# Ag Equipment Intelligence

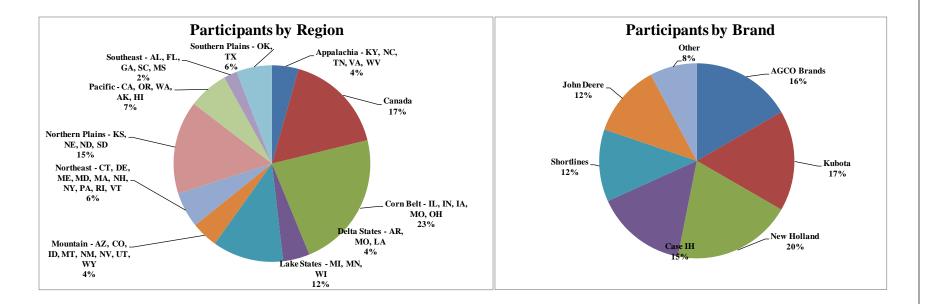
## September 2014 Dealer Sentiments & Business Conditions Update

Copyright Lessiter Publications

### 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 ~139 respondents representing combined annual revenues of roughly \$6.1 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 Down 5% y/y in August Dealers reported sales were down 5% on avg. in August, slightly below the 4% sales declines reported last month. "Other" dealers significantly outperformed for the 2<sup>nd</sup> straight month reporting 11% growth y/y, while Case IH dealers reported the largest declines of 9% y/y.
- Order Intake Down 9% y/y in August Inline with Last Month Orders for the month were reported down 9% y/y. "Other" dealers again outperformed with flat orders y/y, while Case IH dealers saw the largest order declines of 14% y/y.
- 2014 Dealer Outlook Lowered 200bps to Down 8% y/y vs Down 6% Last Month For 2014, dealers are now expecting an 8% decline in sales vs 2013. Deere & Co. is forecasting the N. America Ag equipment industry to be down 5-10% in units in 2014, AGCO expects down 5%, and CNH Industrial is forecasting tractor sales flat to up 5% and combine sales down 20-25%.
- New and Used Inventories Both Slightly Higher vs. Last Month A net 24% of dealers reported new inventories were "too high" in August, up from the net 17% last month. For used inventories, a net 43% of dealers reported levels "too high" compared to a net 39% last month.

#### **Monthly Sales Growth**

- Dealers report average sales were down 5% y/y in August vs down 4% y/y last month.
- Case IH dealers reported the largest declines y/y on average at down 9%, while "Other" brand dealers reported the strongest growth of up 11% y/y.
- Sales were again inline with plan in August, similar to the last two months, as most dealers expected sales declines.

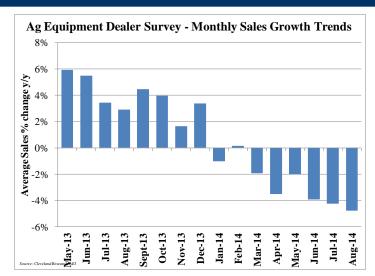
			N. Am	erican Fa	ırm Equip	ment De	aler Surv	vey - Aver	age Deal	er Sales	Growth					
% Change y/y	May-13	Jun-13	Jul-13	Aug-13	Sept-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14
Overall	6%	5%	3%	3%	4%	4%	2%	3%	-1%	0%	-2%	-4%	-2%	-4%	-4%	-5%
By Brand	May-13	Jun-13	Jun-13	Aug-13	Sept-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14
AGCO	1%	1%	-1%	-2%	-3%	-1%	4%	-4%	-3%	0%	-2%	-3%	1%	-3%	4%	-3%
John Deere	9%	6%	4%	-7%	5%	7%	2%	5%	-2%	2%	0%	-3%	-2%	-3%	-6%	-4%
New Holland	5%	7%	2%	4%	2%	4%	5%	5%	-1%	-2%	-2%	-4%	-10%	2%	-2%	-3%
Case IH	-1%	5%	5%	12%	6%	3%	2%	3%	0%	-2%	-6%	-5%	-1%	-10%	-5%	-9%
Kubota	-2%	10%	3%	4%	4%	0%	2%	6%	6%	-3%	1%	-1%	-1%	2%	0%	-2%
Shortlines	5%	4%	11%	-1%	11%	12%	5%	6%	-2%	0%	-2%	1%	3%	-2%	-1%	0%
Other	7%	3%	13%	0%	0%	5%	na	-1%	13%	0%	1%	na	na	-2%	6%	11%

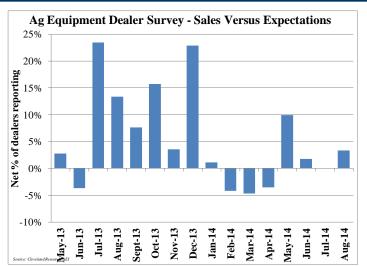
Source: Cleveland Research

			N. Ai	merican l	Farm Equi	ipment D	ealer Su	rvey - Sal	les Versu	is Expect	ations					
% of Dealers Reporting	May-13	Jun-13	Jul-13	Aug-13	Sept-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14
Better than expected	23%	19%	38%	33%	27%	32%	24%	39%	25%	20%	21%	21%	29%	25%	26%	28%
In line with expectations	57%	58%	48%	47%	54%	51%	56%	45%	51%	55%	54%	54%	52%	53%	49%	47%
Worse than expected	20%	23%	14%	20%	19%	17%	20%	16%	24%	25%	26%	25%	19%	23%	26%	25%
Net % (Better - Worse)	3%	-4%	23%	13%	8%	16%	4%	23%	1%	-4%	-5%	-4%	10%	2%	0%	3%

Source: Cleveland Research, AEI.

#### **Monthly Sales Growth Continued**





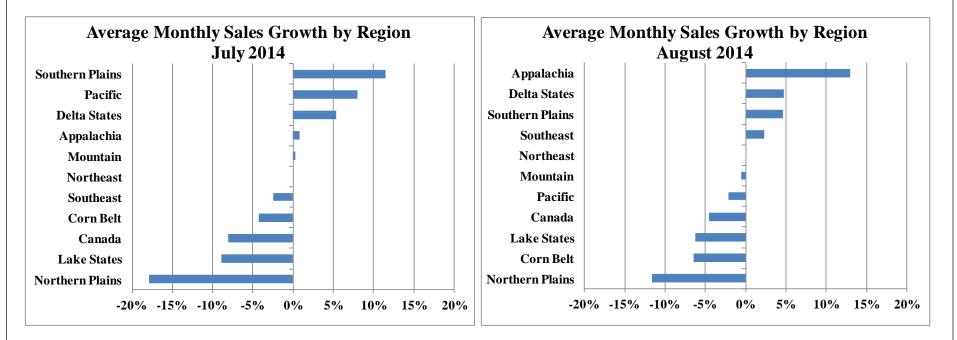
		<b>N.</b> .	America	n Farm E	quipment	Dealer S	Survey - A	Average I	Dealer Re	evenue G	owth Tre	nds				
% of Dealers Reporting	May-13	Jun-13	Jul-13	Aug-13	Sept-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14
Positive Sales Growth	58%	52%	64%	53%	57%	59%	45%	63%	40%	45%	49%	39%	50%	46%	42%	37%
Flat Sales	19%	21%	21%	21%	25%	20%	35%	18%	24%	17%	22%	20%	12%	18%	21%	22%
Negative Sales Growth	23%	27%	15%	26%	18%	22%	20%	19%	36%	37%	29%	40%	39%	36%	37%	42%
Net % Reporting Growth	35%	25%	49%	26%	39%	37%	26%	44%	3%	8%	20%	-1%	11%	11%	5%	-5%
Average % Change y/y	6%	5%	3%	3%	4%	4%	2%	3%	-1%	0%	-2%	-4%	-2%	-4%	-4%	-5%

					Opti	mism/Se	ntiment	ws. Last N	<b>fonth</b>							
	May-13	Jun-13	Jul-13	Aug-13	Sept-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14
More Optimistic	27%	26%	21%	19%	14%	15%	14%	9%	12%	24%	26%	24%	25%	23%	13%	12%
Same	52%	50%	58%	50%	62%	60%	45%	52%	52%	50%	51%	44%	45%	42%	45%	50%
Less Optimistic	21%	24%	21%	31%	23%	25%	41%	39%	36%	26%	23%	32%	30%	35%	42%	38%
Net % Dealer Optimism	6%	2%	1%	-12%	-9%	-11%	-27%	-30%	-23%	-1%	3%	-9%	-5%	-11%	-28%	-26%

Source: Cleveland Research

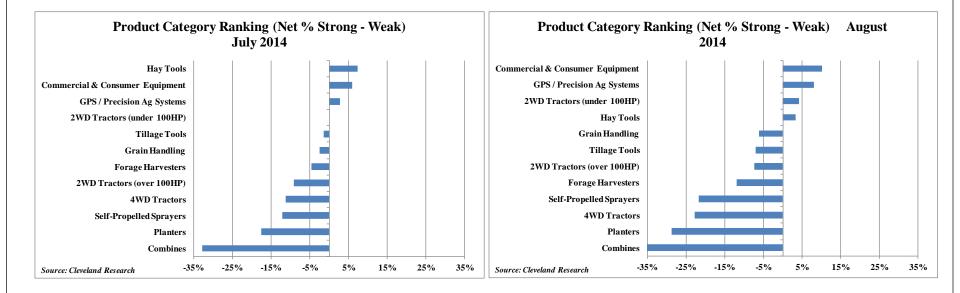
#### **Monthly Sales Growth by Region**

- Four out of eleven regions showed positive average monthly sales growth in August, inline with July. The Appalachia region was the strongest with average sales growth of 13%, while the Northern Plains reported the largest sales declines on avg. for the 5<sup>th</sup> month in a row.
- Compared to last month, the Appalachia region saw the strongest pick up in growth, while the Pacific region saw the largest deceleration vs last month.

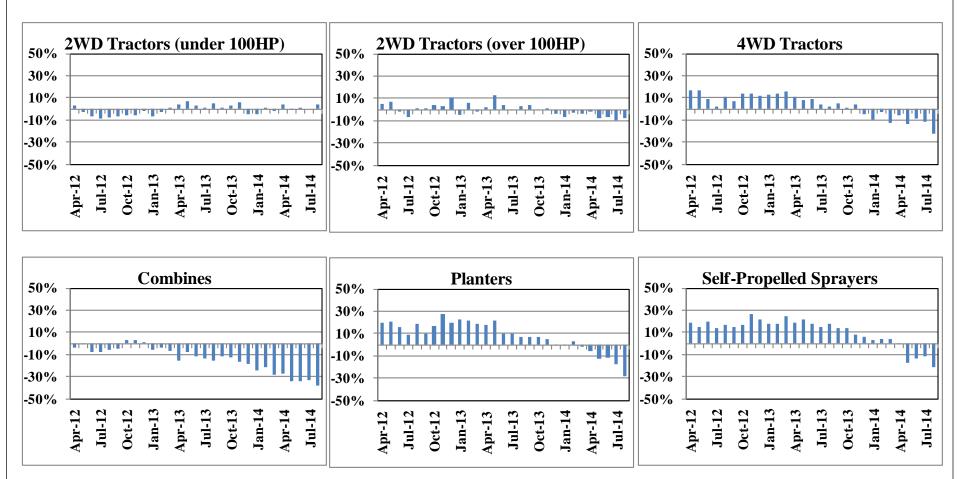


#### **Equipment Category Sales Trends**

- Four out of twelve product categories ranked in net positive territory in August vs three last month. Commercial/Consumer Equipment was the strongest category (net 10% reporting strength). Combines were the weakest category for the 16<sup>th</sup> straight month (net 38% reporting weakness vs net 33% last month).
- Comparing August to July, GPS/Precision Ag saw the largest improvement of the group while Planters, 4WD Tractors, and Self-Propelled Sprayers all took a meaningful step down.

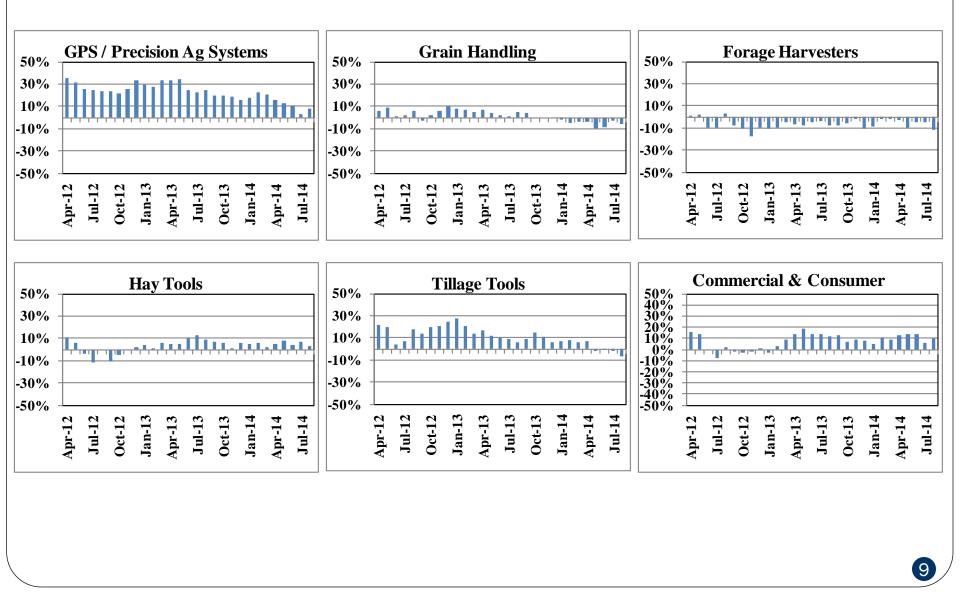


#### **Equipment Category Sales Trends**



Source: Farm Equipment Magazine Survey

#### **Equipment Category Sales Trends (Continued)**



#### **Most Interesting Commentary - Monthly Sales and Outlook**

- Combines and big tractors over 200 hp are slow. Most dealers are moving from 100 dollars per hour to 300 dollars on combine rolls. If a farmer paid \$32,500 a year to roll that now goes to over \$90,000. That is a hard sell with \$3.50 corn.
- We were expecting a downturn.
- New large ag equipment is way off.
- *Reflects the down turn in farm economy.*
- Crop prices are really the most important factor affecting demand right now.
- Weather was very wet in July and very dry August.
- Farmers are worried about 179 depreciation, farmers are worried about low commodity prices.
- Commodities seem to go continually down.
- Commodity prices are down and will affect big equipment sales.
- 2014 is okay but 2015 looks dismal.
- With no 179 and \$3.00 corn things are going to slow down big time.
- We are concerned about the financial & psychological impact of lower crop prices. Fall 2014 sales and Spring 2015 sales are likely to suffer a downturn.
- Prices of new equipment are too high and commodity prices falling.

#### **Monthly Order Trends**

#### **Overall Orders**

- Incoming orders declined 9% y/y on average in August, inline with last month.
- All dealer brands saw declines in orders compared to last year with the exception of "Other" brand dealers. Case IH dealers reported the largest decline on avg. at down 14% y/y.

#### New Combine Order Intentions

• Combine order intentions decreased again vs last month, with a net 51% of dealers now planning to order fewer combines than last year. August marks the weakest month in the history of our survey.

			<b>N.</b> 4	American	Farm Eq	uipment	Dealer S	urvey - A	verage O	rders G	owth					
% Change y/y	May-13	Jun-13	Jul-13	Aug-13	Sept-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14
Overall	2%	0%	0%	2%	1%	1%	-2%	-3%	-3%	-2%	-4%	-5%	-4%	-8%	-9%	-9%
<u>By Brand</u>	May-13	Jun-13	Jul-13	Aug-13	Sept-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14
AGCO	-1%	0%	-7%	-2%	-5%	-2%	-2%	-5%	1%	-4%	0%	-1%	-5%	-8%	-3%	-7%
John Deere	3%	2%	2%	7%	2%	2%	-2%	-3%	-4%	-1%	-5%	-6%	-5%	-8%	-11%	-7%
New Holland	-1%	-1%	-1%	-12%	0%	0%	-3%	-1%	-6%	-3%	-4%	-8%	-5%	-8%	-5%	-7%
Case IH	0%	-2%	1%	3%	1%	4%	-1%	-1%	-4%	-1%	-7%	-4%	-6%	-8%	-9%	-14%
Kubota	1%	0%	-5%	-1%	0%	0%	-4%	1%	-6%	-2%	-3%	-7%	-8%	-6%	-4%	-9%
Shortlines	0%	1%	9%	15%	5%	5%	-3%	-1%	-8%	0%	-6%	-2%	-5%	-13%	-10%	-13%
Other	1%	0%	0%	-1%	0%	0%	na	1%	6%	0%	3%	na	na	-6%	1%	0%

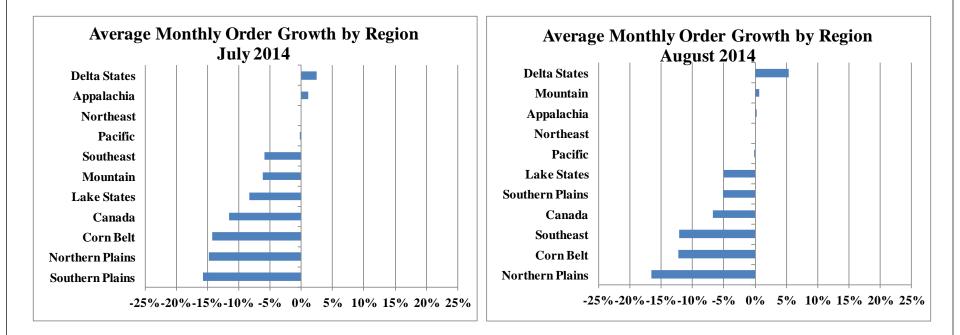
Source: Cleveland Research

					New	Combine	Order In	ntentions	vs. Last Y	Year						
	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14
More	9%	9%	14%	8%	16%	10%	11%	17%	8%	10%	7%	9%	11%	6%	6%	10%
Same	68%	62%	46%	49%	45%	39%	38%	44%	48%	44%	51%	50%	46%	43%	38%	30%
Less	23%	29%	41%	43%	39%	51%	52%	39%	44%	46%	42%	41%	43%	51%	56%	60%
Net % (More-Less)	-14%	-20%	-27%	-35%	-22%	-40%	-41%	-22%	-36%	-37%	-35%	-32%	-32%	-44%	-50%	-51%

Source: Cleveland Research

#### **Order Trends by Region**

- The Delta States and Mountain States were the only geographies to show positive order growth in August. Northern Plains dealers reported the most significant decline in orders at down 17% y/y.
- Compared to last month, the Southern Plains region saw the largest improvement in orders while the Southeast region saw the most significant deceleration in orders on average.



#### **2014 Sales Outlook**

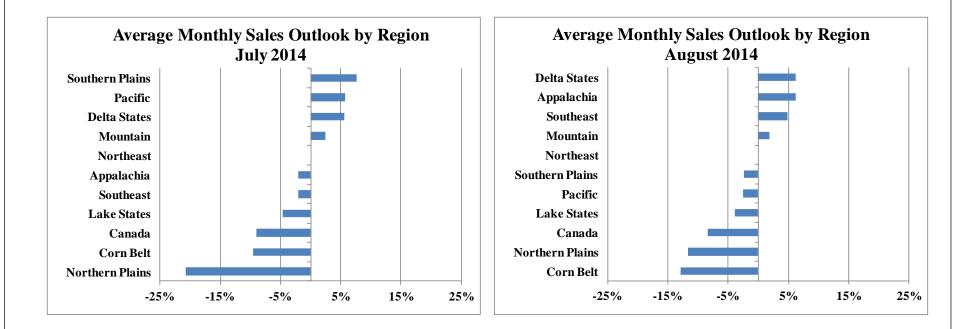
- The average dealer outlook for 2014 sales was lowered to down 8% y/y in August vs the down 6% forecast over the last two months. Deere is forecasting the N. America Ag equipment industry to be down 5-10% in units in 2014, AGCO expects a 5% decline, and CNH Industrial is forecasting tractor sales up 0-5% and combine sales down 20-25%.
- Among the survey participants, "Other" brand dealers were again the most optimistic (projecting modest growth in 2014), while Case IH dealers are forecasting the largest sales declines of 14% y/y for 2014.

				N. Ameri	can Farn	n Equipmo	ent Deale	er Survey	- Full Ye	ar Sales	Forecast					
		2013 (	Dutlook							2014	Outlook					
% change y/y	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14
AGCO	2%	3%	-4%	2%	-1%	-3%	-2%	0%	-2%	-1%	2%	0%	0%	-1%	2%	-4%
John Deere	8%	4%	6%	1%	2%	2%	0%	-3%	-2%	-1%	-3%	-3%	-2%	-6%	-6%	-6%
New Holland	1%	6%	0%	-3%	2%	1%	-2%	-2%	-5%	0%	-1%	-6%	-9%	-3%	-3%	-6%
Case IH	0%	0%	3%	-5%	-3%	0%	-1%	-7%	-5%	-5%	-5%	-6%	-9%	-11%	-9%	-14%
Kubota	4%	8%	-3%	3%	-1%	-1%	-3%	-2%	-3%	-1%	-2%	-2%	-10%	-3%	-4%	-7%
Shortlines	3%	2%	12%	5%	4%	6%	-3%	0%	-4%	-3%	-4%	1%	-2%	-8%	-2%	-5%
Other	3%	1%	4%	1%	2%	2%	na	0%	3%	3%	7%	na	na	-4%	3%	2%
Overall	5%	3%	3%	3%	0%	1%	-1%	-4%	-4%	-2%	-3%	-4%	-4%	-6%	-6%	-8%

Source: Cleveland Research

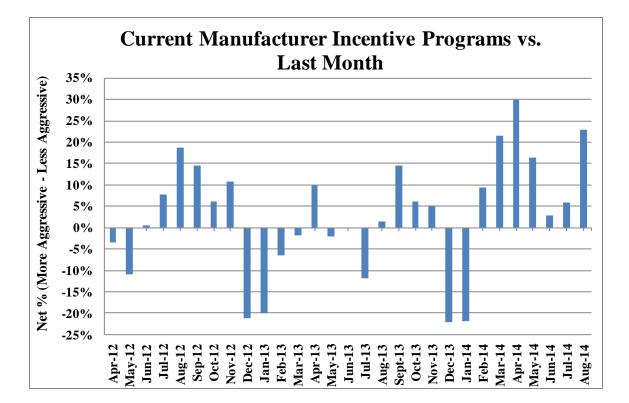
#### **2014 Sales Outlook Continued**

• Four of eleven regions are projecting sales to grow for the full year 2014 in August, similar to the last two months. Dealers in the Delta and Appalachia States are now projecting the largest gains at up 6% y/y, while dealers in the Corn Belt are forecasting the largest y/y sales declines of 13%.



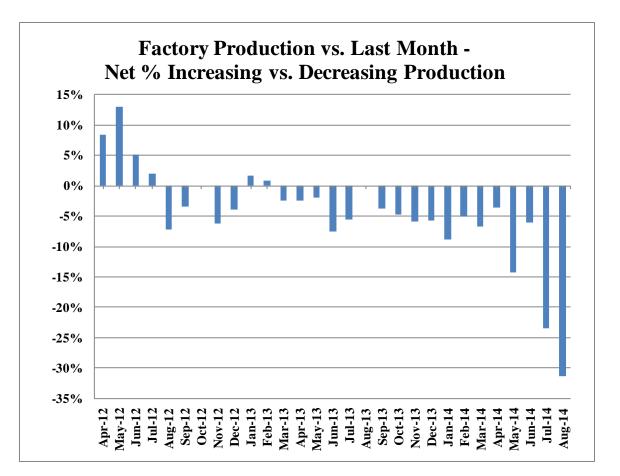
#### **Current Manufacturer Incentive Programs**

• A net 23% of dealers report that manufacturers are more aggressive with incentives in August (31% more aggressive; 61% same; 8% less aggressive), up significantly from the net 6% reporting more aggressive incentives last month.



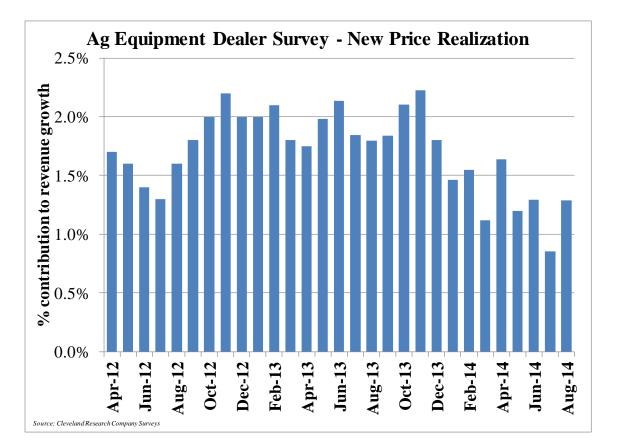
#### **Factory Production**

• A net 31% of dealers report that factory production was down compared to last month down from the net 23% reporting lower production levels in July.



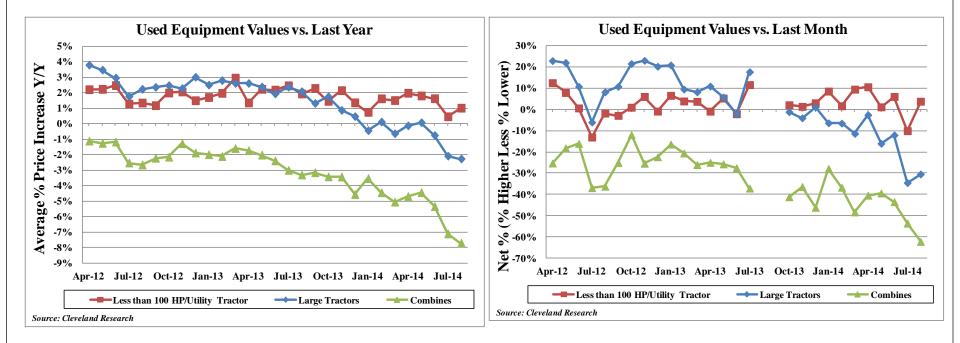
#### **Pricing Trends**

• Dealers report price contributed roughly ~1.3% to total August revenue growth vs the 0.9% last month. Final tier 4 price increases are expected to be ~5-10% on average, although not impacting all lines of equipment.



#### **Used Equipment Pricing**

- Used equipment values in August took another step down vs July. Combine values are reported at down 7.7% y/y vs down 7.1% last month, while used HHP tractors values are reported at down 2.3% y/y vs down 2.1% last month.
- Comparing August to July, a net 62% of dealers reported the used combine values took a step down.



18

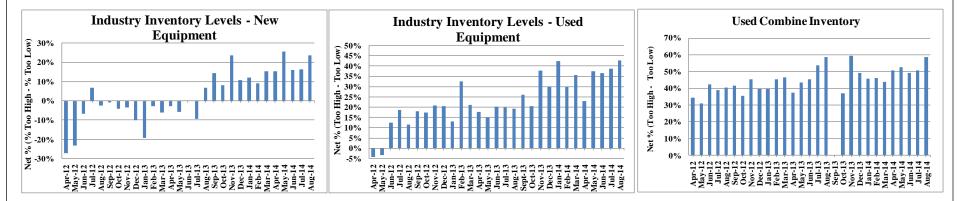
#### **Inventory Levels**

#### New Equipment Inventory

• A net 24% of dealers categorize their new inventory as "too high" (38% too high; 47% about right; 14% too low), up from the net 17% last month.

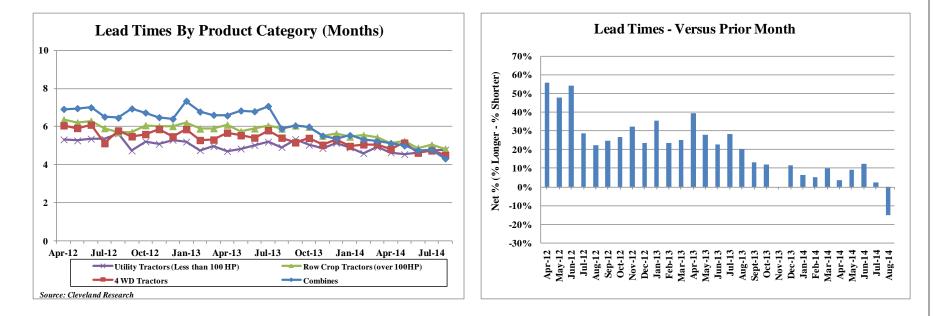
#### **Used Equipment Inventory**

- A net 43% of dealers reported used equipment inventory as "too high" in August (54% too high; 36% about right; 11% too low), up from the net 39% last month.
- For used combines specifically, a net 59% reported inventories "too high" compared to a net 51% last month.
- A net 14% of dealers reported used HHP tractor inventories "too high," below the net 20% last month.



#### **Equipment Availability**

- Overall, a net 15% of dealers report shorter factory lead-times compared to last month (15% longer; 55% same; 30% shorter). August markets the first month where lead times were reported as "shorter" in the history of our survey.
- Combine lead times were reported at 4.3 months on avg vs 4.8 months last month, row crop tractor lead times were 4.8 months vs 5.0 last month, and 4WD tractors were 4.5 months vs 4.7 last month.



#### **Most Interesting Commentary - Used Inventory**

- Combine and large HP inventories are high.
- Not enough under 100hp tractors, haytools and consumer products.
- Low hour tractors are in abundance.
- We predicted an industry problem coming, so we took our own action 12 to 18 months ago.
- I am reluctant to add much more inventory, especially larger items. I believe the big dealers are going to be dumping inventory on the the auction market over the next few months and that will affect the market.
- Low on smaller implements--smaller tractors and compact tractors-- but too high on combines, platfroms and corn heads.
- Used inventory is about level with Aug 2013 but still higher than we would like.
- Just heavy on a couple of product lines others are about right.
- Late model used air drills are too high.
- Sales of a few large tractors and 5 or 6 used combines would change my opinion.
- Inventory of Used MacDon SP Windrowers is too high. Inventory on used round balers is too high.
- Too many late model combines.

### **Dealer Commentary on Biggest Surprise in the Month**

- How fast interest in equipment has dropped and values on used have dropped sharply.
- I was surprised (and I should not have been) that CIH was still telling us to order product, even today! This is especially unusual after the song and dance we got about, "The best deal is the pre-sold deal!"
- New Holland cancelled a local dealer meeting... perhaps changes are happening.
- Due to the high amount of new 2014 inventory in stock we have not placed any orders for 2015. First time in 20 years that we have no open orders at this time of year. More sales in lawn service.
- Continued strong demand on hay tools.
- Due to the extremely wet conditions in our trade area we sold a lot of Grain Carts & have had more interest in combines with duals for better floatation. If we could supply with tracks this fall we would see some additional combine sales, this would be a first for us. Used equipment to smaller farmers were much stronger than we expected. Our big farmers really pushed back on new purchases this year and last month as no exception.
- I was a little surprised that sales were as strong as they were. I have a lot of cattle producers in my area and they continue to spend money.
- Bigger you are the bigger the slow down. This is a great year to be smaller. The bigger the farmer the bigger the problem. All about timing. Big is not going to good this time round.
- Poultry equipment sales increase, driven by processor requirements on the grower. Some weakness in new hay tool sales (hay mowers, etc.). We had expected high beef and dairy prices to support sales better.
- 4wd tractor interest & used combine sales.
- Extra rain in our area stopped sales and kept revenue flat.
- SDS developing in our area and really changing everyone's attitude about this fall harvest.



## NA Farm Equipment Industry Retail Sales

				N	ORTH AN	/IERICAN I	FARMEQUI	PMENT REI	TAIL SAL	ES				
[				Units						% char	nge year-ov	ær-year		
					Total	Row Crop	)					Total	Row Crop	
	< 40 HP	Utility	Row Crop	4-Wheel	Tractor	& 4WD	Combines	<40 HP	Utility	Row Crop	4-Wheel	Tractor	& 4WD	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	5,186	3,981	2,474	632	12,273	3,106	718	5%	17%	10%	31%	11%	13%	-3%
Dec-12	8,233	6,294	4,338	900	19,765	5,238	1,128	13%	4%	18%	37%	12%	21%	3%
Jan-13	4,694	4,087	2,960	678	12,419	3,638	621	20%	11%	27%	89%	21%	35%	18%
Feb-13	5,111	3,701	2,589	669	12,070	3,258	620	17%	4%	27%	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	13,907	5,615	4,301	851	24,674	5,152	1,144	4%	-7%	28%	-4%	4%	21%	62%
May-13	17,189	6,239	3,483	554	27,465	4,037	883	27%	4%	20%	-9%	19%	15%	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	10,739	5,542	3,168	491	19,940	3,659	1,480	24%	15%	15%	-11%	19%	11%	10%
Aug-13	9,359	5,006	2,840	587	17,792	3,427	1,250	15%	11%	16%	0%	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%
Nov-13	5,628	3,873	2,651	644	12,796	3,295	903	9%	-3%	7%	2%	4%	6%	26%
Dec-13	7,683	6,944	4,940	962	20,529	5,902	1,547	-7%	10%	14%	7%	4%	13%	37%
Jan-14	4,762	4,172	3,314	631	12,879	3,945	824	1%	2%	12%	-7%	4%	8%	33%
Feb-14	5,310	3,655	2,423	575	11,963	2,998	526	4%	-1%	-6%	-14%	-1%	-8%	-15%
Mar-14	10,156	5,149	3,157	657	19,119	3,814	906	22%	4%	-9%	-7%	10%	-9%	-24%
Apr-14	14,163	6,029	3,744	746	24,682	4,490	999	2%	7%	-13%	-12%	0%	-13%	-13%
May-14	16,815	6,602	2,929	474	26,820	3,403	671	-2%	6%	-16%	-14%	-2%	-16%	-24%
Jun-14	15,198	6,520	2,731	409	24,858	3,140	839	13%	2%	-17%	-24%	5%	-18%	-25%
Jul-14	11,249	5,943	3,225	389	20,806	3,614	1,035	5%	7%	2%	-21%	4%	-1%	-30%
Aug-14	9,691	5,444	2,575	371	18,081	2,946	946	4%	9%	-9%	-37%	2%	-14%	-24%

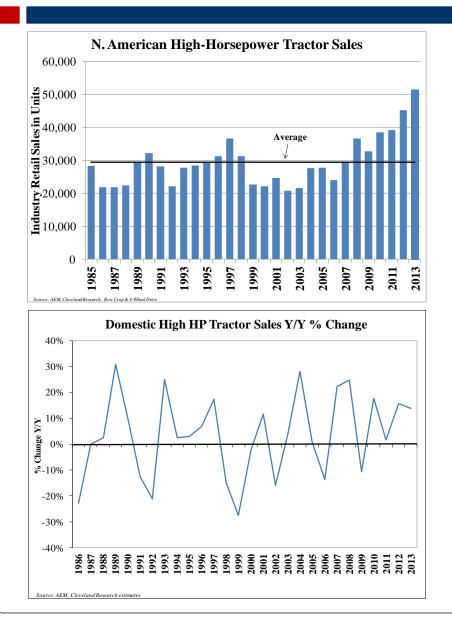
Source: AEM; Cleveland Research Company estimates. High hp tractors are row crop & 4-wheel drive.

## NA Farm Equipment Industry Inventory

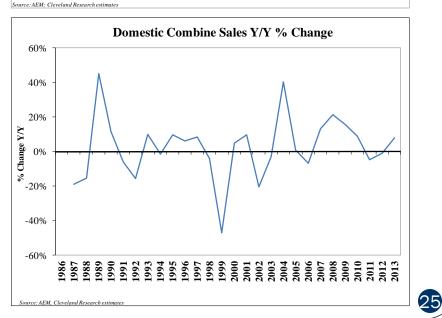
					NORTH A	MERICAN	FARMEQU	IPMENT IN	VENTORY	<i>I</i>				
			Inv	entory (Uni	its)					Invento	ory to 12-m	o. Sales		
					Total	Row Crop						Total	Row Crop	
	< 40 HP	Utility	Row Crop	4-Wheel	Tractor	& 4WD	Combines	<40HP	Util	RC	4-WD	Tractor	& 4WD	Comb
Dec-11	59,746	26,551	7,666	1,035	94,998	8,701	1,250	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%	50%	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%	25%	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%
Oct-13	63,364	31,876	14,009	2,094	111,343	16,103	2,222	55%	50%	33%	25%	49%	32%	17%
Nov-13	67,922	33,406	14,847	2,312	118,487	17,159	2,343	59%	53%	35%	27%	52%	34%	18%
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%	52%	36%	27%	49%	35%	25%

Source: AEM; Cleveland Research Company estimates

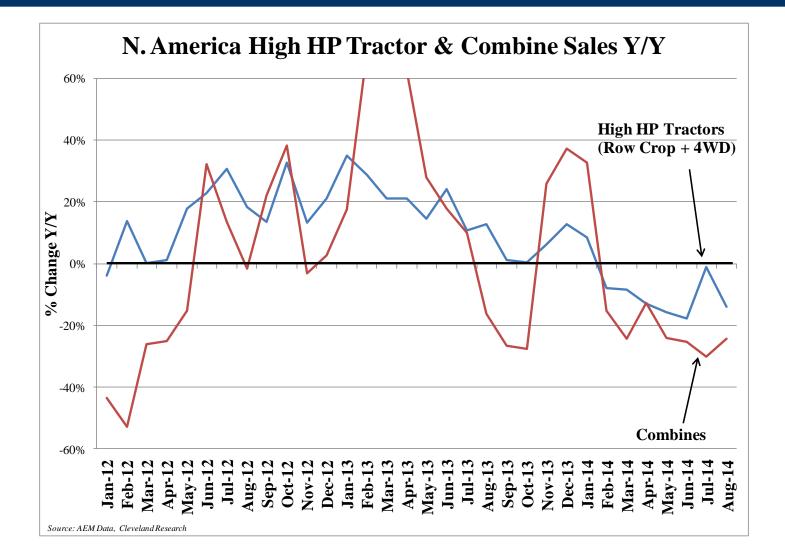
#### Annual Ag Equipment Industry Sales (1985 - 2013)



N. American Annual Combine Sales 16,000 14,000 Industry Retail Sales in Units Average 12,000 10,000 8,000 6,000 4,000 2,000 0 2005 1985 **980** 1993 1995 1999 2001 2003 2007 2009 1987 1991 1997 2011 2013



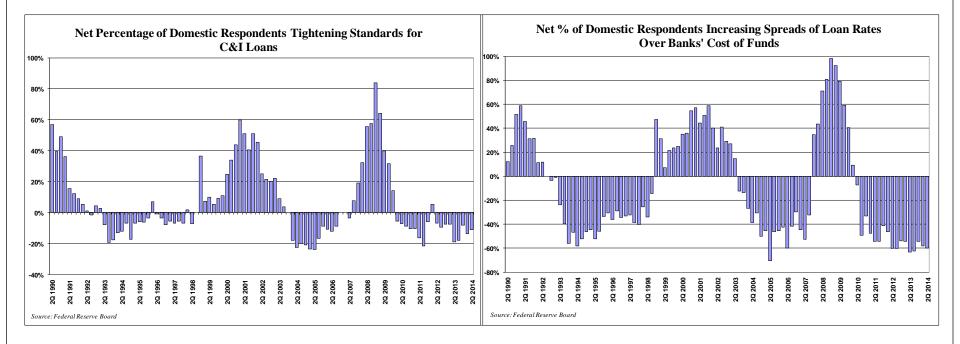
#### **NA Ag Equipment Sales**



Source: AEM

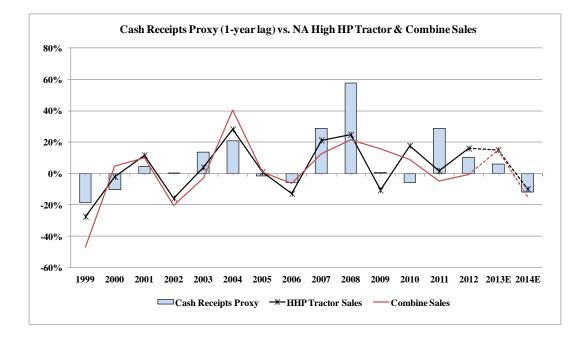
#### **Credit – C&I Loan Demand Increases as Standards Loosen Slightly**

- The 2Q14 Senior Loan Officer survey saw a slight tightening of loan standards. A net 11% of loan officers reported easier credit standards in 2Q14 compared with a net 14% in 1Q14.
- Bank rate spreads saw a slight decrease in 2Q14 with a net 60% of loan officers reporting lower lending spreads, down from a net 58% in 1Q14.
- Demand for commercial and industrial loans decelerated slightly in 2Q as a net 14% of loan officers reported stronger demand for commercial and industrial loans, below the net 16% of loan officers reporting stronger demand for loans in 1Q14.



#### **Commodity Prices – Cash Receipts vs. Next Year Equipment Sales**

The USDA's updated WASDE report suggests cash receipts down 12% for 2013/14 and down 15% for 2014/15 in our simplified cash receipts proxy. The chart below depicts N. American high HP tractor and combine sales on a one year lag vs. our simplified farm cash receipts proxy (using the 3 most important crops - corn, soybeans, wheat). The updated September USDA report left the cash receipts outlook for 2013/14 unchanged at down 12% y/y. The 2014/15 cash receipts outlook, however, was revised lower to down 15% vs down 10% last month. The correlation between equipment sales and cash receipts has historically provided a good proxy for next year's equipment demand.



## **Commodity Prices – Simplified Cash Receipts Proxy**

			CORN -	DOMESTIC					COR	N - INTERNA	TIONAL	
Year	Production	Domestic Use	Exports	Total Use	End Stocks	Stocks/Use	Avg Price	Year	Production	Total Use	End Stocks	Stocks/Use
2011/12	12,360	10,985	1,543	12,528	989	7.9%	\$6.22	2011/12	22,010	23,171	4,235	18.3%
2012/13	10,780	10,379	731	11,111	821	7.4%	\$6.89	2012/13	22,963	23,626	4,179	17.7%
2013/14	13,925	11,675	1,925	13,600	1,181	8.7%	\$4.40-\$4.50	2013/14	24,919	25,794	5,632	21.8%
2014/15								2014/15				
August	14,032	11,710	1,725	13,435	1,808	13.5%	\$3.55-\$4.25	August	24,762	26,425	5,586	21.1%
September	14,395	11,855	1,750	13,605	2,002	14.7%	\$3.20-\$3.80	September	24,482	26,360	5,475	20.8%
					Corn l	Futures Price:	\$3.46	1				
Change m/m	363	145	25	170	194	1.3%	(\$0.20)	Change m/m	-280	-65	-111	-0.4%
Change y/y	470	180	-175	5	821	6.0%	(\$0.45)	Change y/y	-437	566	-158	-1.1%

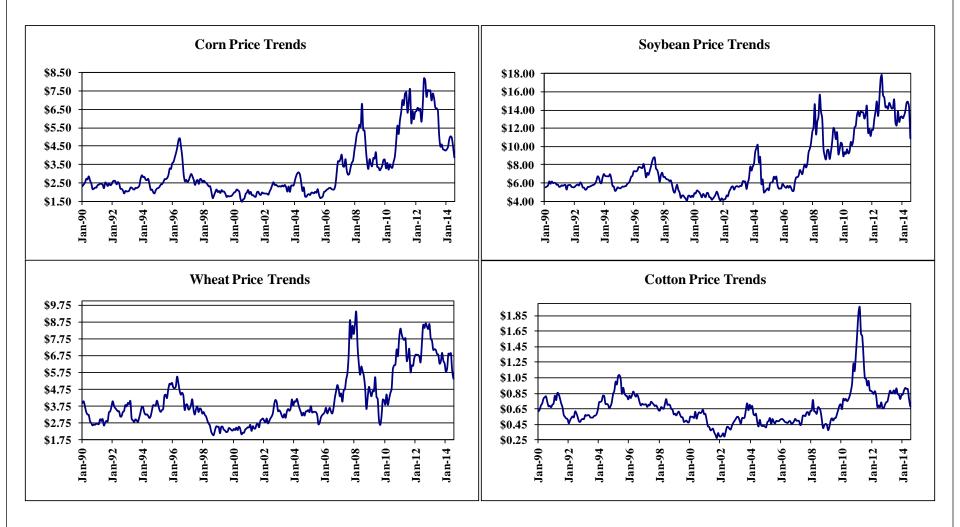
		2	SOYBEANS	- DOMESTIC	2				SOYBEA	ANS - INTERI	NATIONAL	
Year	Production	Domestic Use	Exports	Total Use	End Stocks	Stocks/Use	Avg Price	Year	Production	Total Use	End Stocks	Stocks/Use
2011/12	3,094	3,155	1,365	4,520	169	3.7%	\$12.50	2011/12	5,629	7,536	1,785	23.7%
2012/13	3,034	3,099	1,320	4,419	141	3.2%	\$14.40	2012/13	6,873	7,777	2,170	27.9%
2013/14	3,289	3,379	1,645	5,024	130	2.6%	\$13.00	2013/14	7,114	8,151	2,328	28.6%
2014/15								2014/15				
August	3,816	3,541	1,675	5,216	430	8.2%	\$9.35-\$11.35	August	7,380	8,547	2,716	31.8%
September	3,913	3,583	1,700	5,283	475	9.0%	\$9.00-\$11.00	September	7,519	8,588	2,838	33.0%
					Soybean l	Futures Price:	\$9.94					
Change m/m	97	42	25	67	45	0.7%	\$0.00	Change m/m	139	40	122	1.3%
Change y/y	624	204	55	259	345	6.4%	\$0.00	Change y/y	405	436	510	4.5%

			WHEAT -	DOMESTIC					WHEA	AT - INTERNA	TIONAL	
Year	Production	Domestic Use	Exports	Total Use	End Stocks	Stocks/Use	Avg Price	Year	Production	Total Use	End Stocks	Stocks/Use
2011/12	1,999	1,180	1,051	2,231	743	33.3%	\$7.24	2011/12	23,506	24,369	6,458	26.5%
2012/13	2,266	1,406	1,007	2,413	718	29.8%	\$7.77	2012/13	21,821	23,418	5,889	25.1%
2013/14	2,130	1,250	1,176	2,426	590	24.3%	\$6.87	2013/14	24,107	24,588	6,261	25.5%
2014/15								2014/15				
August	2,030	1,191	925	2,116	663	31.3%	\$5.80-\$6.80	August	24,282	24,779	6,427	25.9%
September	2,030	1,191	900	2,091	698	33.4%	\$5.50-\$6.30	September	24,424	24,897	6,517	26.2%
					Wheat 1	Futures Price:	\$5.20					
Change m/m	0	0	-25	-25	35	2.0%	\$0.00	Change m/m	142	118	91	0.2%
Change v/v	-100	-59	-276	-335	108	9.1%	\$0.00	Change v/v	317	309	256	0.7%

	FARMER CROP RECIEPTS PROXY											
Production:					Average Price:			Crop Cash Receipts*				
Year	Corn	Soybeans	Wheat	Corn	Soybeans	Wheat	Corn	Soybeans	Wheat	Total	% change y/y	
2008/09	12,092	2,967	2,499	\$4.06	\$9.97	\$6.78	\$49,094	\$29,581	\$16,943	\$95,618	1%	
2009/10	13,092	3,359	2,218	\$3.55	\$9.59	\$4.87	\$46,477	\$32,213	\$10,802	\$89,491	-6%	
2010/11	12,447	3,329	2,207	\$5.18	\$11.30	\$5.70	\$64,475	\$37,618	\$12,580	\$114,673	28%	
2011/12	12,360	3,094	1,999	\$6.22	\$12.50	\$7.24	\$76,879	\$38,675	\$14,473	\$130,027	13%	
2012/13	10,780	3,034	2,266	\$6.89	\$14.40	\$7.77	\$74,274	\$43,690	\$17,607	\$135,571	4%	
2013/14	13,925	3,289	2,130	\$4.45	\$13.00	\$6.87	\$61,966	\$42,757	\$14,633	\$119,356	-12%	
2014/15												
August	14,032	3,816	2,030	\$3.90	\$10.35	\$6.30	\$54,725	\$39,496	\$12,789	\$107,009	-10%	
September	14,395	3,913	2,030	\$3.50	\$10.00	\$5.90	\$50,383	\$39,130	\$11,977	\$101,490	-15%	

Source: USDA; Cleveland Research estimates. \*Note: Cash reciepts estimated as USDA production X USDA average price forecast

#### **Long Term Commodity Price Trends**



30

Source: USDA, FactSet

## **Commodity Trends – Long Run Supply and Demand Projections**

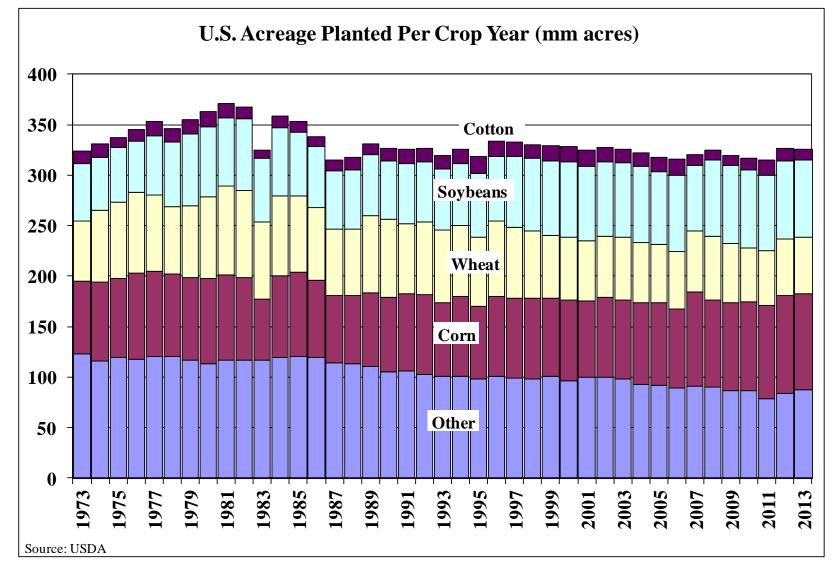
	20	13 USDA - I	Long Run C	rop Supply	and Deman	d Projecti	ons	
CORN - D	OMESTIC							
<u>Year</u>	Production	<u>Domestic</u> <u>Use</u>	<u>Use for</u> Ethanol	<u>Exports</u>	<u>Total Use</u>	<u>End</u> Stocks	Stocks/Use	Avg Price
2004/05	11,807	8,848	1,323	1,814	10,662	2,114	19.8%	\$2.06
2005/06	11,114	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

	20	13 USDA - Long	Run Crop Supply	and Deman	d Projecti	ons	
<u>SOYBEAN</u> <u>Year</u>	S - DOMEST	<u>IC</u> <u>Domestic</u> Use	<u>Exports</u>	<u>Total Use</u>	<u>End</u> Stocks	Stocks/Use	Avg Price
2004/05	3,124	2.986	1,103	4,089	256	6.3%	\$5.74
2004/05	3,063	1.927	947	2.874	449	15.6%	\$5.66
2005/00	3,188	3.073	1,118	4.191	574	13.7%	\$6.43
2000/07	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

WHEAT -	DOMESTIC	D ()					
<u>Year</u>	Production	Domestic Use	Exports	<u>Total Use</u>	End Stocks	Stocks/Use	Avg Prie
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

31

#### **U.S. Acreage Planted Per Crop Year**



Source: Deere, CRC estimates