MERCER CAPITAL

VALUE FOCUS

Agribusiness Industry

SEGMENT FOCUS

Agriculture Machinery, Equipment & Implements

2016

Q1: Agriculture Machinery, Equipment & Implements

Q2: Crops and Crop Services

Q3: Agriculture Real Estate

Q4: Agriculture Chemicals

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Segment Focus

Agriculture Machinery, Equipment & Implements

The agricultural equipment industry enjoyed a strong run over the 2009 to 2013 period due to rising commodity prices, land values, and crop yields, as well as the benefits of the economic recovery. However, the decline in farm income in 2014 significantly depressed sales of agricultural machinery, with industry revenues only partially recovering in 2015. As lower commodity prices due to record high yields and reduced global demand persist, this will continue to **impact the disposable income available** to producers to fund new equipment purchases and upgrades. Lower farm incomes have also led to a greater proportion of agricultural equipment purchases being financed with debt.

The most recent **U.S. farm sector income forecast** projects net farm income of $56.4 billion in 2015, a 38% decline from the 2014 estimate of $90.5 billion, according to the USDA. Farm income is expected to remain at cyclical lows in 2016, falling another 3% to $54.8 billion. The largest contributors to the decline in income is a reduction in crop and livestock receipts, as government payments should remain fairly stable and input costs actually decline.

Manufacturers

The agricultural equipment manufacturing industry has been volatile for the five years to 2016, reporting negative 3.4% 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 0.8% through 2021. A December 2015 investor presentation from Deere & Company (**NYSE: DE**), the industry's market share leader, projects a 15%-20% decline for the agriculture segment of the business in the U.S. and Canada in 2016, with the decline most pronounced for higher-horsepower models (see also **Unit Retail Sales on page 2**).

Inventory management becomes a central focus of manufacturers during cyclical downturns (and cyclical peaks for that matter). Well managed inventory levels can reduce the amount of discounting necessary to move products, which has the potential to significantly erode margins. However, declining inventory levels are still generally considered a negative bellwether for the industry. CNH Industrial (**NYSE: CNHI**), another significant player in the agricultural equipment manufacturing industry, reported a 53% year-over-year decline in the production of North America row crop production units for the first quarter of 2016. CNH also reported a 27% year-over-year decline in units of row crop channel inventory. Both Deere and CNH are largely forecasting double digit revenue declines, depending on the region of the world, for their agricultural equipment segments in 2016.

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 2016, dealers continued to see the most **dramatic sales declines in the 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. Combine sales also continued to decline through March 2016.

United States Unit Retail Sales – March 2016

	March			YTD – March			Beginning Inventory
	2015	2014	%Chg	2015	2014	%Chg	Mar. 2015
2WD Farm Tractors							
< 40 HP	11,887	8,922	33.2	23,216	18,407	26.1	81,982
40 < 100 HP	4,810	4,369	10.1	11,776	11,406	3.2	40,238
100+ HP	1,711	2,101	-18.6	4,366	6,507	-32.9	11,021
Total 2WD Farm Tractors	**18,408**	**15,392**	**19.6**	**39,358**	**36,320**	**8.4**	**133,241**
4WD Farm Tractors	**191**	**375**	**-49.1**	**524**	**848**	**-38.2**	**810**
Total Farm Tractors	**18,599**	**15,767**	**18.0**	**39,882**	**37,168**	**7.3**	**134,051**
Self-Prop Combines	**274**	**331**	**-17.2**	**856**	**1,004**	**-14.7**	**859**

Source: Association of Equipment Manufacturers

Dealers (continued)

Inventory levels remain a concern for dealers. **According to a recent survey** of dealers by **Farm Equipment**, an industry publication, a net 42% of dealers reported new equipment inventories as "too high", while a net 40% of dealers reported used inventory levels as "too high." Combine inventory levels, in particular, have worsened (i.e., increased) in early 2016. Pricing, on the other hand, was flat for some segments (new equipment and small tractors) and down for others (7% decline for large tractors and 14% decline for used combines).

As one of the largest equipment dealer groups, Titan Machinery's (**NASDAQ: TITN**) fourth quarter 2016 results (Titan has a fiscal year ending January 31, 2016) clearly demonstrate the challenges facing the industry. Titan reported a 32% decline in year-over-year revenue for the fourth quarter and a gross margin of 4.8% in 4Q16 compared to 13.9% in 4Q15. Earnings were also impacted by several impairment charges related to inventory and long-live assets within the agriculture and construction segments.

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.

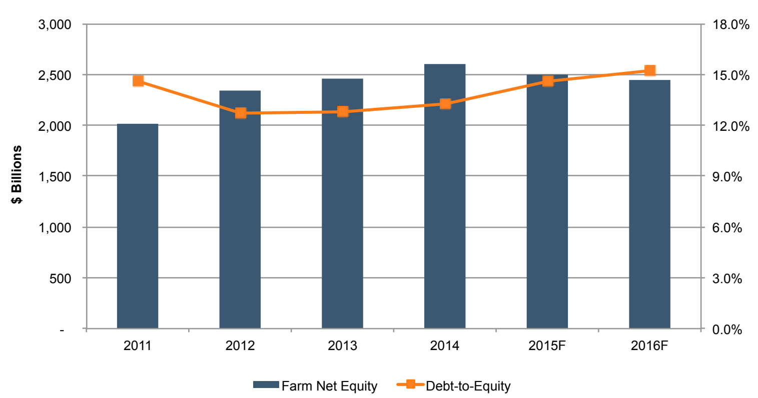
The efficiencies available through the use of increased technology in farming are potentially staggering. The NASS estimated in 2011 that crop producers in the United States could save 16 million gallons of fuel, 2 million quarts of herbicide and 4 million pounds of insecticide if guidance systems were used on only 10% of planted acres.

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, more recently 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 two years of lower commodity prices, although from a multi-decade perspective farm leverage **remains at historically low levels**.

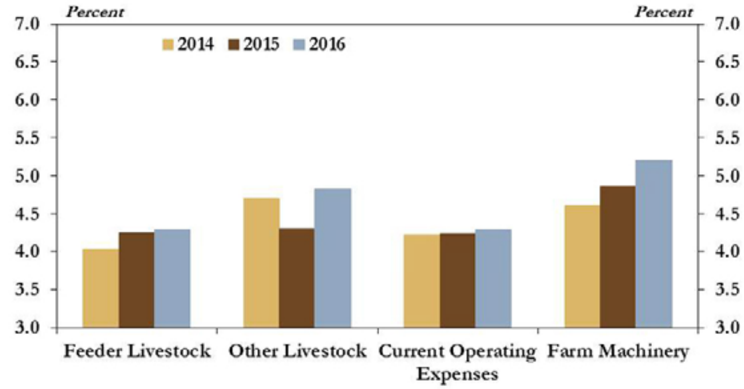
The effect of higher debt-to-equity ratios has manifested itself in the form of higher borrowing costs for farmers, as the Federal Reserve Bank of Kansas City **reported in April 2016** that interest rates have increased for all categories of non-real estate farm loans, as shown below. A large portion of machinery lending is likely not reflected in these amounts due to the fact it is dealer-financed. Despite higher farm sector leverage, delinquency and charge-off rates for agricultural loans remain near long-term historical lows.

Farm Balance Sheet Leverage



Source: United States Department of Agriculture Economic Reserach Service

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



Source: Agricultural Finance Databook, Table A.5, data obtained from the national Survey of Terms of Bank Lending to Farmers, conducted February 2016

Recent M&A Activity

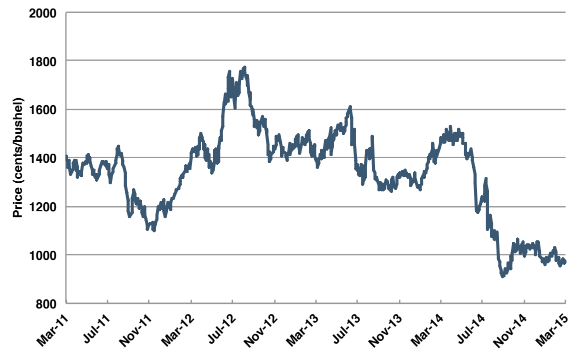
Agricultural Equipment

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 of the manufacturers are large, publicly-traded companies for which more information is available. One such company was the recent target of a large private equity buyout. On December 10, 2015, Blount International, Inc. (**NYSE: BLT**), **announced a definitive agreement to be acquired by two private equity firms** in an all-cash transaction valued at approximately $855 million, including the assumption of debt. The deal value equates to $10 per share for Blount's common equity, and represented an 86% premium over the prior day closing price of $5.38.

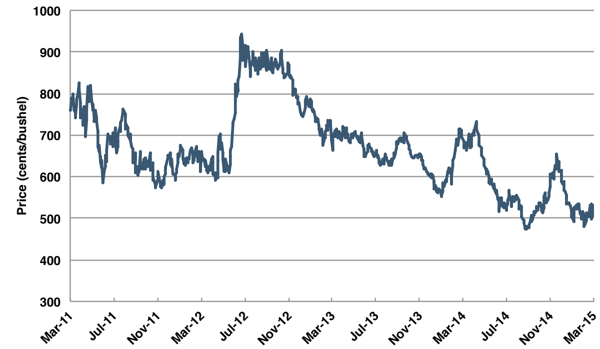
Despite the steep premium, a number of investors viewed the price as a "fire sale" executed at the low point of the commodities cycle, and lawsuits are likely to ensue. The transaction closed April 12, 2016. Although Blount is best known for its market-leading position in the chainsaw manufacturing industry, the company has a prominent Farm, Ranch and Agriculture segment.

Corn

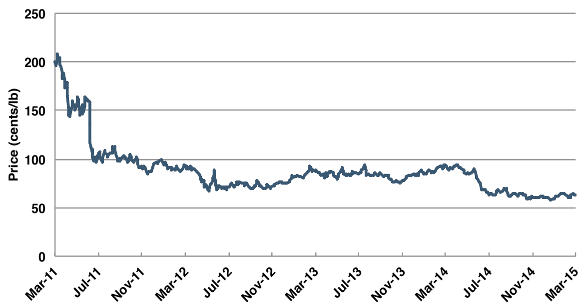
Soybeans



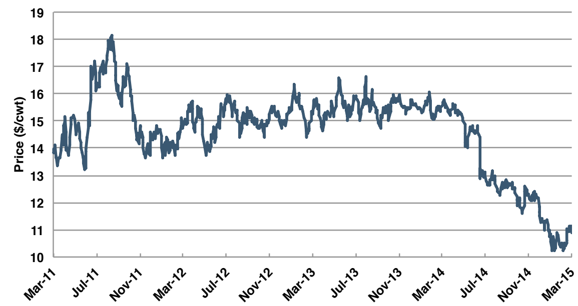
Wheat



Cotton

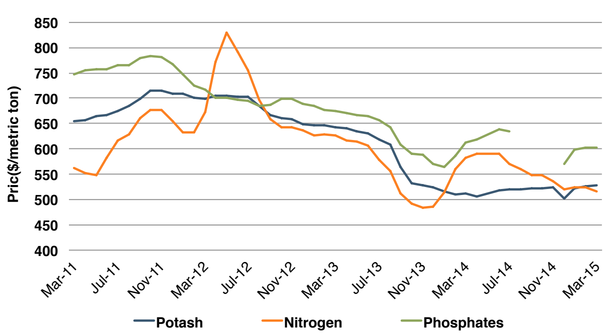


Rough Rice

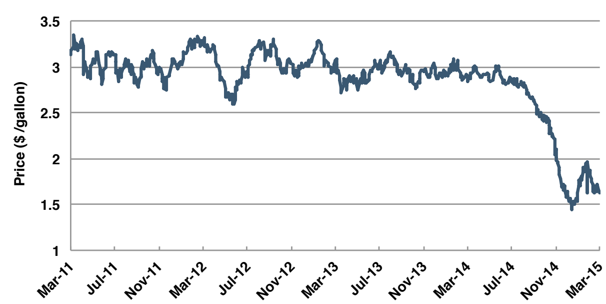


Oats

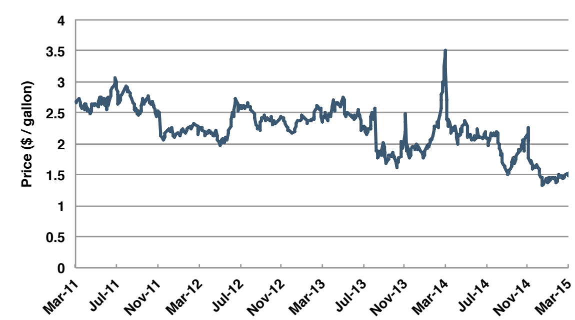
Retail Fertilizer



Gulf Coast Diesel: Ultra-low Sulfur No. 2



Ethanol

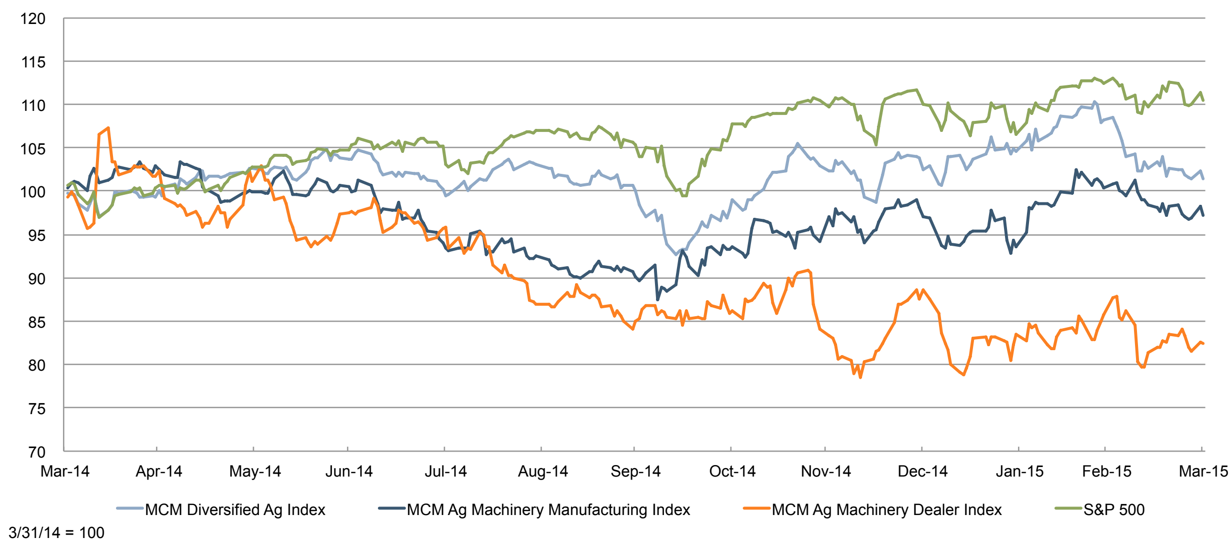


Publicly Traded Agribusiness Companies

Company Name	Ticker	March 31 Price ($)	52 Wk Perform (Market Cap)	Sales ($)	Enterprise Value ($M)	Debt/ MVTC	EBITDA Margin	EV/ EBITDA (x)	EV / Nxt Yr EBITDA (x)	Price/ Earnings (x)
Diversified Agribusiness										
Agrium Inc	AGU	104.27	10.4%	16,042	20,112	25.3%	10.6%	11.80	7.79	18.92
CF Industries Holdings Inc	CF	283.68	1.8%	4,743	18,304	25.1%	58.2%	6.63	7.01	10.73
Mosaic Co/The	MOS	46.06	-11.3%	9,056	20,761	18.5%	22.8%	10.07	7.61	17.12
Potash Corp of Saskatchewan Inc	POT	32.25	-9.0%	7,115	31,020	13.7%	40.0%	10.90	8.90	17.62
Intrepid Potash Inc	IPI	11.55	-25.3%	410	1,022	14.7%	23.5%	10.61	8.32	88.85
Rentech Nitrogen Partners LP	RNF	15.06	-15.8%	335	921	36.4%	19.3%	14.24	9.61	nm
Terra Nitrogen Co LP	TNH	145.71	3.0%	648	2,723	0.0%	60.7%	6.92	nm	12.07
Yara International ASA	YARIY	50.75	17.5%	15,122	16,040	12.8%	15.8%	6.73	nm	11.56
Monsanto Co	MON	112.54	-7.3%	15,582	62,590	13.0%	29.8%	13.49	11.26	22.83
Syngenta AG	SYT	67.81	-8.0%	15,134	10,523	40.9%	16.3%	4.26	3.37	3.85
Archer-Daniels-Midland Co	ADM	47.40	8.5%	81,201	35,884	15.9%	4.5%	9.83	8.50	13.82
Bunge Ltd	BG	82.36	4.2%	57,161	17,890	29.1%	2.7%	11.64	8.07	29.58
Median - Diversified Agribusiness			**-2.7%**	**12,089**	**18,097**	**17.2%**	**21.1%**	**10.34**	**8.19**	**17.12**
Agricultural Machinery & Equipment										
Manufacturers										
Deere & Co	DE	87.69	-8.9%	34,796	66,388	55.2%	18.3%	10.41	19.98	11.06
AGCO Corp	AGCO	47.64	-17.3%	9,724	5,339	20.5%	9.5%	5.76	7.33	10.98
Lindsay Corp	LNN	76.25	-19.1%	593	1,023	11.5%	14.0%	12.27	12.91	21.54
Art's-Way Manufacturing Co Inc	ARTW	4.72	-26.5%	36	29	33.9%	7.1%	11.24	nm	20.52
Median - Manufacturers			**-18.2%**	**5,159**	**3,181**	**27.2%**	**11.8%**	**10.83**	**12.91**	**15.79**
Dealers										
Titan Machinery Inc	TITN	13.35	-14.2%	2,118	1,317	78.3%	3.3%	18.72	25.44	nm
Rocy Mountain Dealerships	RME	8.85	-19.7%	962	212	21.7%	4.3%	5.19	nm	11.49
Cervus Equipment	CVL	18.99	-9.8%	926	407	29.2%	4.7%	9.28	nm	16.09
Median - Dealers			**-14.2%**	**962**	**407**	**29.2%**	**4.3%**	**9.28**	**25.44**	**13.79**

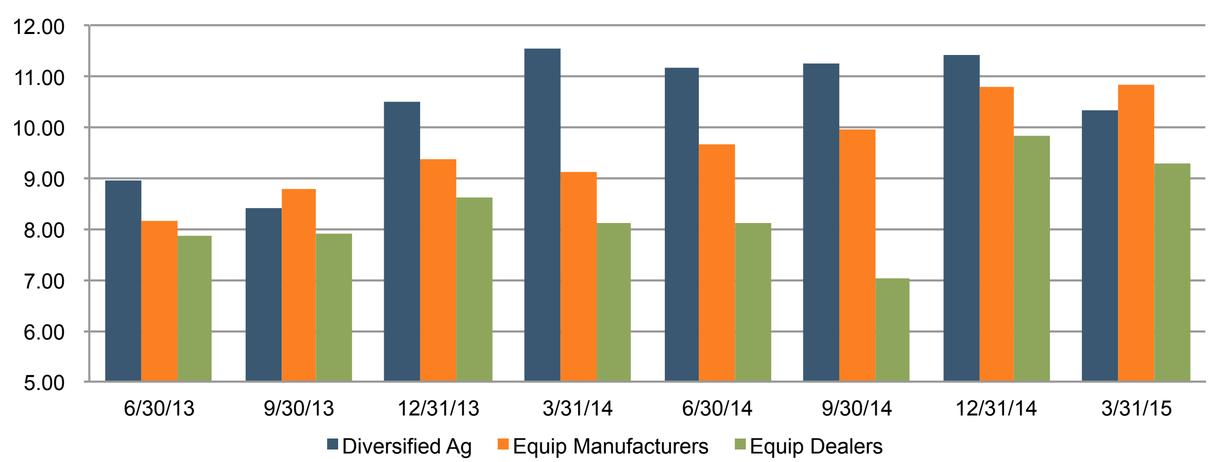
Source: Bloomberg

Mercer Capital Agriculture Indices: One Year Performance



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.

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