

Ag Equipment Intelligence

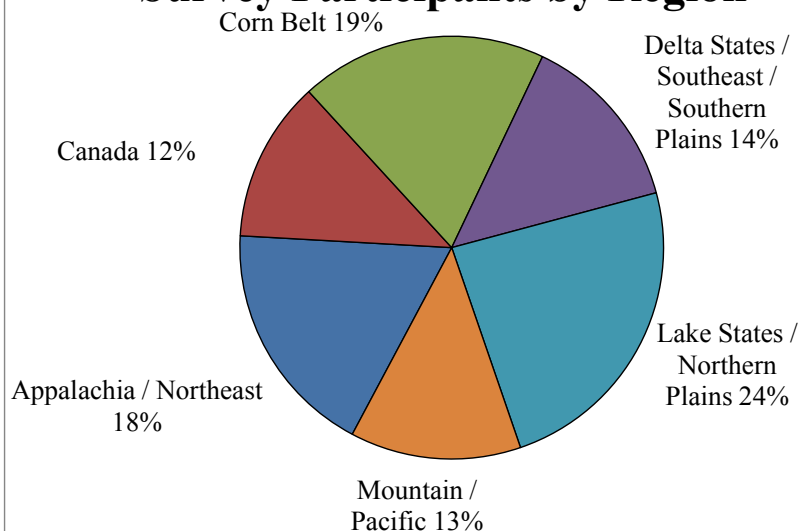
October 2016 Dealer Sentiments &
Business Conditions Update

Monthly Ag Equipment Intelligence North American Dealer Survey

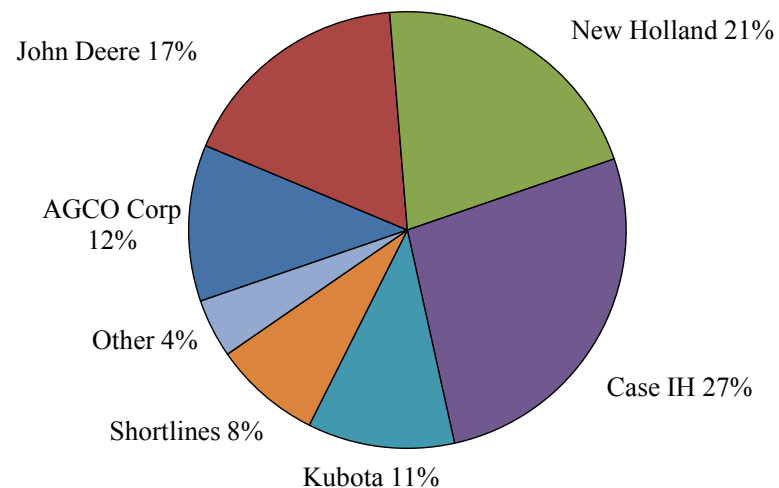
Background:

- We are pleased to announce the results of the September Ag Equipment Intelligence survey conducted in partnership with Cleveland Research Company. We hope this monthly survey will provide valuable and timely insight into industry trends and fundamentals.
- The September survey had ~140 respondents representing combined annual revenues of roughly \$6 billion. Participants representing a broad cross section of geographies and brands are summarized in the charts below.

Survey Participants by Region



Participants by Brand



Appalachia / Northeast – CT, DE, KY, MA, MD, ME, NC, NH, NY, NJ, PA, RI, TI, TN, VA, VT, WV, **Corn Belt** – IL, IN, IA, MO, OH, **Delta States / Southeast / Southern Plains** – AL, AR, FL, GA, LA, MS, OK, SC, TX, **Lake States / Northern Plains** – KS, MI, MN, NE, ND, SD, WI, **Mountain / Pacific** – AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, UT, WA, WY. Note AGCO represents Massey Ferguson and Challenger brands. *Note regions have been condensed.

Highlights / Summary Thoughts

- **Sales** – Average dealer sales were reported down 7% y/y in September vs the 11% decline reported in August. A net 28% of dealers missed their sales budget, inline with August. A net 33% of dealers reported a sales decline in the month, an improvement from the net 43% citing a decline in August. Commercial and consumer lawn equipment sales continue to show strength, while large equipment demand remains very weak.
- **Outlook** – The full year 2016 dealer average sales growth forecast improved to down 12% from down 15% in August as monthly sales have trended better than forecast year to date (sales YTD are down 10%). A net 48% of dealers are forecasting a sales decline for the year vs a net 45% forecasting a decline last month. The sales growth forecast for 2017 was reported at down 8% on average compared to the down 3% reported last month.
- **Inventory** – A net 43% of dealers reported new equipment inventories as too high, inline with the past 2 months. Used inventory levels were reported slightly lower than August, as a net 38% of dealers reported inventory as too high vs. 40% last month.
- **Pricing** – Dealers reported relatively flat new equipment pricing as OEM price increases have been offset by greater discounting at the dealer level. Used tractors were reported down 7% y/y on average, slightly better than the 8% reported in August. Used combine pricing was down 11% y/y, inline with August.

Monthly Sales Growth

- Average dealer sales were reported down 7% y/y in September, an improvement from the 11% decline in August. A net 28% of dealers missed their sales budgets in September, compared to the 27% that missed budget last month.
- A net 24% of dealers report they are less optimistic about overall business conditions vs 25% in August. Optimism has been negative for more than two years.

N. American Farm Equipment Dealer Survey - Average Dealer Sales Growth

% Change y/y	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16
AGCO	-8%	-1%	4%	-12%	-24%	-13%	-14%	-22%	-27%	-9%	-13%	-7%	-18%	-4%	-1%	-19%	-7%	-22%	-12%
John Deere	-8%	-11%	-15%	-14%	-19%	-14%	-15%	-16%	-12%	-16%	-11%	-11%	-13%	-11%	-6%	-8%	-16%	-17%	-4%
New Holland	-3%	-2%	-7%	-5%	-17%	-12%	-23%	-14%	-13%	-15%	-11%	-10%	-15%	-16%	2%	-3%	-8%	-11%	-12%
Case IH	-13%	-16%	-19%	-19%	-17%	-19%	-20%	-19%	-22%	-18%	-18%	-20%	-15%	-9%	-19%	-8%	-5%	-11%	-8%
Kubota	-4%	-1%	0%	0%	0%	-3%	-2%	2%	-5%	-13%	-8%	0%	8%	2%	6%	2%	8%	1%	4%
Shortlines/Other	-18%	-8%	-6%	-16%	-7%	-38%	-7%	-9%	-8%	-8%	-9%	-1%	-4%	-6%	-7%	-4%	8%	-22%	-22%
Total	-8%	-10%	-13%	-13%	-18%	-15%	-16%	-16%	-16%	-15%	-13%	-12%	-13%	-10%	-6%	-9%	-8%	-11%	-7%

Source: Cleveland Research, AEI

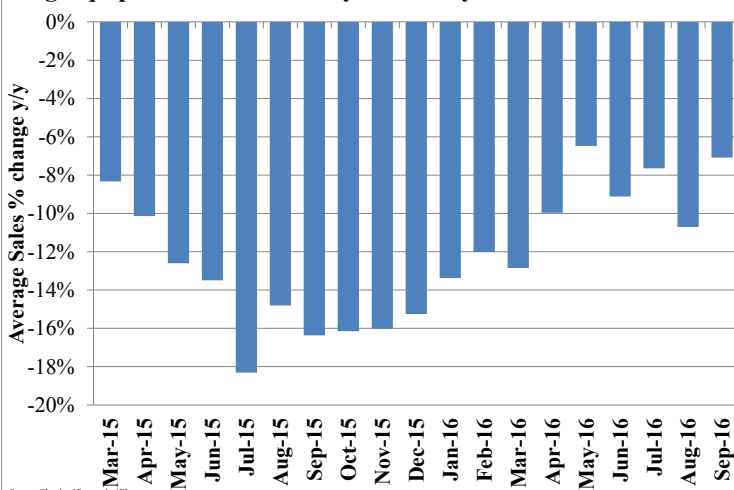
N. American Farm Equipment Dealer Survey - Sales Versus Expectations

% of Dealers Reporting	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16
Better than expected	20%	27%	23%	21%	18%	16%	19%	15%	12%	19%	12%	15%	20%	24%	21%	22%	15%	14%	14%
In line with expectations	50%	44%	39%	48%	45%	56%	53%	43%	51%	47%	52%	47%	52%	48%	46%	40%	43%	44%	44%
Worse than expected	28%	29%	36%	31%	36%	28%	28%	41%	37%	34%	35%	38%	28%	29%	34%	38%	42%	41%	42%
Net % (Better - Worse)	-8%	-2%	-13%	-10%	-18%	-12%	-9%	-26%	-25%	-15%	-23%	-22%	-8%	-5%	-13%	-17%	-28%	-27%	-28%

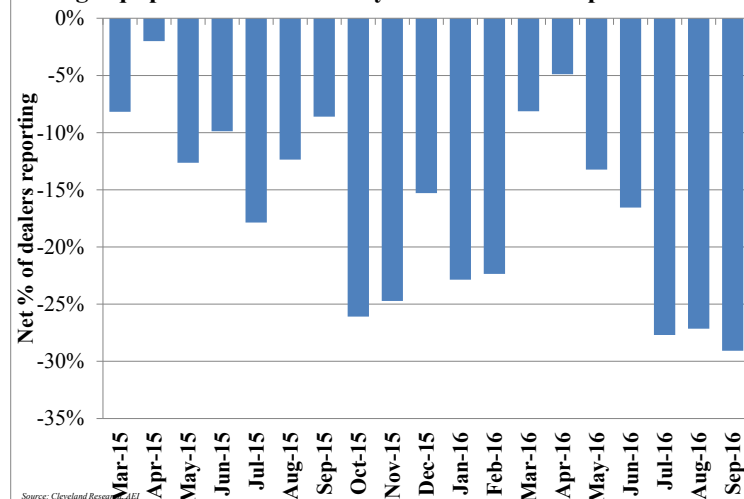
Source: Cleveland Research, AEI

Monthly Sales Growth Continued

Ag Equipment Dealer Survey - Monthly Sales Growth Trends



Ag Equipment Dealer Survey - Sales Versus Expectations



N. American Farm Equipment Dealer Survey - Average Dealer Revenue Growth Trends

% of Dealers Reporting	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16
Positive Sales Growth	20%	27%	29%	26%	20%	19%	24%	20%	16%	18%	14%	20%	23%	27%	29%	27%	20%	19%	22%
Flat Sales	50%	11%	17%	11%	16%	16%	16%	15%	17%	10%	22%	20%	17%	23%	16%	23%	21%	19%	22%
Negative Sales Growth	28%	62%	54%	63%	64%	65%	60%	65%	67%	72%	64%	60%	60%	50%	55%	50%	59%	62%	56%
Net % Reporting Growth	-8%	-35%	-25%	-37%	-43%	-46%	-35%	-46%	-52%	-54%	-50%	-40%	-37%	-23%	-26%	-23%	-39%	-43%	-33%
Average % Change y/y	-8%	-10%	-13%	-13%	-18%	-15%	-16%	-16%	-16%	-15%	-13%	-12%	-13%	-10%	-6%	-9%	-8%	-11%	-7%

Source: Cleveland Research

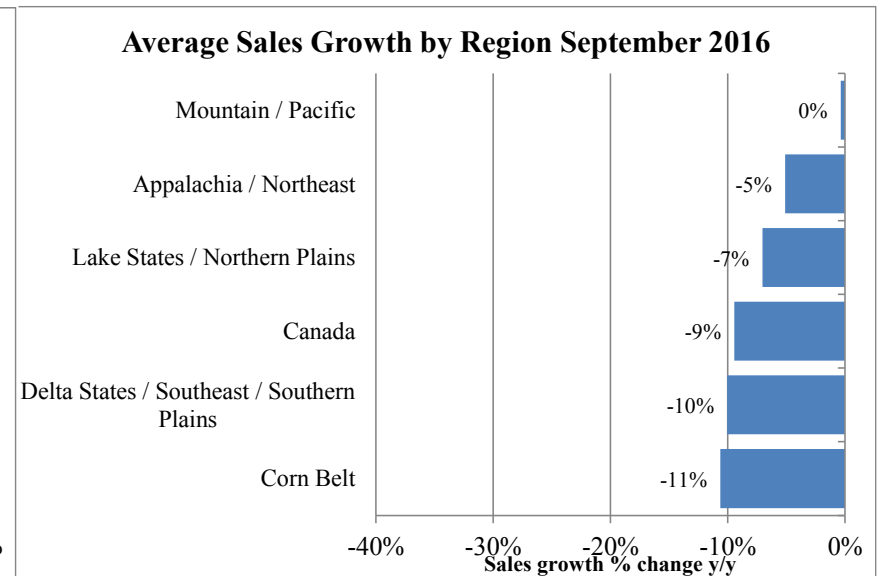
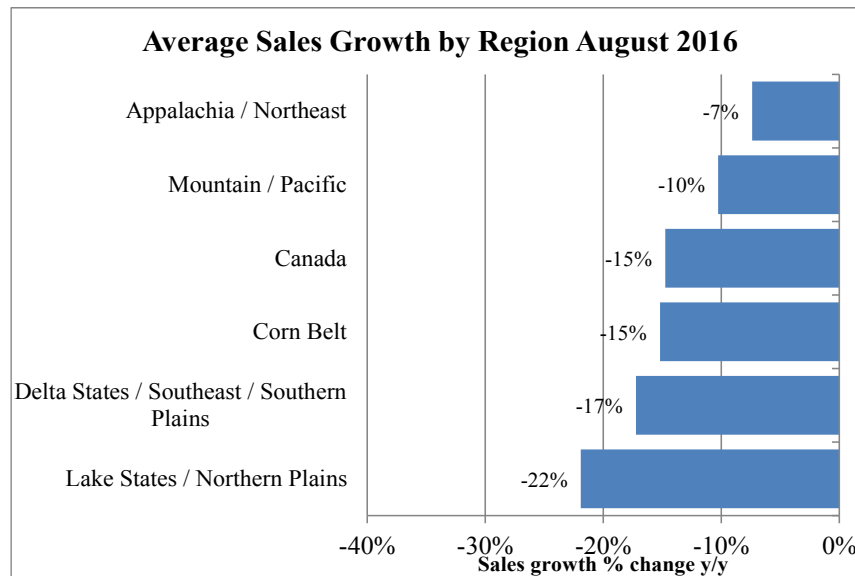
Optimism/Sentiment vs. Last Month

% of Dealers Reporting	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16
More Optimistic	14%	14%	12%	13%	14%	11%	12%	8%	10%	8%	11%	13%	17%	15%	22%	11%	16%	11%	14%
Same	42%	47%	48%	58%	52%	45%	51%	60%	52%	48%	46%	51%	55%	59%	51%	60%	44%	52%	49%
Less Optimistic	43%	40%	40%	30%	35%	43%	37%	33%	38%	44%	43%	36%	28%	26%	27%	30%	40%	36%	38%
Net % Dealer Optimism	-29%	-26%	-26%	-18%	-21%	-32%	-26%	-25%	-28%	-35%	-31%	-24%	-11%	-11%	-4%	-19%	-24%	-25%	-24%

Source: Cleveland Research

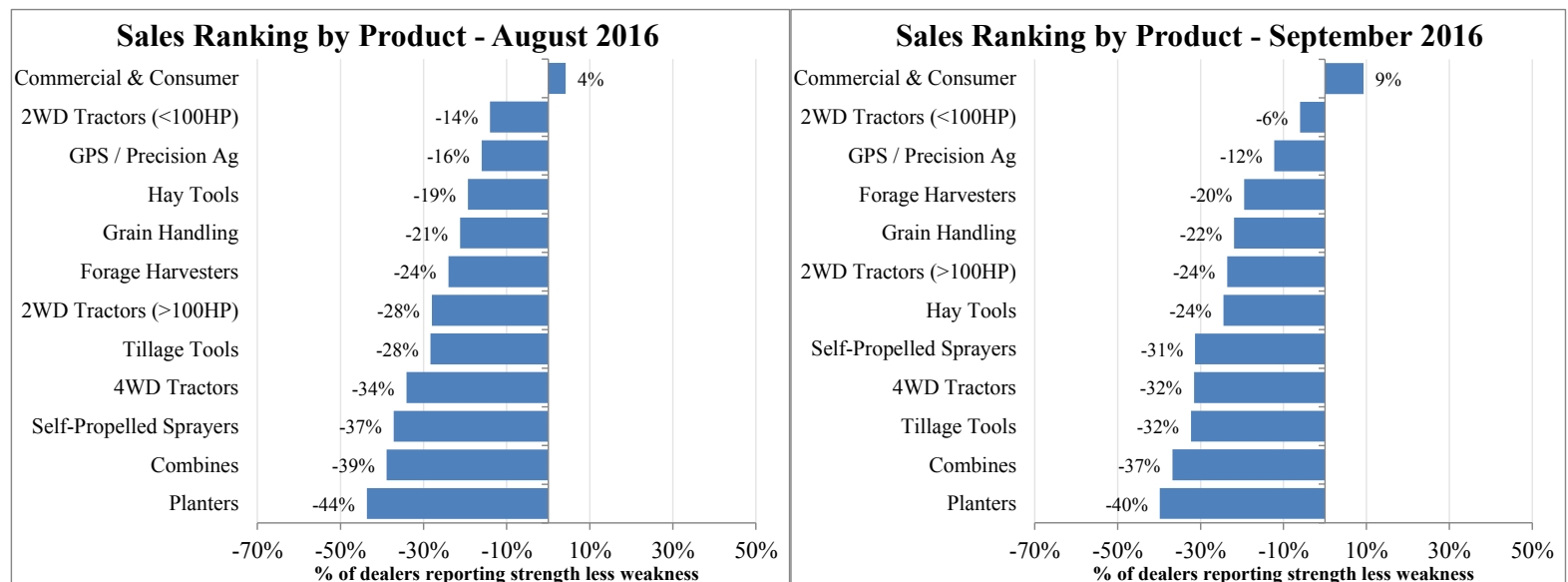
Monthly Sales Growth by Region

- Sales trends by region were negative overall in the month, but sequential improvement was noted across all regions. Lake States/Northern Plains showed the largest sequential improvement in the month.

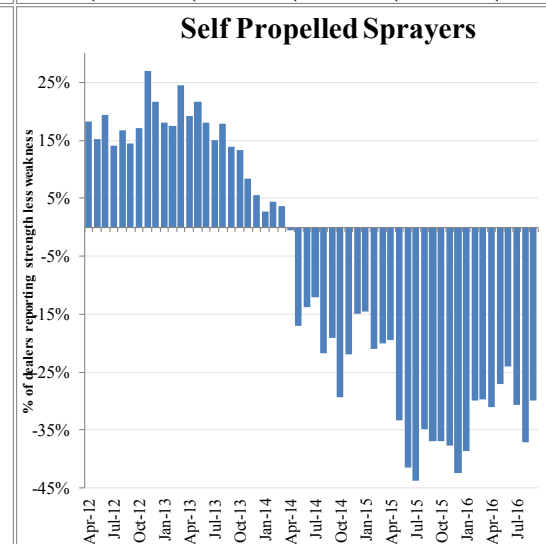
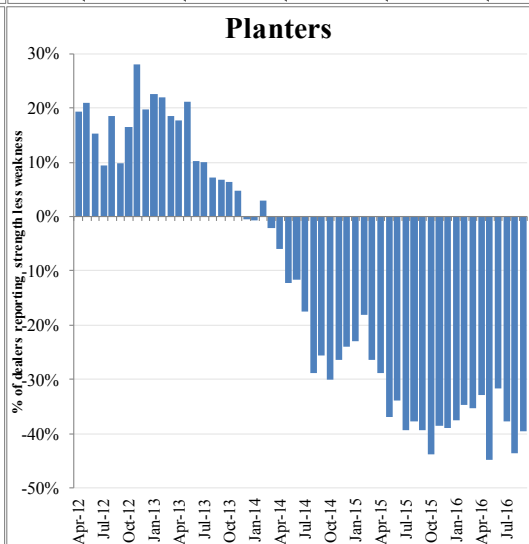
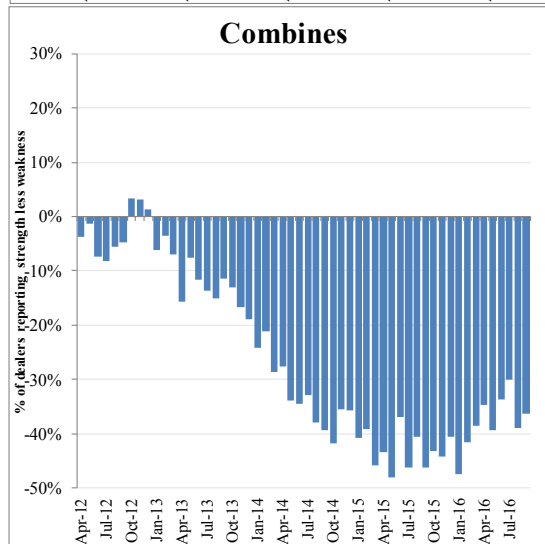
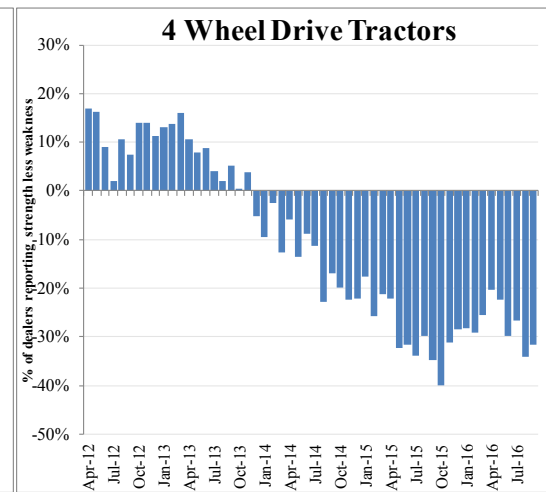
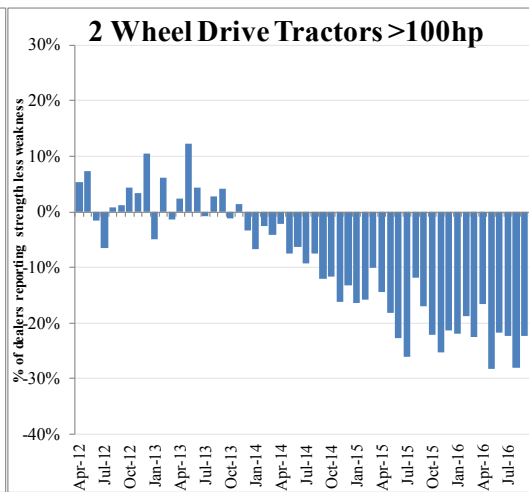
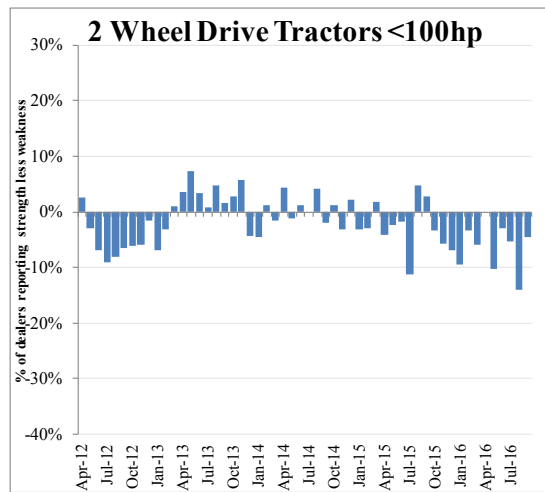


Equipment Category Sales Trends

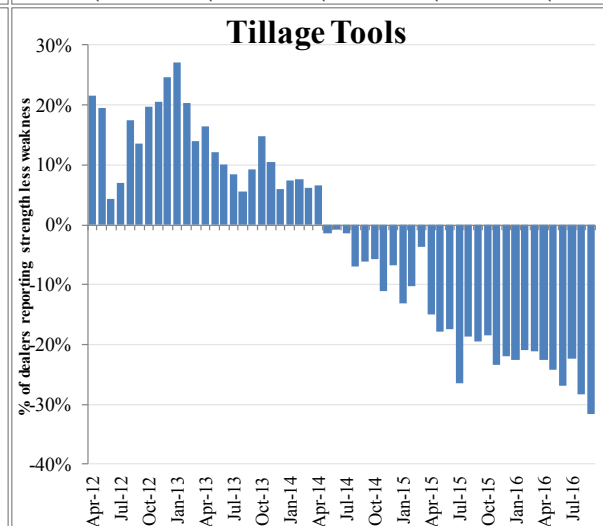
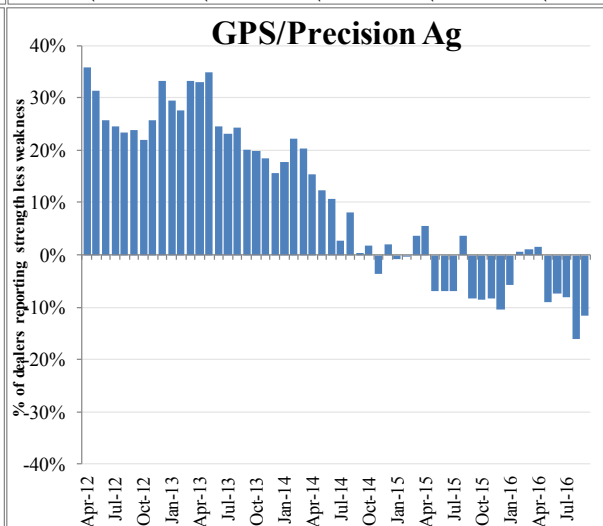
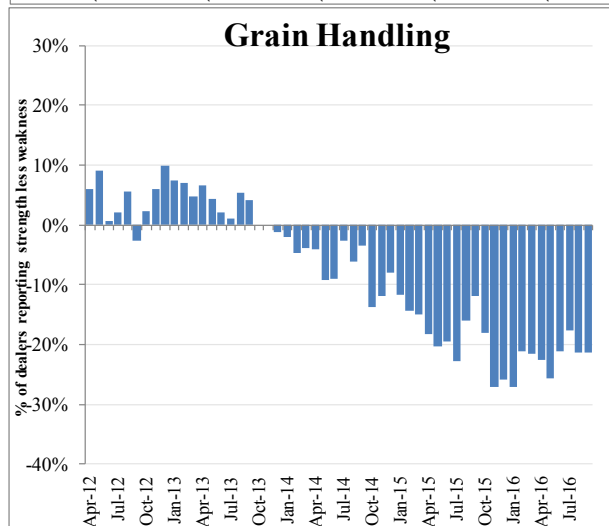
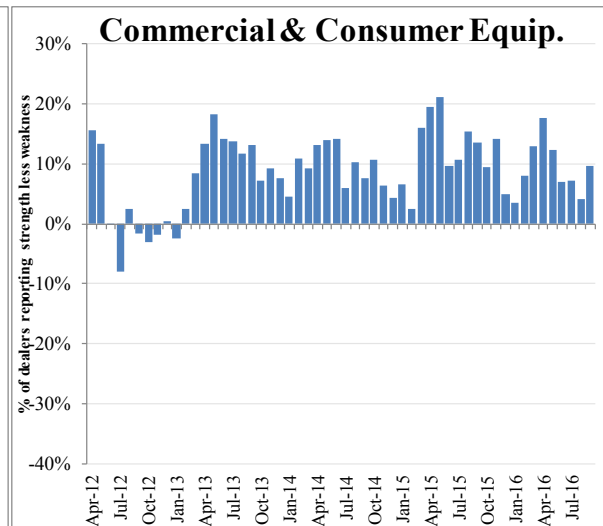
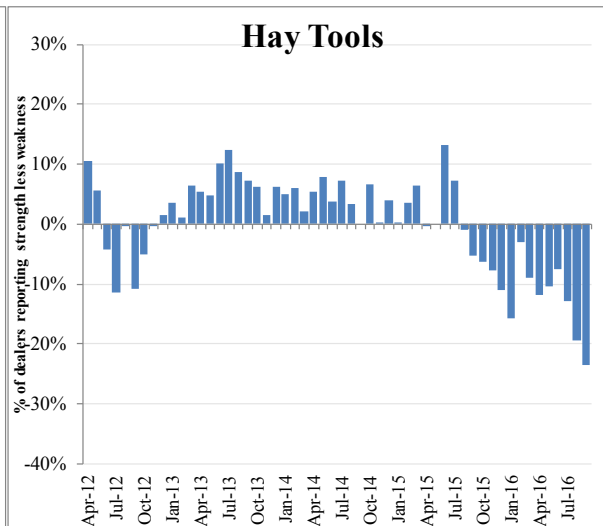
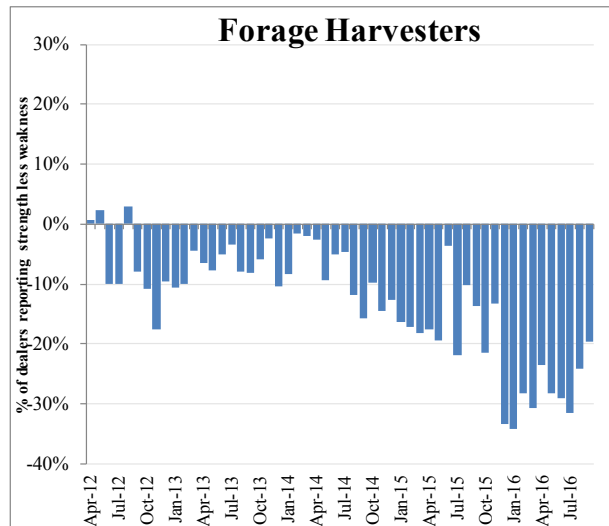
- Commercial & consumer lawn equipment continues to show strength in contrast to declines in other categories (combines, planters, tillage tools, and sprayers in particular). While GPS / Precision AG equipment had seen strength in the 1H16, trends have deteriorated over the past few months. We continue to see significant headwinds to large equipment sales.



Equipment Category Sales Trends



Equipment Category Sales Trends (Continued)



Most Interesting Commentary - Monthly Sales and Outlook

- *Commodity prices are starting to sink in for farmers. We're increasingly seeing agriculture lenders putting pressure on our customers. Even when farmers want to trade, lenders have the final say.*
- *I am seeing discounts in the small tractor and row crop tractor markets especially on the financing side. Why buy a late model used tractor when you can buy a new one and finance it at 0%?*
- *We really have a problem with late model HHP 4WD tractors and combines.*
- *Too many used tractors 100+ HP, planters, and combines.*
- *The only change for us in the month was an increase in parts and service revenue. Equipment sales are still well below last three years.*
- *Sales were very slow in the first 2/3 of the month, but picked up at the end.*
- *Manufacturer discounts are not getting bigger.*
- *September is usually a big month for us in seeding equipment sales but this year was dead.*
- *Average size farmers seem to be talking more about purchases than the larger guys. Land debt is going to become an issue.*
- *The late season surge in new hay equipment was unexpected.*
- *Cattle prices aren't as high as a lot of people hoped and I think that is really going to hurt our end of year business.*
- *Banks are scared to death. I don't believe that the used market has bottomed yet.*
- *I don't see a pickup in '16 and probably not in '17.*
- *Crops are looking better than expected with the dry weather in New York. Milk prices have come up slightly in and it looks like the farmers will have enough forage stored for the following months.*
- *There may be a small surge in yearend business after harvest for those who marketed into this year. After January 1st, 2017 it will no doubt totally collapse.*
- *There is a huge misalignment right now between what customers can pay and the cost of equipment in this country. Not sure how the marketplace will sort itself out.*
- *We don't see much changing in 2017. We expect continued low commodity and milk prices. Hopefully we will have rain. There are 25 counties in New York that are declared disaster areas.*
- *I think once the smoke clears on this year things will reset. Customers will get back in the market. Used equipment will be cheaper. New equipment will sell only if it's discounted. Dealers will only order what they can sell, but farmers and ranchers will still need some equipment.*
- *Hopefully once we get past the election and if we get badly needed moisture, 2017 could be a decent year. Cattle numbers are down in our area and it will take some time to rebuild cattle herds.*

Average Dealer Sales Outlook

- Dealers forecast 2016 sales down 12% y/y, better than August's forecast of down 15%. A net 48% of dealers are forecasting a sales decline (20% increase, 12% about the same, 68% decline). The 2017 sales growth forecast was reported at down 8% on average, worse than last month's forecast of 3% declines.
- The second table below details the 2016 industry outlooks from Deere, CNHI and AGCO. N. American forecasts estimates have not changed through AGCO, DE and CNH's August earnings releases.

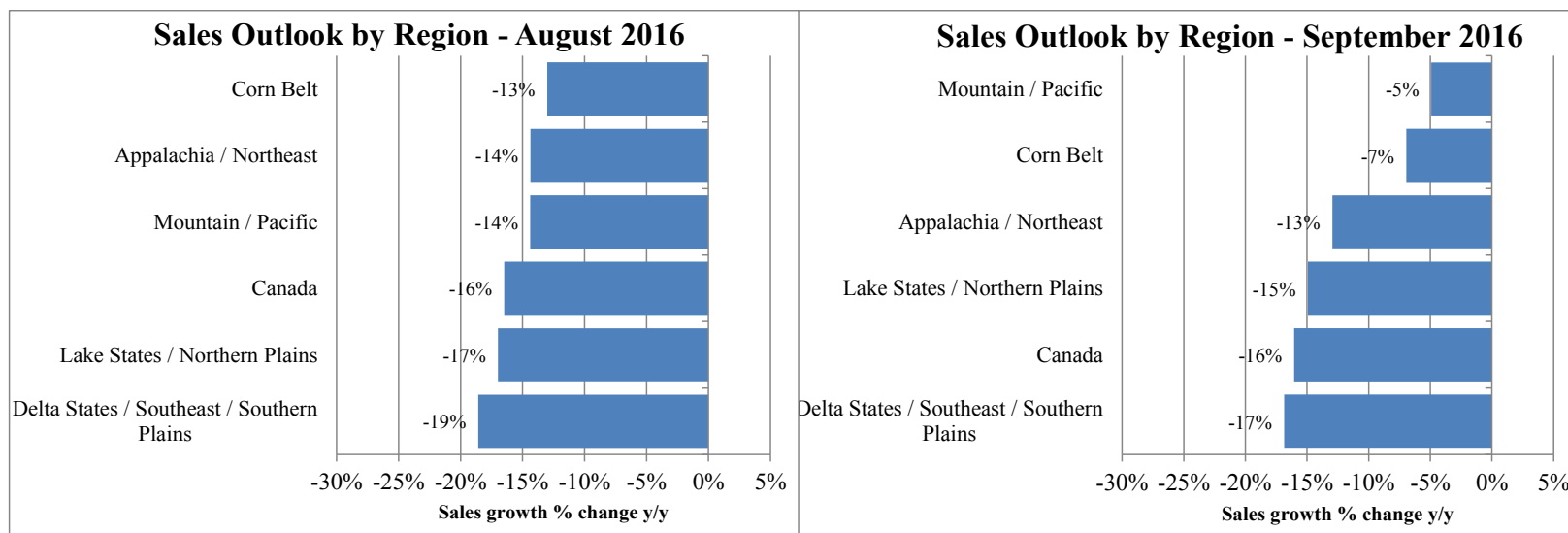
N. American Farm Equipment Dealer Survey - Full Year Sales Forecast													
% change y/y	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16
AGCO	-9%	-8%	-7%	-9%	-10%	-6%	-15%	-6%	-7%	-8%	-13%	-17%	-20%
John Deere	-6%	-10%	-9%	-8%	-12%	-10%	-12%	-10%	-6%	-11%	-15%	-14%	-12%
New Holland	-5%	-12%	-9%	-13%	-6%	-11%	-12%	-8%	-2%	-11%	-14%	-21%	-18%
Case IH	-7%	-8%	-10%	-10%	-12%	-15%	-11%	-15%	-23%	-11%	-15%	-15%	-9%
Kubota	3%	3%	4%	2%	-7%	5%	9%	2%	0%	1%	7%	2%	2%
Shortlines/Other	-9%	-15%	-8%	-6%	-12%	0%	-14%	-24%	-6%	-4%	11%	-26%	-12%
Overall	-6%	-9%	-9%	-9%	-11%	-10%	-11%	-11%	-9%	-10%	-12%	-15%	-12%

Source: Cleveland Research, AEI

2016 Ag Equipment Industry Sales Outlook (units)			
Geography	Deere	CNH Industrial	AGCO Corp.
N. America	Down 15-20%	Tractors (5%); Combines (15-20%)	Down 10-15%
Western Europe	Flat to Down 5%	Tractors (0-5%), Combines (5-10%)	Flat to Down 5%
Latin America	Down 15-20%	Tractors (15-20%), Combines (5-10%)	Down 15-20%
CIS or ROW	na	na	na
Asia	Flat to Down Slightly	Tractors 0-5%, Combines 5-10%	na
Source: Company reports, CRC estimates			

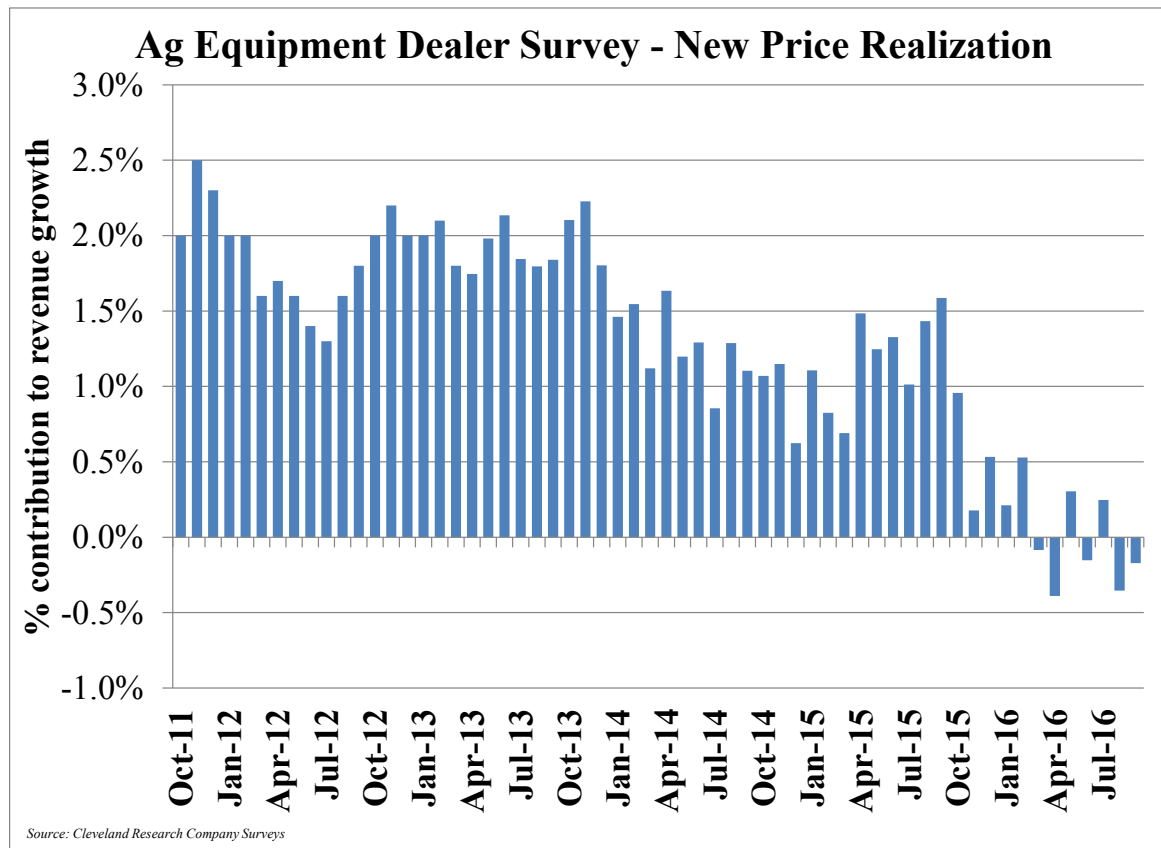
2016 Sales Outlook

- Trends remained negative by region in the month, but the 2016 outlook improved in all regions except Canada. The Delta States/Southeast/Southern Plains continue to have the weakest forecast at down 17% for the year.



Pricing Trends

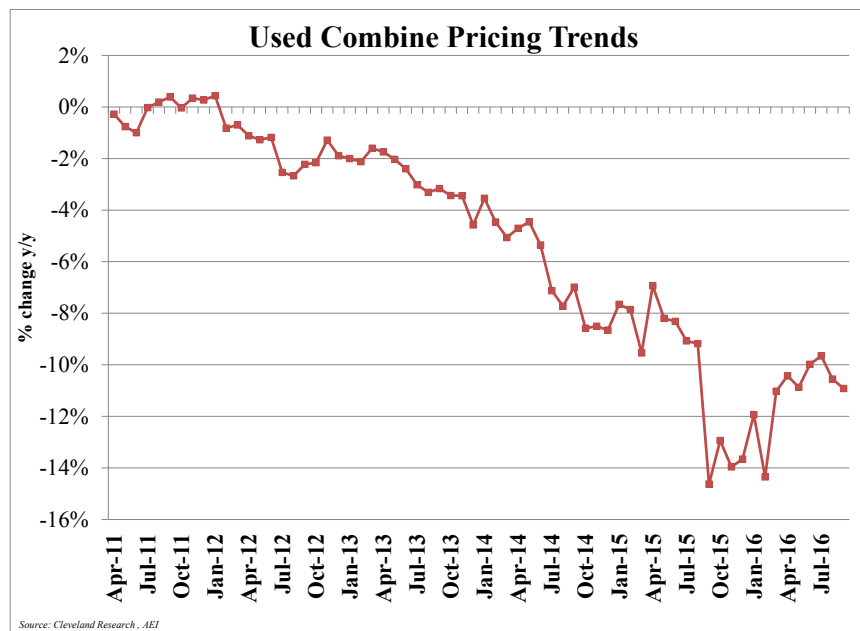
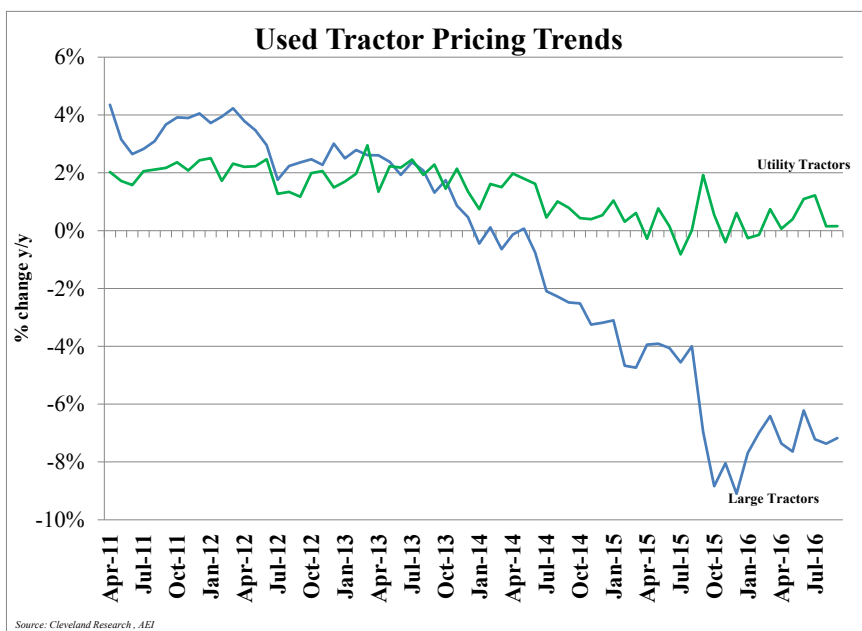
- Dealers reported relatively flat pricing over the last few months as incentives programs have more than offset list price increases back in 4Q15. The effect of the strong US dollar on Canadian exchange rates has also played a part in pricing inflation within North America.



Used Equipment Pricing

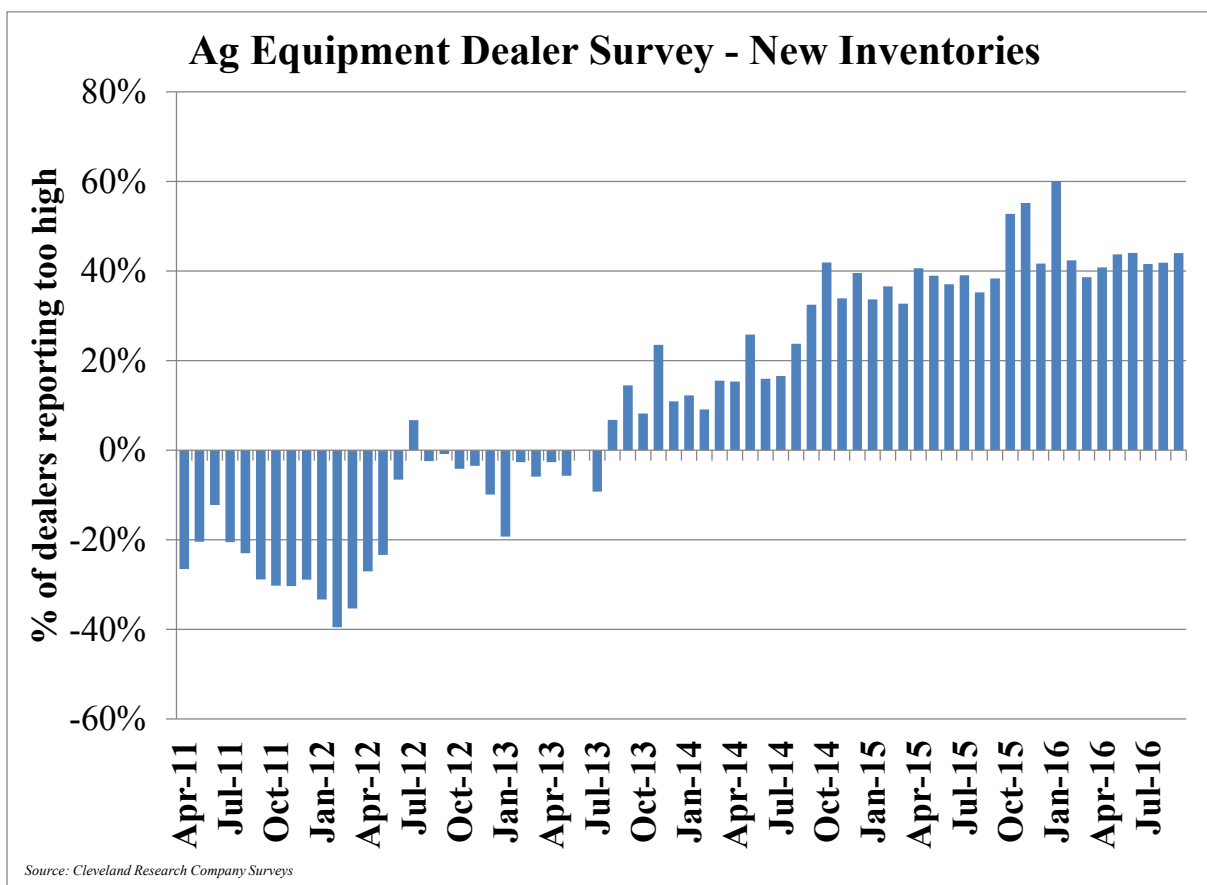
- Pricing trends were relatively inline with last month. Large tractors were reported down ~7% y/y on average, slightly better than the 8% reported in August. Combine pricing was down 11% y/y, inline with August.

Used Tractor and Combine Values (Y/Y)													
	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16
Compact (<40HP)	2%	1%	(1%)	0%	(1%)	0%	1%	0%	1%	2%	2%	1%	1%
Utility (40-100HP)	2%	0%	(0%)	1%	0%	(1%)	0%	0%	0%	1%	1%	(0%)	(0%)
Row Crop (100HP+)	(4%)	(6%)	(7%)	(7%)	(6%)	(5%)	(5%)	(6%)	(7%)	(5%)	(6%)	(6%)	(6%)
4WD Tractors	(9%)	(11%)	(9%)	(11%)	(10%)	(9%)	(8%)	(8%)	(9%)	(8%)	(8%)	(9%)	(8%)
Combines	(15%)	(13%)	(14%)	(14%)	(12%)	(14%)	(11%)	(10%)	(11%)	(10%)	(10%)	(11%)	(11%)



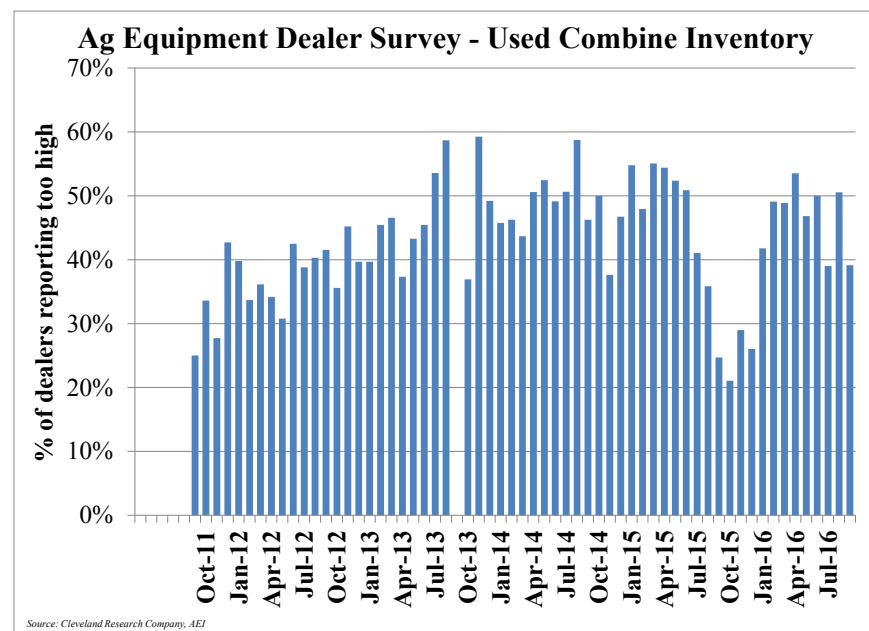
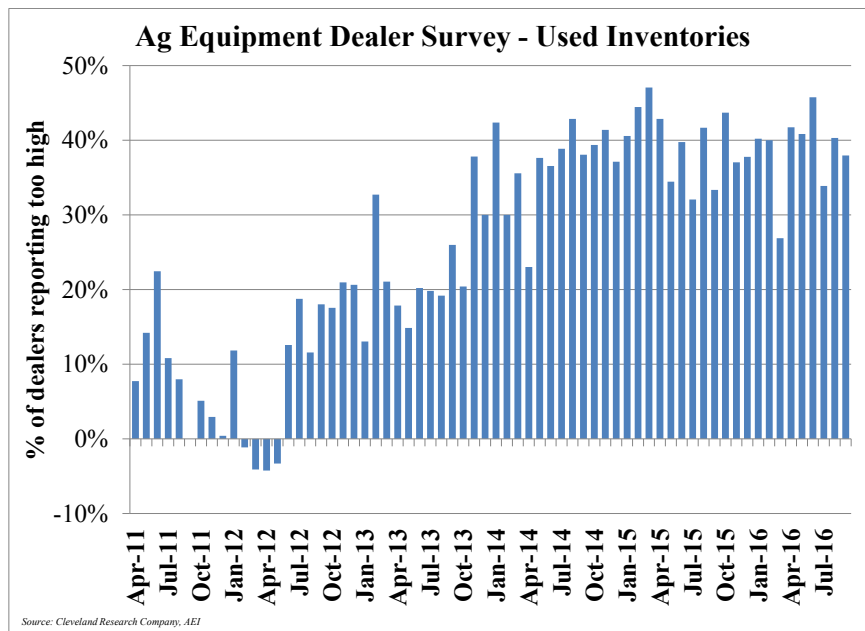
New Equipment Inventory Levels

- A net 43% of dealers reported new equipment inventories are too high (50% too high, 43% about right, 7% too low), a slightly worse reading than August's net 42% of inventories reported too high. New inventory levels have been reported as too high for nearly 3 years.



Used Equipment Inventory Levels

- A net 38% of dealers reported used equipment inventory as too high (46% too high, 46% about right, 8% too low), better than the 40% reporting heightened inventory in August (49% too high, 43% about right, 8% too low). Used combine inventory levels were reported as too high by a net 39% of dealers in September, compared to August's reading of 51% and July's 39%.



North American Farm Equipment Industry Retail Sales

NORTH AMERICAN FARM EQUIPMENT RETAIL SALES														
	Units							% change year-over-year						
	< 40 HP	Utility	Row Crop	4-Wheel	Total Tractor	Row Crop & 4WD	Combines	< 40 HP	Utility	Row Crop	4-Wheel	Total Tractor	Row Crop & 4WD	Combines
Jan-14	4,755	4,152	3,303	631	12,841	3,934	824	1%	2%	12%	-7%	3%	8%	33%
Feb-14	5,308	3,745	2,423	575	12,051	2,998	526	4%	1%	-6%	-14%	0%	-8%	-15%
Mar-14	10,108	5,110	3,155	655	19,028	3,810	899	22%	3%	-9%	-7%	9%	-9%	-25%
Apr-14	14,191	6,010	3,752	745	24,698	4,497	996	2%	7%	-13%	-12%	0%	-13%	-13%
May-14	16,828	6,586	2,928	474	26,816	3,402	669	-2%	6%	-16%	-14%	-2%	-16%	-24%
Jun-14	15,245	6,488	2,733	408	24,874	3,141	837	13%	2%	-16%	-25%	5%	-18%	-25%
Jul-14	11,245	5,934	3,206	389	20,774	3,595	1,034	5%	7%	1%	-21%	4%	-2%	-30%
Aug-14	9,691	5,444	2,575	371	18,081	2,946	946	4%	9%	-9%	-37%	2%	-14%	-24%
Sep-14	11,333	6,193	3,276	492	21,294	3,768	1,142	32%	28%	-2%	-14%	23%	-4%	-11%
Oct-14	10,950	7,085	4,920	733	23,688	5,653	983	14%	6%	-17%	-40%	1%	-21%	-41%
Nov-14	5,857	4,177	1,891	354	12,279	2,245	450	4%	8%	-29%	-45%	-4%	-32%	-50%
Dec-14	8,089	7,473	3,730	512	19,804	4,242	920	6%	8%	-24%	-47%	-3%	-28%	-40%
Jan-15	5,382	4,506	3,124	220	13,232	3,344	384	13%	9%	-5%	-65%	3%	-15%	-53%
Feb-15	5,305	3,250	1,955	348	10,858	2,303	399	0%	-13%	-19%	-39%	-10%	-23%	-24%
Mar-15	9,702	4,799	2,539	499	17,539	3,038	470	-4%	-6%	-20%	-24%	-8%	-20%	-48%
Apr-15	16,624	6,461	3,131	430	26,646	3,561	664	17%	8%	-17%	-42%	8%	-21%	-33%
May-15	16,028	5,643	1,994	260	23,925	2,254	549	-5%	-14%	-32%	-45%	-11%	-34%	-18%
Jun-15	15,679	6,526	2,409	300	24,914	2,709	502	3%	1%	-12%	-26%	0%	-14%	-40%
Jul-15	14,372	7,039	2,469	268	24,148	2,737	806	28%	19%	-23%	-31%	16%	-24%	-22%
Aug-15	9,800	5,087	1,768	167	16,822	1,935	679	1%	-7%	-31%	-55%	-7%	-34%	-28%
Sep-15	10,917	5,348	1,934	249	18,448	2,183	845	-4%	-14%	-41%	-49%	-13%	-42%	-26%
Oct-15	12,876	6,855	3,263	515	23,509	3,778	799	18%	-3%	-34%	-30%	-1%	-33%	-19%
Nov-15	5,940	3,697	1,164	221	11,022	1,385	344	1%	-11%	-38%	-38%	-10%	-38%	-24%
Dec-15	8,693	6,350	2,559	515	18,117	3,074	886	7%	-15%	-31%	1%	-9%	-28%	-4%
Jan-16	5,647	4,261	1,981	242	12,131	2,223	457	5%	-5%	-37%	10%	-8%	-34%	19%
Feb-16	6,404	3,386	1,186	222	11,198	1,408	241	21%	4%	-39%	-36%	3%	-39%	-40%
Mar-16	12,453	5,136	1,909	259	19,757	2,168	350	28%	7%	-25%	-48%	13%	-29%	-26%
Apr-16	17,713	5,586	2,548	337	26,184	2,885	465	7%	-14%	-19%	-22%	-2%	-19%	-30%
May-16	17,201	5,634	1,976	234	25,045	2,210	333	7%	0%	-1%	-10%	5%	-2%	-39%
Jun-16	15,794	6,594	1,974	223	24,585	2,197	567	1%	1%	-18%	-26%	-1%	-19%	13%
Jul-16	13,344	5,418	1,833	152	20,747	1,985	619	-7%	-23%	-26%	-43%	-14%	-27%	-23%
Aug-16	11,600	5,068	1,315	102	18,085	1,417	563	18%	0%	-26%	-39%	8%	-27%	-17%
Sep-16	12,632	5,491	1,768	203	20,094	1,971	621	16%	3%	-9%	-18%	9%	-10%	-27%

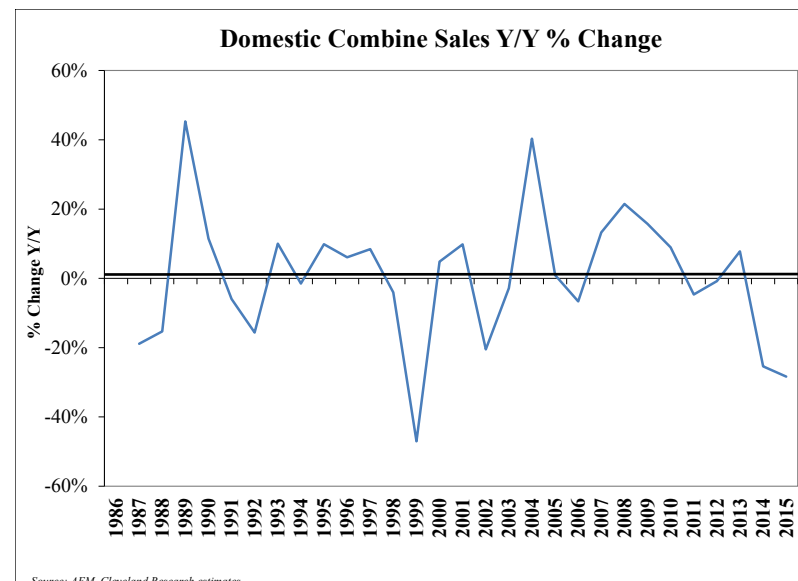
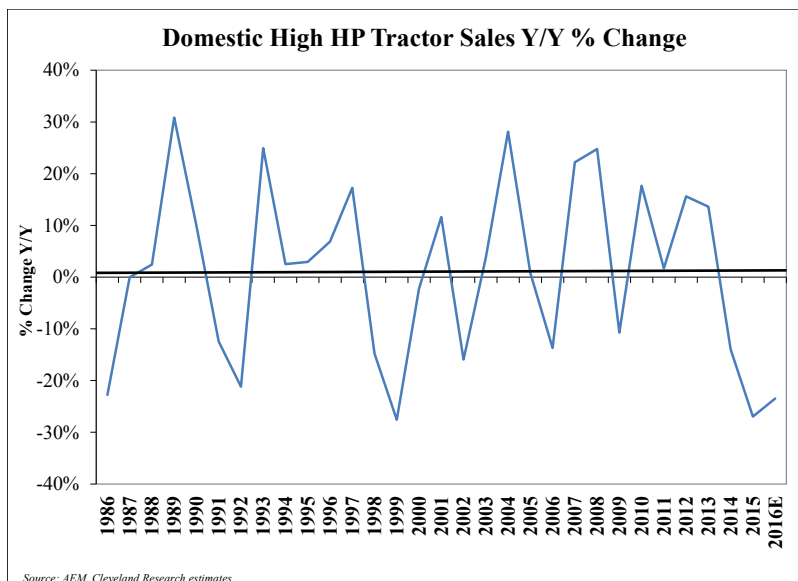
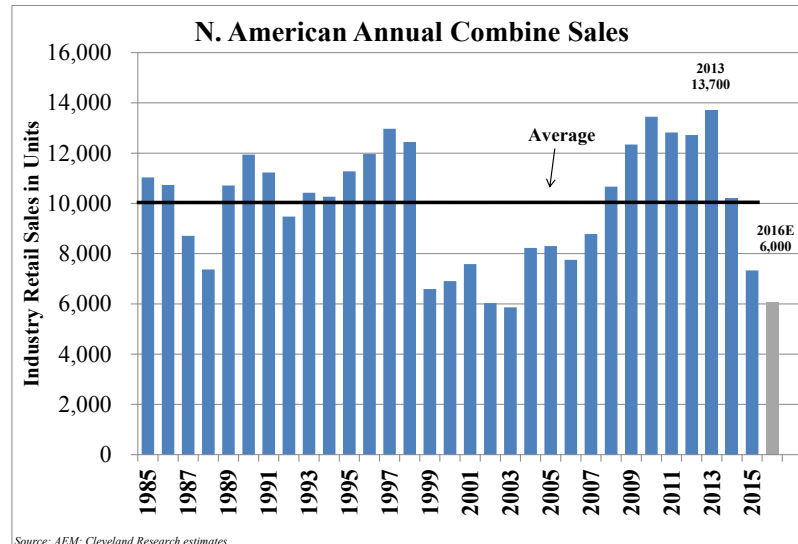
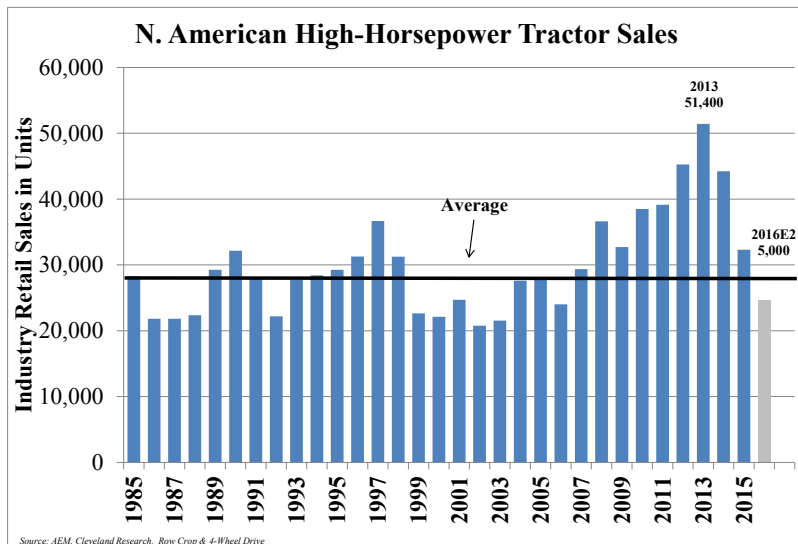
Source: AEM; Cleveland Research Company estimates. High hp tractors are row crop & 4-wheel drive.

North American Farm Equipment Industry Inventory

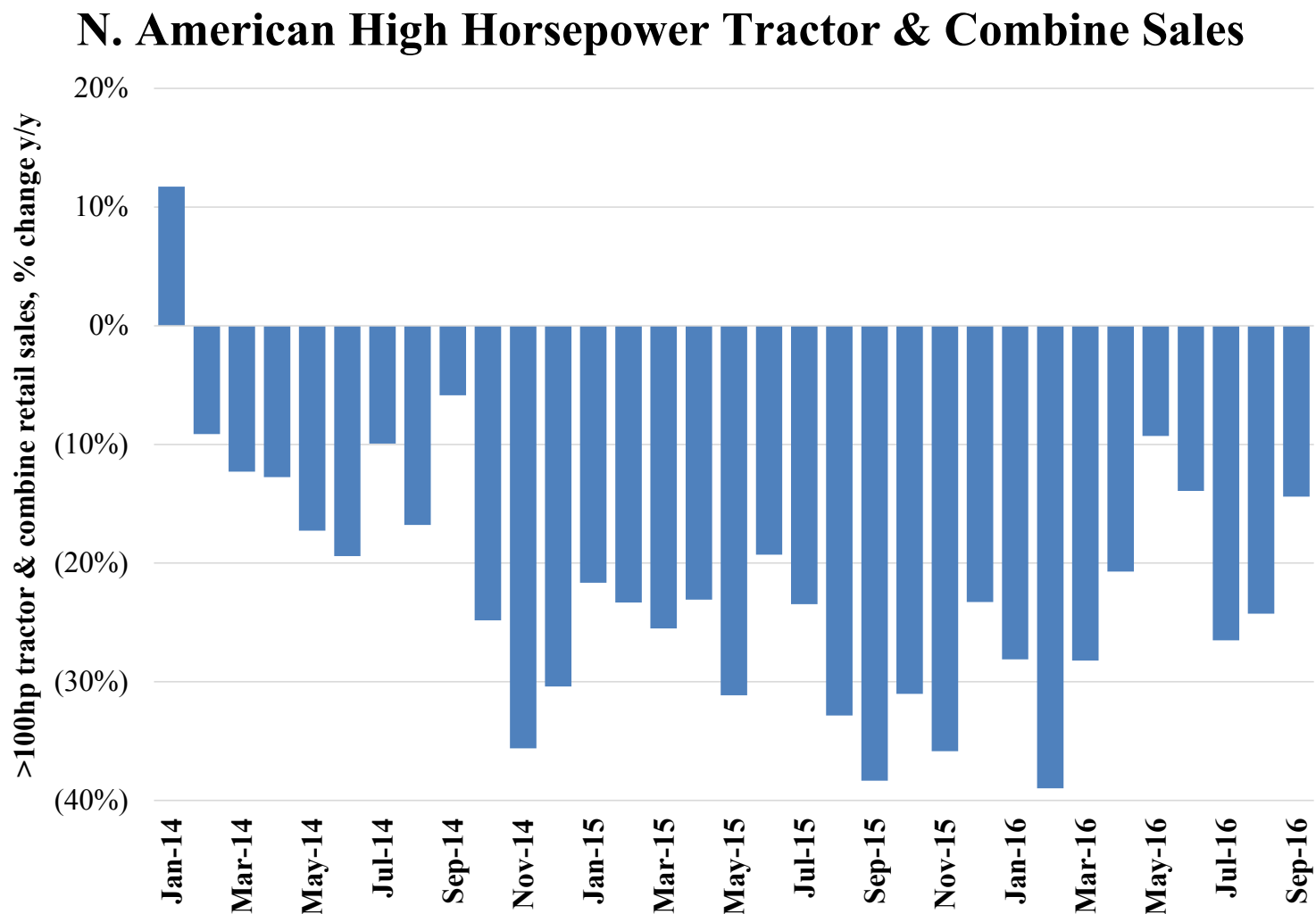
NORTH AMERICAN FARM EQUIPMENT INVENTORY														
	Inventory (Units)							Inventory to 12-mo. Sales						
	< 40 HP	Utility	Row Crop	4-Wheel	Total Tractor	Row Crop & 4WD	Combines	<40HP	Util	RC	4-WD	Total Tractor	Row Crop & 4WD	Comb
Dec-13	67,863	32,028	13,318	2,049	115,258	15,367	2,083	59%	50%	31%	24%	50%	30%	15%
Jan-14	69,111	33,240	12,620	2,028	116,999	14,648	1,681	60%	52%	29%	24%	51%	28%	12%
Feb-14	71,514	34,326	13,267	2,046	121,153	15,313	2,063	62%	54%	31%	25%	53%	30%	15%
Mar-14	71,249	35,256	14,058	2,218	122,781	16,276	2,456	61%	55%	33%	27%	53%	32%	18%
Apr-14	69,986	35,615	13,298	2,117	121,016	15,415	2,467	60%	55%	31%	26%	52%	31%	18%
May-14	66,364	34,755	13,505	2,255	116,879	15,760	2,734	57%	54%	32%	28%	51%	32%	21%
Jun-14	62,025	34,004	14,531	2,294	112,854	16,825	3,101	53%	52%	35%	29%	49%	34%	24%
Jul-14	61,829	34,393	14,836	2,159	113,217	16,995	3,144	52%	53%	36%	27%	49%	35%	25%
Aug-14	62,466	35,692	15,060	2,193	115,411	17,253	3,360	53%	54%	37%	29%	49%	36%	28%
Sep-14	61,811	35,926	16,185	2,399	116,321	18,584	2,891	51%	54%	40%	32%	49%	38%	24%
Oct-14	63,713	35,965	14,640	1,802	116,120	16,442	2,187	52%	53%	37%	25%	49%	35%	19%
Nov-14	67,691	37,110	14,840	1,652	121,293	16,492	2,046	55%	55%	38%	24%	51%	36%	19%
Dec-14	69,876	35,550	14,638	1,426	121,490	16,064	1,674	57%	52%	39%	22%	51%	36%	16%
Jan-15	73,716	35,405	13,934	1,439	124,494	15,373	1,713	59%	51%	37%	24%	53%	35%	18%
Feb-15	78,177	36,676	13,981	1,436	130,270	15,417	1,820	63%	54%	38%	25%	55%	36%	19%
Mar-15	81,662	37,881	14,179	1,346	135,068	15,525	2,040	66%	56%	39%	24%	58%	37%	22%
Apr-15	80,348	37,047	13,193	1,353	131,941	14,546	2,116	64%	54%	37%	26%	56%	35%	24%
May-15	78,880	37,037	13,177	1,400	130,494	14,577	2,058	63%	55%	38%	28%	56%	36%	23%
Jun-15	76,286	36,584	13,006	1,416	127,292	14,422	2,276	61%	54%	37%	29%	55%	36%	27%
Jul-15	72,876	35,232	12,507	1,354	121,969	13,861	2,218	56%	51%	37%	28%	52%	36%	27%
Aug-15	74,247	36,442	12,555	1,343	124,587	13,898	2,232	58%	53%	38%	29%	53%	37%	28%
Sep-15	65,844	37,545	12,551	1,374	117,314	13,925	2,001	51%	56%	39%	32%	51%	38%	26%
Oct-15	75,042	37,885	11,906	1,266	126,099	13,172	1,504	57%	56%	39%	31%	54%	38%	20%
Nov-15	79,228	39,911	12,983	1,317	133,439	14,300	1,492	61%	60%	44%	33%	58%	43%	20%
Dec-15	82,737	41,363	13,140	1,189	138,429	14,329	1,277	63%	63%	46%	30%	60%	44%	17%
Jan-16	86,618	42,352	12,727	1,129	142,826	13,856	1,169	66%	65%	47%	28%	63%	44%	16%
Feb-16	92,071	44,704	13,298	1,097	151,170	14,395	1,281	69%	68%	50%	28%	66%	48%	18%
Mar-16	93,703	45,127	13,327	1,131	153,288	14,458	1,281	69%	69%	52%	31%	66%	49%	18%
Apr-16	90,381	44,499	13,136	1,115	149,131	14,251	1,312	66%	69%	52%	31%	65%	50%	19%
May-16	86,451	43,931	13,015	1,152	144,549	14,167	1,492	63%	68%	52%	33%	62%	49%	22%
Jun-16	82,264	42,688	12,928	1,005	138,885	13,933	1,593	60%	66%	52%	29%	60%	49%	24%
Jul-16	81,046	41,621	12,765	920	136,352	13,685	1,580	59%	66%	53%	28%	60%	50%	24%
Aug-16	79,823	41,683	12,962	998	135,466	13,960	1,671	58%	66%	55%	31%	59%	52%	26%

Source: AEM; Cleveland Research Company estimates

Annual Agricultural Equipment Industry Sales (1985 - 2015)



North America Large Ag Equipment Sales

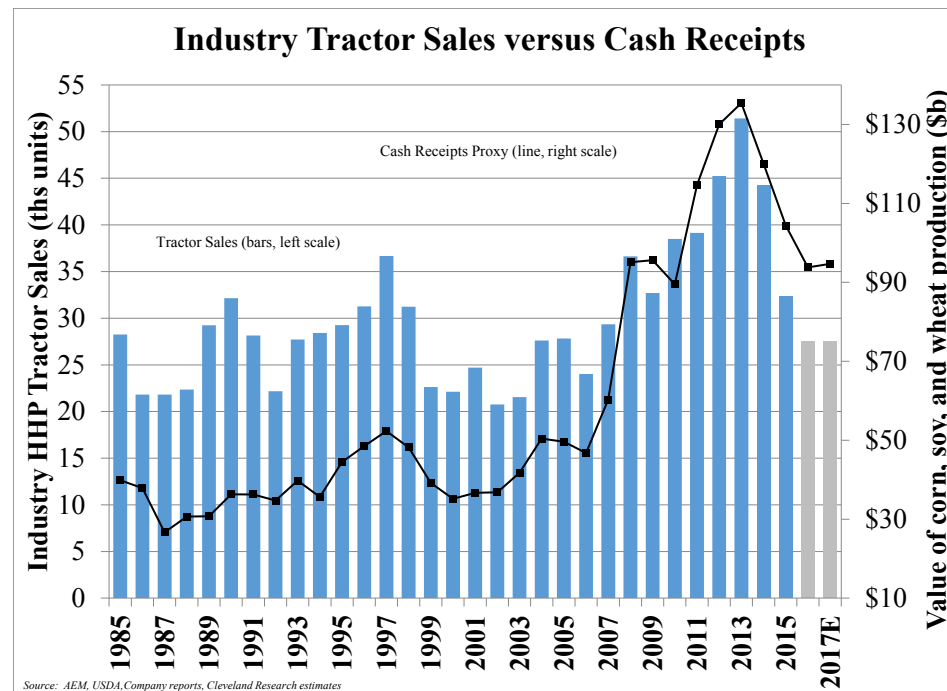


Source: AEM, CRC estimates

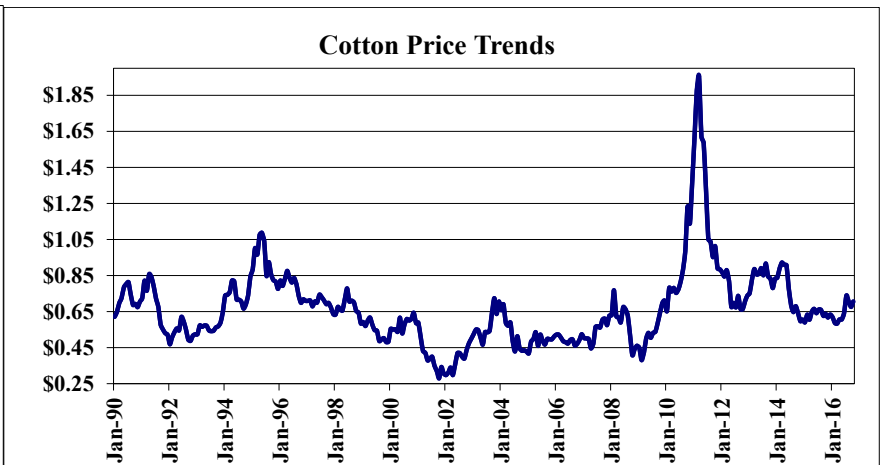
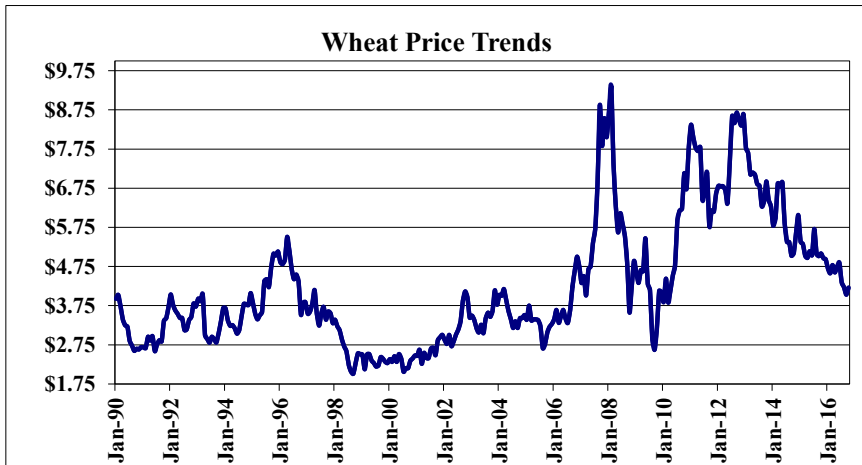
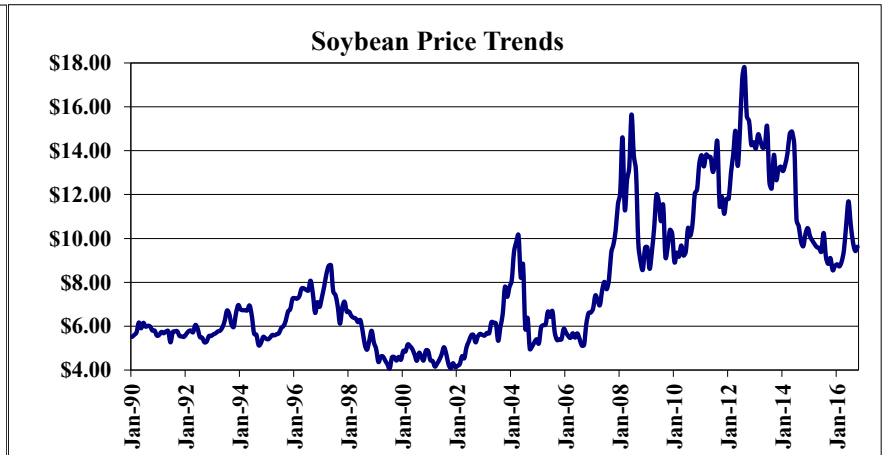
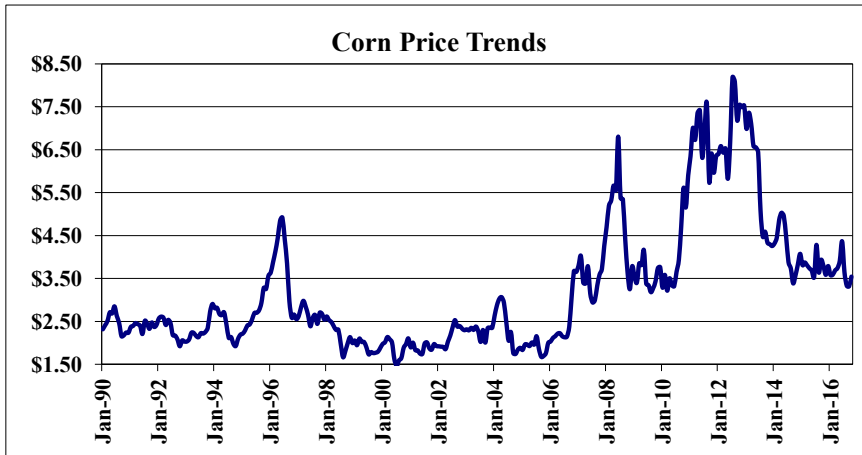
Commodity Prices – Cash Receipts vs. Next Year Equipment Sales

USDA's October WASDE Update Highlights – The following chart illustrates the historical relationship between the value of production of corn, soybeans, and wheat in the U.S. compared to annual industry sales of high horsepower tractors.

USDA's October crop report was slightly better than September, with cash receipts proxy forecast up 2% y/y in 2016/2017 vs. prior estimate of up 1%. Declines on corn yields fell from September's forecast of 174 to 173 bu/acre. Corn and wheat price forecasts increased 2-3%, while soybean pricing was flat.



Long Term Commodity Price Trends



Commodity Trends – Long Run Supply and Demand Projections

US Corn, Soy, and Wheat Supply and Demand - Long Term Annual Forecast 2016													
US Corn Balance Sheet - USDA Long Term Forecast (Feb 2016)													
Millions of bushels	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Planted	95	91	88	95	90	90	90	90	90	89	89	88	88
Harvested	88	83	81	87	83	83	83	82	82	81	81	80	80
Yield (bu/acre)	158	171	168	173	170	172	174	176	178	180	182	184	186
Beginning Stocks (MM bu)	821	1,232	1,731	1,738	1,755	1,730	1,740	1,755	1,775	1,785	1,790	1,785	1,735
Production (MM bu)	13,829	14,216	13,601	15,057	14,035	14,200	14,355	14,465	14,535	14,610	14,680	14,740	14,900
Imports (MM bu)	36	32	55	50	30	30	30	30	30	30	30	30	30
Total Supply (MM bu)	14,686	15,480	15,387	16,845	15,820	15,960	16,125	16,250	16,340	16,425	16,500	16,555	16,665
Feed & Residual (MM Bu)	5,036	5,315	5,250	5,650	5,550	5,650	5,750	5,850	5,925	6,000	6,075	6,150	6,225
Food, Seed, & Industrial Total	6,501	6,568	6,610	6,650	6,615	6,595	6,595	6,550	6,530	6,485	6,465	6,445	6,425
Ethanol & By-Products	5,134	5,209	5,250	5,275	5,225	5,200	5,200	5,150	5,125	5,075	5,050	5,025	5,000
Domestic Use	11,537	11,883	11,860	12,300	12,165	12,245	12,345	12,400	12,455	12,485	12,540	12,595	12,650
Exports	1,917	1,864	1,725	2,225	1,925	1,975	2,025	2,075	2,100	2,150	2,175	2,225	2,275
Total Use	13,454	13,747	13,585	14,525	14,090	14,220	14,370	14,475	14,555	14,635	14,715	14,820	14,925
Ending Stocks	1,232	1,731	1,803	2,320	1,730	1,740	1,755	1,775	1,785	1,790	1,785	1,735	1,740
Ending Stocks/Use	9.2%	12.6%	13.3%	16.0%	12.3%	12.2%	12.2%	12.3%	12.3%	12.2%	12.1%	11.7%	11.7%
Weeks Carryover	4.8	6.5	6.9	8.3	6.4	6.4	6.4	6.4	6.4	6.4	6.3	6.1	6.1
Average Farm Price (\$/bu)	\$4.46	\$3.70	\$3.60	\$3.25	\$3.65	\$3.70	\$3.70	\$3.70	\$3.70	\$3.70	\$3.70	\$3.75	\$3.75
Value of Production	\$61,677	\$52,599	\$48,964	\$48,935	\$51,228	\$52,540	\$53,114	\$53,521	\$53,780	\$54,057	\$54,316	\$55,275	\$55,875
% change y/y	-17%	-15%	-7%	0%	5%	3%	1%	1%	0%	1%	0%	2%	1%
U.S. Soybean Balance Sheet - USDA Long Term Forecast (Feb 2016)													
Millions of bushels	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Planted	77	83	83	84	82	82	82	82	81	81	81	81	81
Harvested	76	83	82	83	81	81	81	81	80	80	80	80	80
Yield Per Harvested Acre (Bushels)	44	48	48	51	47	48	48	49	49	50	50	51	51
Beginning Stocks	141	92	191	197	421	382	348	323	299	275	270	270	265
Production	3,358	3,927	3,929	4,269	3,810	3,850	3,890	3,920	3,940	3,980	4,020	4,035	4,065
Imports	72	33	30	30	30	30	30	30	30	30	30	30	30
Total Supplies	3,571	4,052	4,150	4,496	4,261	4,262	4,268	4,273	4,269	4,285	4,320	4,335	4,360
Crush	1,734	1,873	1,880	1,950	1,920	1,940	1,960	1,980	1,995	2,005	2,020	2,030	2,045
Exports	1,647	1,843	1,740	2,025	1,835	1,850	1,860	1,870	1,875	1,885	1,905	1,915	1,925
Seed & Residual	98	145	34	31	124	124	125	124	124	125	125	125	124
Total Use	3,479	3,861	3,654	4,101	3,879	3,914	3,945	3,974	3,994	4,015	4,050	4,070	4,094
Ending Stocks	92	191	400	395	382	348	323	299	275	270	270	265	266
Stocks/Use	2.7%	4.9%	10.9%	9.6%	9.8%	8.9%	8.2%	7.5%	6.9%	6.7%	6.7%	6.5%	6.5%
Average Price (\$/bu)	\$13.00	\$10.10	\$8.85	\$9.05	\$8.80	\$8.95	\$9.00	\$9.10	\$9.20	\$9.20	\$9.20	\$9.30	\$9.35
Value of Production	\$43,654	\$39,663	\$34,772	\$38,634	\$33,528	\$34,458	\$35,010	\$35,672	\$36,248	\$36,616	\$36,984	\$37,526	\$38,008
% change y/y	0%	-9%	-12%	11%	-13%	3%	2%	2%	2%	1%	1%	1%	1%

Commodity Trends – Long Run Supply and Demand Projections (Cont.)

US Corn, Soy, and Wheat Supply and Demand - Long Term Annual Forecast 2016 (continued)

U.S. Wheat Balance Sheet - USDA Long Term Forecast (Feb 2016)

Millions of bushels	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Planted	56	57	55	50	51	52	52	52	52	52	52	52	52
Harvested	45	46	47	44	43	44	44	44	44	44	44	44	44
Yield Per Harvested Acre (Bushels)	47	44	44	53	46	47	47	47	48	48	48	49	49
Beginning Stocks	718	590	752	976	928	842	784	739	707	688	677	669	669
Production	2,134	2,026	2,052	2,310	2,000	2,035	2,050	2,065	2,080	2,095	2,110	2,130	2,140
Imports	169	144	120	125	130	135	140	145	150	155	160	165	170
Total Supplies	3,021	2,760	2,924	3,410	3,058	3,012	2,974	2,949	2,937	2,938	2,947	2,964	2,979
Food	955	960	960	968	981	988	995	1,002	1,009	1,016	1,023	1,030	1,037
Seed	77	81	66	69	70	70	70	70	70	70	70	70	70
Feed&residual	223	111	140	260	215	210	200	190	180	175	175	175	175
Exports	1,176	855	780	975	950	960	970	980	990	1,000	1,010	1,020	1,030
Total Use	2,431	2,007	1,946	2,272	2,216	2,228	2,235	2,242	2,249	2,261	2,278	2,295	2,312
Ending Stocks	590	753	978	1,138	842	784	739	707	688	677	669	669	667
Stocks/Use	24.3%	37.5%	50.3%	50.1%	38.0%	35.2%	33.1%	31.5%	30.6%	29.9%	29.4%	29.2%	28.8%
Average Price (\$/bu)	\$6.87	\$5.99	\$4.90	\$3.70	\$4.50	\$4.60	\$4.65	\$4.70	\$4.75	\$4.80	\$4.85	\$4.90	\$4.95
Value of Production	\$14,661	\$12,136	\$10,055	\$8,547	\$9,000	\$9,361	\$9,533	\$9,706	\$9,880	\$10,056	\$10,234	\$10,437	\$10,593
% change y/y	-16%	-17%	-17%	-15%	5%	4%	2%	2%	2%	2%	2%	2%	1%

Total Acreage and Value of U.S. Corn, Soy and Wheat Production - USDA February 2016 Projection

Total Corn, Soy, Wheat	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Planted (mm acres)	228	231	225	228	223	223	223	223	222	222	221	220	220
Harvested (mm acres)	209	212	210	214	206	207	207	207	206	205	205	204	204
Yield (bu/acre)	92	95	93	101	96	97	98	99	100	101	102	103	104
Production	19,321	20,169	19,582	21,636	19,845	20,085	20,295	20,450	20,555	20,685	20,810	20,905	21,105
Average Price (\$/bu)	\$6.21	\$5.18	\$4.79	\$4.44	\$4.72	\$4.80	\$4.81	\$4.84	\$4.86	\$4.87	\$4.88	\$4.94	\$4.95
Value of Production	\$119,992	\$104,398	\$93,790	\$96,117	\$93,756	\$96,359	\$97,656	\$98,898	\$99,908	\$100,729	\$101,534	\$103,238	\$104,476
% change y/y	-11%	-13%	-10%	2%	-2%	3%	1%	1%	1%	1%	1%	2%	1%

Source: USDA, Cleveland Research estimates

U.S. Acreage Planted Per Crop Year

