

VALUE FOCUS Agribusiness

Segment Focus: Agricultural Technology Fourth Quarter 2019

Agricultural Technology

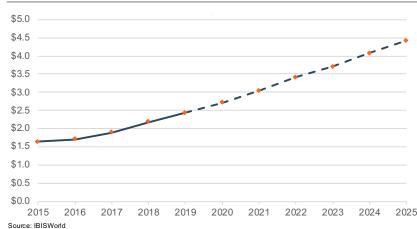
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Agricultural Technology Industry Outlook

NOTE: This newsletter includes data and discussion on economic activity through December 2019. As we all know, the economy (and everyday life) has changed dramatically since the last year-end. Our Q1 2020 update will be available soon and will include discussion on the short-term and longer-term impact of the COVID-19 pandemic.

The Agtech industry is comprised of a wide variety of established and startup companies aimed at increasing yields and efficiency through the integration of technology in the farming process. For the purposes of this outlook, we will focus companies operating in the precision ag systems and software space, which includes companies who provide software development services, applications, and testing aimed at tracking and analyzing agricultural data. These services are performed in conjunction with other harvesting or field-input machinery systems. Software and their related systems may be sold directly to farmers or integrated into third-party products such as farm machinery and implements.



Precision Ag Industry Historical and Projected Revenue (\$ Billions)

The precision ag systems and services industry has grown at an annualized rate of 5.7% over the five years to 2019 to reach \$2.4 billion in revenue. Industry growth has been strong over this five year period mainly due to increasing demand from crop farmers seeking to maximize productive efficiencies to meet continually growing global demand. Still, depressed farm incomes and low crop prices have led many industry producers to post low revenues in recent years. This is reflected in the estimate that industry revenue is expected to increase 11.4% in 2019 alone on the heels of new technology introductions by major players, recovering agricultural markets, and improving demand for ag equipment and machinery.

Industry Outlook (cont.)

Over the next five years to 2024, industry revenue is expected to continue its pattern of growth, increasing to \$4.1 billion. If realized, this growth would represent 10.9% annualized growth from 2020 through 2024. The main drivers of demand for industry services and revenue growth are expected to come from provisions within the 2018 Farm Bill and increasing farmer adoption of a wide variety of newly released industry products. The 2018 Farm Bill included provisions aimed at rural development and streamlining payments to farmers for their products. This will put more money in farmers' pockets and increase their abilities to utilize and purchase industry products, which will increase industry revenue. Further, as broadband and mobile technologies further expand into rural areas, farmers will become increasingly likely to adopt the wide variety of new products being developed by industry operators, which will also increase industry revenue in future years.¹

2019 Funding Overview

According to research from AgFunder, upstream agtech industry segments attracted approximately \$7.6 billion in investor funding in 2019. Ag biotech, farm management software, farm robotics & equipment, novel farming, and agribusiness marketplaces are all considered to be upstream industry segments in the agtech landscape. The estimated \$7.6 billion investment in these industries in 2019 represents growth of 1.3% from the total investment amount in 2018, although the total number of fundings (1,039) was down 7% from 2018. Still, in 2018 and 2019, total funding was virtually identical for upstream agtech industry segments at approximately \$7.6 billion. This figure has grown steadily year-over-year from 2013, when total funding was **\$1.6 billion**.

Among these industry segments, ag biotech attracted the greatest amount of investment at \$1.1 billion. Operators in this space design on-farm inputs for crop and animal ag including genetics, microbiome management, breeding, and animal health. Farm management software companies, which create software and devices that capture and support ag data, attracted \$887 million in funding in 2019.²

The largest of these farm management software companies' fundings was Planet Labs' \$168 million round of Series D funding, which closed in early 2019.³ With more than 120 satellites in orbit, Planet Labs' provides imagery solutions to ag producers, giving farmers insights on crop growth, anomalies in fields, input optimizations, and other factors throughout the growing process. Planet Labs' provides daily imagery to users, allowing farmers to react to crop stress in a timely and efficient manner. Imagery services such as Planet's will be crucial for farmers' attempt to maximize yield in the ongoing depressed pricing environment.

Farm Income and Overall Ag Economy Overview

Extreme weather plagued farmers during 2019, particularly those in the upper Midwest. Heavy flooding inundated fields across the country throughout the spring, which caused delayed plantings for corn, soybeans, and other major crops. As of October 7, the USDA estimated that only 22% of corn in North Dakota was mature and 36% of the corn planted in South Dakota was mature. In the country's 18 largest corn-producing states, only 58% of the 2019 crop was mature by early October, compared to a historical average of 85%. Cold weather and snow took a toll on these late maturing crops, as parts of the upper Midwest received 1 to 2 feet of snow in mid-October. In the wake of the blizzards, farmers in the Dakotas reported that their harvests could be delayed by as many as three weeks, if they are able to be harvested at all. Still, the effects of the blizzard on major corn-producing states and tightening corn and soybean supplies could benefit growers in other parts of the country who are able to harvest their 2019 crops and sell them at higher prices than they would have been able to otherwise. This would have a positive upstream effect on seed and fertilizer companies and equipment dealers, as higher crop prices would **translate to higher spending on inputs**.

After months of tense negotiations, the U.S. and China reached a limited agreement to end the ongoing trade war. This tentative end to the trade war is expected to bring widespread relief to farmers and the overall ag economy is 2020, as China agreed to increase its purchases of American agricultural goods by \$32 billion over previous levels in the next two years. This would increase total farm-product purchases by China to \$40 billion a year, with the potential for this total to grow to \$50 billion. The announcement of these purchases was met with some skepticism, as Chinese officials declined to specify the amount of agricultural products they agreed to purchase **as part of the deal**. Nonetheless, any additional purchases of ag products by the Chinese are expected to bring some relief to U.S. producers in 2020. This recovery is reflected in the U.S. Farm Sector Income Statement from the USDA below, which forecasts a 12% increase in net farm income in 2019 and an additional 3% in 2020.

¹ IBISWorld. "Precision Ag Systems and Services Industry in the US". February 2020.

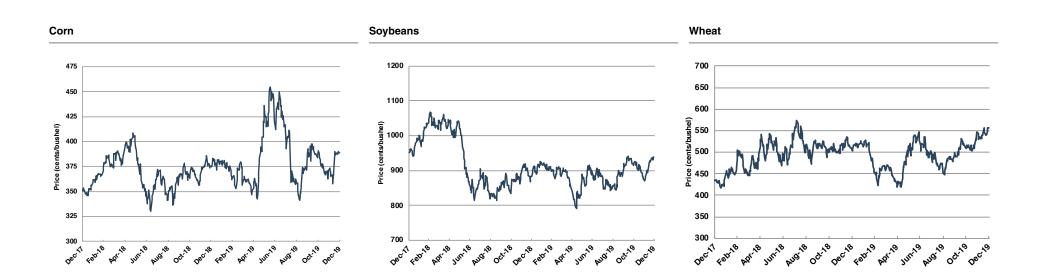
- ² Ibid.
- ³ Ibid.

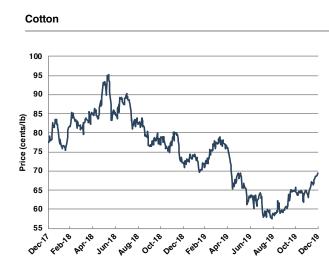
Farm Income and Overall Ag Economy Overview (cont.)

U.S. Farm Sector Income Statement, 2014-2020F (\$billions)

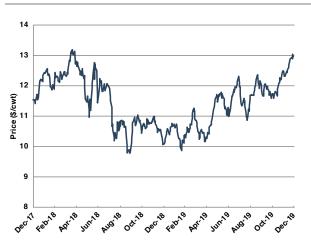
	2014	2015	2016	2017	2018	2019F	2020F
Crops	211.7	187.9	195.8	194.9	196.2	196.7	198.6
Livestock	212.3	189.5	162.7	175.6	176.5	177.6	185.8
Direct Government Payments	9.8	10.8	13.0	11.5	13.7	23.7	15.0
Other Farm-related Income	36.6	34.4	27.9	31.2	29.1	34.3	31.5
Gross Cash Income	\$470.3	\$422.6	\$399.4	\$413.2	\$415.5	\$432.2	\$430.9
Noncash Income	16.9	17.8	17.1	18.3	19.1	20.1	20.8
Value of Inventory Adjustment	(3.9)	0.4	(4.2)	(6.0)	(7.1)	(14.5)	(0.4)
Total Gross Income	\$483.3	\$440.8	\$412.3	\$425.4	\$427.6	\$437.8	\$451.3
Total Expenses	391.0	359.2	350.0	350.4	343.8	344.3	354.7
Net Farm Income	\$92.2	\$81.6	\$62.3	\$75.1	\$83.8	\$93.6	\$96.7
Sauraa USDA WASDE Banart							

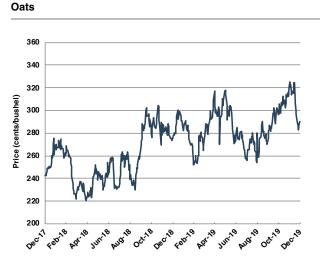
Source: USDA WASDE Report



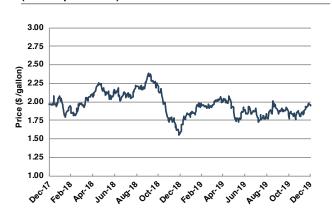


Rough Rice

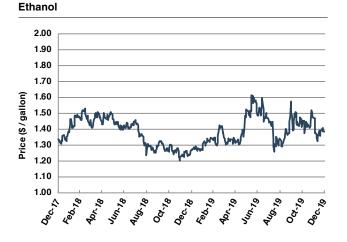




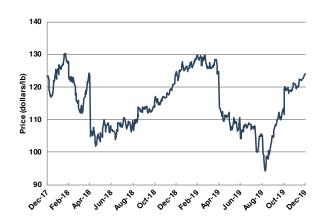
Fourth Quarter 2019



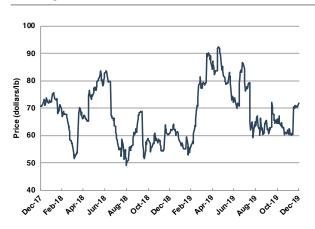
U.S. Gulf Coast Ultra-Low Sulfur No 2 Diesel Spot Price (Dollars per Gallon)



Live Cattle



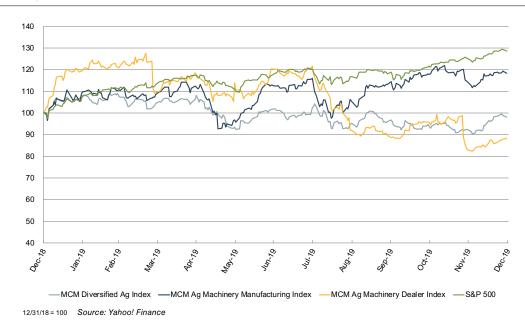
Lean Hogs



Publicly Traded Agribusiness Companies

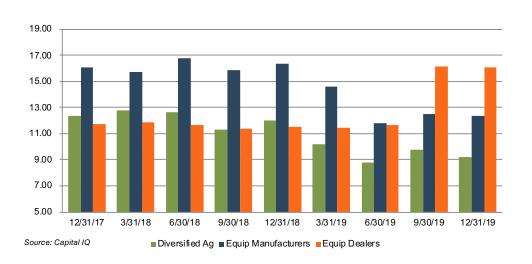
Company Name	Ticker	Price 12/31/19	52 Wk Perform (Market Cap)	LTM Revenue (\$)	Enterprise Value (\$M)	Debt/ MVTC	EBITDA Margin	EV / LTM EBITDA (x)	TEV / Nxt Yr EBITDA (x)	Price/ LTM Earnings (x)
Diversified Agribusiness										
CF Industries Holdings, Inc.	NYSE:CF	47.7	9.7%	4,673	17,033	29.2%	39.3%	9.2	10.1	21.8
The Mosaic Company	NYSE:MOS	21.6	-25.9%	9,351	12,645	38.6%	18.7%	7.2	8.3	NM
Intrepid Potash, Inc.	NYSE:IPI	2.7	4.2%	176	412	18.2%	33.2%	7.0	7.1	18.2
Yara International ASA	OB:YAR	41.5	8.0%	13,254	15,441	27.0%	12.8%	9.1	6.4	20.3
Nutrien Ltd.	TSX: NTR	47.9	2.0%	19,501	39,491	31.3%	21.4%	9.4	8.9	21.2
Archer-Daniels-Midland Company	NYSE:ADM	46.3	13.1%	64,656	34,681	25.6%	4.1%	13.0	10.2	18.9
Bunge Limited	NYSE:BG	57.5	7.7%	41,900	15,877	45.2%	-0.4%	(99.8)	12.2	NM
Median - Diversified Agribusiness			8%	13,254	15,877	29.2%	18.7%	9.1	8.9	20.3
Agricultural Machinery & Equipme Manufacturers	nt									
Deere & Company	NYSE:DE	173.2	16%	39,233	96,554	47.1%	15.7%	15.6	18.1	16.8
AGCO Corporation	NYSE:AGCO	77.2	39%	9,041	7,604	19.6%	8.9%	9.4	8.3	47.0
Lindsay Corporation	NYSE:LNN	95.9	0%	442	1,027	14.2%	7.2%	32.4	19.3	NM
Median - Manufacturers			16%	9,041	7,604	19.6%	8.9%	15.6	18.1	31.9
Dealers										
Titan Machinery Inc.	NasdaqGS:TITN	14.7	12%	1,314	875	68.9%	4.0%	16.5	14.6	29.5
Rocky Mountain Dealerships Inc.	TSX:RME	4.9	-23%	643	453	79.0%	4.0%	17.7	22.9	29.1
Cervus Equipment Corporation	TSX:CERV	6.3	-32%	891	361	73.0%	3.3%	12.1	10.2	24.6
Median - Dealers			-23%	891	453	73.0%	4.0%	16.5	14.6	29.1

Source: Capital IQ



Mercer Capital Agriculture Indices: One Year Performance

Historical EV / EBITDA Multiples





Mercer Capital

Agribusiness Industry Services Mercer Capital has expertise providing business valuation and financial advisory services to companies in the agribusiness industry.

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- Crop and Crop Services
- Agriculture Real Estate
- Agriculture Chemicals

Services Provided

- Valuation of agriculture companies
- Transaction advisory for acquisitions and divestitures
- Valuations for purchase accounting and impairment testing
- Fairness and solvency opinions
- Litigation support for economic damages and valuation
 and shareholder disputes

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