

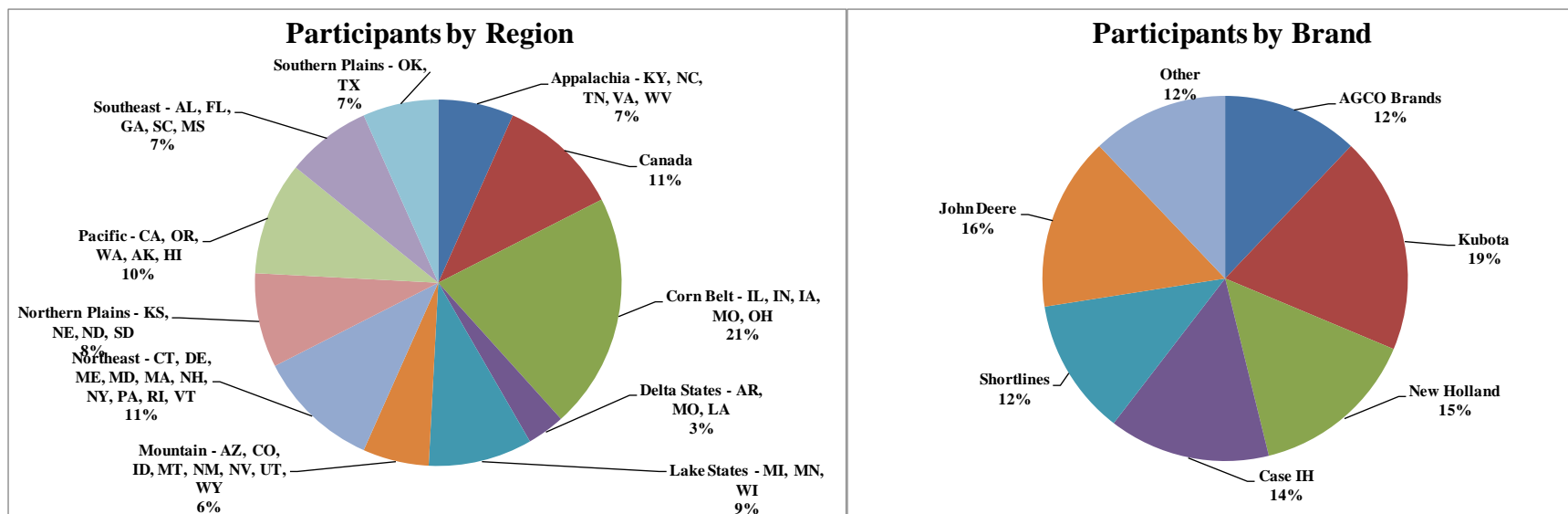
Ag Equipment Intelligence

November 2013 Dealer Sentiments &
Business Conditions Update

Monthly Ag Equipment Intelligence North American Dealer Survey

Background:

- We are pleased to announce the results of the November 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 November survey had ~122 respondents representing combined annual revenues of roughly \$4.7 billion. Participants representing a broad cross section of geographies and brands are summarized in the charts below.
- It is important to note Challenger, Fendt, Massey Ferguson, and Valtra are included under AGCO while the “other” category includes manufacturers with relatively few respondents.



Highlights / Summary Thoughts



- **Industry Sales Growth Steady in October-** Ag equipment dealers reported year-over-year sales grew 4% on average in October, inline with September. Similar to last month, Shortlines dealers saw the highest growth at 12%, while AGCO was the weakest with sales down 1%.
- **2014 Dealer Outlook for 1% Revenue Growth -** For 2014, dealer outlook is for a 1% sales growth, up slightly from the flat outlook reported last month. Deere is forecasting the N. American Ag equipment industry to be down 5-10% in 2014.
- **New Equipment Inventories “Too High”-** A net 8% of dealers categorize their new inventory as “too high” (24% too high; 59% about right; 16% too low), vs. 14% last month. This is the third straight month new equipment inventories among dealers are too high following a period of 12 straight months of new inventory “comfortable” or “too low.”
- **Used Combine Inventory Glut Improves Slightly -** Within the used equipment categories, a net 37% of dealers reported used combine inventory levels were “too high” (43% too high; 51% about right; 6% too low) in October. This is down from the net 59% reporting “too high” in August (September number was not recorded).

Monthly Sales Growth

- Ag equipment dealers reported year-over-year sales grew 4% on average in October, similar to September.
- Shortlines dealers saw the highest growth for the forth straight month at 5%, while AGCO was the weakest with sales down 2%.
- A net 16% (32%, 51%, 17%) of dealers reported better than expected results for October. Last month's reading was 8%.

N. American Farm Equipment Dealer Survey - Average Dealer Sales Growth														
% Change y/y	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sept-13	Oct-13
Overall	6%	7%	7%	9%	5%	3%	2%	7%	6%	5%	3%	3%	4%	4%
By Brand	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sept-13	Oct-13
AGCO	4%	3%	7%	13%	-2%	0%	5%	5%	1%	1%	-1%	-2%	-3%	-1%
John Deere	10%	10%	7%	9%	6%	4%	1%	9%	9%	6%	4%	-7%	5%	7%
New Holland	5%	0%	6%	6%	3%	1%	4%	5%	5%	7%	2%	4%	2%	4%
Case IH	3%	7%	8%	5%	7%	4%	3%	6%	-1%	5%	5%	12%	6%	3%
Kubota	-1%	3%	-2%	8%	4%	3%	6%	13%	-2%	10%	3%	4%	4%	0%
Shortlines	5%	7%	5%	3%	1%	-2%	4%	3%	5%	4%	11%	-1%	11%	12%
Other	0%	1%	3%	4%	6%	-3%	NA	5%	7%	3%	13%	0%	0%	5%

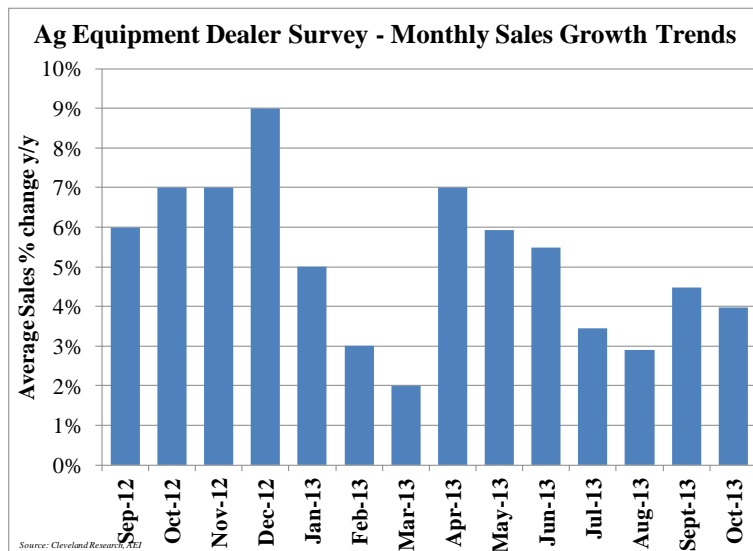
Source: Cleveland Research

N. American Farm Equipment Dealer Survey - Sales Versus Expectations														
% of Dealers Reporting	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sept-13	Oct-13
Better than expected	25%	26%	35%	38%	23%	18%	27%	25%	23%	19%	38%	33%	27%	32%
In line with expectations	56%	54%	48%	49%	59%	60%	55%	52%	57%	58%	48%	47%	54%	51%
Worse than expected	19%	20%	17%	13%	18%	22%	18%	24%	20%	23%	14%	20%	19%	17%
Net % (Better - Worse)	6%	5%	18%	25%	5%	-4%	9%	1%	3%	-4%	23%	13%	8%	16%

Source: Cleveland Research

Source: Farm Equipment Magazine Survey

Monthly Sales Growth Continued



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

% of Dealers Reporting	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sept-13	Oct-13
Positive Sales Growth	58%	61%	70%	69%	48%	44%	51%	60%	58%	52%	64%	53%	57%	59%
Flat Sales	21%	17%	12%	14%	28%	35%	30%	20%	19%	21%	21%	21%	25%	20%
Negative Sales Growth	21%	22%	18%	17%	24%	21%	19%	20%	23%	27%	15%	26%	18%	22%
Net % Reporting Growth	37%	39%	52%	52%	25%	23%	32%	40%	35%	25%	49%	26%	39%	37%
Average % Change y/y	6%	7%	7%	9%	5%	3%	2%	7%	6%	5%	3%	3%	4%	4%

Optimism/Sentiment vs. Last Month

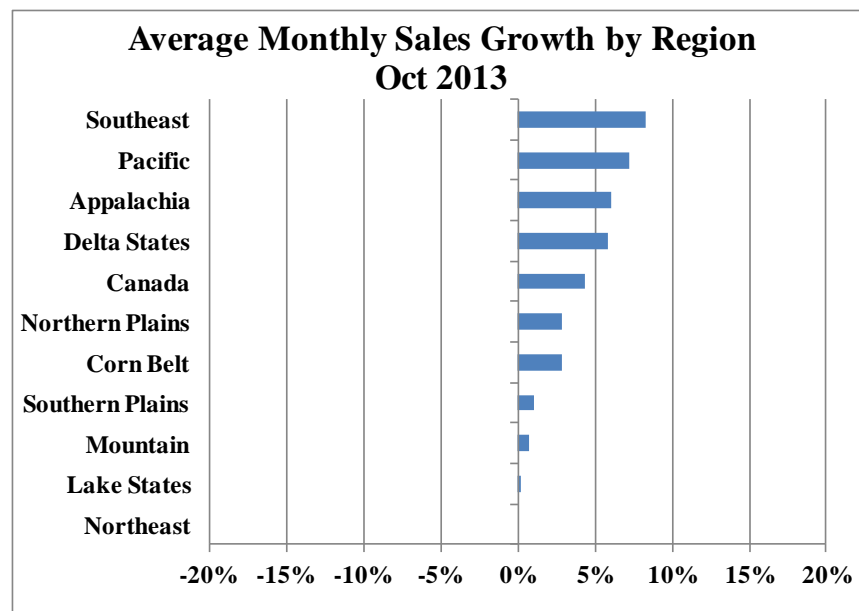
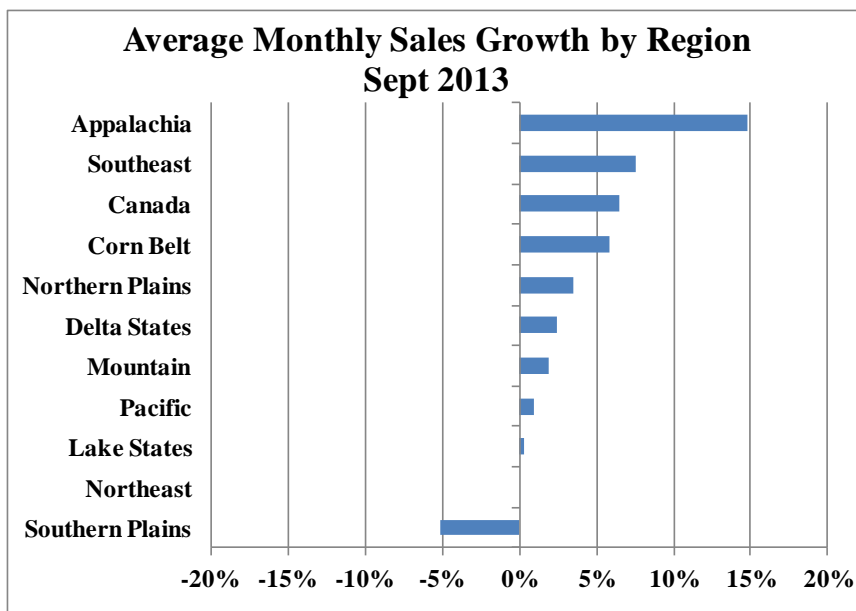
	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sept-13	Oct-13
More Optimistic	31%	27%	28%	28%	34%	34%	21%	27%	27%	26%	21%	19%	14%	15%
Same	54%	54%	52%	55%	51%	50%	54%	58%	52%	50%	58%	50%	62%	60%
Less Optimistic	15%	20%	20%	18%	15%	16%	26%	15%	21%	24%	21%	31%	23%	25%
Net % Dealer Optimism	15%	7%	8%	10%	19%	18%	-5%	13%	6%	2%	1%	-12%	-9%	-11%

Source: Cleveland Research

Source: Farm Equipment Magazine Survey

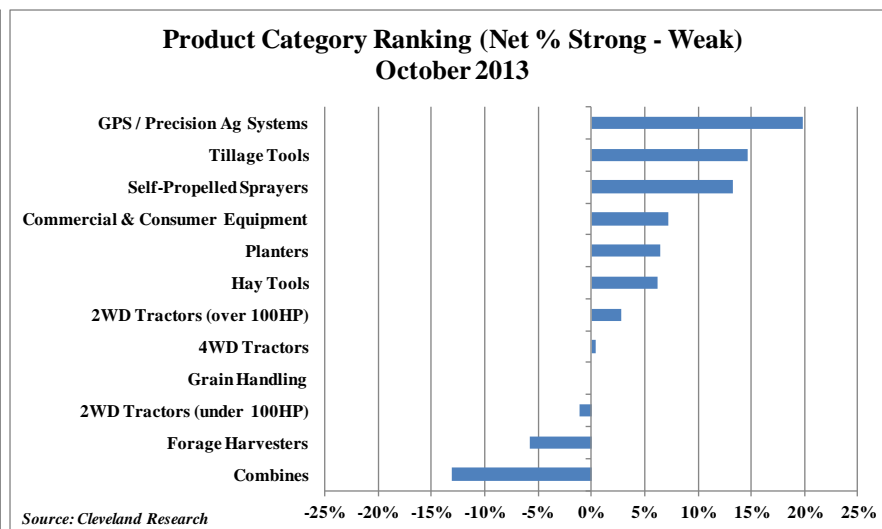
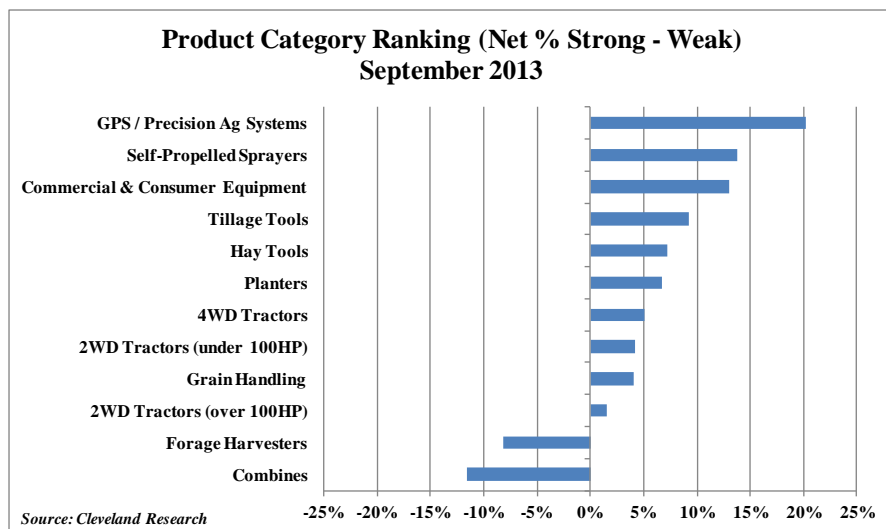
Monthly Sales Growth by Region

- Nine out of eleven regions showed positive average monthly sales growth in October compared to 8 of 11 regions in September. The Northeast and Lake States regions showed flat growth this month and were the weakest performing regions.
- Compared to last month, Appalachia saw the most sales growth deceleration, reporting 6% growth this month compared to 15% decline last month. The Southern Plains and Pacific regions had the largest acceleration reporting a 6 point improvement in y/y growth from Sept to Oct.

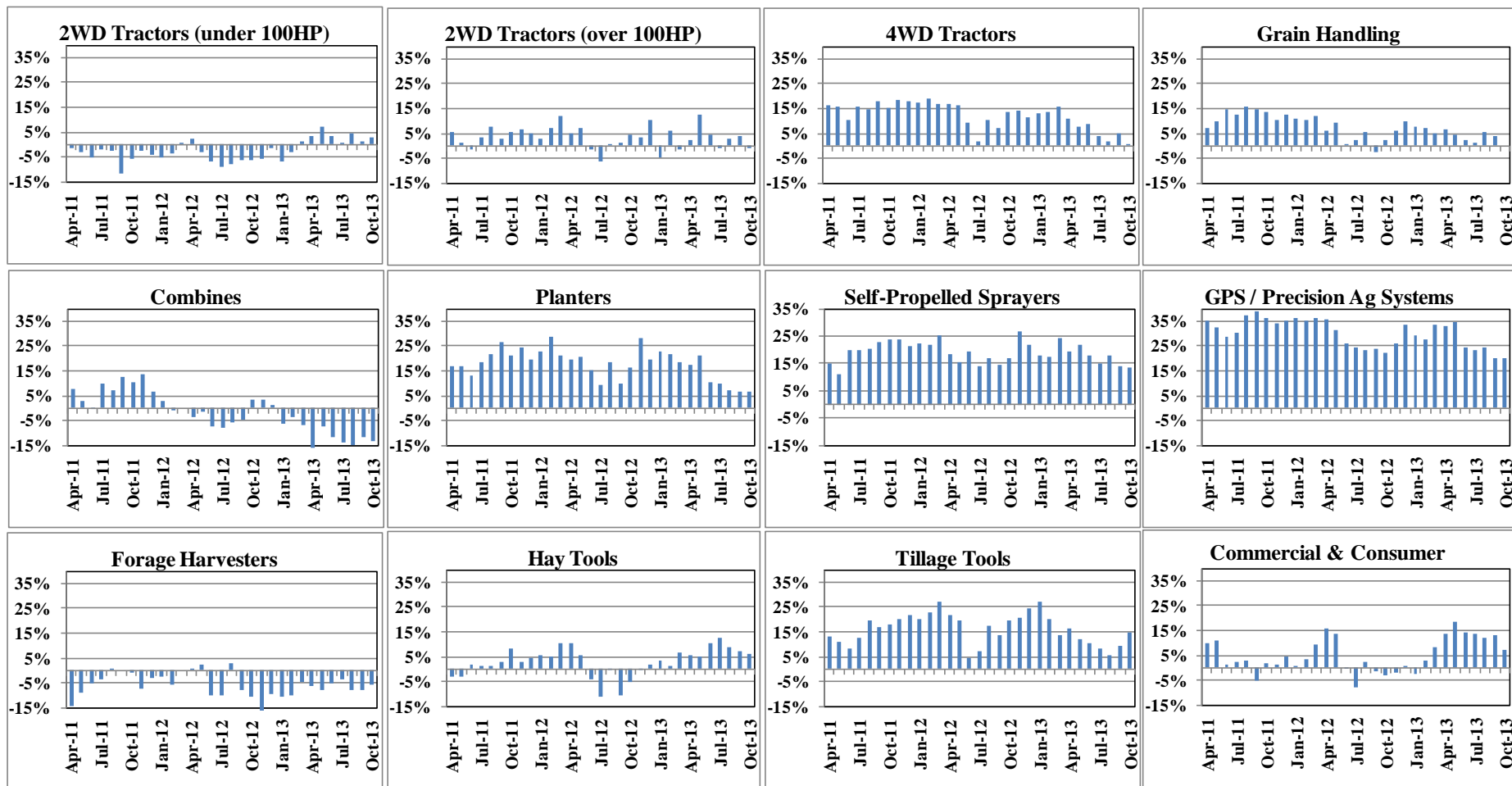


Equipment Category Sales Trends

- Nine out of twelve product categories ranked in positive territory in October, down from ten last month. GPS/precision ag systems was the best performing category for the eleventh straight month, while Combines were the weakest category for the sixth straight month.
- Compared to last month, six of the twelve product categories saw sales growth slow in October. Commercial & consumer equipment saw the largest slowdown, while tillage tools saw the largest improvement.



Equipment Category Sales Trends



Dealer Commentary on Monthly Sales and Outlook

- *The hay crop is good as well as the second cutting, also selling lots of short lines.*
- *We got a rain in August.*
- *Ag is good, commercial is down.*
- *Our sales are because of LS products, our Massey is way off (product line and price are poor). Bush Hog has gotten very pricy.*
- *Sales due to approved San Joaquin Air Pollution rebates.*
- *2014 tax laws are poor; no progress on farm bill; cotton prices poor.*
- *Cattle prices continue to be high and there is a lot of buying for tax purposes.*
- *We had an above average October last year. This year was more inline with the norm.*
- *Accelerated delivery of 2014 models.*
- *Late model used equipment is slower to sell and more price sensitive.*
- *We are a Rural Lifestyle dealership and activity slowed noticeably during the U S Government shutdown.*
- *Prices of the 2013 crop will be a factor , as well as pre 2014 tax savings.*
- *Pricing well be a factor, Not sure the buyer knows where the government is taking things (insurance, etc.).*
- *Used inventory down from previous years which should allow us to be more market aggressive.*
- *Used inventories across the country are very high.*
- *Crop prices are going down.*
- *Southeastern US had good yields on cotton, peanuts, corn, soybeans. Crop prices are weaker.*
- *Lower trending commodity prices.*
- *Dramatic increase in gross farm receipts.*
- *No confidence in the New Holland brand at all. Corn prices make planting corn in NE Missouri a real gamble, so their will be less income for these farmers.*
- *Dairy looks better because of corn prices.*
- *Seems to more interest and pricing going forward.*

Order Growth

Overall Orders

- Incoming orders grew 1% on average in October, similar to last month.
- Shortlines saw the highest orders growth for the forth consecutive month, reporting 5% growth, while AGCO saw the largest orders decline at 2%.

New Combine Order Intentions

- Order intentions declined from last month among dealers with a net 40% of dealers planning to order fewer combines than last year vs. a net 22% believing they would order fewer combines last month.

N. American Farm Equipment Dealer Survey - Average Orders Growth														
% Change y/y	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sept-13	Oct-13
Overall	2%	4%	2%	4%	3%	3%	1%	2%	2%	0%	0%	2%	1%	1%
<u>By Brand</u>	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sept-13	Oct-13
AGCO	-1%	2%	1%	7%	2%	0%	0%	3%	-1%	0%	-7%	-2%	-5%	-2%
John Deere	4%	5%	3%	5%	5%	4%	3%	2%	3%	2%	2%	7%	2%	2%
New Holland	0%	-1%	0%	-1%	0%	-1%	0%	0%	-1%	-1%	-1%	-12%	0%	0%
Case IH	-2%	4%	2%	2%	3%	4%	0%	3%	0%	-2%	1%	3%	1%	4%
Kubota	-1%	2%	0%	5%	2%	0%	1%	2%	1%	0%	-5%	-1%	0%	0%
Shortlines	0%	2%	3%	3%	5%	1%	0%	1%	0%	1%	9%	15%	5%	5%
Other	1%	0%	3%	0%	4%	0%	NA	1%	1%	0%	0%	-1%	0%	0%

Source: Cleveland Research

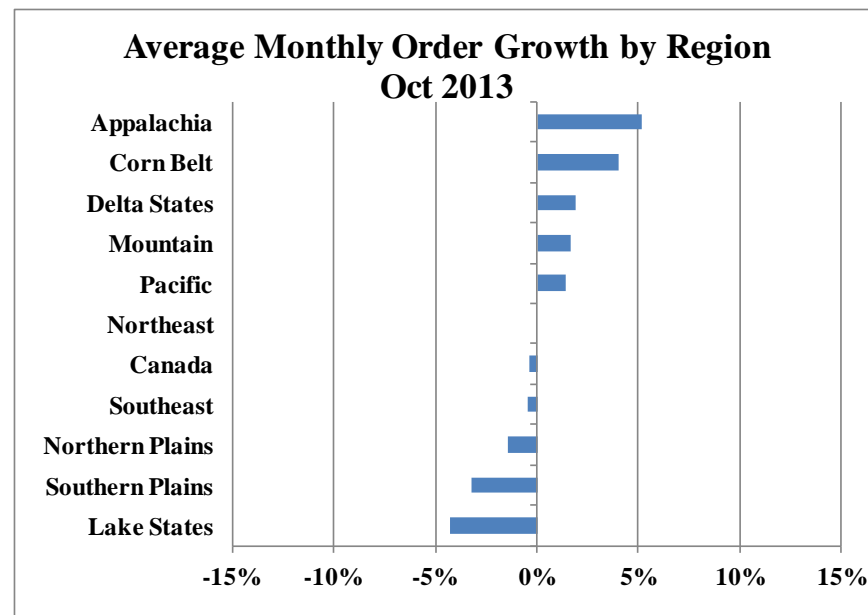
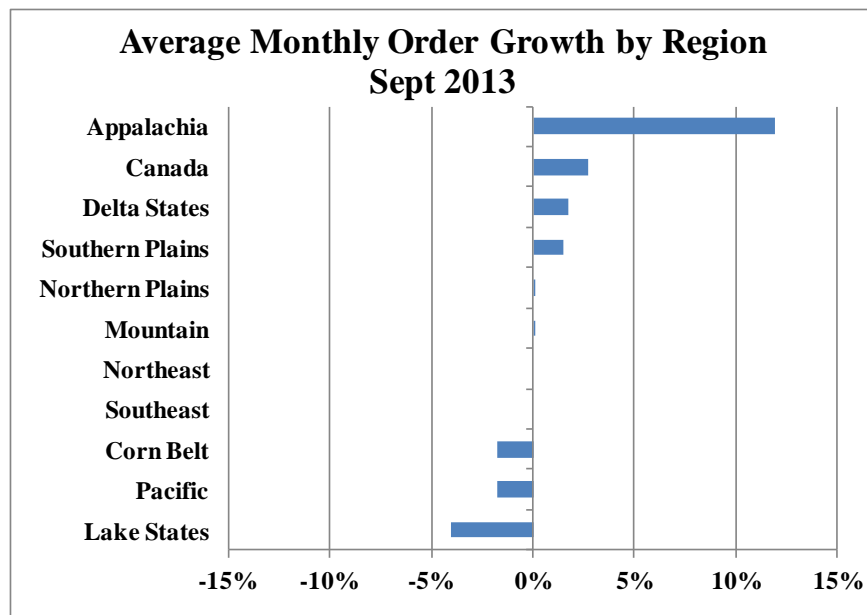
New Combine Order Intentions vs. Last Year														
	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sept-13	Oct-13
More	6%	15%	21%	20%	20%	18%	16%	24%	9%	9%	14%	8%	16%	10%
Same	68%	52%	52%	54%	59%	55%	60%	60%	68%	62%	46%	49%	45%	39%
Less	26%	32%	28%	26%	21%	27%	23%	16%	23%	29%	41%	43%	39%	51%
Net % (More- Less)	-20%	-17%	-7%	-7%	-2%	-9%	-7%	8%	-14%	-20%	-27%	-35%	-22%	-40%

Source: Cleveland Research

Source: Farm Equipment Magazine Survey

Order Growth by Region

- Five out of eleven regions showed positive monthly orders growth in October, down from the prior month. Appalachia remained the top-performing region, while the Lake States and Northern Plains saw the sharpest decline.
- Compared to last month, the Corn Belt showed the most significant improvement, while the Appalachia demonstrated the most significant slowdown in orders.



2014 Sales Outlook

- For 2014, dealers are expecting 1% sales growth, up slightly from the 0% outlook reported last month. Deere is forecasting the N. American Ag equipment industry to be down 5-10% in 2014.
- Shortline dealers are the most optimistic about next year (6% growth forecast), while the AGCO dealers hold the weakest outlook (3% decline).

Dealer Outlook

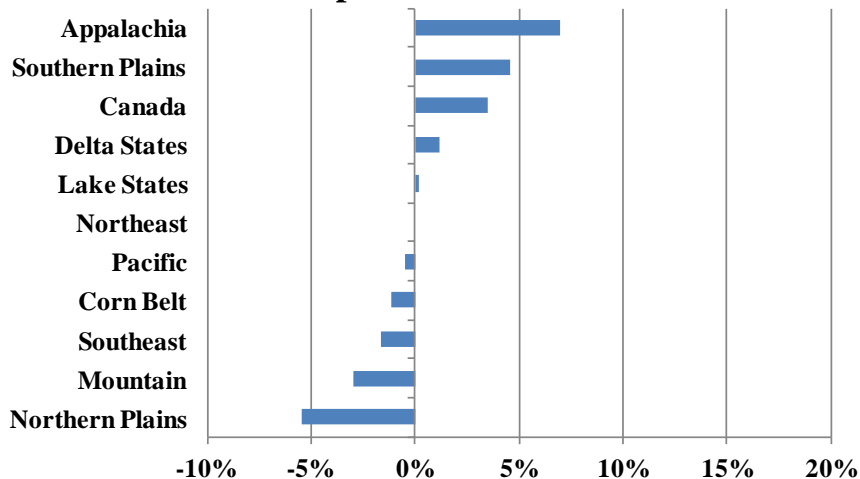
(% chg v/v)	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sept-13	Oct-13
	2013 Outlook												2014 Outlook	
Overall	3%	2%	4%	2%	4%	4%	3%	5%	5%	3%	3%	3%	0%	1%
By Brand	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sept-13	Oct-13
AGCO	4%	4%	3%	3%	2%	2%	6%	6%	2%	3%	-4%	2%	-1%	-3%
John Deere	4%	2%	6%	3%	4%	4%	3%	5%	8%	4%	6%	1%	2%	2%
New Holland	1%	0%	0%	-1%	1%	0%	2%	4%	1%	6%	0%	-3%	2%	1%
Case IH	2%	2%	2%	-1%	3%	4%	1%	5%	0%	0%	3%	-5%	-3%	0%
Kubota	3%	2%	0%	0%	4%	4%	3%	7%	4%	8%	-3%	3%	-1%	-1%
Shortlines	5%	0%	2%	0%	4%	4%	2%	3%	3%	2%	12%	5%	4%	6%
Other	3%	3%	-2%	2%	1%	5%	NA	1%	3%	1%	4%	1%	2%	2%

Source: Cleveland Research

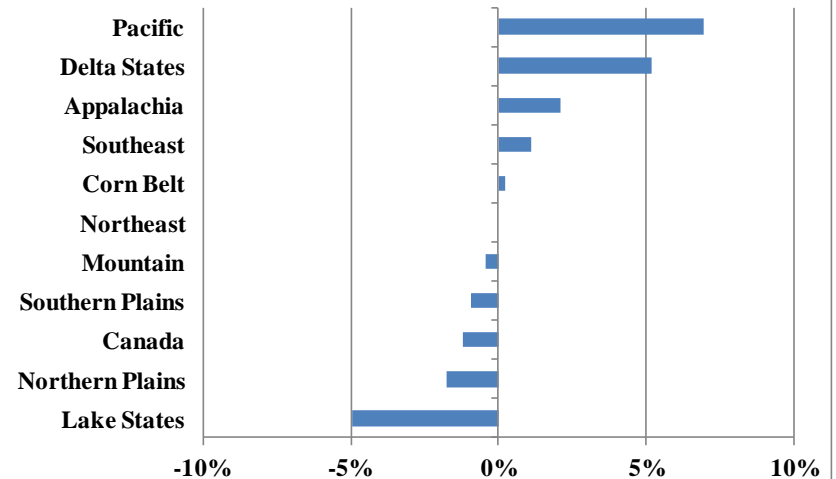
2014 Sales Outlook Continued

- Four out of eleven regions are projecting a positive full year 2014 sales outlook in October. The Pacific region is the most optimistic (expecting 7% growth), while the Lake States region is expecting sales to decline 5% in 2014.

**Average Monthly Sales Outlook by Region
September 2013**

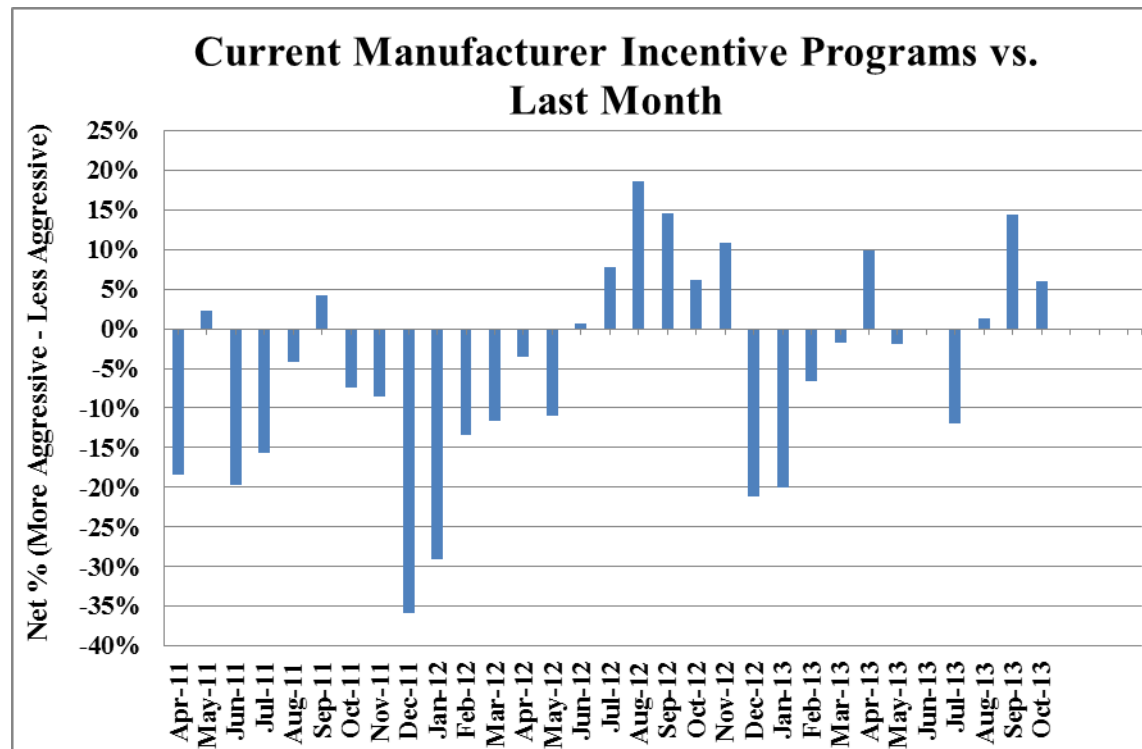


**Average Monthly Sales Outlook by Region
Oct 2013**



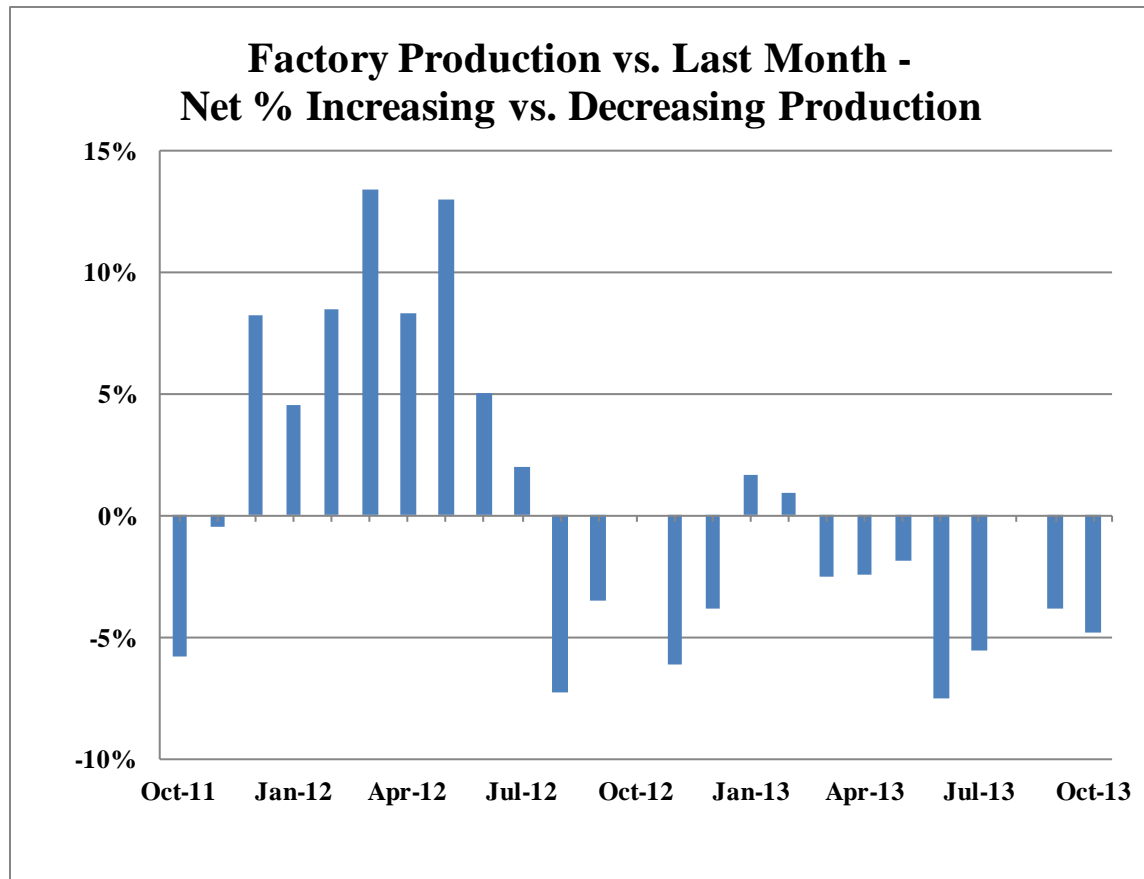
Current Manufacturer Incentive Programs

- A net 6% of dealers report that manufacturers are more aggressive with incentives in October (17% more aggressive; 72% same; 11% less aggressive) compared to 14% reporting more aggressiveness in September.



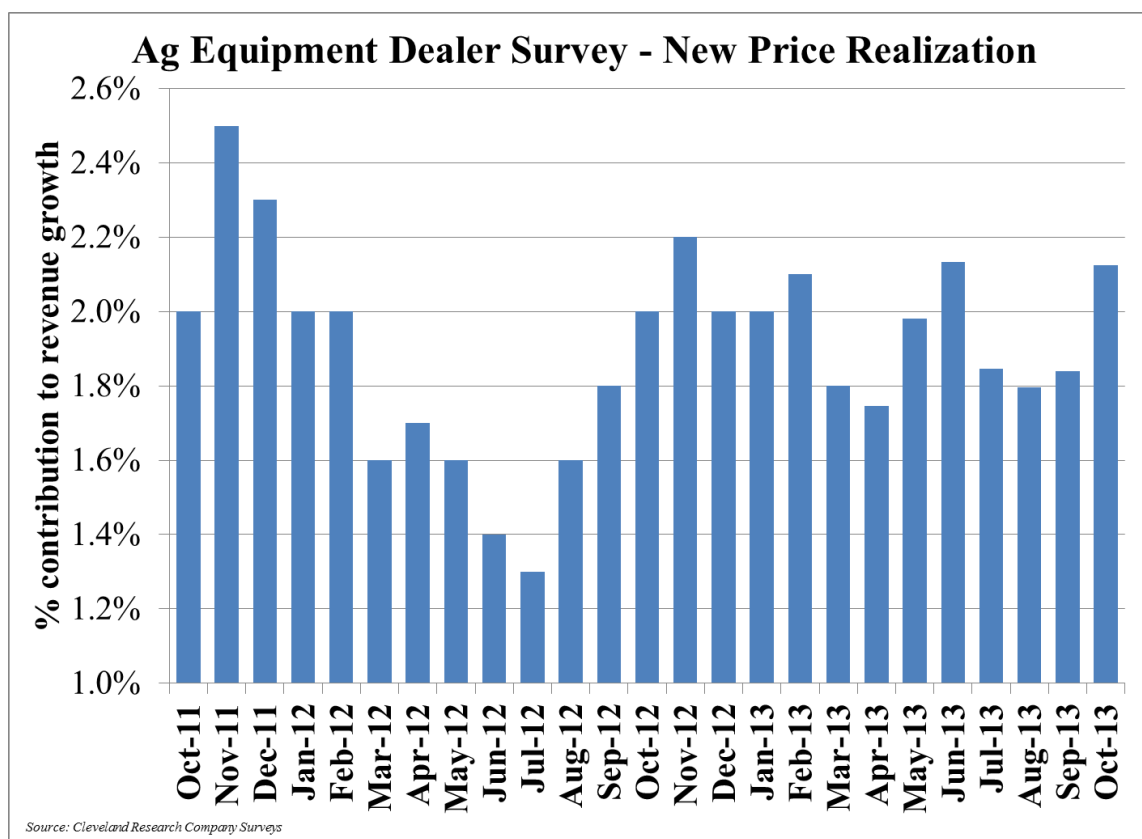
Factory Production

- A net 5% of dealers report that factory production was down compared to last month (6% increasing production; 84% no change in production; 11% decreasing production).



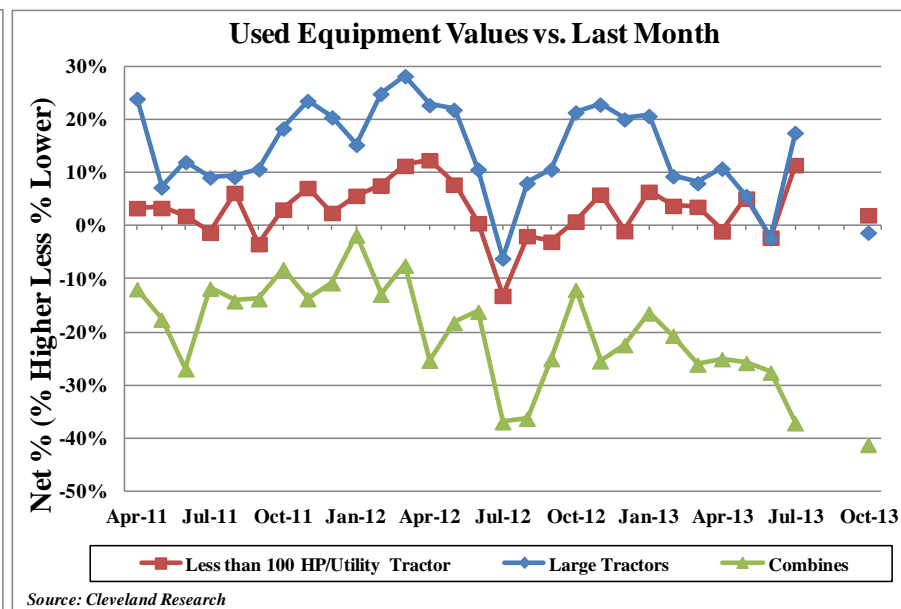
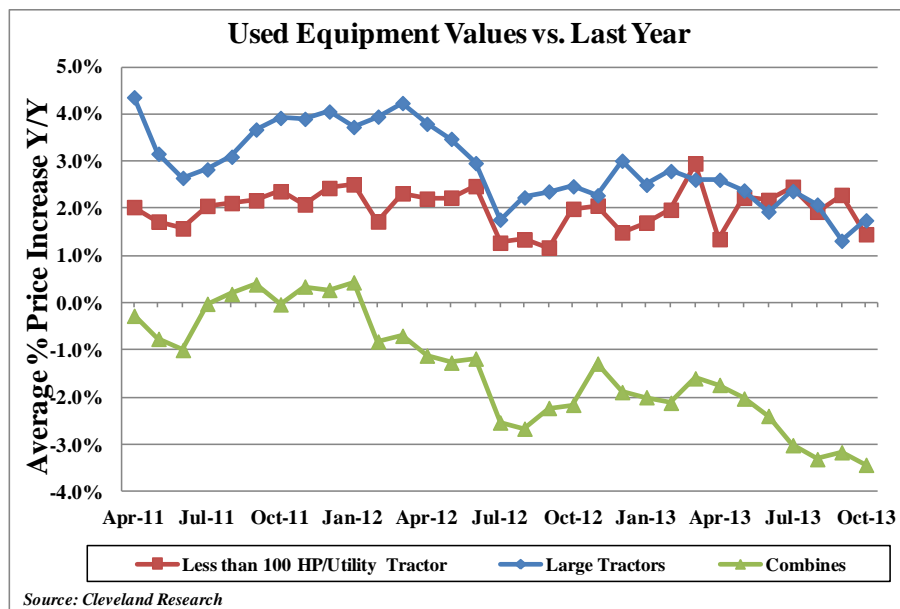
Pricing Trends

- Dealers report price contributed roughly ~2.1% to total October revenue growth, up from the prior three months. We would expect this trend to move higher in the coming months as new Model Year price increase announcements are made, as well Final Tier 4 price increases.



Used Equipment Pricing

- By category, used prices for tractors over 100HP are up 1.8% year-over-year on average, up from 1.3% reported last month. Prices for used tractors under 100HP are up 1.5%, down from 2.3% the prior month. Used combine values fell further to down 3.4% y/y compared to down 3.2% last month.
- Used equipment values vs. last month were lower in October than in July (Aug and Sept were not recorded).



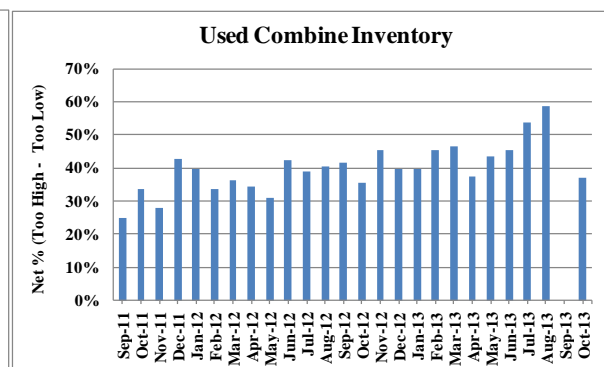
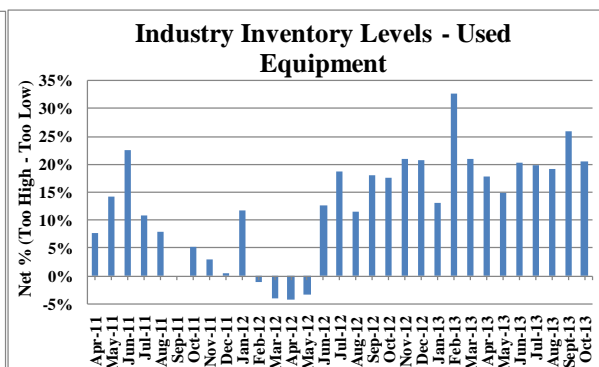
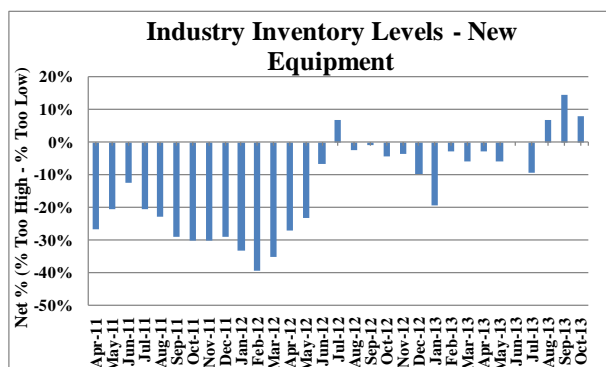
Inventory Levels

New Equipment Inventory

- A net 8% of dealers categorize their new inventory as “too high” (24% too high; 59% about right; 16% too low), vs. 14% of dealers last month who categorized their new inventory as “too high”.

Used Equipment Inventory

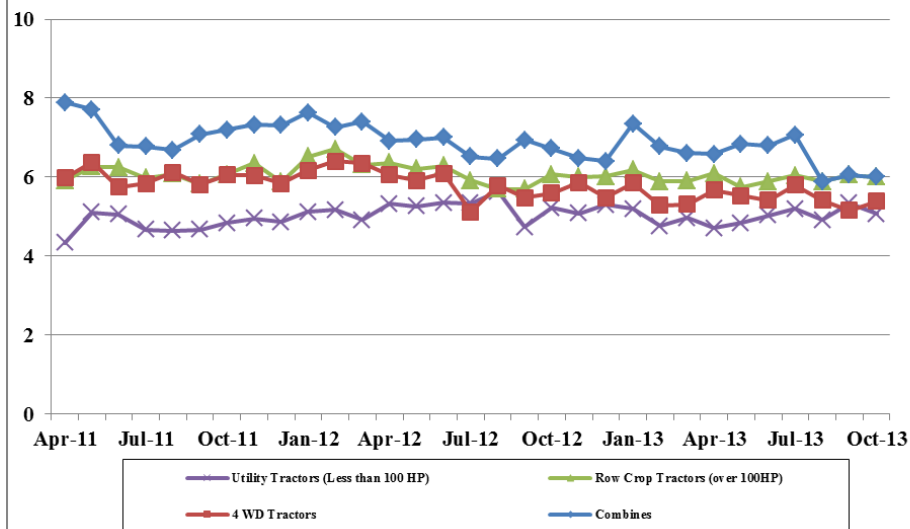
- Used equipment inventory remains high as a net 20% of dealers categorize their used inventory levels as “too high” (37% too high; 47% about right; 16% too low), down slightly from 26% reported last month.
- Used combine inventory did fall quite significantly. A net 37% of dealers reported inventory as “too high” in October vs a net 59% in August.



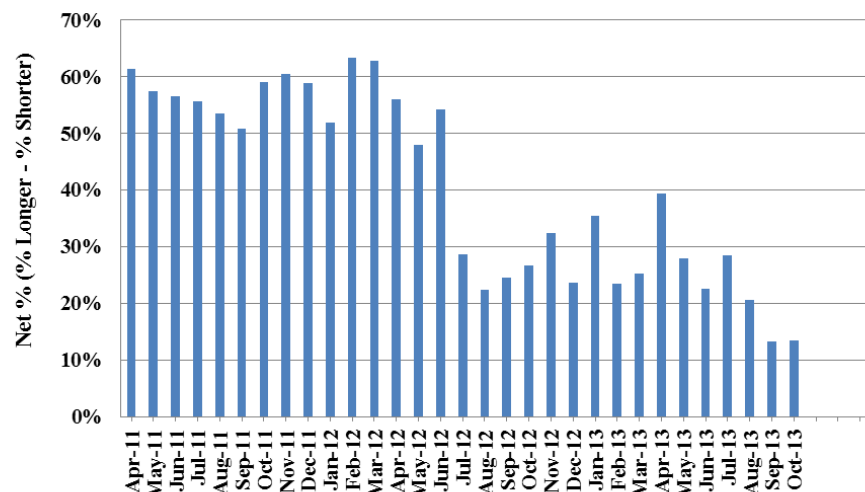
Equipment Availability

- Overall, a net 13% of dealers report longer factory lead-times compared to last month (23% longer; 68% same; 9% shorter), similar to last month.
- On average combine lead times are 6 months; 4WD are 5.4 months; row crop tractor lead times are 6 months; and smaller tractors (<100 HP) lead times are 5.1 months.

Lead Times By Product Category (Months)



Lead Times - Versus Prior Month



Dealer Commentary on Used Inventory Levels

- *24 row planters are hard to move on the used side.*
- *Hard to buy at the right price, and short.*
- *Combines and 4WD articulated tractors are very slow, and contribute heavily on our inventory dollars.*
- *Dealer inventory levels remain at elevated levels.*
- *Used tillage and used combines are the biggest problem for us.*
- *Used combine inventories (especially aged ones) are too high.*
- *We've got too many combines and 4 wheel drives.*
- *Too many self propelled forage harvesters.*

Dealer Commentary on Biggest Surprise in the Month

- *Still have interest in planters, conservations discs and used tractors.*
- *Tobacco and peanut farmers are pricing new harvesters for next year.*
- *Expected more planter interest after harvest was complete, but have not seen it.*
- *The commercial side is very slow; Ag trend is good, but for large used.*
- *Continual wet weather and poor harvest conditions.*
- *We sell small to med size tractors and had the best Oct, every. LS tractor going great.*
- *Volume - I had no idea we'd done that much more business than last year until I ran the figures just now.*
- *Lack of rain or snow – absolutely great harvesting weather, but we do need a good dose of moisture before the ground freezes.*
- *Sales for us are constant despite a very short crop. Tail end of tax buying year?*
- *Low crop price expectations are hurting large tractor sales.*
- *Customers are deferring new purchases into next year.*
- *Used combine sale have actually been surprising.*
- *Extra commercial account sales.*
- *Sales are up.*
- *Slow tractor sales.*
- *People are reluctant to buy the tier 4 tractor engines.*
- *Big multi-unit sales. We're seeing good pre-sell.*
- *Continued customer traffic.*
- *I am surprised how quiet it is in equipment sales and how fast it stopped. We believe there is money from grain left over but farmers maybe keeping it for a cushion.*
- *Harvest is taking a long time to get done around here, it may affect sales in Nov., however, I plan on a lot of year-end business.*

NA 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 & 4-Wheel	Combines	<40HP	Util	RC	4-WD	Total	High hp	Comb
Jan-12	3,899	3,698	2,335	359	10,291	2,694	528	5%	6%	2%	-29%	3%	-4%	-44%
Feb-12	4,360	3,547	2,046	488	10,441	2,534	367	-2%	15%	16%	6%	7%	14%	-53%
Mar-12	8,589	4,559	2,703	743	16,594	3,446	718	-3%	-8%	-4%	19%	-4%	0%	-26%
Apr-12	13,365	6,016	3,369	887	23,637	4,256	705	17%	11%	1%	0%	12%	1%	-25%
May-12	13,562	5,984	2,911	611	23,068	3,522	691	8%	17%	21%	4%	11%	18%	-15%
Jun-12	12,503	6,118	2,571	502	21,694	3,073	954	3%	3%	24%	17%	5%	23%	32%
Jul-12	8,632	4,830	2,755	551	16,768	3,306	1,345	12%	2%	33%	21%	12%	31%	14%
Aug-12	8,146	4,514	2,452	585	15,697	3,037	1,491	11%	8%	15%	35%	11%	18%	-2%
Sep-12	8,002	4,531	3,120	773	16,426	3,893	1,760	1%	-1%	14%	11%	3%	14%	22%
Oct-12	9,918	6,891	5,644	1,499	23,952	7,143	2,312	25%	16%	33%	33%	25%	33%	38%
Nov-12	5,158	4,005	2,492	632	12,287	3,124	722	5%	18%	10%	31%	11%	14%	-3%
Dec-12	8,239	6,333	4,350	902	19,824	5,252	1,137	14%	4%	19%	37%	12%	21%	3%
Jan-13	4,723	4,114	2,956	677	12,470	3,633	616	21%	11%	27%	89%	21%	35%	17%
Feb-13	5,102	3,734	2,588	669	12,093	3,257	622	17%	5%	26%	37%	16%	29%	69%
Mar-13	8,311	4,941	3,464	706	17,422	4,170	1,199	-3%	8%	28%	-5%	5%	21%	67%
Apr-13	13,883	5,652	4,269	855	24,659	5,124	1,149	4%	-6%	27%	-4%	4%	20%	63%
May-13	17,193	6,326	3,406	556	27,481	3,962	887	27%	6%	17%	-9%	19%	12%	28%
Jun-13	13,449	6,363	3,272	541	23,625	3,813	1,123	8%	4%	27%	8%	9%	24%	18%
Jul-13	10,725	5,563	3,177	492	19,957	3,669	1,480	24%	15%	15%	-11%	19%	11%	10%
Aug-13	9,280	5,034	2,846	588	17,748	3,434	1,252	14%	12%	16%	1%	13%	13%	-16%
Sep-13	8,527	4,871	3,360	574	17,332	3,934	1,291	7%	8%	8%	-26%	6%	1%	-27%
Oct-13	9,665	6,747	5,943	1,228	23,583	7,171	1,671	-3%	-2%	5%	-18%	-2%	0%	-28%

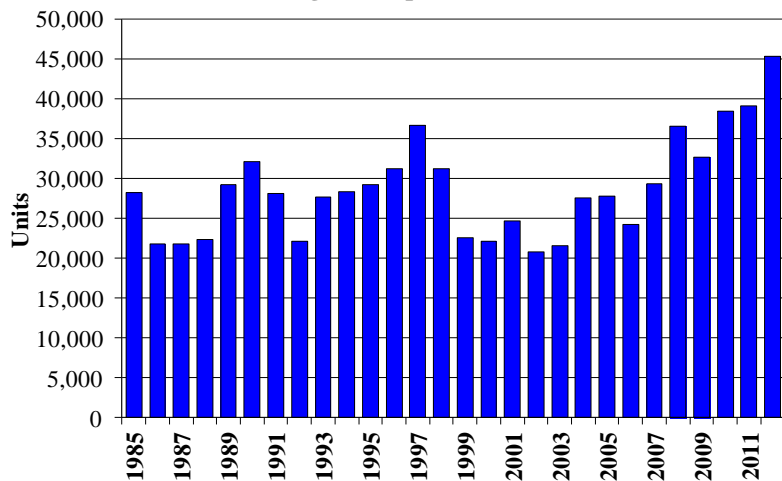
NA Farm Equipment Industry Inventory

NORTH AMERICAN FARM EQUIPMENT INVENTORY

	Inventory (Units)							Inventory to 12-mo. Sales						
	< 40 HP	Utility	Row Crop	4-Wheel	<u>Total</u> Tractor	<u>Memo:</u> High hp	Combines	<40HP	Util	RC	4-WD	Total	High HP	Comb
Dec-11	59,746	26,551	7,666	1,035	94,998	8,701	1,250	62%	47%	24%	14%	49%	22%	10%
Jan-12	61,967	27,298	7,277	1,222	97,764	8,499	1,338	64%	48%	23%	17%	51%	22%	11%
Feb-12	65,727	28,689	7,763	1,360	103,539	9,123	1,676	68%	50%	24%	19%	54%	23%	14%
Mar-12	68,756	29,144	8,199	1,518	107,617	9,717	1,955	72%	51%	26%	21%	56%	25%	17%
Apr-12	66,562	28,743	8,241	1,472	105,018	9,713	1,961	68%	50%	26%	20%	54%	25%	17%
May-12	65,188	28,322	8,930	1,659	104,099	10,589	2,258	66%	48%	27%	22%	53%	27%	20%
Jun-12	62,380	27,773	9,395	1,665	101,213	11,060	2,476	63%	47%	28%	22%	51%	27%	21%
Jul-12	61,495	28,135	10,351	1,950	101,931	12,301	2,791	61%	48%	31%	26%	51%	30%	24%
Aug-12	61,108	28,892	11,307	2,248	103,555	13,555	3,008	60%	49%	33%	29%	51%	32%	26%
Sep-12	62,319	29,587	11,580	2,398	105,884	13,978	2,870	62%	50%	34%	31%	52%	33%	24%
Oct-12	61,918	29,266	10,573	1,931	103,688	12,504	1,662	60%	49%	30%	24%	50%	28%	13%
Nov-12	65,873	29,835	11,232	2,079	109,019	13,311	1,520	64%	49%	31%	25%	52%	30%	12%
Dec-12	67,319	29,137	10,335	1,753	108,544	12,088	1,409	64%	48%	28%	21%	52%	27%	11%
Jan-13	69,290	30,182	10,399	1,803	111,674	12,202	1,659	66%	49%	28%	20%	52%	26%	13%
Feb-13	72,473	30,842	11,375	1,850	116,540	13,225	2,186	68%	50%	30%	20%	54%	28%	17%
Mar-13	72,499	30,869	11,700	1,931	116,999	13,631	2,518	69%	50%	30%	21%	54%	29%	19%
Apr-13	70,567	30,512	12,507	1,883	115,469	14,390	2,577	66%	49%	32%	21%	53%	30%	18%
May-13	65,268	30,400	13,202	2,068	110,938	15,270	2,866	59%	49%	33%	23%	50%	31%	20%
Jun-13	62,097	29,271	13,330	2,158	106,856	15,488	3,249	56%	47%	33%	24%	48%	31%	23%
Jul-13	59,174	29,628	14,138	2,177	105,117	16,315	3,208	52%	47%	34%	24%	47%	33%	22%
Aug-13	58,941	30,907	15,063	2,307	107,218	17,370	3,325	52%	49%	36%	26%	47%	34%	23%
Sep-13	60,787	31,714	15,372	2,507	110,380	17,879	3,255	53%	50%	37%	29%	48%	35%	24%

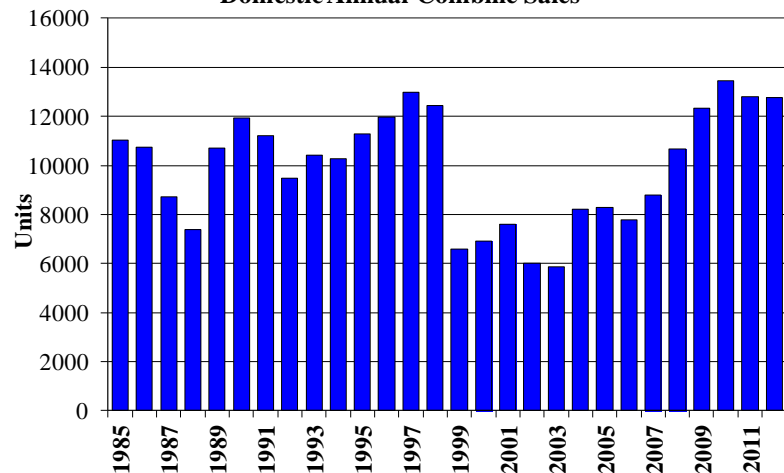
Annual Ag Equipment Industry Sales – 1985-2012

Domestic High-horsepower Tractor Sales



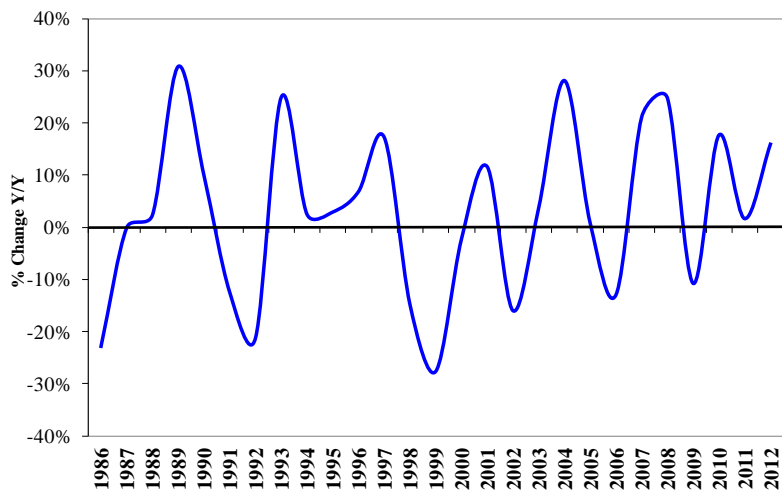
Source: AEM. Row crop and 4-wheel drive retail sales.

Domestic Annual Combine Sales



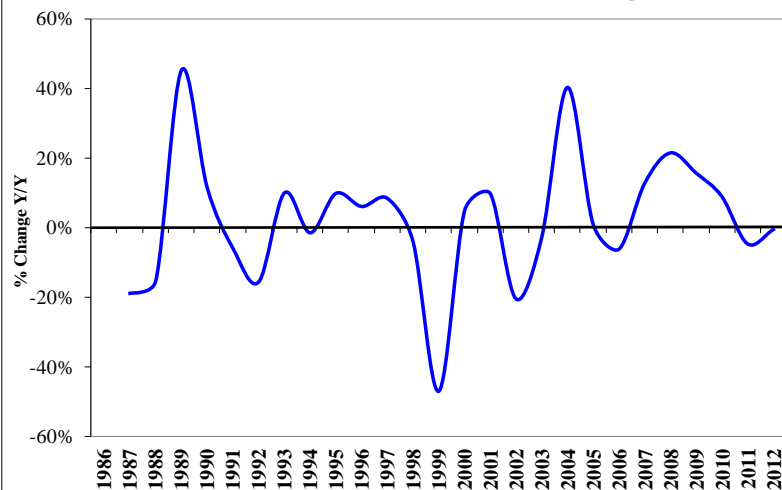
Source: AEM.

Domestic High HP Tractor Sales Y/Y % Change



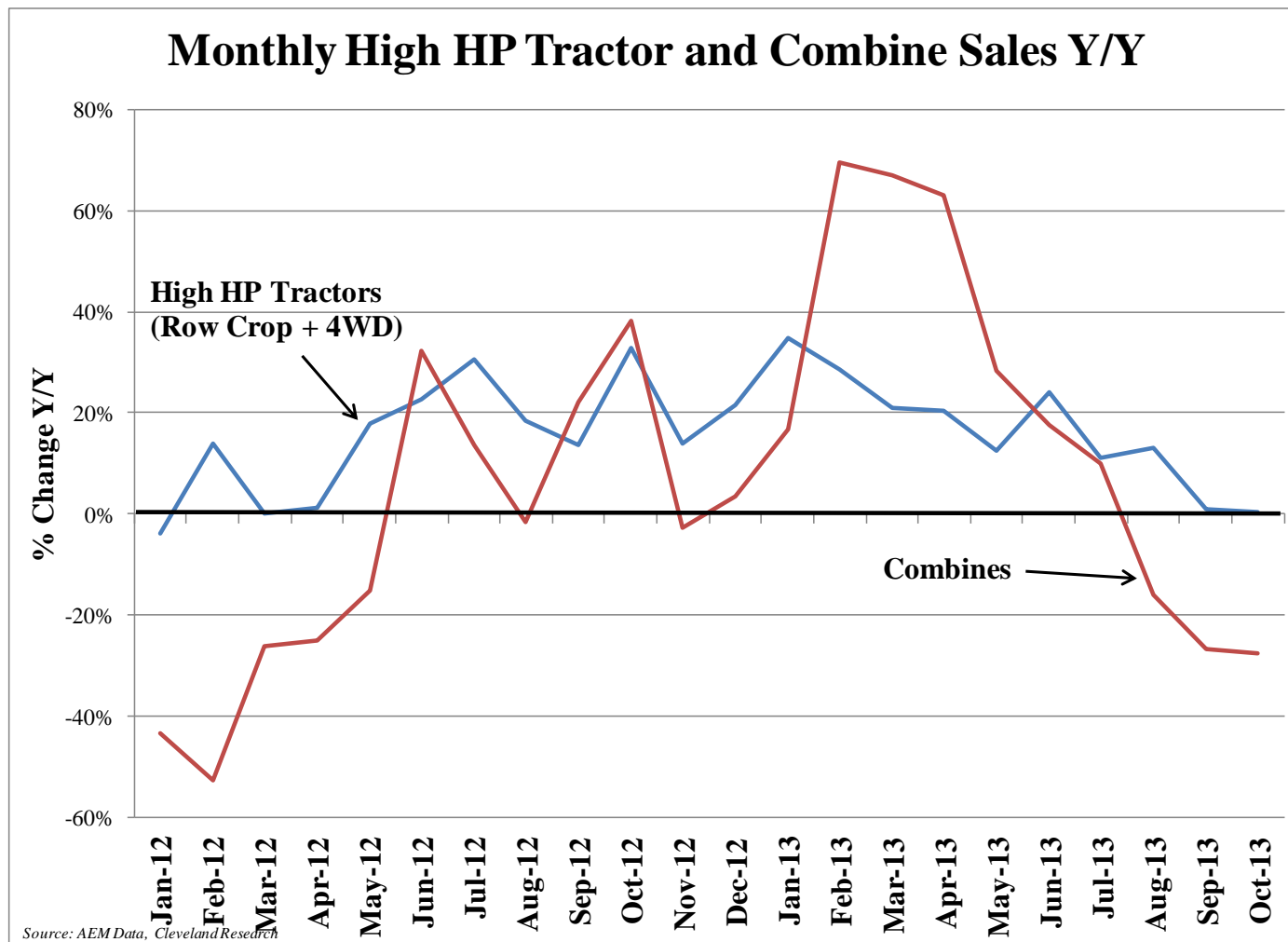
Source: AEM. Cleveland Research estimates

Domestic Combine Sales Y/Y % Change



Source: AEM. Cleveland Research estimates

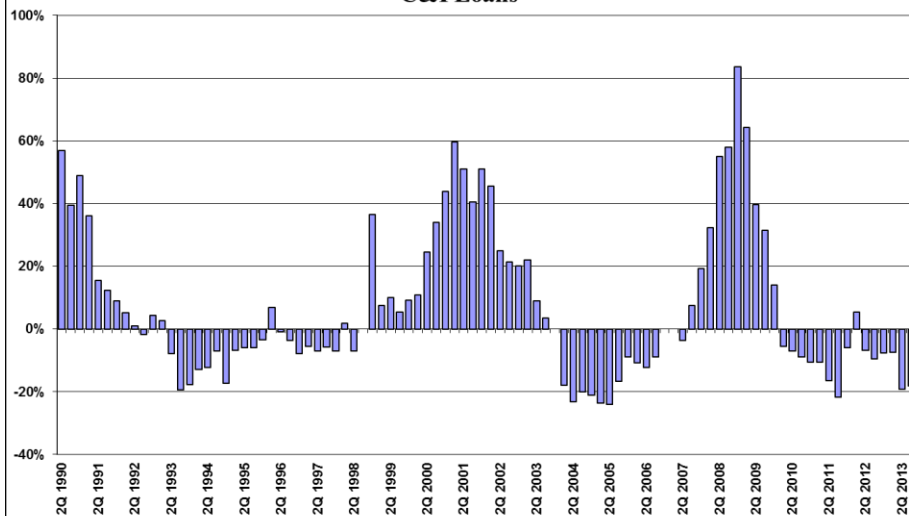
NA Ag Equipment Sales



Credit – C&I Loan Demand Declines as Lending Standards Loosen

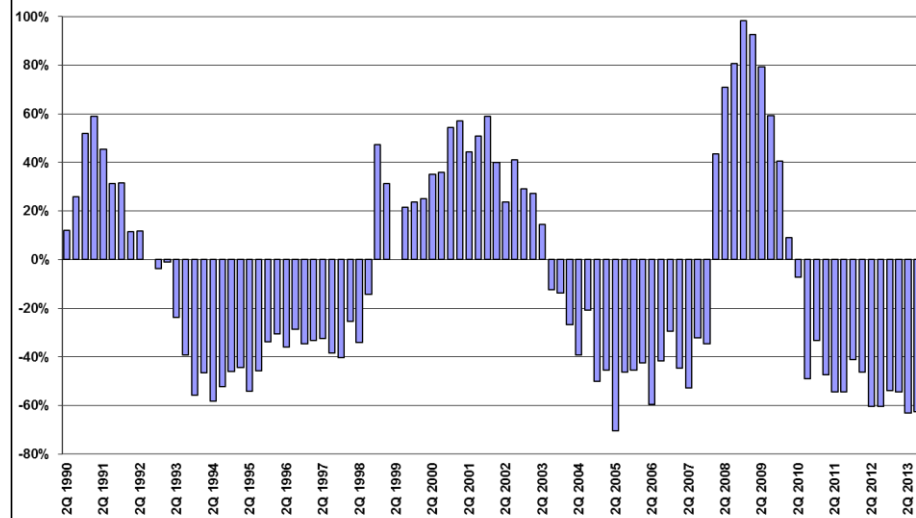
- The 3Q13 Senior Loan Officer survey saw a slight uptick in tightening of loan standards. A net 18% of loan officers reported easier credit standards in 3Q13 compared with a net 19% in 2Q.
- Bank rate spreads also saw a slight increase in 3Q13 with a net 62.5% of loan officers reporting lower lending spreads, up from a net 63% in 2Q.
- Demand for commercial and industrial loans accelerated in 3Q as a net 15% of loan officers reported stronger demand for commercial and industrial loans, up from the net 6% of loan officers reporting stronger demand for loans in 2Q.

Net Percentage of Domestic Respondents Tightening Standards for C&I Loans



Source: Federal Reserve Board

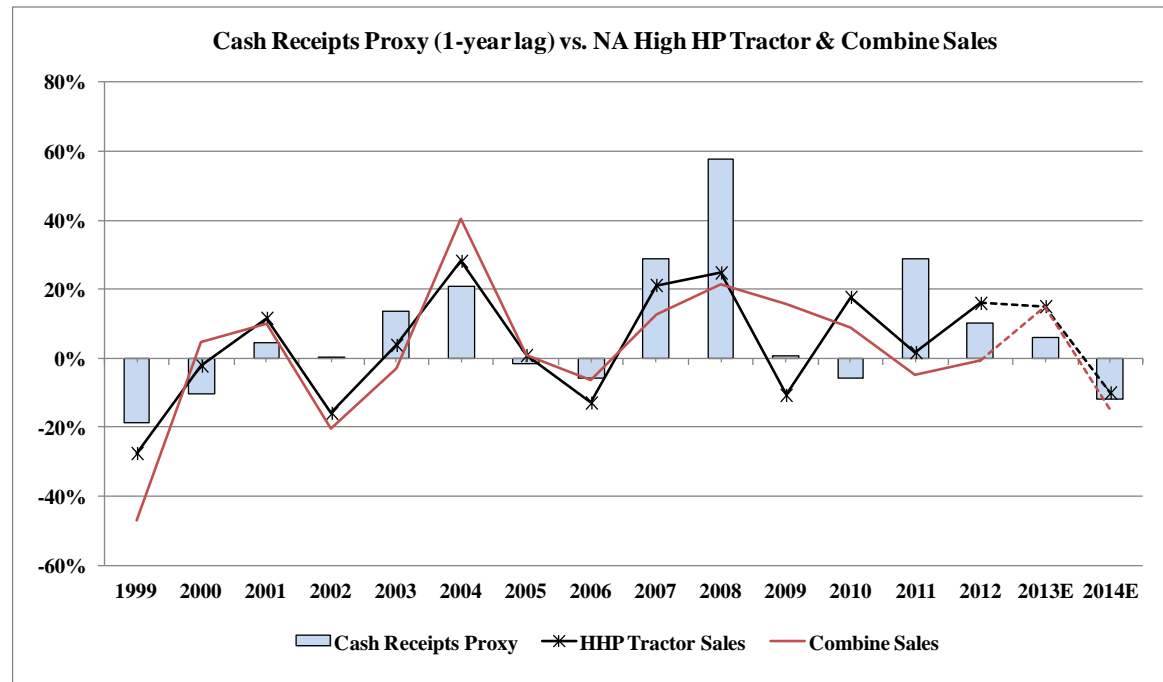
Net % of Domestic Respondents Increasing Spreads of Loan Rates Over Banks' Cost of Funds



Source: Federal Reserve Board

Commodity Price Trends - Cash Receipts vs. Next Year Equipment Sales

The USDA's Updated crop supply and demand forecast for the 2013/14 crop year points to a (13%) decline in our simplified cash receipts proxy, slightly worse than the September forecast. The chart below depicts N. American high HP tractor and combine sales on a one year lag vs. our simplified farm cash receipts proxy as illustrated using the three most important crops – corn, soybeans, and wheat. The updated August USDA cash receipts outlook for 2013 is for down 13% over 2012, slightly worse than the 12% from September forecast. If historical trends hold, this would imply that 2014 could be a challenging year for equipment demand vs. 2013, as the correlation between equipment sales and cash receipts has provided a good proxy for future equipment demand.



Commodity Price Trends – Simplified Cash Receipts Proxy

USDA - World Agricultural Supply and Demand Estimates (bu millions)												
CORN - DOMESTIC								CORN - INTERNATIONAL				
Year	Production	Domestic Use	Exports	Total Use	End Stocks	Stocks/Use	Avg Price	Year	Production	Total Use	End Stocks	Stocks/Use
2010/11	12,447	11,220	1,835	13,055	1,128	10.1%	\$5.18	2010/11	20,194	22,192	3,766	17.0%
2011/12	12,358	11,005	1,650	12,655	851	7.7%	\$5.95-\$6.25	2011/12	22,010	23,171	4,235	18.3%
2012/13	10,780	10,385	750	11,135	759	7.3%	\$6.70-\$7.10	2012/13	22,963	23,626	4,179	17.7%
2013/14								2013/14				
August	13,763	11,450	1,225	12,675	1,873	16.4%	\$4.50-\$5.30	August	23,918	25,166	4,075	16.2%
September	13,843	11,450	1,225	12,675	1,855	16.2%	\$4.40-\$5.20	September	23,820	25,078	4,107	16.4%
November	13,989	11,550	1,400	12,950	1,887	16.3%	\$4.10-\$4.90	November	23,916	25,195	4,582	18.2%
Revision to 2013/14:								Corn Futures Price: \$4.44				
Change m/m	146	100	175	275	32	0.1%	-\$0.30	m/m chg	97	117	476	1.8%
Change y/y	3,209	1,165	650	1,815	1,128	9.0%	(\$2.40)	y/y chg	953	1,569	404	0.5%
SOYBEANS - DOMESTIC								SOYBEANS - INTERNATIONAL				
Year	Production	Domestic Use	Exports	Total Use	End Stocks	Stocks/Use	Avg Price	Year	Production	Total Use	End Stocks	Stocks/Use
2010/11	3,329	3,280	1,501	4,781	215	6.6%	\$11.30	2010/11	6,397	7,457	2,361	31.7%
2011/12	3,056	3,111	1,335	4,446	175	5.6%	\$12.30	2011/12	5,629	7,536	1,785	23.7%
2012/13	3,015	3,080	1,350	4,430	125	4.1%	\$14.30	2012/13	6,873	7,777	2,170	27.9%
2013/14								2013/14				
August	3,255	3,176	1,385	4,561	220	6.9%	\$10.35-\$12.35	August	7,096	8,083	2,435	30.1%
September	3,149	3,140	1,370	4,510	150	4.8%	\$11.50-\$13.50	September	7,200	8,110	2,479	30.6%
November	3,258	3,243	1,450	4,693	170	5.2%	\$11.15-\$13.15	November	7,160	8,127	2,410	29.7%
Revision to 2013/14: NA								Soybean Futures Price: \$12.67				
Change m/m	109	103	80	183	20	0.5%	(\$0.35)	m/m chg	-40	17	-68	-0.9%
Change y/y	243	163	100	263	45	1.2%	(\$2.15)	y/y chg	288	350	240	1.8%
WHEAT - DOMESTIC								WHEAT - INTERNATIONAL				
Year	Production	Domestic Use	Exports	Total Use	End Stocks	Stocks/Use	Avg Price	Year	Production	Total Use	End Stocks	Stocks/Use
2010/11	2,207	1,128	1,289	2,417	862	76.4%	\$5.70	2010/11	21,718	22,919	6,385	27.9%
2011/12	1,999	1,199	1,055	2,254	728	60.7%	\$7.25	2011/12	23,506	24,369	6,458	26.5%
2012/13	2,269	1,381	1,025	2,406	731	52.9%	\$7.80	2012/13	21,821	23,418	5,889	25.1%
2013/14								2013/14				
August	2,114	1,311	1,100	2,411	551	42.0%	\$6.40-\$7.60	August	23,804	24,659	5,805	23.5%
September	2,114	1,311	1,100	2,411	561	42.8%	\$6.50-\$7.50	September	23,933	24,647	5,916	24.0%
November	2,130	1,333	1,100	2,433	565	42.4%	\$6.70-\$7.30	November	23,825	24,515	5,993	24.4%
Revision to 2013/14: NA								Wheat Futures Price: \$6.86				
Change m/m	0	0	0	0	10	0.8%	\$0.00	m/m chg	129	-12	111	0.5%
Change y/y	-155	-70	75	5	-170	-10.1%	(\$0.80)	y/y chg	2,112	1,229	26	-1.1%
FARMER CROP RECEIPTS												
Production:			Avg Price:			Crop Cash Receipts*						
Corn	Soybeans	Wheat	Corn	Soybeans	Wheat	Corn	Soybeans	Wheat	Total	y/y % Chg		
2004/05	11,807	3,124	2,158	\$2.06	\$5.74	\$3.40	\$22,228	\$17,337	\$7,199	\$46,764	-6%	
2005/06	11,114	3,063	2,105	\$2.00	\$5.66	\$3.42	\$32,014	\$20,499	\$7,719	\$60,232	29%	
2006/07	10,531	3,188	1,812	\$3.04	\$6.43	\$4.26	\$54,760	\$27,038	\$13,290	\$95,088	58%	
2007/08	13,038	2,677	2,051	\$4.06	\$9.97	\$6.78	\$49,094	\$29,581	\$16,943	\$95,618	1%	
2008/09	12,092	2,967	2,499	\$3.60	\$9.50	\$4.90	\$47,131	\$31,911	\$10,868	\$89,910	-6%	
2009/10	13,092	3,359	2,218	\$5.25	\$11.40	\$5.65	\$65,347	\$37,951	\$12,470	\$115,767	29%	
2010/11	12,447	3,329	2,207	\$6.10	\$12.35	\$7.25	\$75,384	\$37,742	\$14,493	\$127,618	10%	
2011/12	12,358	3,056	1,999	\$6.90	\$14.30	\$7.80	\$74,382	\$43,115	\$17,698	\$135,195	6%	
2012/13	10,780	3,015	2,269									
2013/14												
August	13,763	3,255	2,114	\$4.90	\$11.35	\$7.00	\$67,439	\$36,944	\$14,798	\$119,181	-12%	
September	13,843	3,149	2,114	\$4.80	\$12.50	\$7.00	\$66,446	\$39,363	\$14,798	\$120,607	-11%	
November	13,989	3,258	2,130	\$4.50	\$12.15	\$7.00	\$62,951	\$39,585	\$14,910	\$117,445	-13%	

*Note: Cash receipts estimated as USDA production X USDA average price forecast

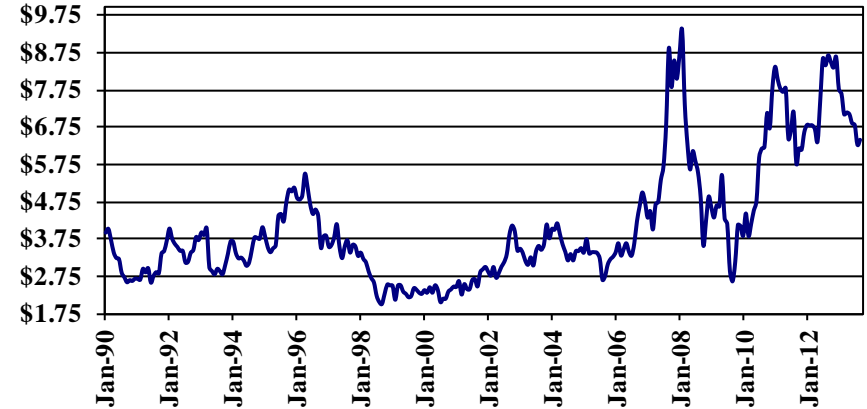
Source: USDA; Cleveland Research estimates

Long Term Commodity Price Trends

Corn Price Trends



Wheat Price Trends



Soybean Price Trends



Cotton Price Trends



Commodity Trends – Long Run Supply and Demand Projections

2013 USDA - Long Run Crop Supply and Demand Projections								
CORN - DOMESTIC								
Year	Production	Domestic Use	Use for Ethanol	Exports	Total Use	End Stocks	Stocks/Use	Avg Price
2004/05	11,807	8,848	1,323	1,814	10,662	2,114	19.8%	\$2.06
2005/06	11,114	9,122	1,603	2,147	11,270	1,967	17.5%	\$2.00
2006/07	10,531	9,081	2,150	2,125	11,206	1,304	11.6%	\$3.04
2007/08	13,038	10,302	3,026	2,436	12,738	1,624	12.7%	\$4.20
2008/09	12,092	10,198	3,677	1,858	12,056	1,673	13.9%	\$4.06
2009/10	13,092	11,086	4,568	1,980	13,066	1,708	13.1%	\$3.55
2010/11	12,447	11,220	4,800	1,835	13,055	1,128	8.6%	\$5.18
2011/12	12,358	10,984	5,011	1,543	12,527	988	7.9%	\$6.22
2012/13	10,725	10,017	4,500	1,150	11,167	647	5.8%	\$7.60
2013/14	14,435	11,340	4,675	1,700	13,040	2,067	15.9%	\$5.40
2014/15	13,610	11,570	4,825	1,900	13,470	2,232	16.6%	\$4.10
2015/16	13,105	11,545	4,825	2,000	13,545	1,817	13.4%	\$4.30
2015/17	13,595	11,715	4,850	2,050	13,765	1,672	12.1%	\$4.40
2017/18	13,925	11,880	4,900	2,125	14,005	1,617	11.5%	\$4.50
2018/19	14,255	12,070	4,975	2,200	14,270	1,627	11.4%	\$4.55
2019/20	14,500	12,260	5,075	2,275	14,535	1,617	11.1%	\$4.60
2020/21	14,750	12,450	5,175	2,350	14,800	1,592	10.8%	\$4.65
2021/22	15,000	12,645	5,275	2,425	15,070	1,547	10.3%	\$4.75
2022/23	15,260	12,835	5,375	2,500	15,335	1,497	9.8%	\$4.85
10-yr Avg	14,244	12,031	4,995	2,153	14,184	1,729	12.3%	\$4.61

2013 USDA - Long Run Crop Supply and Demand Projections								
SOYBEANS - DOMESTIC								
Year	Production	Domestic Use	Exports	Total Use	End Stocks	Stocks/Use	Avg Price	
2004/05	3,124	2,986	1,103	4,089	256	6.3%	\$5.74	
2005/06	3,063	1,927	947	2,874	449	15.6%	\$5.66	
2006/07	3,188	3,073	1,118	4,191	574	13.7%	\$6.43	
2007/08	2,677	3,056	1,161	4,217	205	4.9%	\$10.10	
2008/09	2,967	3,047	1,283	4,330	138	3.2%	\$9.97	
2009/10	3,359	3,361	1,499	4,860	151	3.1%	\$9.59	
2010/11	3,329	3,280	1,501	4,781	215	4.5%	\$11.30	
2011/12	3,094	1,793	1,362	3,155	169	5.4%	\$12.30	
2012/13	2,971	1,676	1,345	3,021	140	4.6%	\$14.30	
2013/14	3,335	1,790	1,515	3,305	185	5.6%	\$11.35	
2014/15	3,280	1,802	1,480	3,282	197	6.0%	\$10.35	
2015/16	3,360	1,838	1,530	3,368	204	6.1%	\$10.65	
2015/17	3,415	1,869	1,560	3,429	205	6.0%	\$10.75	
2017/18	3,470	1,900	1,575	3,475	215	6.2%	\$10.85	
2018/19	3,505	1,926	1,590	3,516	219	6.2%	\$10.90	
2019/20	3,535	1,956	1,590	3,546	222	6.3%	\$10.95	
2020/21	3,570	1,982	1,600	3,582	226	6.3%	\$11.05	
2021/22	3,600	2,012	1,605	3,617	223	6.2%	\$11.20	
2022/23	3,635	2,038	1,610	3,648	226	6.2%	\$11.35	
10-yr Avg	3,471	1,911	1,566	3,477	212	6.1%	\$10.94	

2013 USDA - Long Run Crop Supply and Demand Projections								
WHEAT - DOMESTIC								
Year	Production	Domestic Use	Exports	Total Use	End Stocks	Stocks/Use	Avg Price	
2004/05	2,158	1,172	1,063	2,235	540	24.2%	\$3.40	
2005/06	2,105	1,146	1,009	2,155	571	26.5%	\$3.42	
2006/07	1,812	1,140	909	2,049	456	22.3%	\$4.26	
2007/08	2,051	1,050	1,264	2,314	306	13.2%	\$6.48	
2008/09	2,499	1,260	1,015	2,275	657	28.9%	\$6.78	
2009/10	2,218	1,138	879	2,017	976	48.4%	\$4.87	
2010/11	2,207	1,128	1,289	2,417	862	35.7%	\$5.70	
2011/12	1,999	1,182	1,050	2,231	743	33.3%	\$7.24	
2012/13	2,269	1,338	1,100	2,438	704	28.9%	\$8.10	
2013/14	2,190	1,281	1,000	2,281	733	32.1%	\$7.20	
2014/15	2,105	1,234	925	2,159	804	37.2%	\$5.40	
2015/16	2,005	1,231	930	2,161	778	36.0%	\$5.65	
2015/17	2,025	1,238	935	2,173	765	35.2%	\$5.75	
2017/18	2,040	1,244	940	2,184	761	34.8%	\$5.85	
2018/19	2,035	1,251	940	2,191	745	34.0%	\$5.90	
2019/20	2,050	1,258	940	2,198	737	33.5%	\$5.95	
2020/21	2,065	1,265	940	2,205	737	33.4%	\$6.00	
2021/22	2,080	1,272	940	2,212	745	33.7%	\$6.10	
2022/23	2,080	1,279	940	2,219	746	33.6%	\$6.20	
10-yr Avg	2,068	1,255	943	2,198	755	34.4%	\$6.00	

U.S. Acreage Planted Per Crop Year

