# Ag Equipment Intelligence

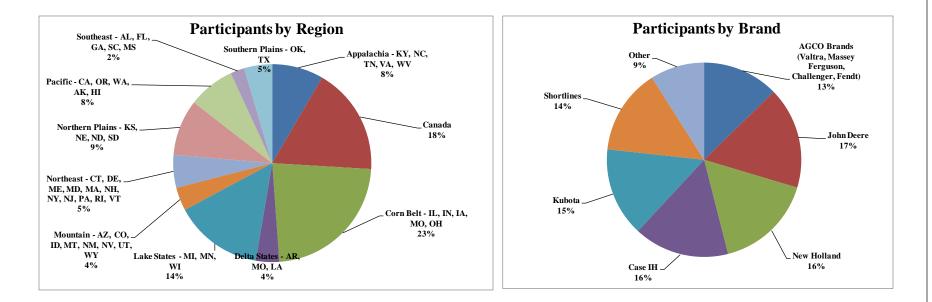
# December 2014 Dealer Sentiments & Business Conditions Update

Copyright Lessiter Publications

### Monthly Ag Equipment Intelligence North American Dealer Survey

#### **Background:**

- We are pleased to announce the results of the December 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 December survey had ~131 respondents representing combined annual revenues of roughly \$5.4 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 9% y/y in November Dealers reported sales were down 9% on avg. in November which compares to sales declines of 9% in October and 6% in September. Case IH dealers reported the largest declines on average at down 14% for the month.
- Order Intake Down 16% y/y in November Orders for the month were reported down 16% y/y on avg. in our survey which compares to the 15% avg. order declines in October. Case IH dealers reported the largest declines on average at down 21% y/y.
- **Dealers Expecting 2015 Sales Down 10% y/y** Dealers are now expecting sales to decline 10% y/y on average for the full year 2015, which is similar to the down 11% forecast last month.
- New Inventories Slightly Better vs Last Month; Used Inventories Still Too High A net 41% of dealers reported used inventories "too high" in November, slightly above the net 39% last month. New inventories, however, were better with a net 34% of dealers reporting "too high" compared to a net 42% last month.

#### **Monthly Sales Growth**

- Dealers report average sales were down 9% y/y in November, inline with the sales declines last month.
- Case IH dealers reported the largest declines y/y on average at down 14%, while AGCO dealers reported the strongest growth of up 5% y/y on average.
- A net 18% of dealers reported that sales were below plan in the month, slightly worse than the net 5% missing plan over the past 2 months.

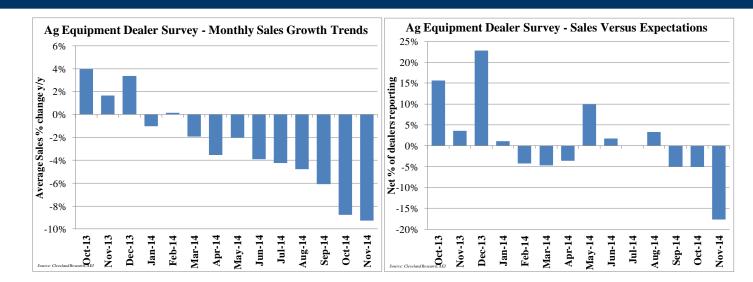
		N. An	nerican F	arm Equ	ipment I	Dealer Sur	vey - Ave	erage Deal	ler Sales (	Growth				
% Change y/y	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14
Overall	4%	2%	3%	-1%	0%	-2%	-4%	-2%	-4%	-4%	-5%	-6%	-9%	-9%
By Brand	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14
AGCO	-1%	4%	-4%	-3%	0%	-2%	-3%	1%	-3%	4%	-3%	4%	5%	5%
John Deere	7%	2%	5%	-2%	2%	0%	-3%	-2%	-3%	-6%	-4%	-6%	-11%	-8%
New Holland	4%	5%	5%	-1%	-2%	-2%	-4%	-10%	2%	-2%	-3%	0%	0%	-9%
Case IH	3%	2%	3%	0%	-2%	-6%	-5%	-1%	-10%	-5%	-9%	-13%	-15%	-14%
Kubota	0%	2%	6%	6%	-3%	1%	-1%	-1%	2%	0%	-2%	1%	1%	-8%
Shortlines	12%	5%	6%	-2%	0%	-2%	1%	3%	-2%	-1%	0%	5%	-6%	-1%
Other	5%	na	-1%	13%	0%	1%	na	na	-2%	6%	11%	na	17%	na

Source: Cleveland Research

		<b>N.</b> A	merican	Farm Eo	quipment	Dealer St	urvey - Sa	ales Versu	s Expecta	tions				
% of Dealers Reporting	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14
Better than expected	32%	24%	39%	25%	20%	21%	21%	29%	25%	26%	28%	24%	22%	21%
In line with expectations	51%	56%	45%	51%	55%	54%	54%	52%	53%	49%	47%	47%	51%	40%
Worse than expected	17%	20%	16%	24%	25%	26%	25%	19%	23%	26%	25%	29%	27%	39%
Net % (Better - Worse)	16%	4%	23%	1%	-4%	-5%	-4%	10%	2%	0%	3%	-5%	-5%	-18%

Source: Cleveland Research, AEI.

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



	N.	America	n Farm l	Equipme	nt Dealer	Survey -	Average	Dealer Re	venue Gr	owth Tre	nds			
% of Dealers Reporting	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14
Positive Sales Growth	59%	45%	63%	40%	45%	49%	39%	50%	46%	42%	37%	37%	40%	27%
Flat Sales	20%	35%	18%	24%	17%	22%	20%	12%	18%	21%	22%	18%	14%	16%
Negative Sales Growth	22%	20%	19%	36%	37%	29%	40%	39%	36%	37%	42%	46%	46%	58%
Net % Reporting Growth	37%	26%	44%	3%	8%	20%	-1%	11%	11%	5%	-5%	-9%	-6%	-31%
Average % Change y/y	4%	2%	3%	-1%	0%	-2%	-4%	-2%	-4%	-4%	-5%	-6%	-9%	-9%
				Op	otimism/S	entiment	vs. Last N	Aonth						
% of Dealers Reporting	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14
More Optimistic	15%	14%	9%	12%	24%	26%	24%	25%	23%	13%	12%	16%	8%	9%
Same	60%	45%	52%	52%	50%	51%	44%	45%	42%	45%	50%	46%	48%	38%

23%

3%

26%

-1%

32%

-9%

30%

-5%

35%

-11%

42%

-28%

38%

-26%

38%

-22%

44%

-36%

53%

-44%

Source: Cleveland Research

25%

-11%

41%

-27%

39%

-30%

36%

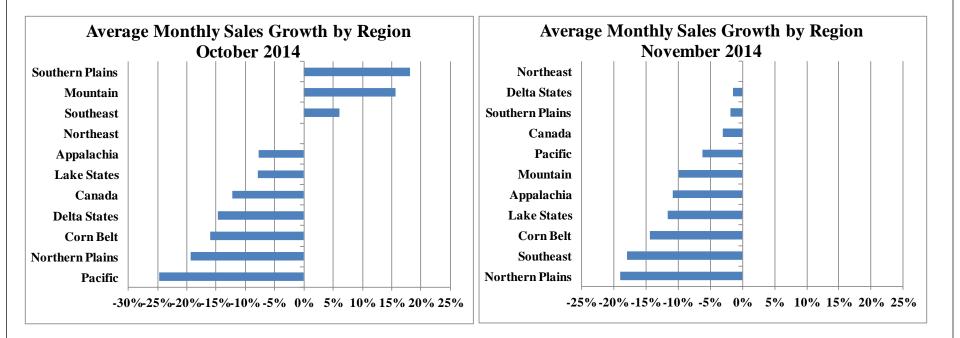
-23%

Less Optimistic

Net % Dealer Optimism

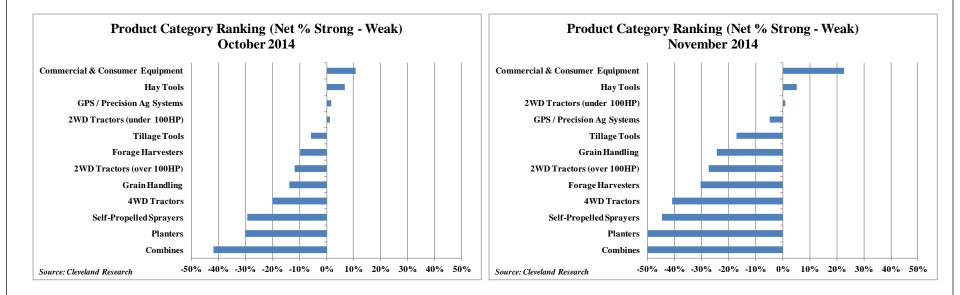
#### **Monthly Sales Growth by Region**

- No regions showed positive average monthly sales growth in November compared to the three regions in October. The Northeast was the only region to report flat sales y/y on average for the month while the Northern Plains reported the largest sales declines in the month at down 19% y/y.
- Compared to last month, the Pacific region saw the strongest improvement, while the Mountain states saw the largest deceleration.

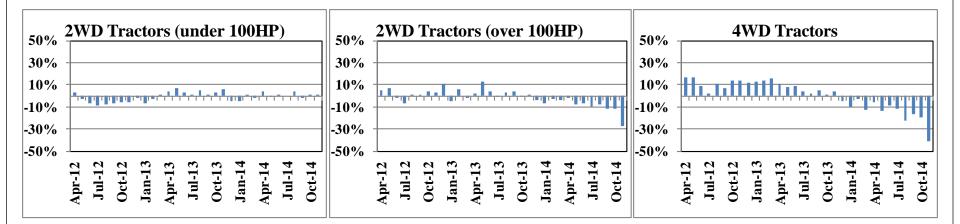


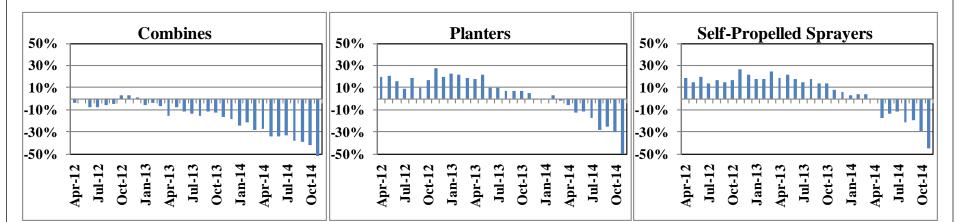
#### **Equipment Category Sales Trends**

- Commercial/Consumer Equipment was strongest category in November for the 4<sup>th</sup> consecutive month. Notably, GPS / Precision Ag Systems was reported as net "weak" for the first time in the history of our survey (April 2011).
- Comparing November to October, commercial and consumer equipment showed the largest improvement while 4WD tractors and Forage Harvesters showed the most meaningful softening.

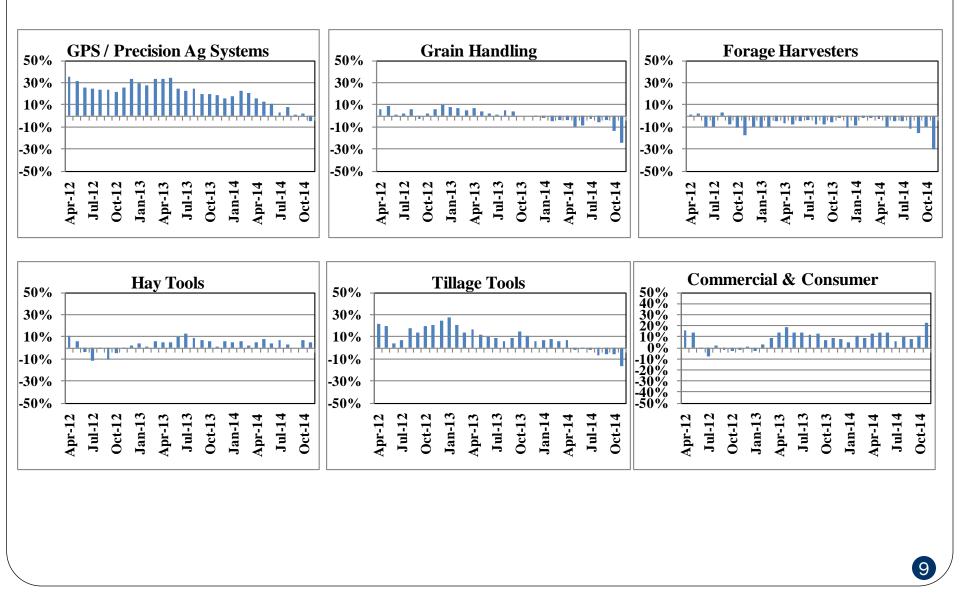


#### **Equipment Category Sales Trends**





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



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

- Tractor sales are very slow. It may be a result of late harvest.
- We knew that we would have a rough month but was not anticipating the sales to be off as much as they were.
- New high dollar equipment sales have gone to zero.
- New Holland did not honor Built My Way retail leases from July!
- We are much less willing to roll equipment (trade-ins).
- Our pre sell business is down by design
- There is not enough of incentive from our manufacturer on pre-sells (early orders).
- We improved market share on under 160 HP lost share over 160 HP because we're less aggressive in rolling low hour late model trades.
- Case and New Holland increased price in October on tier 4b units.
- New tier 4b pricing adds 11% to combines that is over \$40,000 of increase, which is real money.
- My salespeople have lost all confidence in New Holland since they are not honoring the Built My Way protected programs!
- The manufacturer is looking to ship items in days instead of months. You order today they ship in 30 days.
- We would have been down this year much more but we end our year in November. Last December we did more than 20% of the total years business. This December is down so far!
- Commodity price declines for cash grain segment of market
- Lack of pre-buy and customers extending their trade cycle. We're hoping for extension of section 179.
- Put on seat belts we are going for a ride!
- Our main line is not competitive and New Holland is exiting the leasing programs.
- Customers are reluctant to purchase even with preseason discounts.

#### **Monthly Order Trends**

#### **Overall Orders**

• Incoming orders declined 16% y/y on avg. in November which compares to the 15% declines on avg. in October. Our conversations with dealers suggest early orders for large ag equipment are down significantly in comparison to small ag equipment.

#### **New Combine Order Intentions**

• Combine order intentions continue to deteriorate as 67% of dealers are planning to order fewer combines than last year.

		N.	America	n Farm H	Equipmer	nt Dealer S	Survey - A	Average O	orders Gro	owth				
% Change y/y	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14
Overall	1%	-2%	-3%	-3%	-2%	-4%	-5%	-4%	-8%	-9%	-9%	-10%	-15%	-16%
<b>By Brand</b>	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14
AGCO	-2%	-2%	-5%	1%	-4%	0%	-1%	-5%	-8%	-3%	-7%	-4%	-2%	-17%
John Deere	2%	-2%	-3%	-4%	-1%	-5%	-6%	-5%	-8%	-11%	-7%	-14%	-17%	-14%
New Holland	0%	-3%	-1%	-6%	-3%	-4%	-8%	-5%	-8%	-5%	-7%	-4%	-5%	-15%
Case IH	4%	-1%	-1%	-4%	-1%	-7%	-4%	-6%	-8%	-9%	-14%	-11%	-18%	-21%
Kubota	0%	-4%	1%	-6%	-2%	-3%	-7%	-8%	-6%	-4%	-9%	-9%	-4%	-16%
Shortlines	5%	-3%	-1%	-8%	0%	-6%	-2%	-5%	-13%	-10%	-13%	-9%	-23%	-17%
Other	0%	na	1%	6%	0%	3%	na	na	-6%	1%	0%	na	0%	na

Source: Cleveland Research

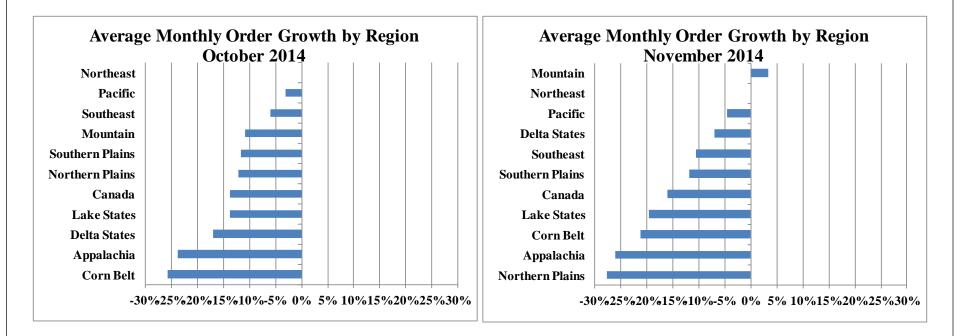
				New	Combin	e Order I	ntentions	vs. Last Y	ear					
	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14
More	10%	11%	17%	8%	10%	7%	9%	11%	6%	6%	10%	4%	3%	5%
Same	39%	38%	44%	48%	44%	51%	50%	46%	43%	38%	30%	30%	29%	23%
Less	51%	52%	39%	44%	46%	42%	41%	43%	51%	56%	60%	66%	68%	72%
Net % (More- Less)	-40%	-41%	-22%	-36%	-37%	-35%	-32%	-32%	-44%	-50%	-51%	-62%	-64%	-67%

Source: Cleveland Research

Source: Farm Equipment Magazine Survey

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

- Mountain State dealers were the only region to report positive y/y orders on average for the month at up 3% y/y, while Northern Plains dealers reported the largest average order declines of down 28% y/y.
- Compared to last month, Mountain State dealers showed a modest improvement in orders while Northern Plains dealers saw the most significant order deceleration.



#### **Average Dealer Sales Outlook**

- The average dealer sales outlook for 2015 is for 10% declines y/y, which is similar to the 11% expected decline last month. AGCO and Deere dealers are the most optimistic while Shortlines and Case IH dealers are more pessimistic.
- The second table below details the industry outlooks from Deere, Case IH/New Holland and AGCO.

			N. Amer	rican Far	m Equip	ment Deal	er Survey	- Full Yea	ar Sales F	orecast				
							2014	Outlook						
% change y/y	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14
Overall	1%	-1%	-4%	-4%	-2%	-3%	-4%	-4%	-6%	-6%	-8%	-4%	-9%	-6%
							2015	Outlook						
% change y/y	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14
AGCO												6%	0%	-9%
John Deere												-12%	-14%	-9%
New Holland												9%	-8%	-10%
Case IH												-12%	-11%	-16%
Kubota												7%	-6%	-14%
Shortlines												3%	-12%	-16%
Other												0%	3%	na
Overall												-9%	-11%	-10%

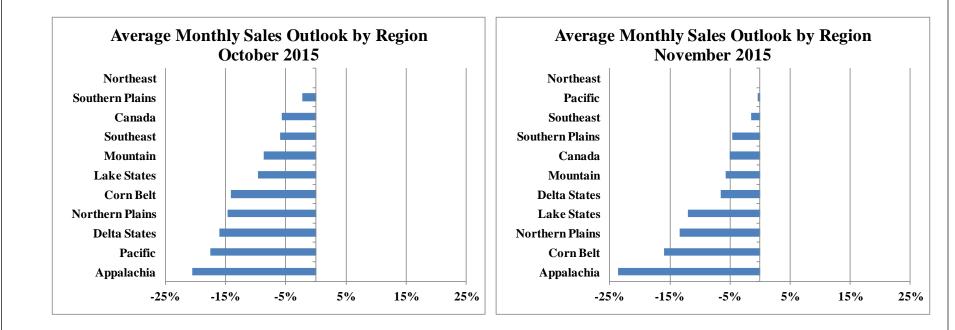
Source: Cleveland Research

	2015	Ag Equipment Outlook - Deere, AGCO, CI	NH
Geography	Deere	<b>CNH Industrial</b>	AGCO Corp.
N. America	Down 25-30%	Tractors flat; Combines (10-15%)	Down 5-10% (HHP down 20%)
Western Europe	Down ~10%	Tractors (0-5%), Combines (5-10%)	Down 5-10%
Latin America	Down ~10%	Tractors (5-10%), Combines (10-15%)	Down ~10%
CIS or ROW	Furter Deterioration	na	na
Asia	Down Slightly	Tractors 0-5%, Combines (5-10%)	na

Source: Company reports, CRC estimates

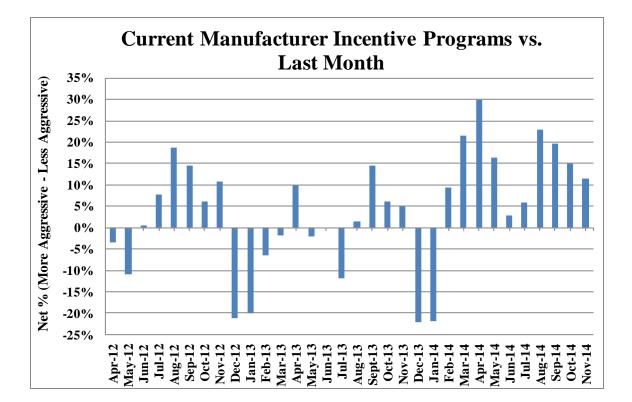
#### **2015 Sales Outlook Continued**

• No regions are expecting 2015 sales to grow y/y in our November survey, similar to last month. Dealers in the Northeast and Pacific regions are most optimistic, projecting flat sales y/y while dealers in the Appalachia region continue to be most pessimistic, projecting 24% sales declines next year.



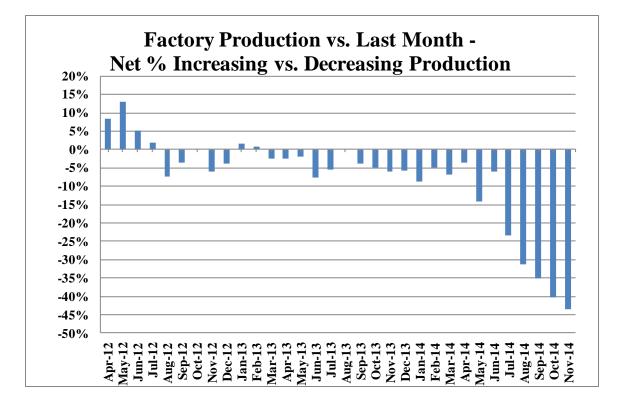
#### **Current Manufacturer Incentive Programs**

• A net 12% of dealers report that manufacturers are more aggressive with incentives in November (28% more aggressive; 55% same; 17% less aggressive), compared to the net 15% of dealers reporting more aggressive incentives last month.



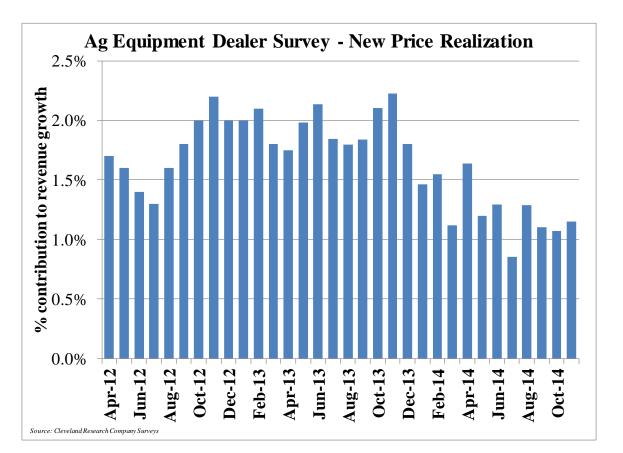
#### **Factory Production**

• A net 44% of dealers report that factory production was down in November compared to October vs a net 40% of dealers reporting lower production volume last month.



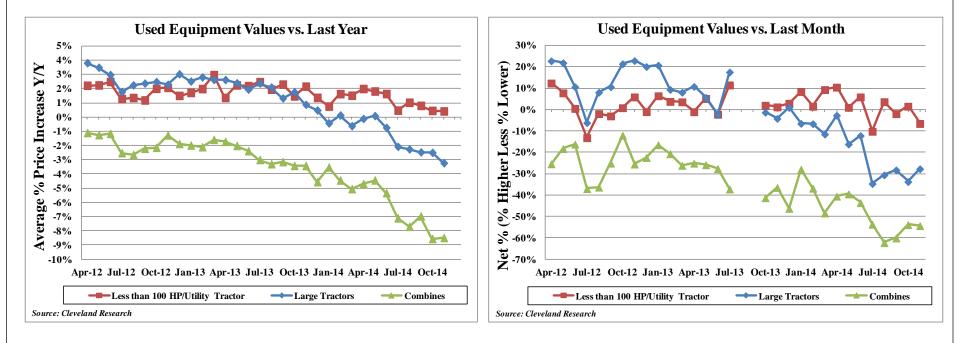
### **Pricing Trends**

• Dealers report price contributed roughly ~1.1% to total revenues in November, similar to 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 combine values are reported at down 9% y/y, similar to last month while large tractor values are reported at down 3% y/y and small tractor values are relatively flat y/y.
- On an absolute basis, all three product category values were reported as declining in November vs October.



(18)

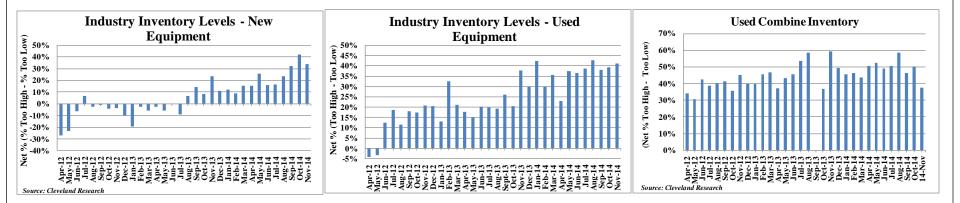
#### **Inventory Levels**

#### **New Equipment Inventories Slightly Better**

• A net 34% of dealers report new inventory as "too high" (42% too high; 51% about right; 8% too low), down from the net 42% last month.

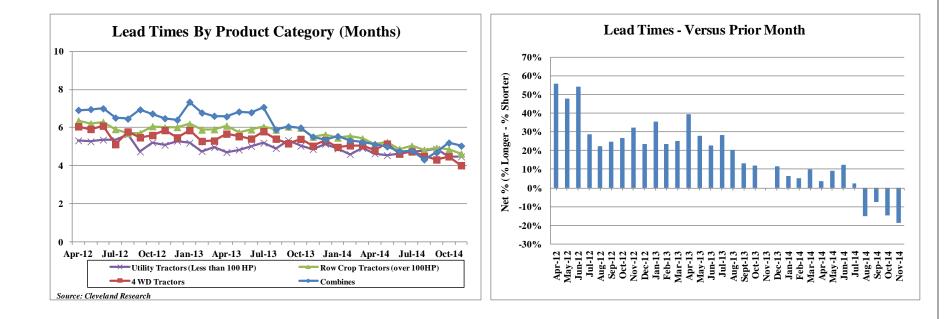
#### **Used Equipment Inventories Remain an Issue**

- A net 41% of dealers reported used equipment inventory as "too high" in November (51% too high; 40% about right; 9% too low), slightly above the net 39% last month.
  - Used Combines a net 38% reported inventories "too high," below the net 50% last month.
  - Used HHP tractors a net 18% of reported inventories "too high," below the net 27% last month.
  - Used Sprayers a net 27% of dealers reported inventories "too high," below the net 35% last month.



#### **Equipment Availability**

- Overall, a net 19% of dealers report shorter factory lead-times compared to last month (15% longer; 51% same; 34% shorter).
- Combine, 4WD and Row Crop tractor lead times were all slightly shorter on average vs last month, while utility tractor lead times were steady month-over-month.



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

- New programs are not aggressive because of used glut.
- No new programs from CNH to help move used equipment. They are claiming they are tight on cash.
- CNH does nothing for used.
- Big name manufacturers are cutting labor first and trying to made the book looks good as long as they can.
- 0% for 60 months programs on a used combines and used tractors. November is year end for New Holland so they are traditionally aggressive this month.
- There are huge competitive dollars to chase other colors.
- We had a lot of high dollar used combines. Now feel like we can talk trades for next year after cleaning up inventory.
- We're having an equipment auction in December so we'll find out where values are the hard way!
- We've got too many used combines and tractors not selling
- I'd guess we're in better shape than 95% of dealers. We only have \$9,000 in inventory that's been on our lot over a year!
- We are in a much better position due to some corrections we have made. Still a little on the high side to date.
- Combine inventory is high and demand is weak. Same for HHP tractors and tillage equipment.
- I refuse to put iron guides values as trade allowances for tractor and combine trades. We are using auction result values now.
- We have about 50% less orders than last year. expecting a real slow down. New combine prices are too high & used combine prices very weak. Recent auctions are having a huge impact on our used values.
- We're offering interest free financing for five years with free trip to Hawaii! Really working to move used!
- We have 0 new combines on hand or on order!

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

- Nothing except the lack of year end business. I was surprised that Section 179 wasn't passed in November.
- Competitor dumping tier 3 combines and 4WD tractors has numbers way up and our share down. This will disrupt our market for, conservatively, 3 or 4 years.
- Grain handling was robust. Guess the extra bushels do wear out machines.
- Surge of new tractor sales at end of month and strong demand for grain handling equipment.
- *Higher interest rates, continually lower prices from competing dealers who just experienced tier 4 price increases.*
- The lack of overall interest in equipment by all customers including livestock farmers and the slow down in tractor sales.
- The lack of sales programs by some of the major farm equipment OEMs.
- Surprised that Case IH isn't throwing out more aggressive incentives on large tractors & combines than they are.
- Just got home from Peoria Farm Show. Attendance was higher than expected, but interest was lower than expected. Other exhibitors had the same comments.
- Customers are finally willing to pay more to trade late model equipment.
- We were able to dump more used equipment than I guessed we would however it cost us a pile of money but we had way too much!!
- We thought that business might have picked up last month but it did not happen
- The amount of unsold new dealer inventory that Deere currently has on dealer lots that is aging.

# NA Farm Equipment Industry Retail Sales

-					NORTH AN	AERICAN F	FARM EQUI	PMENT RE	FAIL SAL					
				Units						% chai	ige year-ov	er-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	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	8,595	4,834	3,356	571	17,356	3,927	1,289	7%	7%	8%	-26%	6%	1%	-27%
Oct-13	9,644	6,687	5,938	1,225	23,494	7,163	1,665	-3%	-3%	5%	-18%	-2%	0%	-28%
Nov-13	5,646	3,871	2,646	643	12,806	3,289	897	9%	-3%	7%	2%	4%	6%	25%
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%
Sep-14	11,333	6,193	3,276	492	21,294	3,768	1,142	32%	28%	-2%	-14%	23%	-4%	-11%
Oct-14	10,934	7,115	4,929	734	23,712	5,663	994	13%	6%	-17%	-40%	1%	-21%	-40%
Nov-14	5,857	4,177	1,891	354	12,279	2,245	450	4%	8%	-29%	-45%	-4%	-32%	-50%

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

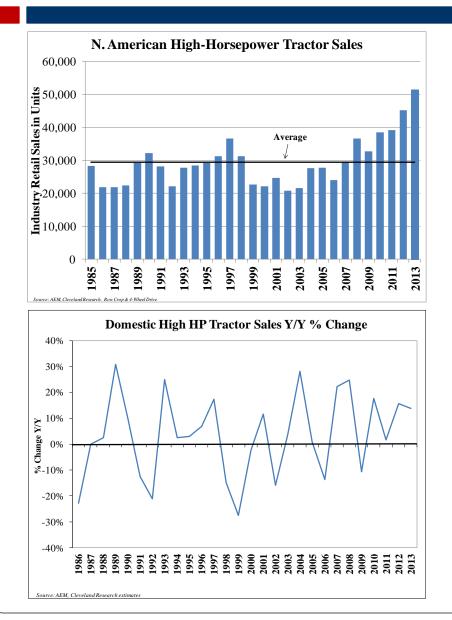
Source: AEM, CRC Estimates

# NA Farm Equipment Industry Inventory

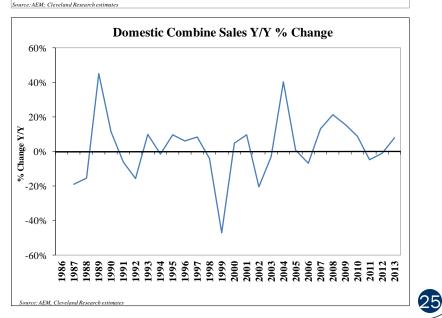
					NORTH A	MERICAN	FARM EQU	PMENT IN	VENTORY	7				
[			Inv	ventory (Un	its)					Invent	tory to 12-m	no. Sales		
	< 40 HP	Utility	Row Crop	4-Wheel	Total Tractor	Row Crop & 4WD	Combines	<40HP	Util	RC	4-WD	Total Tractor	Row Crop & 4WD	Comb
Dec-11	59,746	26,551	7,666	1,035	94,998	8,701	1,250	62%	47%	24%	14%	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%	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%	35%	28%
Sep-14	61,811	35,926	16,185	2,399	116,321	18,584	2,891	51%	53%	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%

Source: AEM; Cleveland Research Company estimates

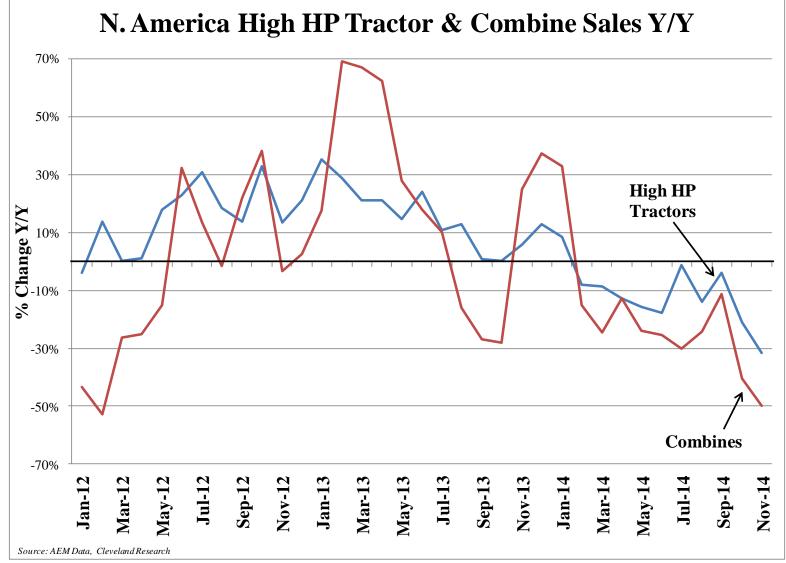
#### Annual Ag Equipment Industry Sales (1985 - 2013)



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



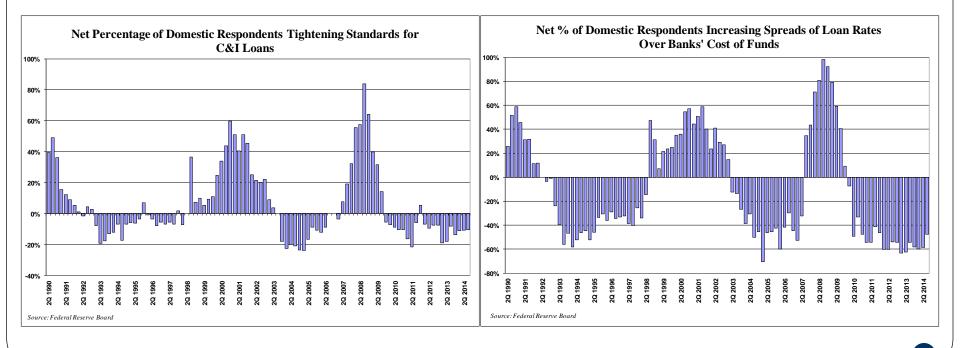
#### NA Ag Equipment Sales





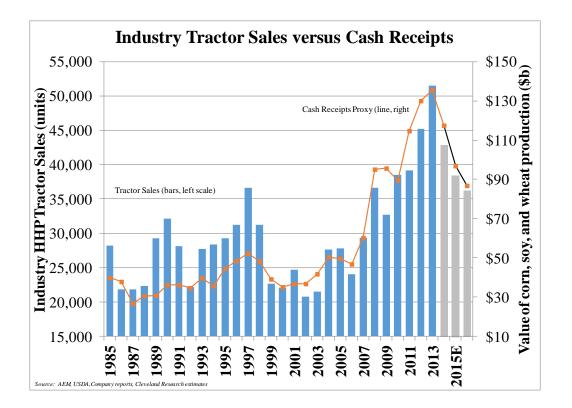
# **Credit – C&I Loan Standards Continue to Loosen Along with Continued Low Rates**

- The 3Q14 Senior Loan Officer survey saw continued loosening of loan standards as a net 11% of loan officers reported easier credit standards in 3Q14 (similar to 1Q and 2Q).
- Bank rate spreads continue to decline in 3Q14 (although slightly less broad-based) as a net 47% of loan officers reporting decreasing spreads. For reference, a net 60% of loan officers reported decreasing spreads in 1Q and 2Q.
- Demand for commercial and industrial loans decelerated slightly in 3Q as a net 16% of loan officers reported stronger demand for commercial and industrial loans, below the net 31% reporting stronger demand in 2Q14.



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

The USDA's updated WASDE report suggests cash receipts down 11% 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 December USDA report left the outlook for 2013/14 and 2014/15 unchanged at down 11% and down 15%, respectively. The correlation between equipment sales and cash receipts has historically provided a good proxy for next year's equipment demand.



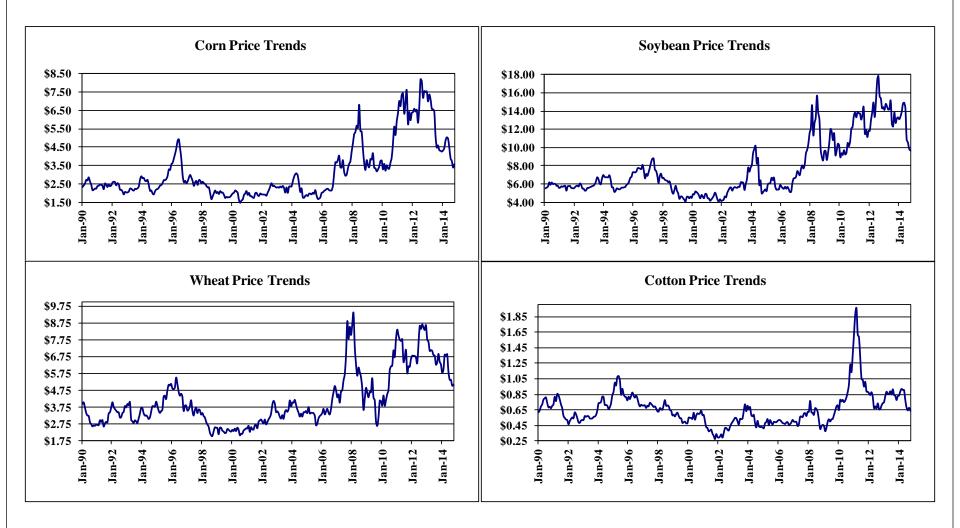
28

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

			L L	SDA - Worl	d Agricultura	I Supply and	Demand Estim	ates (bu millio	ns)			
			CORN - I	DOMESTIC					CORN	I - INTERNA	TIONAL	
Year	Production	Domestic Use	Exports	Total Use	End Stocks	Stocks/Use	Avg Price	Year	Production	Total Use	End Stocks	Stocks/Use
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	11,629	1,917	13,546	1,236	9.1%	\$4.46	2013/14	25,021	25,938	5,569	21.5%
2014/15								2014/15				
November	14,407	11,910	1,750	13,660	2,008	14.7%	\$3.20-\$3.80	November	24,580	26,349	5,531	21.0%
December	14,407	11,920	1,750	13,670	1,998	14.6%	\$3.20-\$3.80	December	24,630	26,354	5,569	21.1%
					Corn	Futures Price:	\$3.48					
Change m/m	0	10	0	10	-10	-0.1%	\$0.00	Change m/m	50	6	37	0.1%
Change y/y	482	291	-167	124	762	5.5%	(\$0.96)	Change y/y	-392	417	0	-0.3%
			NOVDEANG	- DOMESTI	a				COVDE	NO INTED		
Year	Production	Domestic Use	Exports	Total Use	End Stocks	Stocks/Use	Avg Price	Year	Production	ANS - INTERI Total Use	End Stocks	Stocks/Use
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%
2012/13	3,358	3,478	1,520	5,125	92	1.8%	\$13.00	2012/13	7,125	8,185	2,170	27.9%
2013/14 2014/15	5,558	3,478	1,047	5,125	92	1.070	\$15.00	2013/14	7,125	0,105	2,334	20.070
November	3,958	3,615	1,720	5,335	450	8.4%	\$9.00-\$11.00	November	7,508	8,607	2,867	33.3%
December	3,958	3,655	1,720	5,335	410	7.6%	\$9.00-\$11.00	December	7,508	8,616	2,807	33.6%
December	5,958	5,055	1,700	5,415				December	1,555	8,010	2,892	55.070
					Soybean 1	Futures Price:	\$9.44					
Change m/m	0	40	40	80	-40	-0.9%	\$0.00	Change m/m	28	9	25	0.3%
Change y/y	600	177	113	290	318	5.8%	(\$3.00)	Change y/y	410	431	537	4.8%
			WHEAT -	DOMESTIC					WHEA	T - INTERNA	ATIONAL	
Year	Production	Domestic Use	Exports	Total Use	End Stocks	Stocks/Use	Avg Price	Year	Production	Total Use	End Stocks	Stocks/Use
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	2,135	1,256	1,176	2,432	590	24.3%	\$6.87	2013/14	24,128	24,609	6,219	25.3%
2014/15	,	,	,	, -				2014/15	, -	,	-, -	
November	2,026	1,216	925	2,141	644	30.1%	\$5.65-\$6.15	November	24,424	24,970	6,444	25.8%
December	2,026	1,216	925	2,141	654	30.5%	\$5.80-\$6.20	December	24,509	24,967	6,507	26.1%
	,	, -		,	Wheat	Futures Price:	\$5.14		,	,		
Change m/m	0	0	0	0			\$0.10	Change m/m	05	-4	62	0.20/
Change m/m Change y/y	-109	-40	-251	-291	10 64	0.5% 6.3%	\$0.10 (\$0.87)	Change m/m Change v/v	85 382	-4 358	63 288	0.3% 0.8%
Change y/y	-109	-40	-231	-291	04	0.370	(\$0.87)	Change y/y	362	338	200	0.870
					FARME		EPTS PROXY					
		Production:				Average Price	:		Ci	rop Cash Reco	eipts*	
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	3,358	2,135		\$4.46	\$13.00	\$6.87	\$62,106	\$43,654	\$14,667	\$120,427	-11%
2014/15												
October	14,475	3,927	2,035		\$3.40	\$10.00	\$5.90	\$49,215	\$39,270	\$12,007	\$100,492	-17%
November December	14,407	3,958	2,026		\$3.50	\$10.00	\$5.90	\$50,425	\$39,580	\$11,953	\$101,958	-15%
	14,407	3,958	2,026		\$3.50	\$10.00	\$6.00	\$50,425	\$39,580	\$12,156	\$102,161	-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**

Year	Production	Domestic Use	Exports	Total Use	End Stocks	Stocks/Use	Avg Pri
2004/05	11,807	8,848	1,814	10,662	2,114	19.8%	\$2.06
2005/06	11,114	9,122	2,147	11,269	1,968	17.5%	\$2.00
2006/07	10,535	9,086	2,125	11,210	1,304	11.6%	\$3.04
2007/08	13,038	10,300	2,437	12,737	1,624	12.8%	\$4.20
2008/09	12,092	10,207	1,849	12,056	1,674	13.9%	\$4.06
2009/10	13,092	11,079	1,987	13,066	1,708	13.1%	\$3.55
2010/11	12,447	11,220	1,835	13,054	1,128	8.6%	\$5.18
2011/12	12,360	10,985	1,543	12,528	989	7.9%	\$6.22
2012/13	10,780	10,377	731	11,108	823	7.4%	\$6.89
2013/14	13,989	11,550	1,400	12,950	1,888	14.6%	\$4.50
2014/15	14,260	11,865	1,700	13,565	2,607	19.2%	\$3.65
2015/16	14,010	11,965	1,800	13,765	2,877	20.9%	\$3.30
2015/17	13,840	12,035	1,900	13,935	2,807	20.1%	\$3.35
2017/18	13,830	12,100	1,950	14,050	2,612	18.6%	\$3.45
2018/19	13,990	12,190	2,000	14,190	2,437	17.2%	\$3.60
2019/20	14,155	12,305	2,050	14,355	2,262	15.8%	\$3.75
2020/21	14,405	12,425	2,100	14,525	2,167	14.9%	\$3.85
2021/22	14,565	12,540	2,150	14,690	2,067	14.1%	\$3.95
2022/23	14,730	12,655	2,200	14,855	1,967	13.2%	\$4.10
2023/24	14,890	12,750	2,250	15,000	1,882	12.5%	\$4.20
10-yr Avg	14.268	12.163	1.925	14.088	2,369	16.9%	\$3.75

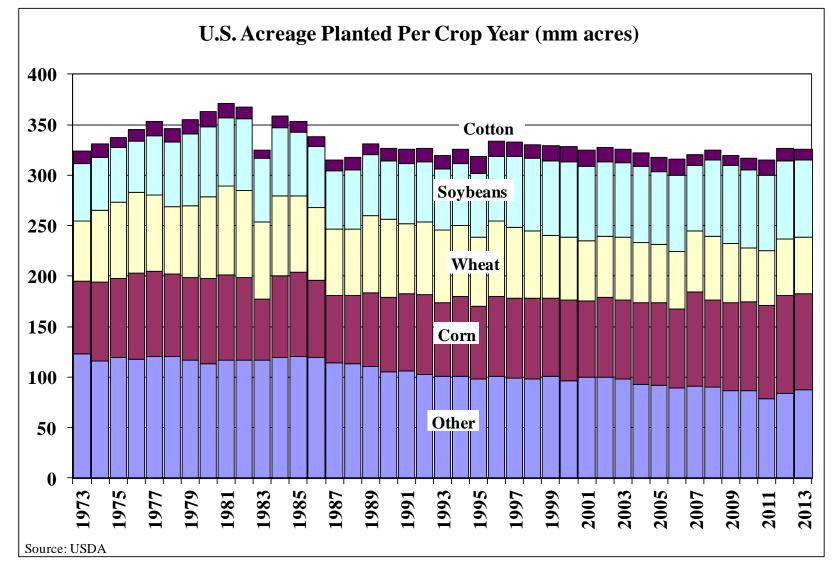
Source: USDA; Cleveland Research estimates

	20	14 USDA - Long	Run Crop Su	pply and Dema	nd Projections				20	14 USDA - Long	Run Crop Su	pply and Dema	nd Projections		
SOYBEANS -	- DOMESTIC							WHEAT - DO	OMESTIC						
<u>Year</u>	Production	Domestic Use	Exports	<u>Total Use</u>	End Stocks	Stocks/Use	Avg Price	Year	Production	Domestic Use	Exports	<u>Total Use</u>	End Stocks	Stocks/Use	Avg Price
2004/05	3,124	1,889	1,097	2,986	256	8.6%	\$5.74								
2005/06	3,068	1,938	940	2,878	449	15.6%	\$5.66	2004/05	2,157	1,168	1,066	2,234	540	24.2%	\$3.40
2006/07	3,197	1,965	1,116	3,081	574	18.6%	\$6.43	2005/06	2,103	1,151	1,003	2,154	571	26.5%	\$3.42
2007/08	2,677	1,897	1,159	3,056	205	6.7%	\$10.10	2006/07	1,808	1,137	908	2,045	456	22.3%	\$4.26
2008/09	2,967	1,768	1,279	3,047	138	4.5%	\$9.97	2007/08	2,051	1,051	1,263	2,314	306	13.2%	\$6.48
2009/10	3,359	1,862	1,499	3,361	151	4.5%	\$9.59	2008/09	2,499	1,260	1,015	2,275	657	28.9%	\$6.78
2010/11	3,329	1,779	1,501	3,280	215	6.6%	\$11.30	2009/10	2,218	1,138	879	2,018	976	48.4%	\$4.87
2011/12	3,094	1,791	1,362	3,153	169	5.4%	\$12.50	2010/11	2,207	1,126	1,291	2,417	862	35.7%	\$5.70
2012/13	3,034	1.779	1.320	3,099	141	4.5%	\$14.40	2011/12	1,999	1,180	1,051	2,231	743	33.3%	\$7.24
2013/14	3,258	1.794	1,450	3,244	170	5.2%	\$12.15	2012/13	2,266	1,406	1,007	2,413	718	29.8%	\$7.77
2014/15	3,480	1,821	1,640	3.461	204	5.9%	\$9.75	2013/14	2,130	1,333	1,100	2,433	565	23.2%	\$7.00
2015/16	3,500	1.836	1,650	3,486	232	6.7%	\$8.85	2014/15	2,220	1,258	1,025	2,283	642	28.1%	\$4.90
2015/17	3,525	1,852	1,675	3,527	245	6.9%	\$8.90	2015/16	2,205	1,227	1,025	2,252	745	33.1%	\$4.35
2017/18	3,580	1.873	1,725	3,598	243	6.8%	\$9.05	2015/17	2,145	1,231	1,025	2,256	794	35.2%	\$4.30
2018/19	3,615	1,898	1,735	3,633	240	6.6%	\$9.25	2017/18	2,080	1,239	1,035	2,274	770	33.9%	\$4.45
2019/20	3,650	1,918	1,750	3.668	240	6.5%	\$9.45	2018/19	2,100	1,247	1,045	2,292	758	33.1%	\$4.60
2020/21	3,685	1,943	1,755	3,698	239	6.5%	\$9.60	2019/20	2,120	1,255	1,055	2,310	753	32.6%	\$4.75
2020/21	3,720	1,969	1,765	3,734	237	6.5%	\$9.75	2020/21	2,135	1,263	1,070	2,333	745	31.9%	\$4.90
2022/23	3,750	1,989	1,705	3,764	241	6.4%	\$9.95	2021/22	2,155	1,271	1,085	2,356	739	31.4%	\$5.05
2022/23	3,785	2,009	1,775	3,799	241	6.4%	\$10.15	2022/23	2,165	1,279	1,100	2,379	725	30.5%	\$5.20
2023/24 10-yr Avg	3,785	1,889	1,790	3,799	245	6.4%	\$10.15 \$9.67	2023/24	2,185	1,287	1,115	2,402	713	29.7%	\$5.35
10-yi Avg	3,029	1,009	1,092	3,301	229	0.470	\$ <b>7.0</b> 7	10-yr Avg	2,151	1,260	1,057	2,317	724	31.3%	\$4.95

Source: USDA; Cleveland Research estimates

Source: USDA; Cleveland Research estimates

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



Source: Deere, CRC estimates