

VALUE FOCUS

Agribusiness Industry



2014

Q1: Agriculture Machinery, Equipment, & Implements

Q3: Agriculture Real Estate

Q2: Crops and Crop Services

Q4: Agriculture Chemicals

Segment Focus

Agriculture Real Estate

2014 Third Quarter

Agricultural Land Values

The 2014 USDA Land Values Summary indicates that agricultural land values continue to increase, which is the environment farmers and ranchers have now found themselves in for more than half a decade. The value of agricultural real estate across the United States, which includes the value of all land and buildings on farms, averaged \$2,950 per acre for 2014, up 8.1% from 2013 values.¹ Since 2013, cropland value has grown 7.6% to \$4,100 per acre, and pasture land prices have increased by 11.1% to \$1,300 per acre. Farm real estate (including both land and structures) is by far the largest asset on the farm sector balance sheet, accounting for 82% of total U.S. farm assets in 2012.² Any material shifts in the agricultural real estate market could have a significant impact on farmers across the country.

While year-over-year values for farmland increased, recent reports indicate a slowdown in farmland price appreciation, suggesting prices may be flattening. In a report from the Federal Reserve Bank of St. Louis, quality farmland values in the 8th District dropped 0.4% from the first to the second quarter of 2014. Quality farmland and pastureland values for the same time in 2013 were 6.7% and 7.5% lower, respectively, from their peak levels in fourth quarter 2013.^{3,4}

Figure 1: Cropland, Average Value per Acre – Region and United States: 2010–2014

Region	2010	2011	2012	2013	2014	Change 2013-14	Change 2010-14
Northeast	\$5,270	\$5,200	\$5,280	\$5,260	\$5,260	0.0%	-0.2%
Lake	3,010	3,310	3,790	4,240	4,670	10.1%	55.1%
Corn Belt	4,090	4,810	5,600	6,470	7,000	8.2%	71.1%
Northern Plains	1,410	1,730	2,210	2,720	3,090	13.6%	119.1%
Appalachian	3,490	3,440	3,550	3,690	3,780	2.4%	8.3%
Southeast	3,800	3,810	3,710	3,690	3,730	1.1%	-1.8%
Delta	1,890	2,020	2,160	2,380	2,510	5.5%	32.8%
Southern Plains	1,400	1,450	1,500	1,480	1,630	10.1%	16.4%
Mountain	1,520	1,540	1,600	1,780	1,690	-5.1%	11.2%
Pacific	4,980	5,070	5,310	5,690	5,860	3.0%	17.7%
United States*	2,700	2,980	3,350	3,810	4,100	7.6%	51.9%

*Excludes Alaska, Hawaii, and American Indian Reservation land
 Source: USDA Land Values 2014 Summary

Agricultural Land Values (cont.)

The Kansas City Federal Reserve Bank has seen year-over-year farmland value gains moderate substantially. Value for irrigated and non-irrigated land in the 10th District increased 4% to 7% from the previous year in the first and second quarter of 2014, compared to increases of 20% or more reported from 2011 to 2013.⁵

The Chicago Federal Reserve Bank reported a 2% increase in farmland values for the 7th District from the first to the second quarter of 2014, far less than the 12% to 20% gains seen in previous quarters.⁶

These recent slowdowns in price appreciation are primarily attributable to the rapid drop in major commodity prices. Corn, soybean, and wheat prices have fallen to their lowest levels in four years after federal forecasters predicted record-setting harvests in 2014. Favorable weather conditions and greater than normal rainfall have allowed crops to thrive, setting up for considerable crop yields across the U.S.⁷ Agricultural Bankers surveyed by the St. Louis, Chicago, and Kansas City Federal Reserve Banks all predict farmland values to flatten or decline through the rest of 2014.⁸

Pastureland Trends Remain Strong

Overall farmland price appreciation may be slowing, but pastureland values continue to climb. Pastureland appreciation gains outpaced cropland for the first time since 2009, increasing to \$1,300 an acre, primarily due to rising beef prices. Calf producers are predicted to clear a record profit of more than \$400 per calf this year, and market participants expect pastureland values to continue to rise as producers seek to gain control of land to expand their herds.⁹

Figure 2: Pasture Average Value per Acre – Region and United States: 2010-2014

Region	2010	2011	2012	2013	2014	Change 2013-14	Change 2010-14
Northeast	\$3,170	\$3,220	\$3,240	\$3,370	\$3,460	2.7%	9.1%
Lake	1,710	1,710	1,740	1,870	1,950	4.3%	14.0%
Corn Belt	1,900	2,000	2,130	2,290	2,360	3.1%	24.2%
Northern Plains	502	531	648	754	954	26.5%	90.0%
Appalachian	3,240	3,170	3,110	3,210	3,280	2.2%	1.2%
Southeast	4,190	3,900	3,700	3,770	3,790	0.5%	-9.5%
Delta	2,110	2,120	2,130	2,190	2,270	3.7%	7.6%
Southern Plains	1,300	1,350	1,390	1,410	1,540	9.2%	18.5%
Mountain	518	523	550	594	611	2.9%	18.0%
Pacific	1,660	1,620	1,590	1,590	1,610	1.3%	-3.0%
United States*	1,060	1,070	1,110	1,170	1,300	11.1%	22.6%

*Excludes Alaska, Hawaii, and American Indian Reservation land

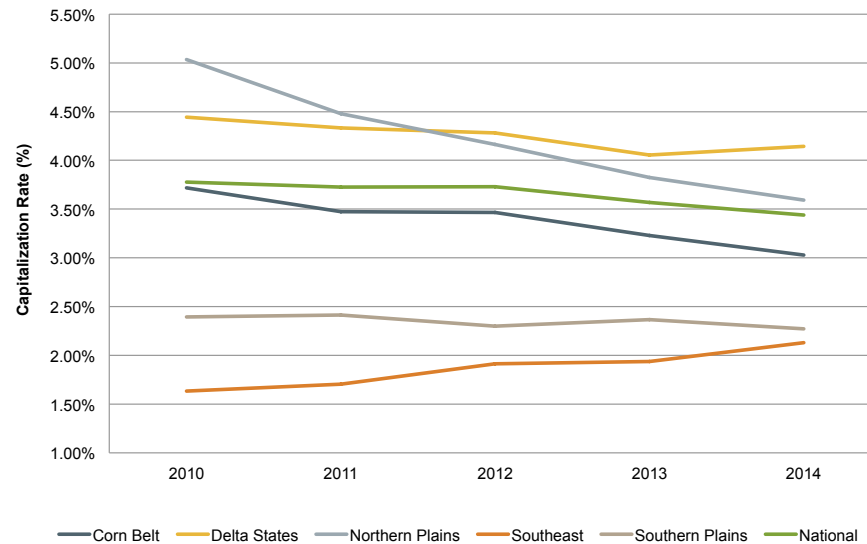
Source: USDA Land Values 2014 Summary

Farmland Cap Rates and Investment

Figure 3 shows capitalization rates for cropland in select geographic regions based on cash rents and cropland values provided by the USDA National Agricultural Statistics Service. Since 2010, capitalization rates nationally have trended downward, as cash rents have lagged the large increases in farmland prices. Current capitalization rates are well below 4%, even trending below 3.5% in some geographies. These rates continue to push cropland values above typical valuation ratios (i.e., price to earnings multiples above 25x to 30x). In areas such as the Southeast, cropland capitalization rates have been climbing, likely reflecting both somewhat lower land prices and higher rents, although the cap rates are still well below national averages. Corn Belt, Delta, and Northern Plains real estate has continued to become more expensive as land prices quickly appreciate. This trend may reverse as land prices plateau or borrowing costs begin increasing from current historic lows.

In the wake of the recent financial crisis, there has been a rising demand for investment opportunities in farmland as an asset class (as opposed to investment by owner-operators). Farmland is popular because it can produce a steady income in the form of rents paid by farmers who are growing crops or raising livestock. Land can also serve as a hedge against inflation because the income it generates and its value typically will rise if inflation increases. Land also tends to be less volatile than other assets such as stocks, while still providing positive returns for investors.

Figure 3: Capitalization Rates for U.S. and Select Regional Cropland, 2010-2014

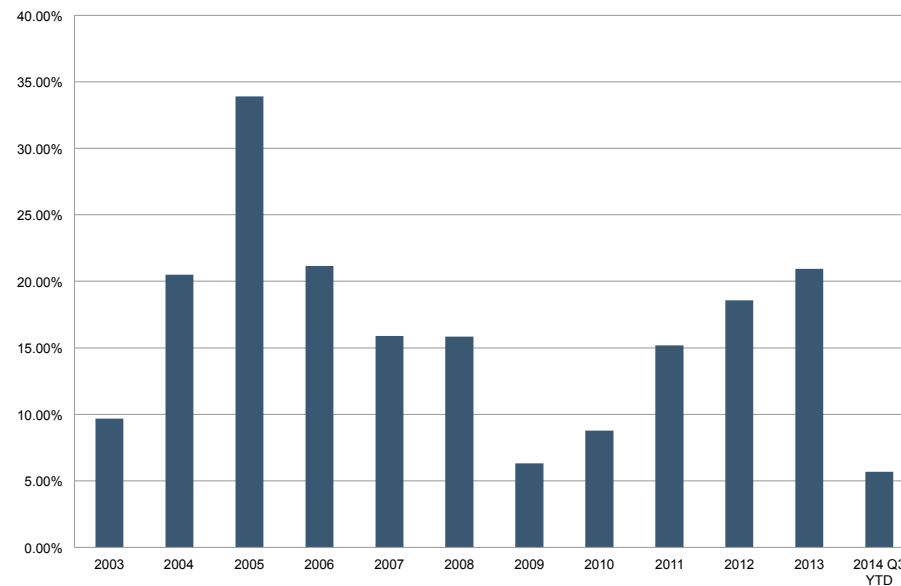


Source: USDA NASS

Farmland Cap Rates and Investment (cont.)

Figure 4 presents annual farmland returns earned by investors of individual agricultural properties that were acquired in the private market for investment purposes only (primarily pension funds and other institutional investors). Returns on farmland investments have increased consistently since 2009, when they reached their lowest point of the past ten years. Even then, returns for 2009 were still north of 6%. Farmland returned 20.9% in combined appreciation and income in 2013 and has returned an average 12.5% per year for the past two decades. Land prices are expected to flatten or decline this year, potentially lowering the annual return for investors in 2014.¹⁰

Figure 4: Annualized Farmland Returns



Source: National Council of Real Estate Investment Fiduciaries

2012 Census of Agriculture

In May 2014 the USDA released the 2012 Census of Agriculture.¹¹ The census has been conducted since 1840 and is collected once every five years. The following graphs and tables, derived from data from the most recent census, describe current characteristics of farmland and farmers in the U.S.

Currently over 40% of all land in the U.S. is farmland, a number that has remained relatively flat since 2007. During that same time, the total number of farms shrank more than 4% and average farm size increased by nearly the same amount, continuing a consolidating trend that has been occurring for several decades.

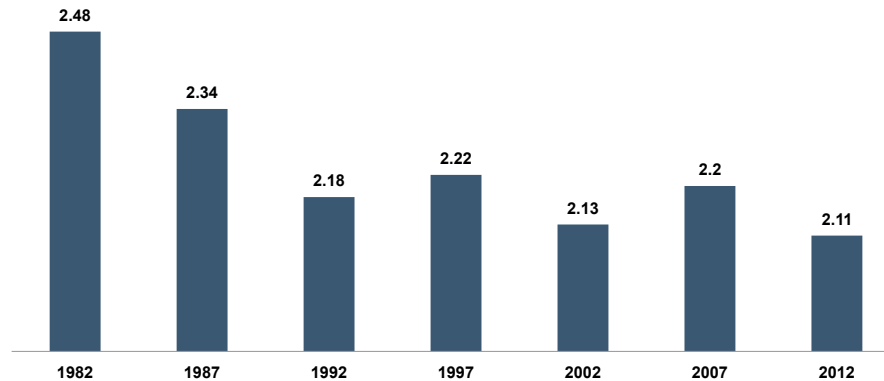
Figure 5: Average U.S. Farm Size

	2007	2012	% Change
Number of Farms	2,204,792	2,109,303	-4.3%
Total Farmland (Acres)	922,095,840	914,527,657	-0.8%
Average Farm Size (Acres)	418	434	3.7%

Source: 2012 Census of Agriculture

Figure 6: Number of U.S. Farms, 1982 - 2012

(millions of Farms)

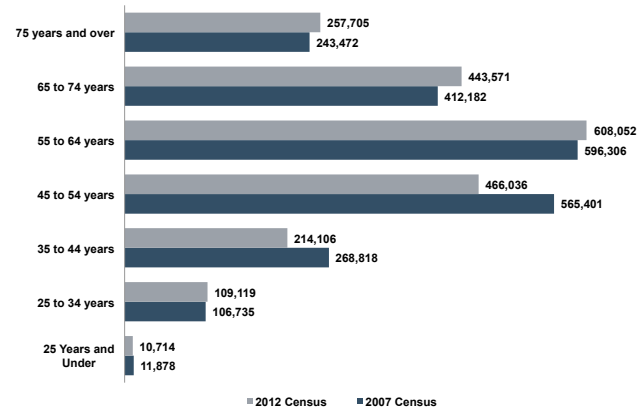


Source: 2012 Census of Agriculture

2012 Census of Agriculture (cont.)

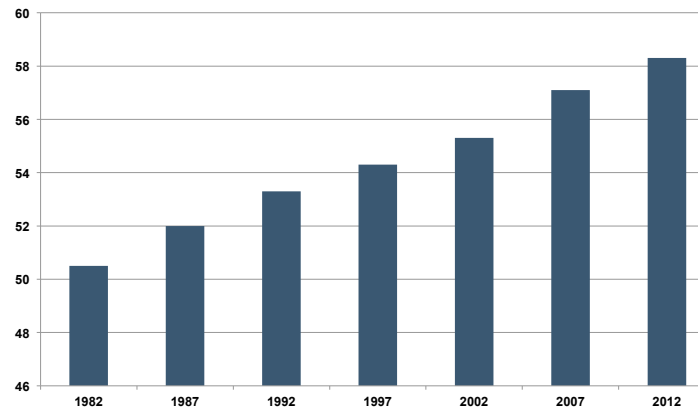
As with many industries, farming is experiencing changing demographics as a result of the aging baby boomer population. The average farmer in 2012 was three years older than in 2002 and nearly eight years older than the average farmer in 1982. Although second and third operators of farms are younger, their average ages also increased relative to prior censuses. Among principal operators, 6% are under 35 years old, 61% are 35 to 64 years, and 33% are 65 and older. In terms of principal operators, older age groups increased their share of farms from 2007 to 2012, and the low number of young farmers is beginning to cause concerns for the industry.

Figure 7: Principal Operators by Age Group, 2007-2012



Source: 2012 Census of Agriculture

Figure 8: Average Age of Principal Farm Operator, 1982-2012



Source: 2012 Census of Agriculture

2012 Census of Agriculture (cont.)

The number of beginning farmers (those who have owned their farms/operations 10 years or less) has fallen sharply, dropping 20% between 2007 and 2012. Beginning farmers still operate close to 25% of the over 2.1 million farms in the U.S, although this percentage has shrunk almost 5% since 2007. The number of beginning farmers operating their farms for five years or less dropped further than those operating their farms for six to ten years, declining 22% and 18% respectively.

Land and equipment prices may be behind the decline in the number of beginning farmers' operations. The price of farmland across the country has appreciated almost 40% since 2010, and some equipment (for example, tractors and combines) can cost hundreds of thousands of dollars.¹² These factors have significantly raised the barriers to entry, dissuading new and younger farmers from entering into operations. If land prices begin to flatten, beginning farmers could find it easier to enter the market.

Figure 9: Number of Beginning Farmers

	2007	2012	% Change
All Beginning Farmers			
10 years or less on current operation	652,820	522,058	-20.0%
Five years or less	291,329	226,670	-22.2%
Six to ten years	361,491	295,388	-18.3%
% of Farms Operating	29.6%	24.8%	-16.4%

Source: 2012 Census of Agriculture

Farm Income

Overall, the economic picture is worsening for many U.S. farmers (although the decline is in the context of very favorable recent market conditions). Net U.S. farm income is expected to fall 13.8% in 2014 to \$113.2 billion, the lowest level in four years, according to the USDA. This drop is heightened by record net income of \$131.3 billion in 2013, the highest inflation-adjusted level since 1973. Crop receipts are expected to decline 7% in 2014, led by a \$12.8 billion decline in corn receipts. Provisions in the 2014 Farm Bill are expected to reduce government payments by 15%.¹³

This decrease is narrower than the 27% drop forecasted earlier in 2014, due to an improved outlook for livestock farmers, who are benefiting from record prices for beef and pork as well as low prices for corn and other grains used in animal feed. Disease and drought in some regions of the country have shrunk herd totals to some of the lowest levels recorded. As of July 2014, herds in the U.S. totaled 95 million head of cattle, the lowest cattle and calf inventory since the series began recording in 1973.¹⁴ Dairy farmers are benefiting from the reduced feed costs as well, along with stronger foreign demand for milk. Livestock receipts are expected to increase over 15% overall in 2014, due to a 21% increase in dairy, a 20% increase in hog, and a 15% increase in cattle receipts.¹⁵

Government Legislation/Regulation

The Farm Bill, which has existed in various forms since the 1930s, is the most important piece of legislation affecting agribusiness. The omnibus bill has generally provided various types of assistance to the agriculture industry, including income and commodity price support, farm credit and risk management, research, and economic development, along with appropriations for the Supplemental Nutrition Assistance Program (SNAP). A Farm Bill is typically passed for a five year period, at the end of which it is renewed and updated.

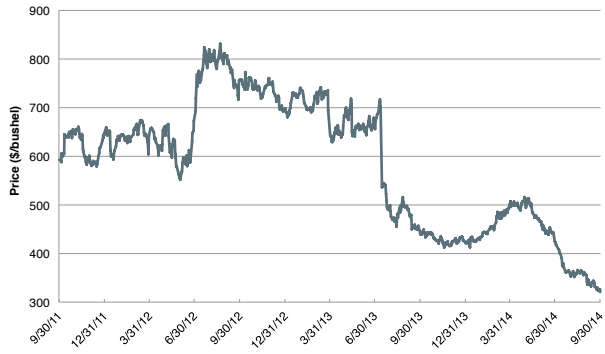
The Agricultural Act of 2014 was signed into law in February of 2014, and will remain in effect through 2018. The bill appropriates \$89.8 billion for crop insurance (\$6 billion more than previous law), \$44.4 billion for commodity programs (\$14 billion less), \$56 billion for conservation (\$4 billion less), and \$3.5 billion for trade assistance (no substantial change) from Fiscal Year 2013 through 2023. Perhaps one of the most important changes that occurred in the new Bill relates to the Direct Payments program, a system that pays farmers whether they incur losses or not. The elimination of Direct Payments is partially offset by higher payments for supplemental disaster assistance. However, this change results in a net 15% decline in projected government payments to farmers.^{16 17}

As discussed above, the aging population of farmers is a concern for the industry. The 2014 Farm Bill has provisions that attempt to address the aging farmer issue. The Bill is continuing its loan program for beginning farmers, providing \$100 million for programs aimed at beginning farmers and ranchers over the next ten years. The Bill also aims to increase access to capital along with crop insurance and risk management tools. The Bill will reduce crop insurance premiums during the first five years of farming in an attempt to reduce the financial burden on new farmers.

References and Data Sources

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- ³ "Midwest Farmland Values Flatten as Market Cools," Online, Subscription, <http://online.wsj.com/articles/midwest-farmland-values-were-mostly-flat-in-second-quarter-1408025222>, Accessed October 14, 2014.
- ⁴ "Agricultural Conditions in the Eighth Federal Reserve District," Online, Available, <http://research.stlouisfed.org/publications/afm/2014/afmq2.pdf>, Accessed October 14, 2014.
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- ⁸ "Midwest Farmland Values Flatten as Market Cools," Online, Subscription, <http://online.wsj.com/articles/midwest-farmland-values-were-mostly-flat-in-second-quarter-1408025222>, Accessed October 14, 2014.
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- ¹² "The Rapidly Aging U.S. Farmer," Online, Available, <http://www.usnews.com/news/blogs/data-mine/2014/02/24/us-farmers-are-old-and-getting-much-older>, Accessed October 22, 2014.
- ¹³ "2014 Farm Sector Income Forecast," Online, Available, <http://www.ers.usda.gov/topics/farm-economy/farm-sector-income-finances/2014-farm-sector-income-forecast.aspx#.VD1pnfldU68>, Accessed October 14, 2014.
- ¹⁴ "July 1st Cattle Inventory down 3% from 2012," Online, Available, <http://usda.mannlib.cornell.edu/usda/current/Catt/Catt-07-25-2014.pdf>, Accessed October 14, 2014.
- ¹⁵ Ibid.
- ¹⁶ Agricultural Act of 2014: Highlights and Implications," Online, Available, http://www.ers.usda.gov/agricultural-act-of-2014-highlights-and-implications.aspx#.VD1sF_IdU68, Accessed October 14, 2014.
- ¹⁷ "2014 Farm Bill Highlights," Online, Available, <http://www.usda.gov/documents/usda-2014-farm-bill-highlights.pdf>, Accessed October 14, 2014.

Corn



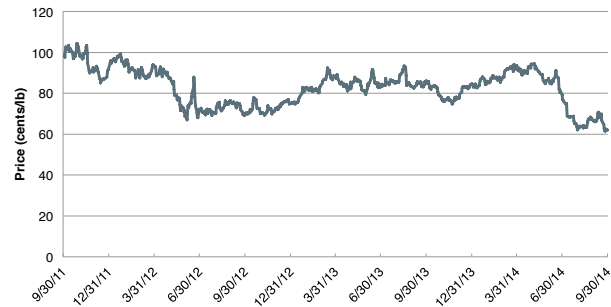
Soybeans



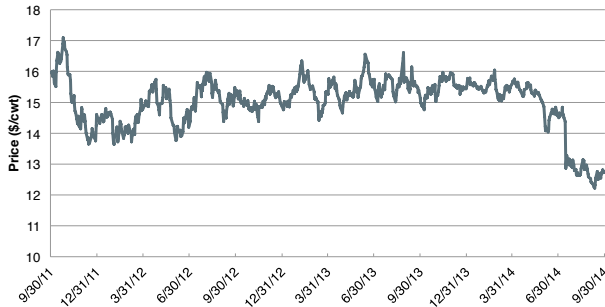
Wheat



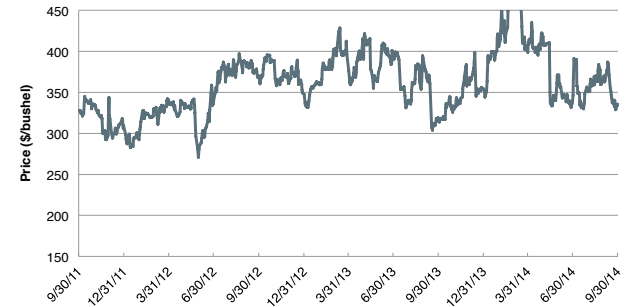
Cotton



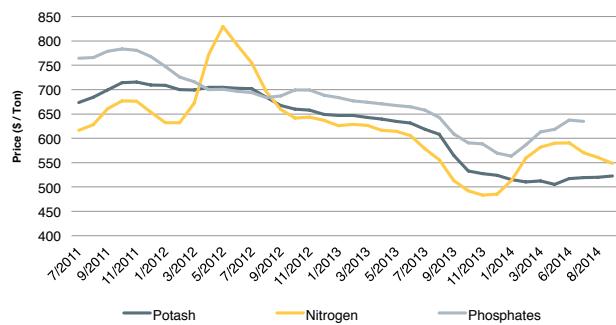
Rough Rice



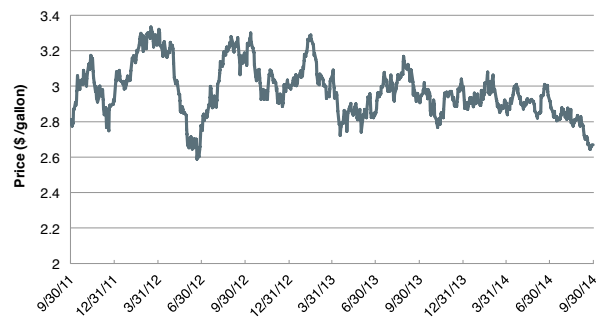
Oats



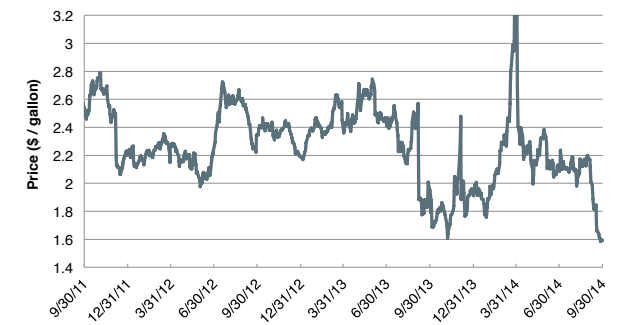
Retail Fertilizer



Gulf Coast Diesel: Ultra-low Sulfur No. 2



Ethanol

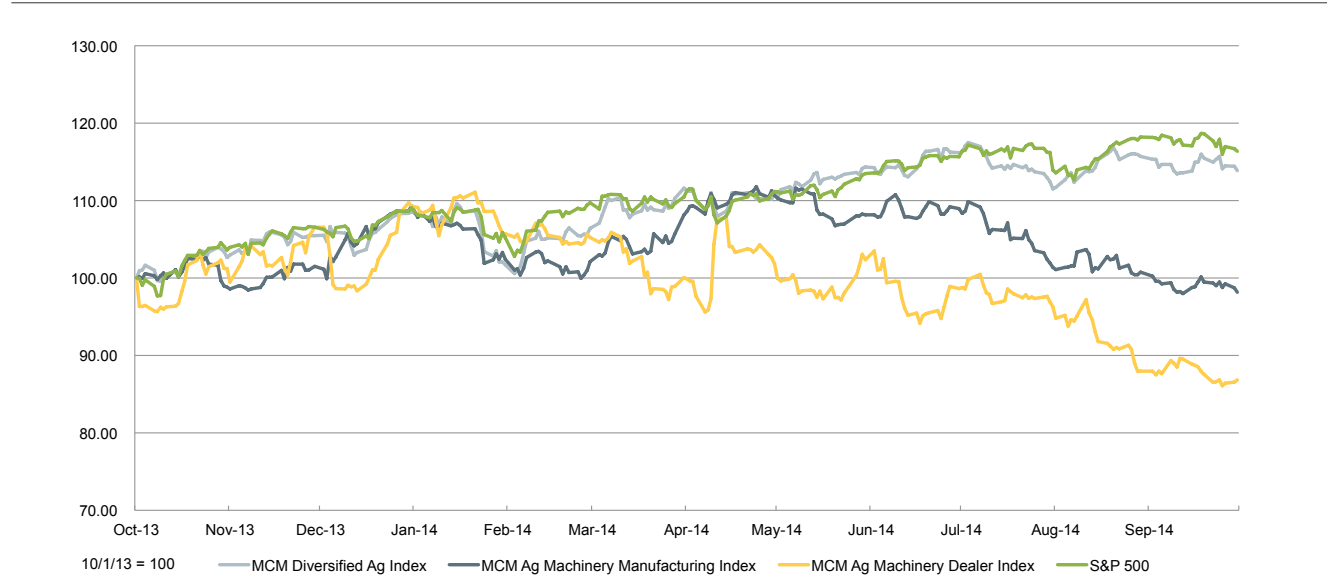


Publicly Traded Agriculture Companies

Company Name	Ticker	Sept. 30 Price (\$)	52 Wk Perform	Sales (\$)	Enterprise Value (\$M)	Debt/Equity	EBITDA Margin	EV/EBITDA (x)	EV / Nxt Yr EBITDA (x)	Price/Earnings (x)
Diversified Agribusiness										
Agrium Inc	AGU	89.00	6.5%	16,153	17,132	25.2%	10.5%	10.09	9.12	15.67
CF Industries Holdings Inc	CF	279.22	15.5%	5,029	18,461	24.9%	44.9%	8.17	8.15	9.70
Mosaic Co/The	MOS	44.41	-5.7%	8,517	19,936	15.2%	21.3%	10.97	9.06	25.09
Potash Corp of Saskatchewan Inc	POT	34.56	10.1%	6,633	32,801	12.6%	38.1%	12.96	11.04	21.20
Intrepid Potash Inc	IPI	15.45	-1.3%	354	1,317	11.4%	21.3%	17.44	13.36	1,009.80
Rentech Nitrogen Partners LP	RNF	12.44	-47.6%	318	804	39.8%	15.6%	16.19	10.66	nm
Terra Nitrogen Co LP	TNH	144.40	-24.1%	642	2,698	0.0%	64.1%	6.55	nm	11.40
Yara International ASA	YARIY	50.23	25.7%	14,254	15,427	10.1%	13.6%	7.98	nm	14.77
Monsanto Co	MON	112.51	8.5%	15,427	62,210	5.2%	29.9%	13.50	13.00	22.64
Syngenta AG	SYT	63.37	-19.6%	14,806	10,503	44.6%	18.9%	3.76	3.38	3.60
Archer-Daniels-Midland Co	ADM	51.10	39.3%	87,726	38,735	14.5%	3.8%	11.49	10.37	20.52
Bunge Ltd	BG	84.23	11.7%	61,330	21,709	40.2%	2.8%	12.73	10.68	192.48
Median - Diversified Ag			7.5%	11,385	17,797	14.8%	20.1%	11.23	10.51	20.52
Agricultural Machinery & Equipment										
Manufacturers										
Deere & Co	DE	81.99	-3.3%	36,553	66,146	55.6%	18.9%	9.59	12.10	9.21
AGCO Corp	AGCO	45.46	-26.8%	10,419	5,496	22.3%	10.5%	5.03	5.56	8.31
Lindsay Corp	LNN	74.75	-8.4%	619	952	0.0%	14.9%	10.31	10.77	19.07
Blount International Inc	BLT	15.13	25.3%	915	1,158	35.4%	13.5%	9.36	8.48	84.06
Art's-Way Manufacturing Co Inc	ARTW	5.00	-26.8%	32	32	37.1%	3.8%	26.15	nm	100.00
Median - Manufacturers			-8.4%	915	1,158	35.4%	13.5%	9.59	9.62	19.07
Dealers										
Titan Machinery Inc	TITN	12.99	-18.5%	2,213	1,361	79.6%	3.4%	18.27	17.38	649.50
Rocy Mountain Dealerships	RME	10.81	-2.3%	999	258	19.7%	3.9%	6.68	nm	14.22
Cervus Equipment	CVL	18.91	0.0%	918	336	15.5%	5.2%	7.03	nm	15.25
Median - Dealers			-2.3%	999	336	19.7%	3.9%	7.03	17.38	15.25

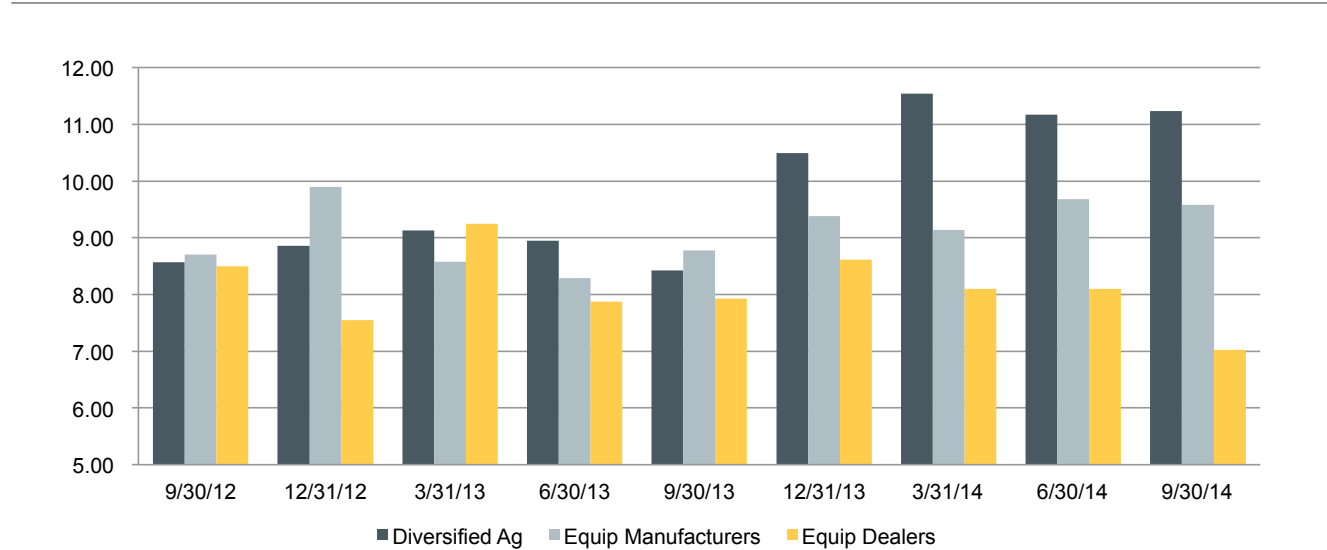
Source: Bloomberg

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

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

Services Provided

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- 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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