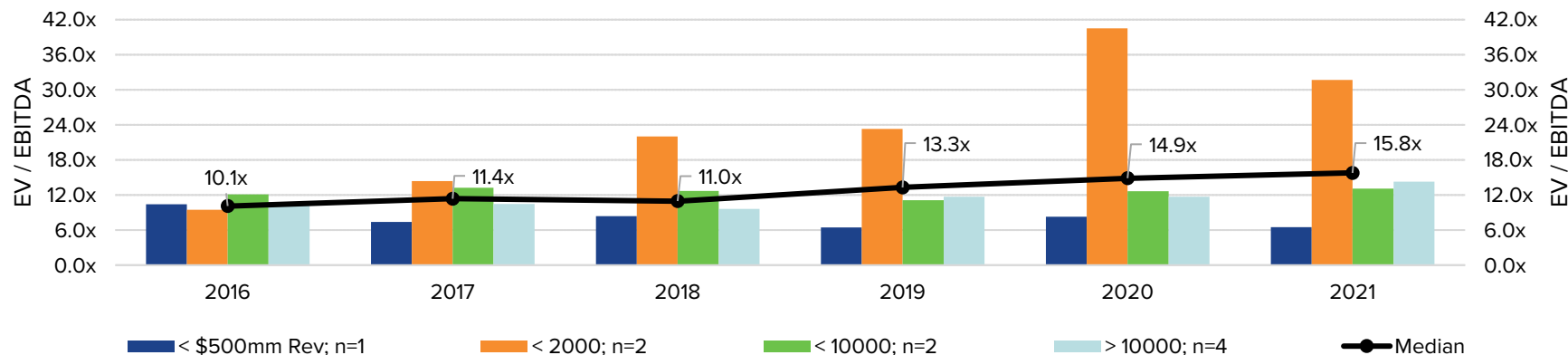
Historical Valuations (as of October 29 of respective year)



# Capital Alliance Food Value Chain Segments

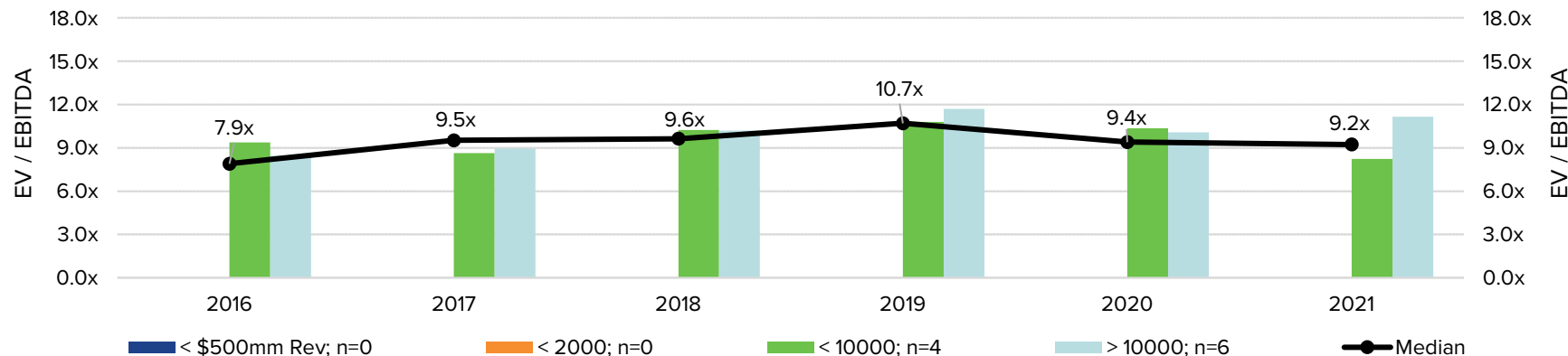
## Food Distributors

Historical Valuations (as of October 29 of respective year)



## Food Retailers

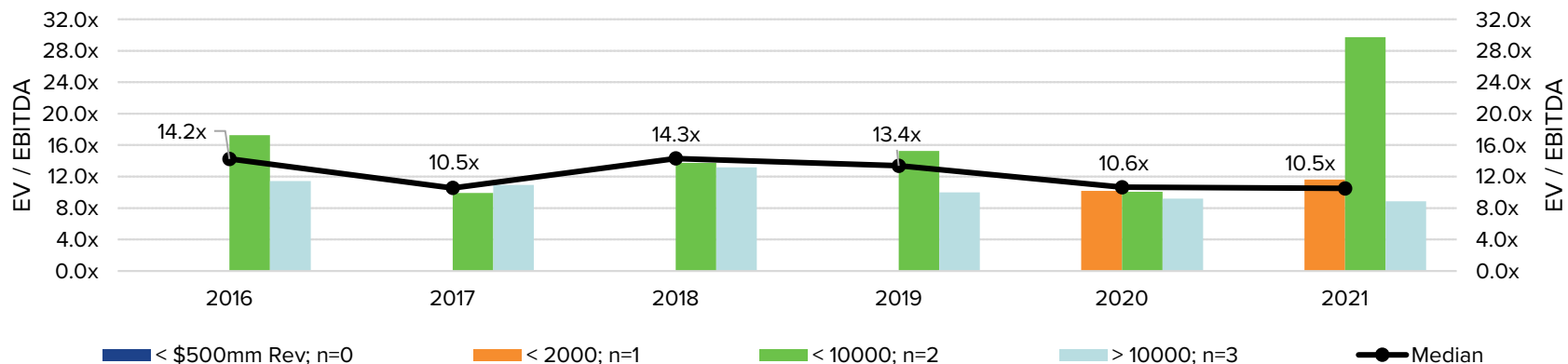
Historical Valuations (as of October 29 of respective year)



# Capital Alliance Food Value Chain Segments

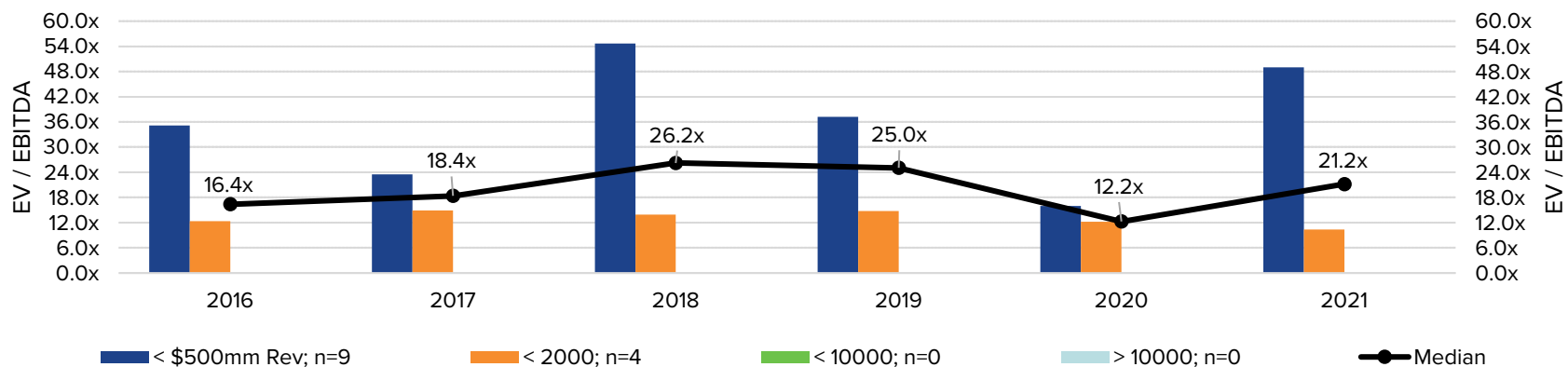
## Agricultural Commodity Processors

Historical Valuations (as of October 29 of respective year)



## Agricultural Land & Growers

Historical Valuations (as of October 29 of respective year)

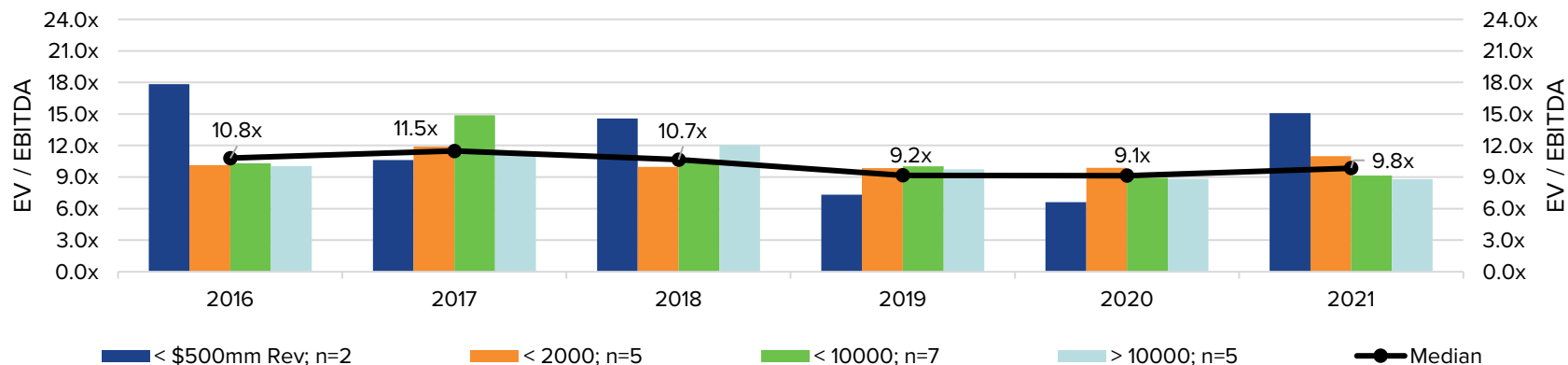




# Capital Alliance Food Value Chain Segments

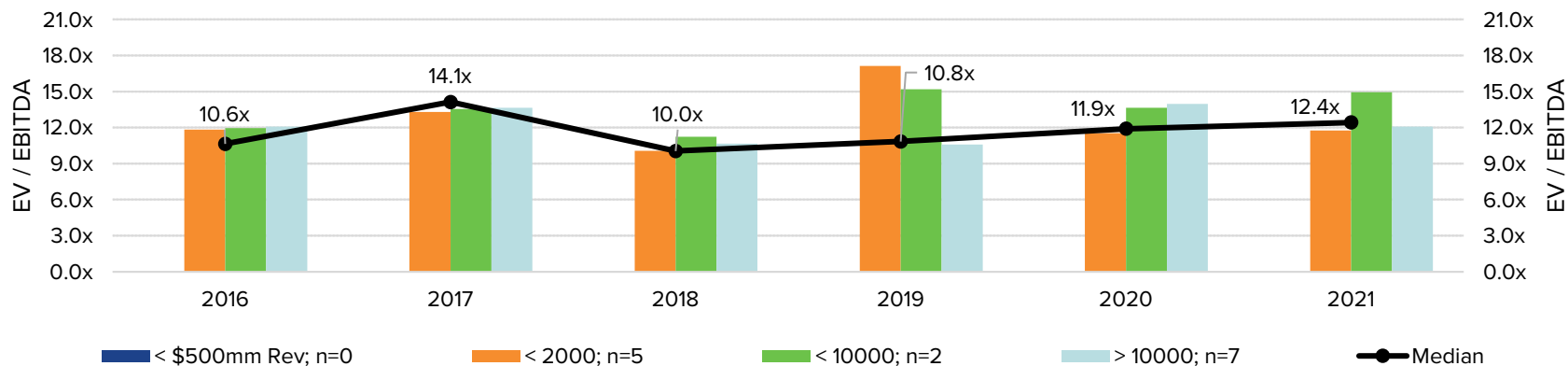
## Agricultural Crop Inputs

Historical Valuations (as of October 29 of respective year)



## Agricultural Equipment

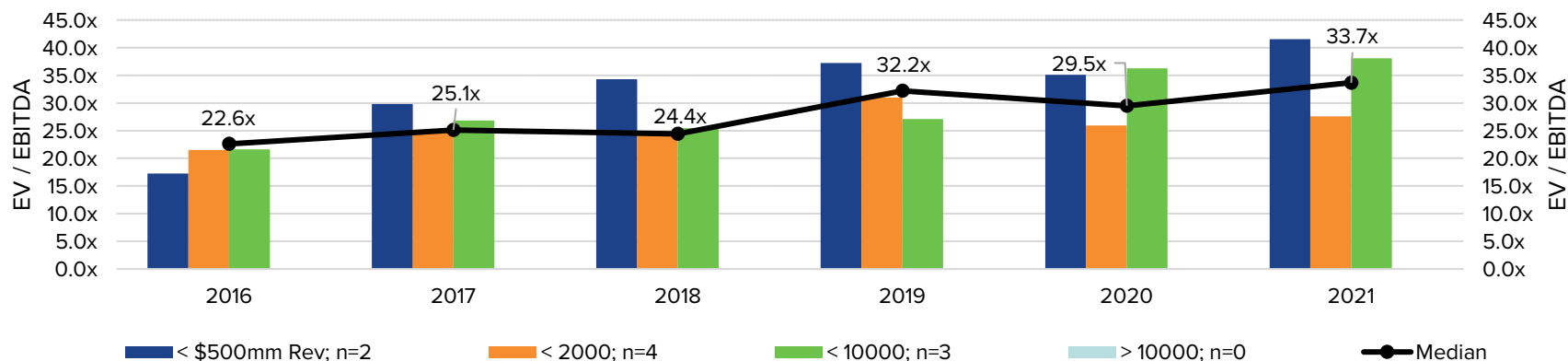
Historical Valuations (as of October 29 of respective year)



# Capital Alliance Food Value Chain Segments

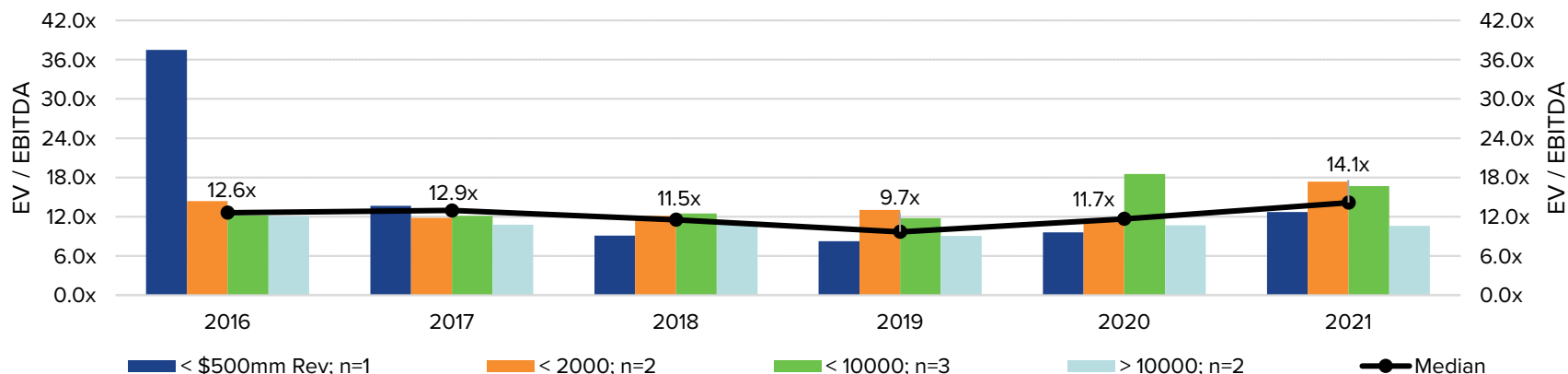
## Agricultural Animal Health & Diagnostics

Historical Valuations (as of October 29 of respective year)



## Agricultural Animal Health Distribution

Historical Valuations (as of October 29 of respective year)



# Capital Alliance Food Value Chain Segments

## Capital Alliance Food Chain Companies Public Trading Valuation Data

(USD in millions except stock price)

Company	Ticker	Price as of 10/29/2021	Price Change YTD	% 52-week range	Market Cap	Enterprise Value	LTM Revenues	LTM EBITDA Margin	LTM Net Income Margin	EV/LTM Revenue	EV/LTM EBITDA	P/LTM Diluted EPS	P/Tangible BV
<b>Food Ingredients</b>													
McCormick & Company, Incorporated	NYSE:MCK	80.23	-16.08%	11.36%	21,465.0	26,689.9	6,145.5	20.5%	12.3%	4.3x	20.3x	28.5x	NM
International Flavors & Fragrances Inc.	NYSE:IFF	147.45	35.47%	82.70%	36,724.6	48,696.6	8,092.2	21.7%	1.7%	6.0x	26.1x	186.9x	NM
Ingredion Incorporated	NYSE:INGR	95.23	21.05%	90.39%	6,380.9	8,321.9	6,732.0	14.6%	2.5%	1.2x	7.7x	46.1x	4.3x
Sensient Technologies Corporation	NYSE:SXT	95.60	29.59%	90.91%	4,041.9	4,510.4	1,374.5	16.8%	8.5%	3.3x	18.7x	34.6x	8.0x
Symrise AG	XTRA:SY1	138.24	4.39%	75.70%	20,373.9	22,135.6	4,276.9	20.8%	9.3%	5.2x	25.3x	49.4x	51.2x
Givaudan SA	SWX:GIVN	4,699.33	11.53%	70.83%	43,365.0	48,531.1	7,002.4	21.5%	12.5%	6.9x	30.7x	49.4x	NM
T. Hasegawa Co., Ltd.	TSE:4958	24.32	15.66%	75.72%	999.5	830.6	483.6	16.8%	11.1%	1.7x	10.5x	19.4x	1.4x
Balchem Corporation	NasdaqGS:BCPC	153.09	32.87%	94.01%	4,955.6	4,986.9	766.6	22.7%	12.2%	6.5x	28.2x	53.5x	18.9x
Corbion N.V.	ENXTAM:CRBN	47.53	-15.70%	15.51%	2,801.7	3,197.7	1,197.4	13.6%	11.5%	2.7x	17.3x	21.2x	6.3x
<b>Mean</b>			<b>13.20%</b>	<b>67.46%</b>		<b>18,655.6</b>		<b>18.8%</b>	<b>9.1%</b>	<b>4.2x</b>	<b>20.5x</b>	<b>54.3x</b>	<b>15.0x</b>
<b>Median</b>			<b>15.66%</b>	<b>75.72%</b>		<b>8,321.9</b>		<b>20.5%</b>	<b>11.1%</b>	<b>4.3x</b>	<b>20.3x</b>	<b>46.1x</b>	<b>7.1x</b>
<b>Packaged Foods</b>													
Saputo Inc.	TSX:SAP	23.84	-14.82%	0.77%	9,879.1	13,111.8	11,615.6	9.0%	3.7%	1.1x	11.9x	22.8x	7.1x
Premium Brands Holdings Corporation	TSX:PBH	107.88	36.32%	92.52%	4,702.8	6,069.2	3,581.0	7.7%	2.4%	1.7x	20.5x	52.9x	28.7x
Maple Leaf Foods Inc.	TSX:MFI	21.76	-1.84%	57.97%	2,698.9	3,727.4	3,550.1	9.9%	3.4%	1.0x	9.8x	22.9x	3.3x
Hormel Foods Corporation	NYSE:HRL	42.32	-9.20%	15.30%	22,961.0	25,981.7	10,351.5	13.1%	8.3%	2.5x	18.5x	26.8x	NM
Mondelez International, Inc.	NasdaqGS:MDLZ	60.74	3.88%	62.73%	84,903.4	102,769.4	27,843.0	22.1%	15.5%	3.7x	14.2x	20.1x	NM
Conagra Brands, Inc.	NYSE:CAG	32.20	-11.20%	0.14%	15,446.0	24,978.8	11,159.1	19.8%	10.8%	2.2x	10.6x	13.0x	NM
Campbell Soup Company	NYSE:CPB	39.95	-17.37%	1.36%	12,069.2	17,294.2	8,476.0	22.7%	11.8%	2.0x	7.7x	12.1x	NM
The J. M. Smucker Company	NYSE:SJM	122.86	6.28%	40.94%	13,312.9	17,928.0	7,888.9	21.9%	10.1%	2.3x	9.8x	17.2x	NM
The Kraft Heinz Company	NasdaqGS:KHC	35.89	3.55%	41.23%	43,974.6	65,925.6	26,272.0	25.5%	8.8%	2.5x	8.0x	19.3x	NM
General Mills, Inc.	NYSE:GIS	61.80	5.10%	73.33%	37,431.8	50,551.6	18,302.9	22.3%	12.7%	2.8x	11.6x	16.4x	NM
Post Holdings, Inc.	NYSE:POST	101.48	0.47%	49.46%	6,465.0	13,587.6	5,942.4	18.5%	3.3%	2.3x	12.3x	36.4x	NM
The Hershey Company	NYSE:HSY	175.35	15.11%	84.30%	36,122.8	40,156.4	8,830.5	26.4%	16.2%	4.5x	16.9x	25.5x	NM
Lancaster Colony Corporation	NasdaqGS:LANC	170.00	-7.47%	19.26%	4,680.1	4,525.3	1,467.1	15.4%	9.7%	3.1x	19.1x	32.9x	8.1x
Cal-Maine Foods, Inc.	NasdaqGS:CALM	36.06	-3.94%	23.55%	1,761.8	1,673.6	1,387.9	1.9%	0.2%	1.2x	52.4x	NM	1.9x
Flowers Foods, Inc.	NYSE:FLO	24.75	9.37%	79.43%	5,240.9	6,207.9	4,332.2	11.1%	5.3%	1.4x	10.7x	23.1x	30.8x
Nomad Foods Limited	NYSE:NOMD	27.23	7.12%	50.90%	4,809.5	6,619.3	3,008.3	17.9%	8.5%	2.2x	11.9x	19.9x	NM
TreeHouse Foods, Inc.	NYSE:THS	36.14	-14.94%	8.55%	2,014.5	4,135.0	4,283.4	11.0%	1.3%	1.0x	7.8x	25.5x	NM
Lamb Weston Holdings, Inc.	NYSE:LW	56.45	-28.31%	7.04%	8,245.6	10,214.6	3,783.6	15.6%	6.8%	2.7x	15.1x	32.3x	121.1x
The Hain Celestial Group, Inc.	NasdaqGS:HAIN	44.87	11.76%	92.57%	4,334.8	4,586.7	1,970.3	11.8%	3.9%	2.3x	18.2x	69.0x	13.2x
J & J Snack Foods Corp.	NasdaqGS:JJSF	147.55	-5.03%	27.80%	2,812.9	2,562.9	1,074.1	9.6%	4.0%	2.4x	21.6x	65.3x	4.4x
B&G Foods, Inc.	NYSE:BGFS	29.44	6.17%	18.51%	1,908.5	4,235.6	1,975.5	17.7%	5.6%	2.1x	11.6x	17.4x	NM
Hostess Brands, Inc.	NasdaqCM:TWNK	18.91	29.17%	98.43%	2,460.1	3,368.6	1,073.8	24.8%	7.5%	3.1x	12.2x	30.4x	NM
Fresh Del Monte Produce Inc.	NYSE:FDP	33.49	39.14%	80.58%	1,591.6	2,309.1	4,221.9	5.4%	2.6%	0.5x	7.6x	14.7x	1.3x
John B. Sanfilippo & Son, Inc.	NasdaqGS:JBSS	84.50	7.15%	53.65%	969.2	1,031.1	874.5	11.9%	7.6%	1.2x	9.8x	14.8x	4.6x
Tootsie Roll Industries, Inc.	NYSE:TR	31.65	9.76%	11.53%	2,134.3	2,010.2	505.3	18.5%	11.9%	4.0x	21.3x	35.8x	4.2x
The Simply Good Foods Company	NasdaqCM:SMPL	39.65	26.43%	97.00%	3,799.9	4,224.7	1,005.6	19.8%	4.1%	4.2x	20.4x	94.4x	NM
SunOpta Inc.	TSX:SOY	7.74	-33.72%	6.74%	839.0	1,120.2	807.1	6.2%	9.2%	1.4x	17.1x	NM	5.4x
BellRing Brands, Inc.	NYSE:BRBR	26.82	10.32%	54.76%	1,059.7	4,648.5	1,189.7	18.5%	2.3%	3.9x	20.8x	37.9x	NM
Lifeway Foods, Inc.	NasdaqGM:LWAY	5.44	0.55%	25.98%	84.0	76.6	110.2	9.7%	4.6%	0.7x	7.0x	16.9x	2.3x
MamaMancini's Holdings, Inc.	NasdaqCM:MMMB	2.67	49.16%	36.89%	94.8	92.7	42.1	9.2%	8.3%	2.2x	22.3x	27.0x	10.2x
Kellogg Company	NYSE:K	61.30	-1.49%	39.12%	20,895.9	29,228.9	14,032.0	17.2%	9.3%	2.1x	11.5x	16.2x	NM
<b>Mean</b>			<b>4.11%</b>	<b>43.62%</b>		<b>15,321.1</b>		<b>15.2%</b>	<b>7.1%</b>	<b>2.3x</b>	<b>15.2x</b>	<b>29.6x</b>	<b>16.4x</b>
<b>Median</b>			<b>3.88%</b>	<b>40.94%</b>		<b>4,648.5</b>		<b>15.6%</b>	<b>7.5%</b>	<b>2.2x</b>	<b>12.2x</b>	<b>23.1x</b>	<b>5.4x</b>

# Capital Alliance Food Value Chain Segments

## Capital Alliance Food Chain Companies Public Trading Valuation Data

(USD in millions except stock price)

Company	Ticker	Price as of 10/29/2021	Price Change YTD	% 52-week range	Market Cap	Enterprise Value	LTM Revenues	LTM EBITDA Margin	LTM Net Income Margin	EV/LTM Revenue	EV/LTM EBITDA	P/LTM Diluted EPS	P/Tangible BV
<b>Food Distributors</b>													
Sysco Corporation	NYSE:SY	76.90	3.56%	70.03%	39,394.0	48,241.7	51,297.8	4.5%	1.0%	0.9x	19.5x	75.4x	NM
United Natural Foods, Inc.	NYSE:UNFI	43.39	171.70%	76.50%	2,449.2	5,909.2	26,950.0	2.9%	0.6%	0.2x	5.5x	18.2x	4.1x
The Chefs' Warehouse, Inc.	NasdaqGS:CHEF	34.87	35.73%	96.93%	1,321.0	1,714.2	1,469.2	0.3%	-3.4%	1.2x	47.7x	NM	101.7x
Performance Food Group Company	NYSE:PFGC	45.23	-5.00%	45.60%	6,979.2	9,974.3	30,398.9	1.9%	0.1%	0.3x	14.1x	150.8x	NM
US Foods Holding Corp.	NYSE:USFD	34.67	4.08%	66.65%	7,714.4	13,242.4	25,944.0	2.8%	0.1%	0.5x	18.2x	NM	NM
HF Foods Group Inc.	NasdaqCM:HFFG	7.06	-6.12%	54.48%	366.5	504.8	639.4	4.7%	1.0%	0.8x	15.8x	60.3x	16.1x
SpartanNash Company	NasdaqGS:SPTN	23.14	32.91%	96.55%	831.6	1,557.6	9,072.3	2.3%	0.8%	0.2x	5.8x	12.1x	1.8x
Premium Brands Holdings Corporation	TSX:PBH	107.88	36.32%	92.52%	4,702.8	6,069.2	3,581.0	7.7%	2.4%	1.7x	20.5x	52.9x	28.7x
Colabor Group Inc.	TSX:GCL	0.73	29.76%	36.21%	74.8	146.0	366.5	4.4%	0.8%	0.4x	6.5x	26.2x	NM
<b>Mean</b>			<b>33.66%</b>	<b>70.61%</b>		<b>9,706.6</b>		<b>3.5%</b>	<b>0.4%</b>	<b>0.7x</b>	<b>17.1x</b>	<b>56.6x</b>	<b>30.5x</b>
<b>Median</b>			<b>29.76%</b>	<b>70.03%</b>		<b>5,909.2</b>		<b>2.9%</b>	<b>0.8%</b>	<b>0.5x</b>	<b>15.8x</b>	<b>52.9x</b>	<b>16.1x</b>
<b>Food Retailers</b>													
Costco Wholesale Corporation	NasdaqGS:COST	491.54	30.46%	98.59%	217,174.1	216,920.1	195,929.0	4.6%	2.6%	1.1x	23.0x	43.6x	13.1x
Walmart Inc.	NYSE:WMT	149.42	3.66%	84.52%	416,657.3	461,919.3	566,145.0	7.1%	1.8%	0.8x	10.5x	42.1x	8.1x
Target Corporation	NYSE:TGT	259.62	47.07%	93.60%	126,704.7	134,810.7	100,328.0	11.0%	6.3%	1.3x	11.9x	20.7x	8.6x
The Kroger Co.	NYSE:KR	40.02	26.01%	54.82%	29,760.4	48,722.4	133,440.0	4.2%	0.9%	0.4x	7.6x	26.8x	5.7x
Grocery Outlet Holding Corp.	NasdaqGS:GO	22.19	-43.46%	4.24%	2,128.5	3,423.6	3,098.9	5.5%	3.3%	1.1x	12.0x	21.4x	12.0x
Sprouts Farmers Market, Inc.	NasdaqGS:SFM	22.14	10.15%	35.28%	2,528.2	3,796.9	6,276.9	7.9%	4.3%	0.6x	5.0x	9.6x	6.5x
Weis Markets, Inc.	NYSE:WMK	56.31	17.78%	77.40%	1,514.7	1,461.3	4,142.8	5.9%	2.6%	0.4x	4.8x	14.0x	1.4x
Casey's General Stores, Inc.	NasdaqGS:CASY	191.54	7.23%	41.00%	7,106.6	8,623.9	8,652.4	9.0%	3.6%	1.0x	11.1x	23.0x	4.6x
Albertsons Companies, Inc.	NYSE:ACI	30.95	76.05%	84.45%	14,457.5	27,644.8	68,956.3	5.2%	1.0%	0.4x	6.1x	28.2x	NM
<b>Mean</b>			<b>19.44%</b>	<b>63.77%</b>		<b>100,813.7</b>		<b>6.7%</b>	<b>2.9%</b>	<b>0.8x</b>	<b>10.2x</b>	<b>25.5x</b>	<b>7.5x</b>
<b>Median</b>			<b>17.78%</b>	<b>77.40%</b>		<b>27,644.8</b>		<b>5.9%</b>	<b>2.6%</b>	<b>0.8x</b>	<b>10.5x</b>	<b>23.0x</b>	<b>7.3x</b>



# Capital Alliance Food Value Chain Segments

## Capital Alliance Food Chain Companies Public Trading Valuation Data

(USD in millions except stock price)

Company	Ticker	Price as of 10/29/2021	Price Change YTD	% 52-week range	Market Cap	Enterprise Value	LTM Revenues	LTM EBITDA Margin	LTM Net Income Margin	EV/LTM Revenue	EV/LTM EBITDA	P/LTM Diluted EPS	P/Tangible BV
<b>Agricultural Commodity Processors</b>													
Archer-Daniels-Midland Company	NYSE:ADM	64.24	27.44%	78.58%	35,938.5	45,005.5	80,137.0	4.7%	3.3%	0.6x	9.5x	13.9x	2.2x
Bunge Limited	NYSE:BG	92.64	41.26%	97.38%	13,017.8	20,091.8	55,079.0	5.0%	4.4%	0.4x	5.6x	5.8x	2.3x
Golden Agri-Resources Ltd	SGX:E5H	0.20	63.23%	80.77%	2,492.3	4,705.2	8,141.6	11.6%	4.2%	0.6x	4.8x	7.3x	0.6x
GrainCorp Limited	ASX:GNC	4.71	46.07%	85.29%	1,078.6	2,299.4	3,246.2	0.6%	0.1%	0.7x	54.7x	183.4x	1.4x
United Malt Group Limited	ASX:UMG	3.03	-3.97%	35.42%	907.1	1,166.4	928.5	9.9%	3.3%	1.3x	11.6x	29.8x	1.7x
Wilmar International Limited	SGX:F34	3.20	-9.01%	19.51%	20,192.4	43,887.9	57,403.5	6.1%	2.9%	0.8x	11.5x	12.2x	1.5x
<b>Mean</b>			<b>27.50%</b>	<b>66.16%</b>		<b>19,526.0</b>		<b>6.3%</b>	<b>3.0%</b>	<b>0.7x</b>	<b>16.3x</b>	<b>42.1x</b>	<b>1.6x</b>
<b>Median</b>			<b>34.35%</b>	<b>79.67%</b>		<b>12,398.5</b>		<b>5.5%</b>	<b>3.3%</b>	<b>0.6x</b>	<b>10.5x</b>	<b>13.0x</b>	<b>1.6x</b>
<b>Agricultural Land &amp; Growers</b>													
Farmland Partners Inc.	NYSE:FPI	11.24	29.20%	57.37%	506.0	1,256.9	49.1	45.7%	6.3%	25.6x	55.7x	NM	1.2x
Gladstone Land Corporation	NasdaqGM:LAND	22.14	51.23%	68.34%	693.6	1,316.8	62.0	78.0%	2.8%	21.2x	27.2x	NM	1.4x
Calavo Growers, Inc.	NasdaqGS:CVGW	40.20	-42.10%	13.33%	710.9	815.7	1,016.8	3.1%	0.7%	0.8x	19.3x	98.5x	3.2x
Limoneira Company	NasdaqGS:LMNR	16.13	-3.12%	36.76%	285.3	432.3	162.3	0.3%	-3.7%	2.7x	124.2x	NM	1.7x
Tejon Ranch Co.	NYSE:TRC	18.21	26.02%	77.11%	479.7	504.4	50.4	8.3%	4.0%	10.0x	67.7x	234.4x	1.3x
Alico, Inc.	NasdaqGS:ALCO	35.60	14.76%	71.93%	267.9	372.7	109.4	27.0%	48.5%	3.4x	12.4x	5.0x	1.1x
Adecoagro S.A.	NYSE:AGRO	8.76	28.82%	58.19%	1,018.8	2,037.5	944.3	42.0%	10.9%	2.2x	4.6x	10.1x	1.1x
Costa Group Holdings Limited	ASX:CGC	2.19	-30.25%	0.00%	1,017.6	1,434.1	885.3	13.0%	4.7%	1.6x	9.5x	21.4x	3.0x
T&G Global Limited	NZSE:TGG	2.13	-0.53%	93.75%	261.0	441.8	972.7	3.8%	0.4%	0.5x	8.0x	69.9x	0.8x
Cresud Sociedad Anónima Comercial, Inmobiliaria, Financiera y Agropecuaria	BASE:CRES	1.09	41.84%	82.11%	629.9	2,328.0	443.1	8.1%	-29.6%	5.3x	NM	NM	1.9x
Select Harvests Limited	ASX:SHV	5.55	37.97%	60.93%	666.8	943.9	206.2	13.4%	3.3%	4.6x	21.2x	84.5x	2.0x
Duxton Broadacre Farms Limited	ASX:DBF	1.25	18.52%	93.58%	53.9	70.5	13.4	15.1%	7.9%	5.3x	34.9x	73.3x	0.9x
Australian Dairy Nutritionals Group	ASX:AHF	0.04	-5.79%	28.85%	21.9	39.1	16.3	-23.1%	-29.5%	2.4x	NM	NM	2.7x
<b>Mean</b>			<b>12.81%</b>	<b>57.10%</b>		<b>922.6</b>		<b>18.0%</b>	<b>2.0%</b>	<b>6.6x</b>	<b>35.0x</b>	<b>74.6x</b>	<b>1.7x</b>
<b>Median</b>			<b>18.52%</b>	<b>60.93%</b>		<b>815.7</b>		<b>13.0%</b>	<b>3.3%</b>	<b>3.4x</b>	<b>21.2x</b>	<b>71.6x</b>	<b>1.4x</b>

# Capital Alliance Food Value Chain Segments

## Capital Alliance Food Chain Companies Public Trading Valuation Data

(USD in millions except stock price)

Company	Ticker	Price as of 10/29/2021	Price Change YTD	% 52-week range	Market Cap	Enterprise Value	LTM Revenues	LTM EBITDA Margin	LTM Net Income Margin	EV/LTM Revenue	EV/LTM EBITDA	P/LTM Diluted EPS	P/Tangible BV
<b>Agricultural Crop Inputs</b>													
Corteva, Inc.	NYSE:CTVA	43.15	11.44%	61.78%	31,680.1	30,798.1	14,875.0	21.3%	8.2%	2.1x	9.1x	24.2x	6.7x
KWS SAAT SE & Co. KGaA	XTRA:KWS	85.34	7.47%	63.40%	2,816.1	3,375.1	1,553.5	16.7%	8.4%	2.2x	11.8x	22.0x	4.2x
The Mosaic Company	NYSE:MOS	41.57	80.66%	93.87%	15,792.3	19,166.1	10,973.8	24.4%	16.3%	1.7x	8.0x	11.3x	1.7x
CF Industries Holdings, Inc.	NYSE:CF	56.80	46.73%	82.37%	12,217.4	18,098.4	4,585.0	38.0%	9.9%	3.9x	9.5x	27.0x	15.9x
FMC Corporation	NYSE:FMC	91.01	-20.81%	10.28%	11,712.9	14,997.9	4,674.4	25.8%	11.7%	3.2x	12.0x	20.5x	NM
American Vanguard Corporation	NYSE:AVD	15.58	0.39%	28.76%	481.1	632.5	509.0	9.5%	3.7%	1.2x	11.7x	24.8x	3.9x
Nutrien Ltd.	TSX:NTR	69.77	45.01%	92.03%	39,815.3	49,497.2	23,642.0	20.5%	9.6%	2.1x	11.6x	41.3x	4.6x
The Andersons, Inc.	NasdaqGS:ANDE	34.06	38.96%	97.51%	1,114.3	3,026.3	10,374.6	3.0%	0.7%	0.3x	8.7x	15.6x	1.5x
Yara International ASA	OB:YAR	52.12	25.56%	65.80%	13,277.2	16,920.1	14,442.0	16.1%	4.5%	1.2x	6.6x	20.0x	2.1x
ICL Group Ltd	TASE:ICL	8.56	68.20%	93.83%	10,990.8	13,496.7	5,648.0	21.5%	7.0%	2.4x	10.2x	27.0x	3.1x
K+S Aktiengesellschaft	XTRA:SDF	17.22	81.04%	96.52%	3,296.6	4,201.4	3,073.6	-48.8%	-19.9%	1.4x	NM	NM	0.9x
CVR Partners, LP	NYSE:UAN	79.09	393.70%	90.04%	844.8	1,449.4	434.0	31.6%	-0.1%	3.3x	15.6x	NM	2.9x
OCI N.V.	ENXTAM:OCI	28.33	47.53%	89.51%	5,942.1	10,644.1	4,370.1	28.7%	3.5%	2.4x	8.3x	40.5x	7.0x
Intrepid Potash, Inc.	NYSE:IPI	48.71	101.70%	90.61%	639.0	617.0	198.9	25.3%	12.7%	3.1x	14.5x	58.0x	1.5x
Compass Minerals International, Inc.	NYSE:CMP	65.60	6.29%	53.58%	2,232.9	3,359.4	1,477.3	19.5%	-8.7%	2.3x	11.6x	43.9x	28.4x
Arab Potash Company	ASE:APOT	37.26	25.79%	51.64%	3,104.1	3,024.3	694.2	37.1%	31.1%	4.4x	8.8x	14.4x	2.4x
Nufarm Limited	ASX:NUF	3.26	3.40%	43.95%	1,240.2	1,820.6	1,149.8	-23.7%	-34.2%	1.6x	NM	NM	2.0x
CVR Energy, Inc.	NYSE:CVI	19.17	28.66%	52.85%	1,927.2	3,322.2	6,248.0	3.2%	-0.5%	0.5x	NM	NM	4.0x
SpartanNash Company	NasdaqGS:SPTN	23.14	32.91%	96.55%	831.6	1,557.6	9,072.3	2.3%	0.8%	0.2x	5.8x	12.1x	1.8x
<b>Mean</b>			<b>53.93%</b>	<b>71.31%</b>		<b>10,526.5</b>		<b>14.3%</b>	<b>3.4%</b>	<b>2.1x</b>	<b>10.2x</b>	<b>26.8x</b>	<b>5.3x</b>
<b>Median</b>			<b>32.91%</b>	<b>82.37%</b>		<b>3,375.1</b>		<b>20.5%</b>	<b>4.5%</b>	<b>2.1x</b>	<b>9.8x</b>	<b>24.2x</b>	<b>3.0x</b>

# Capital Alliance Food Value Chain Segments

## Capital Alliance Food Chain Companies Public Trading Valuation Data

(USD in millions except stock price)

Company	Ticker	Price as of 10/29/2021	Price Change YTD	% 52-week range	Market Cap	Enterprise Value	LTM Revenues	LTM EBITDA Margin	LTM Net Income Margin	EV/LTM Revenue	EV/LTM EBITDA	P/LTM Diluted EPS	P/Tangible BV
<b>Agricultural Equipment</b>													
Deere & Company	NYSE:DE	342.31	27.23%	67.35%	106,137.1	147,457.1	42,402.0	20.9%	12.8%	3.5x	16.3x	19.9x	9.4x
AGCO Corporation	NYSE:AGCO	122.21	18.55%	55.91%	9,212.9	10,438.3	10,700.2	11.3%	7.0%	1.0x	7.5x	12.3x	6.2x
Caterpillar Inc.	NYSE:CAT	204.01	12.08%	54.43%	111,689.7	139,949.7	48,408.0	19.4%	10.6%	2.9x	14.4x	21.8x	12.1x
The Toro Company	NYSE:TTC	95.47	0.66%	39.31%	10,162.3	10,393.9	3,839.9	16.2%	11.0%	2.7x	15.9x	24.7x	26.1x
Lindsay Corporation	NYSE:LNN	145.67	13.40%	55.56%	1,588.9	1,580.2	567.6	12.9%	7.5%	2.8x	19.9x	37.5x	6.4x
Valmont Industries, Inc.	NYSE:VMI	238.96	36.60%	79.05%	5,069.1	5,991.8	3,336.7	12.2%	6.1%	1.8x	14.0x	25.0x	12.2x
CNH Industrial N.V.	NYSE:CNHI	17.11	33.26%	87.25%	23,171.1	40,459.1	31,377.0	10.5%	1.0%	1.3x	11.5x	72.3x	7.2x
Cummins Inc.	NYSE:CM	239.84	5.61%	40.66%	34,442.7	36,846.7	23,151.0	13.3%	9.5%	1.6x	9.7x	16.1x	6.1x
Kubota Corporation	TSE:6326	21.24	-2.63%	66.52%	25,655.4	32,845.9	18,656.9	14.1%	8.3%	1.8x	12.1x	17.0x	1.9x
Iseki & Co., Ltd.	TSE:6310	14.39	7.42%	59.45%	325.5	736.3	1,475.4	7.1%	-1.5%	0.5x	7.4x	NM	0.6x
EXEL Industries SA	ENXTPA:EXE	81.41	9.60%	59.11%	552.5	690.5	968.7	8.7%	4.8%	0.7x	7.6x	11.8x	1.8x
Alamo Group Inc.	NYSE:ALG	151.20	9.60%	69.03%	1,803.5	2,046.1	1,239.1	12.5%	5.8%	1.7x	12.7x	25.1x	6.1x
DEUTZ Aktiengesellschaft	XTRA:DEZ	8.40	34.75%	71.10%	1,014.6	1,112.3	1,714.3	4.7%	-2.9%	0.6x	11.1x	NM	3.0x
Tractor Supply Company	NasdaqGS:TSCO	217.17	54.48%	99.39%	24,830.9	27,588.5	12,290.1	13.4%	7.4%	2.2x	13.0x	27.8x	12.6x
<b>Mean</b>			<b>18.62%</b>	<b>64.58%</b>		<b>32,724.0</b>		<b>12.7%</b>	<b>6.3%</b>	<b>1.8x</b>	<b>12.4x</b>	<b>26.0x</b>	<b>8.0x</b>
<b>Median</b>			<b>12.74%</b>	<b>62.99%</b>		<b>10,416.1</b>		<b>12.7%</b>	<b>7.2%</b>	<b>1.7x</b>	<b>12.4x</b>	<b>23.2x</b>	<b>6.3x</b>
<b>Agricultural Animal Health &amp; Diagnostics</b>													
Zoetis Inc.	NYSE:ZTS	216.20	30.63%	99.05%	102,466.7	106,141.7	7,412.0	41.5%	25.8%	14.3x	33.7x	54.2x	NM
Phibro Animal Health Corporation	NasdaqGM:PAHC	21.94	12.98%	38.49%	888.6	1,225.5	833.4	12.7%	6.5%	1.5x	10.6x	16.4x	7.2x
Elanco Animal Health Incorporated	NYSE:ELAN	32.88	7.21%	57.20%	15,552.9	21,098.9	4,550.3	20.6%	-16.0%	4.6x	22.6x	NM	NM
IDEXX Laboratories, Inc.	NasdaqGS:IDXX	666.14	33.26%	85.82%	56,672.5	57,453.8	3,135.2	32.5%	24.1%	18.3x	58.1x	79.4x	190.9x
Neogen Corporation	NasdaqGS:NEOG	42.31	6.71%	55.80%	4,548.0	4,149.6	487.4	21.0%	12.7%	8.5x	40.0x	72.9x	7.1x
Balchem Corporation	NasdaqGS:BCPC	153.09	32.87%	94.01%	4,955.6	4,986.9	766.6	22.7%	12.2%	6.5x	28.2x	53.5x	18.9x
ImmuCell Corporation	NasdaqCM:ICCC	8.80	47.90%	44.93%	68.1	67.7	16.1	8.8%	-2.7%	4.2x	43.1x	NM	2.1x
Dechra Pharmaceuticals PLC	LSE:DPH	70.07	48.53%	83.08%	7,588.1	7,862.1	839.7	20.2%	9.1%	9.4x	45.6x	100.3x	NM
Bayer CropScience Limited	BSE:506285	66.57	-10.52%	5.21%	2,991.7	2,827.6	597.6	15.8%	9.6%	4.7x	25.9x	45.3x	9.0x
<b>Mean</b>			<b>23.29%</b>	<b>62.62%</b>		<b>22,868.2</b>		<b>21.7%</b>	<b>9.0%</b>	<b>8.0x</b>	<b>34.2x</b>	<b>60.3x</b>	<b>39.2x</b>
<b>Median</b>			<b>30.63%</b>	<b>57.20%</b>		<b>4,986.9</b>		<b>20.6%</b>	<b>9.6%</b>	<b>6.5x</b>	<b>33.7x</b>	<b>54.2x</b>	<b>8.1x</b>
<b>Agricultural Animal Health Distributors</b>													
AmerisourceBergen Corporation	NYSE:ABC	122.02	24.82%	80.34%	25,354.2	31,563.5	204,321.2	1.5%	-1.8%	0.2x	9.6x	NM	NM
Patterson Companies, Inc.	NasdaqGS:PDICO	31.26	5.50%	53.22%	3,039.4	3,624.9	6,281.1	4.8%	2.6%	0.6x	10.9x	18.3x	5.5x
Henry Schein, Inc.	NasdaqGS:HSIC	76.35	14.19%	70.43%	10,665.6	12,855.5	12,236.2	8.3%	5.1%	1.1x	11.6x	18.1x	NM
Covetrus, Inc.	NasdaqGS:CVET	20.19	-29.75%	11.21%	2,778.5	3,642.5	4,539.0	2.8%	-1.9%	0.8x	22.8x	NM	NM
EBOS Group Limited	NZSE:EBO	25.91	25.64%	98.36%	4,254.2	4,647.3	6,899.7	3.5%	2.0%	0.7x	16.5x	29.8x	22.2x
Virbac SA	ENXTPA:VIRP	505.90	74.00%	100.00%	4,271.4	4,242.3	1,168.3	18.4%	16.5%	3.6x	19.1x	22.7x	9.0x
Vetoquinol SA	ENXTPA:VETO	170.68	67.12%	96.81%	2,018.4	1,999.8	577.0	21.8%	8.3%	3.5x	15.5x	43.2x	11.5x
Apium Animal Health Limited	ASX:AHX	0.71	42.78%	87.21%	96.2	136.6	94.6	9.3%	4.0%	1.4x	12.7x	22.7x	NM
<b>Mean</b>			<b>28.04%</b>	<b>74.70%</b>		<b>7,839.0</b>		<b>8.8%</b>	<b>4.4%</b>	<b>1.5x</b>	<b>14.8x</b>	<b>25.8x</b>	<b>12.0x</b>
<b>Median</b>			<b>25.23%</b>	<b>83.77%</b>		<b>3,942.4</b>		<b>6.5%</b>	<b>3.3%</b>	<b>0.9x</b>	<b>14.1x</b>	<b>22.7x</b>	<b>10.2x</b>

# Proven Record of Global Reach





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- Russell Tolander is a Managing Director for Capital Alliance working on mergers & acquisitions engagements across the food value chain.
- He is a former managing director of Institutional Sales and Research at Roth Capital Partners. He has over 20 years of institutional sales, research and investment management experience specific to the small capitalization public equity marketplace. Much of his experience focused on public micro-cap equities under \$100M in capitalization. His generalist experience spans a variety of industries including technology-enabled manufacturing, distribution & logistics; electronics & communications equipment and services; clean technology and alternative energy; business services; and consumer products, restaurant & retail, e-commerce, and internet-enabled businesses.
- Within the branded consumer products and the retail, restaurant and food & beverage industries, he has legacy experience which includes selling the Amerco/U-HAUL (UHAL) IPO and multi-year merchant investments in companies including BJ's Restaurant & Brewhouse (BJRI), Neogen Corporation (NEOG) and Cost-U-Less (acquired).
- More recently he has sales or direct investment exposure in health & wellness/millennial consumer companies including The Joint (JYNT), Lovesac (LOVE), and Castle Brands (acquired).
- Prior to capital markets, he was a research associate for R.J. Rudden Associates providing management consulting services to public utilities. Also, he was an engineer in training at Arizona Public Service Company where he had early exposure to the alternative energy field.
- He holds an MBA from the University of Iowa and a Bachelor of Science in Energy Engineering from the University of Arizona.
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