

VALUE FOCUS

# Agribusiness Industry



SEGMENT FOCUS

**Agriculture Machinery, Equipment & Implements**

**2017**

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**About Mercer Capital**

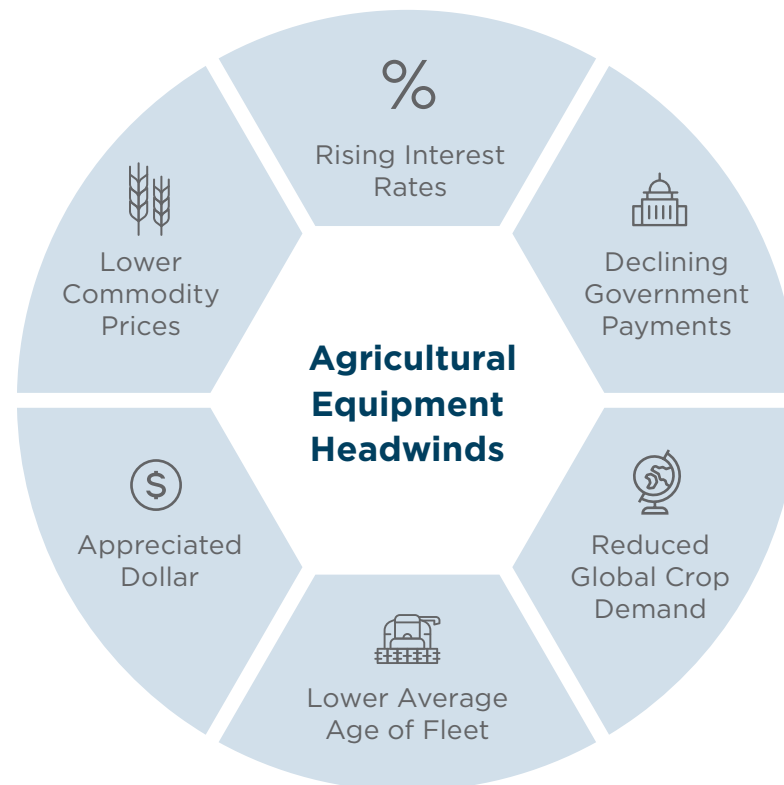
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- Q1: Agriculture Machinery, Equipment & Implements
- Q2: Crops and Crop Services
- Q3: Agriculture Real Estate
- Q4: Agriculture Chemicals

## Segment Focus

### Agriculture Machinery, Equipment & Implements

The agricultural equipment industry is facing a number of headwinds. The decline in farm income since 2014 has depressed sales of agricultural machinery. The **decline in North American tractor sales** in 2016 was the third annual decline in a row and the first three-year decline since 1998-2000. Lower commodity prices due to record high yields and reduced global crop demand due to an appreciated dollar will continue to impact the disposable income available to producers to fund new equipment purchases and upgrades. Equipment manufacturers are further impacted from a drag in global demand due to the appreciated dollar as exports have historically comprised a quarter of revenues. Many farms purchased equipment during the period of growth before 2014 which significantly lowered the average fleet age and may cause a delay in equipment renewal. Lower farm incomes have also led to a greater proportion of agricultural equipment purchases being financed with debt especially given the depressed rate environment of the post-recession period. Rising interest rates could impact the affordability of debt financing, further reducing demand for equipment.



## Agriculture Machinery, Equipment & Implements (continued)

The most recent **U.S. farm sector income forecast** projects net farm income of \$68.3 billion in 2016, a 15.6% decline from the 2015, according to the USDA. Farm income is expected to fall to cyclical lows in 2017, falling another 8.7% to \$62.3 billion. The major contributor to the decline in income is a reduction in crop and livestock receipts but government direct payments are expected to decline as well. Production costs have remained flat as a decline in crop and livestock input costs are offset by a rise in labor, fuel, and interest expenses.

Despite all of these factors, publicly traded stocks of equipment dealers and manufacturers continue to outperform the S&P 500 for the trailing twelve months, primarily reflecting that investor expectations were dire in the year ago period (early 2016) and the expected impact on the ag equipment industry thus far has been more muted.

### U.S. Farm Sector Income Statement, 2012-2017F

\$ Billions

	2012	2013	2014	2015	2016F	2017F
Crops	231.6	220.8	211.4	185.7	187.7	186.7
Livestock	169.8	182.7	212.8	189.8	168.1	168.2
Direct Government Payments	10.6	11.0	9.8	10.8	13.0	12.5
Other Farm-related Income	39.3	41.0	36.6	34.4	30.7	34.4
<b>Gross Cash Income</b>	<b>\$451.3</b>	<b>\$455.5</b>	<b>\$470.5</b>	<b>\$420.6</b>	<b>\$399.5</b>	<b>\$401.8</b>
Noncash Income	18.3	17.7	16.9	17.8	18.8	19.9
Value of Inventory Adjustment	(19.8)	10.6	(4.3)	1.3	(0.1)	(9.3)
<b>Total Gross Income</b>	<b>\$449.8</b>	<b>\$483.8</b>	<b>\$483.1</b>	<b>\$439.7</b>	<b>\$418.2</b>	<b>\$412.4</b>
Total Expenses	353.3	360.1	390.5	358.8	349.9	350.0
<b>Net Farm Income</b>	<b>\$96.5</b>	<b>\$123.7</b>	<b>\$92.6</b>	<b>\$80.9</b>	<b>\$68.3</b>	<b>\$62.3</b>

Source: USDA WASDE Report, February 7, 2017

## Manufacturers

The agricultural equipment manufacturing industry has been volatile for the five years to 2017, reporting negative 2.6% annual revenue growth over the period. Strong growth was reported over the early part of that period, while recent trends have led to a decline in sales. Industry forecasts anticipate annual growth of 0.3% through 2022. An investor presentation from Deere & Company (**NYSE: DE**), the industry's market share leader (25%), **projects a roughly 5% sales decline** for the agriculture segment of the business in the U.S. and Canada in 2017 which is slightly improved from the previous forecast of 5-10%. Deere has indicated that end markets are beginning to stabilize and a focus on cuts in receivables and inventory will allow it to realign production with retail demand. Deere has raised guidance on global sales due to strong demand in South America, especially Brazil, which is expected to increase purchases by 20%. South America offers one bright spot for North American exporters due to the strong cash position of South American farmers.

Inventory management becomes a central focus of manufacturers during cyclical downturns. Well managed inventory levels can reduce the amount of discounting necessary to move products, which has the potential to significantly erode margins. Currently, large farm-equipment inventories present a drag on manufacturers despite output costs. North American high-power tractors (100-plus horsepower) inventory was at 54% of sales in March on a trailing 12 month basis, significantly higher than the 25-40% range from 2013-2015. The four-wheel drive tractor inventory ratio rose to 35.8% from 30% last year and the combine inventory ratio rose to 23.4% from 18% last year.

## Dealers

Agricultural machinery and equipment dealerships have been consolidating for several years, a trend exacerbated by declining industry sales resulting from lower farm incomes. From 2009 to 2016, the number of North American farm **equipment dealer groups that owned five or more stores** grew from 151 to 192. Consolidation provides dealers with increasing economies of scale, and is viewed favorably by the manufacturers as well given that it reduces the number of dealers that they must oversee.

Through March 2017, dealers continued to see the most dramatic **sales declines in higher horsepower equipment**, likely due to the higher price point at which these products sell and the lower level of disposable income in the sector, forcing producers to “trade down” for their equipment purchases. This “trading down” is illustrated by the increased sales of less than 100 horsepower tractors.

As one of the largest equipment dealer groups, Titan Machinery's (**NASDAQ: TITN**) fourth quarter 2017 results (Titan has a fiscal year ending January 31, 2016) demonstrate the challenges facing the industry. Titan reported a 13.8% annual decline in equipment revenue and a 14.5% annual decline in agriculture-related revenue. Margins have stabilized due to stable equipment values but low crop prices will continue to weigh on revenues.

### United States Unit Retail Sales – March 2017

	March			YTD – March			Beginning Inventory Mar. 2017
	2017	2016	%Chg	2017	2016	%Chg	
<b>2WD Farm Tractors</b>							
< 40 HP	13,063	11,892	9.8	26,480	23,252	13.9	76,478
40 < 100 HP	4,863	4,785	1.6	11,322	11,739	-3.6	35,779
100+ HP	1,452	1,706	-14.9	3,774	4,363	-13.5	9,169
<b>Total 2WD Farm Tractors</b>	<b>19,378</b>	<b>18,383</b>	<b>5.4</b>	<b>41,576</b>	<b>39,354</b>	<b>5.6</b>	<b>121,426</b>
<b>4WD Farm Tractors</b>	<b>229</b>	<b>190</b>	<b>20.5</b>	<b>457</b>	<b>524</b>	<b>-12.8</b>	<b>755</b>
<b>Total Farm Tractors</b>	<b>19,607</b>	<b>18,573</b>	<b>5.6</b>	<b>42,033</b>	<b>39,878</b>	<b>5.4</b>	<b>122,181</b>
<b>Self-Prop Combines</b>	<b>300</b>	<b>270</b>	<b>11.1</b>	<b>715</b>	<b>851</b>	<b>-16.0</b>	<b>857</b>

Source: Association of Equipment Manufacturers

## Technology

Applying new technologies to agriculture will continue to increase crop yields, streamline operations, and increase overall efficiency. Machinery manufacturers and farm technology firms are continuing to increase automation on the farm, producing new technologies such as precision steering and intelligent management systems. Companies in this industry include technology specific companies, such as Trimble Navigation Limited, as well as more traditional equipment manufacturers that have started to explore technologies to enhance their core product, such as Deere & Company. The precision ag technology centers on Geographical Information Systems (GIS), the intricacy of which has increased significantly over the past five years. Other products include variable-rate application controllers, yield monitoring systems, guidance systems, and technical support.

The Precision Agriculture Systems and Services Industry (precision ag) **experienced 4.7% annual revenue growth** from 2011 to 2016, and is forecast to experience annual growth of 5.5% from 2016 to 2021. This compares favorably to more anemic growth forecasts for more established ag-related industries, such as equipment manufacturing and dealers. While certain factors such as commodity pricing and general demand for agricultural machinery will negatively impact growth in the near-term, technological advances and the desire for improved crop yields and productivity will continue to drive demand for the industry.

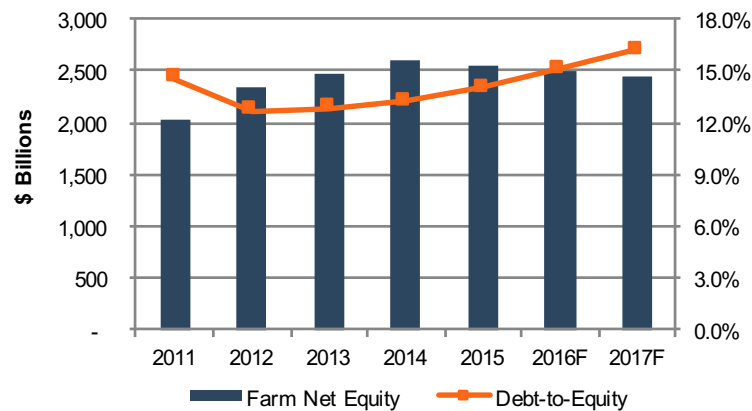
Unlike the adoption of advances in robots and biotechnology which have been embraced by many farmers and generated significant changes and improvements for the management of farms, farmers have been disappointed with the performance of big data services. Farmers expected to use large amounts of collected data to unlock insights into their land's performance and boost production. However, problems with digesting and interpreting the available data, using the necessary software, and integrating the technology with farm equipment have delayed the application of big data to farm management. **Investments in data-driven agricultural services** fell 39% in 2016 mainly due to a decline in drone investments.

# Financing for Agricultural Machinery

A prolonged period of low interest rates has served to stimulate the market for agricultural equipment, much of which is purchased on credit. However, recent agricultural equipment purchases have increasingly been financed out of necessity rather than the availability of cheap debt. As shown below, farm balance sheets are beginning to show some signs of stress following **three years of lower commodity prices**, although from a multi-decade perspective farm leverage remains at historically low levels.

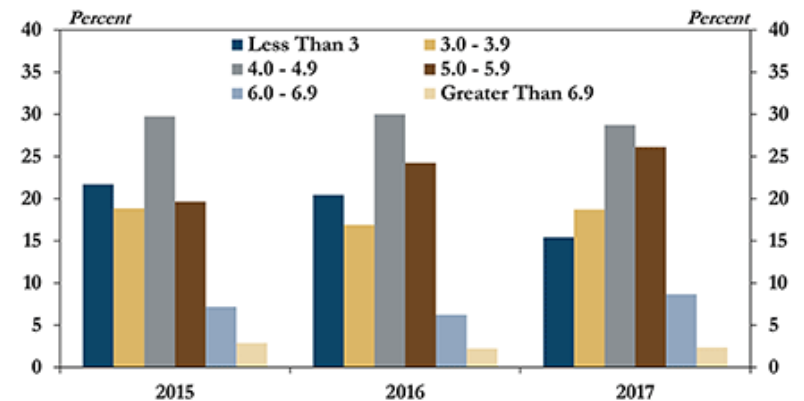
Higher debt-to-equity ratios have increased borrowing costs for farmers, as the **Federal Reserve Bank of Kansas City reported in April 2017** that interest rates have increased for all categories of non-real estate farm loans, as shown below. A large portion of machinery lending is likely not reflected in these amounts due to the fact it is dealer-financed. Despite remaining at historical lows around 1% in recent periods, delinquency rates at commercial banks for non-real estate farm loans have started to increase and are currently approximately 2%.

**Farm Balance Sheet Leverage**



Source: United States Department of Agriculture Economic Research Service

**Interest Rates on Non-Real Estate Farm Loans, First Quarter**



Source: Agricultural Finance Databook, Table A.7, data obtained from the national Survey of Terms of Bank Lending to Farmers

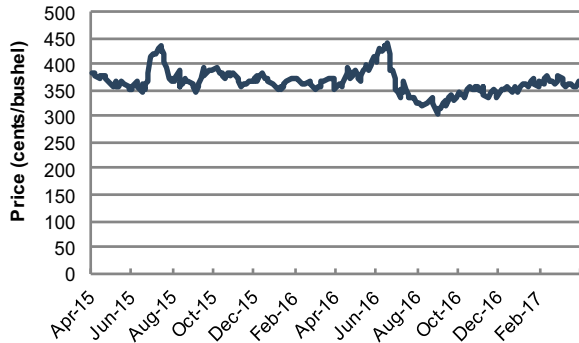
## Recent M&A Activity

### Agricultural Equipment

The majority of acquisitions in the equipment dealer and precision ag industries occur between smaller private companies, and therefore terms of the deals are rarely known. On the other hand, most manufacturers are large, publicly-traded companies for which more information is available. Recent developments in the global agricultural M&A space have come under increased scrutiny due to antitrust concerns. Monsanto (**NYSE: MON**) abandoned a deal to **sell its high-tech crop planter unit to Deere** due to the U.S Department of Justice's worries that the deal would stifle competition in the precision ag industry. Monsanto determined that they would not be able to win approval for the deal that was announced in November 2015 and valued at \$190 million.



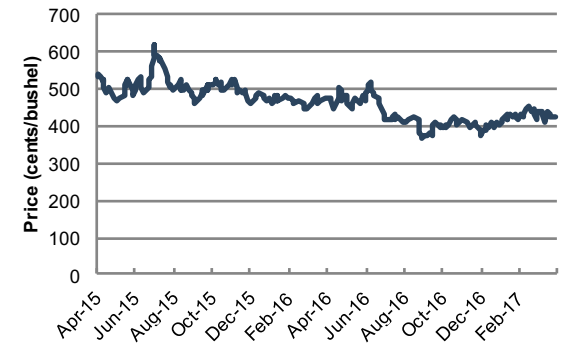
**Corn**



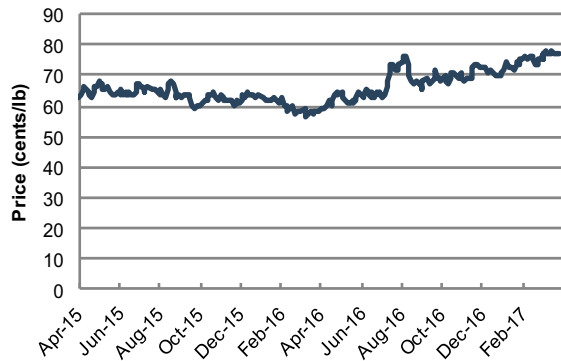
**Soybeans**



**Wheat**



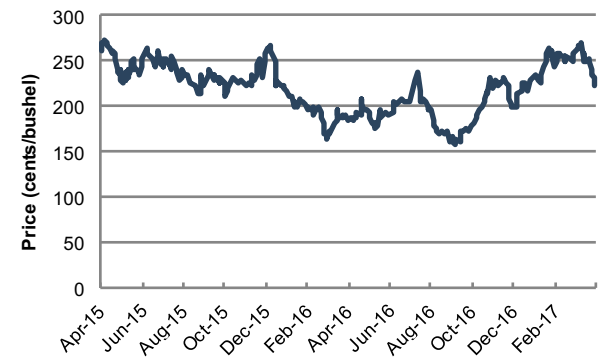
**Cotton**



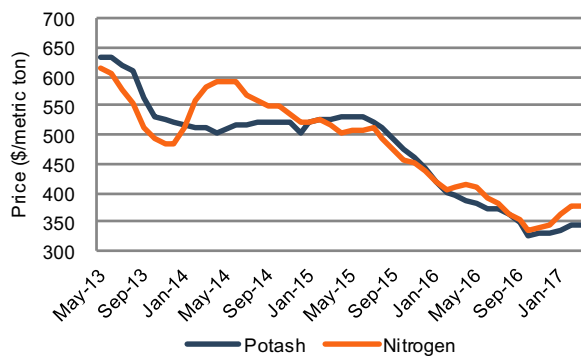
**Rough Rice**



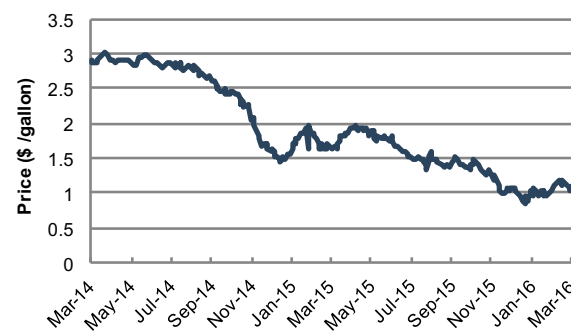
**Oats**



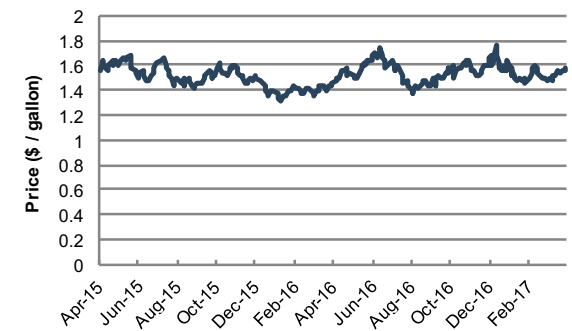
**Retail Fertilizer**



**Gulf Coast Diesel: Ultra-low Sulfur No. 2**



**Ethanol**

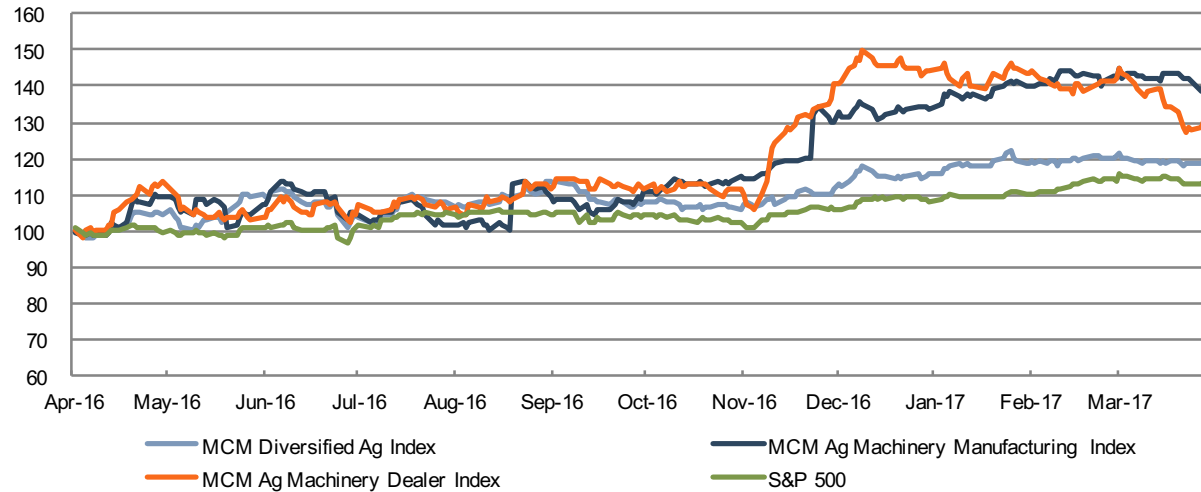


## Publicly Traded Agribusiness Companies

Company Name	Ticker	Price 3/31/17 (\$)	52 Wk Perform (Market Cap)	LTM Revenue (\$)	Enterprise Value (\$M)	Debt/ EV	EBITDA Margin	EV / LTM EBITDA (x)	TEV / Nxt Yr EBITDA (x)	Price/ LTM Earnings (x)
<b>Diversified Agribusiness</b>										
Agrium Inc.	TSX:AGU	95.24	7.7%	13,660	17,780	28.6%	11.5%	11.33	9.56	22.70
CF Industries Holdings, Inc.	NYSE:CF	29.35	-6.3%	3,718	14,600	39.6%	32.2%	12.21	11.16	NA
The Mosaic Company	NYSE:MOS	29.18	8.1%	7,067	13,403	29.5%	15.2%	12.50	10.63	254.82
Potash Corporation of Saskatchewan Inc.	TSX:POT	17.05	0.0%	3,824	18,917	24.4%	32.7%	15.15	13.11	36.06
Intrepid Potash, Inc.	NYSE:IPI	1.72	55.0%	140	346	25.5%	-6.0%	NA	24.49	NA
Terra Nitrogen Company, L.P.	NYSE:TNH	98.24	-11.7%	429	1,846	0.0%	59.4%	7.25	NA	11.92
Yara International ASA	OB:YAR	38.52	2.2%	10,847	12,288	16.3%	12.4%	9.12	6.75	17.20
Monsanto Company	NYSE:MON	113.20	29.0%	14,475	56,104	16.3%	29.4%	13.17	14.44	26.00
Syngenta AG	SWX:SYNN	442.02	5.9%	12,790	42,749	8.5%	20.5%	16.32	14.90	34.53
Archer-Daniels-Midland Company	NYSE:ADM	46.04	26.8%	62,950	32,321	22.3%	4.1%	12.54	10.61	19.35
Bunge Limited	NYSE:BG	79.26	39.9%	44,884	15,646	33.2%	3.3%	10.70	7.93	20.79
<b>Median - Diversified Agribusiness</b>			<b>7.7%</b>	<b>10,847</b>	<b>15,646</b>	<b>24.4%</b>	<b>15.2%</b>	<b>12.36</b>	<b>10.89</b>	<b>22.70</b>
<b>Agricultural Machinery &amp; Equipment</b>										
<b>Manufacturers</b>										
Deere & Company	NYSE:DE	108.86	41.4%	26,545	66,488	52.2%	14.6%	17.11	19.13	23.47
AGCO Corporation	NYSE:AGCO	60.18	21.1%	7,479	6,116	31.0%	7.7%	10.63	10.12	34.08
Lindsay Corporation	NYSE:LNN	88.12	23.1%	509	954	12.3%	10.8%	17.33	14.91	40.25
<b>Median - Manufacturers</b>			<b>23.1%</b>	<b>7,479</b>	<b>6,116</b>	<b>31.0%</b>	<b>10.8%</b>	<b>17.11</b>	<b>14.91</b>	<b>34.08</b>
<b>Dealers</b>										
Titan Machinery Inc.	NasdaqGS:TITN	15.34	32.7%	1,213	633	57.2%	2.2%	23.26	16.85	NA
Rocky Mountain Dealerships Inc.	TSX:RME	7.62	68.6%	714	387	70.9%	4.5%	12.06	14.04	11.68
Cervus Equipment Corporation	TSX:CERV	8.86	4.5%	850	259	57.4%	3.9%	7.84	7.13	9.12
<b>Median - Dealers</b>			<b>32.7%</b>	<b>850</b>	<b>387</b>	<b>57.4%</b>	<b>3.9%</b>	<b>12.06</b>	<b>14.04</b>	<b>10.40</b>

Source: Capital IQ

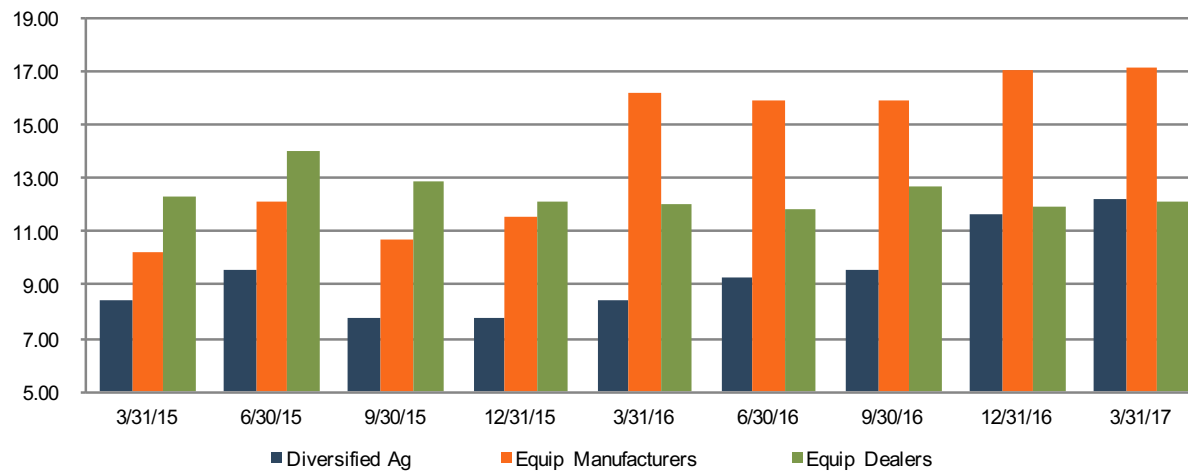
**Mercer Capital Agriculture Indices: One Year Performance**



12/31/13 = 100

Source: Yahoo! Finance

**Historical EV / EBITDA Multiples**



Source: Bloomberg

# Mercer Capital

Agribusiness Industry  
Services

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

## Industry Segments

Mercer Capital serves the following industry segments:

- Agriculture Machinery, Equipment, & Implements
- 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

Contact a Mercer Capital professional to discuss your needs in confidence.

## Contact Us

### Nicholas J. Heinz, ASA

901.322.9788

heinzn@mercercapital.com

### Timothy R. Lee, ASA

901.322.9740

leet@mercercapital.com

### Laura J. Stevens, CFA, ASA

901.322.9764

stevensl@mercercapital.com

### Mercer Capital

5100 Poplar Avenue, Suite 2600

Memphis, Tennessee 38137

901.685.2120 (P)

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