# Ag Equipment Intelligence

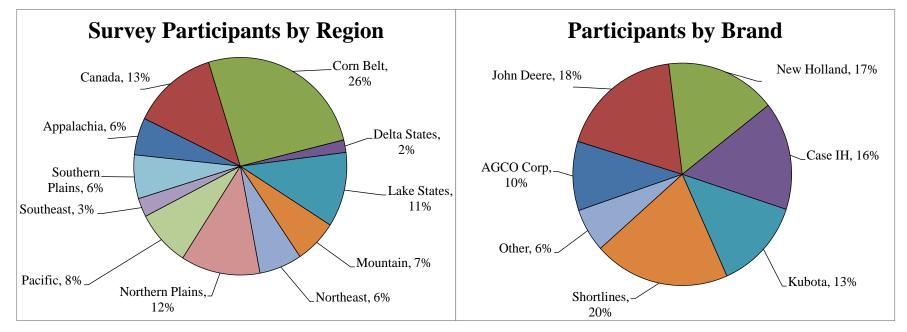
## April 2015 Dealer Sentiments & Business Conditions Update

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### Monthly Ag Equipment Intelligence North American Dealer Survey

#### **Background:**

- We are pleased to announce the results of the April 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 April survey had ~110 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.



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

Source: Farm Equipment Magazine Survey

#### **Highlights / Summary Thoughts**

- Industry Sales Down 8% y/y in March Dealers reported sales were down 8% on average in March, better than the 12% sales decline in February, helped by one extra billing day versus last year. A net 8% of dealers missed their sales budgets for the month, the second consecutive month of sales below expectations.
- Orders Fell 12% y/y in March vs down 15% Last Month Orders for the month were reported down 12% y/y on average, a deterioration from the 15% average order decline last month.
- **Dealers Adjust 2015 Sales Outlook to Down 13%** Dealers in this month's survey forecast sales to decline 13% for the full year on average, up from the 15% decline forecast last month but generally consistent with the 10-15% total sales decline forecast since last September.
- New and Used Equipment Inventories Remain "Too High" A net 33% of dealers report new inventory as "too high" compared to a net 37% last month, consistent with the last four month trend. Used equipment inventories continue to rise with a net 44% of dealers reporting used equipment inventory as "too high" this month, above the net 44% level last month and the highest level in our survey history.

#### **Monthly Sales Growth**

- Dealers report average sales were down 8% y/y in March, improved from the 12% average sales decline reported last month. March 2015 had one extra billing day than March 2014, helping average reported sales growth by perhaps 5%.
- Sales were slightly below dealer expectations, with a net 8% of dealers missing their sales budgets for the month, the second consecutive month of sales below plan.

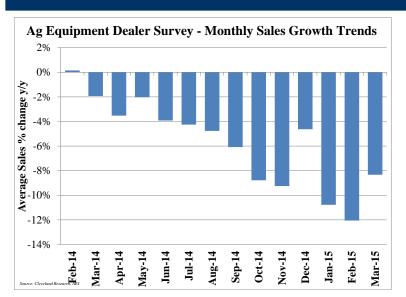
	N. American Farm Equipment Dealer Survey - Average Dealer Sales Growth														
% Change y/y	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	
AGCO	0%	-2%	-3%	1%	-3%	4%	-3%	4%	5%	5%	-13%	-12%	3%	-8%	
John Deere	2%	0%	-3%	-2%	-3%	-6%	-4%	-6%	-11%	-8%	-3%	-10%	-21%	-8%	
New Holland	-2%	-2%	-4%	-10%	2%	-2%	-3%	0%	0%	-9%	-1%	-4%	-6%	-5%	
Case IH	-2%	-6%	-5%	-1%	-10%	-5%	-9%	-13%	-15%	-14%	-6%	-19%	-11%	-13%	
Kubota	-3%	1%	-1%	-1%	2%	0%	-2%	1%	1%	-8%	-6%	-10%	5%	-16%	
Shortlines/Other	0%	0%	1%	3%	-2%	3%	5%	5%	5%	-1%	1%	-8%	-14%	-13%	
Total	0%	-2%	-4%	-2%	-4%	-4%	-5%	-6%	-9%	-9%	-5%	-11%	-12%	-8%	

Source: Cleveland Research, AEI

	N. American Farm Equipment Dealer Survey - Sales Versus Expectations														
% of Dealers Reporting	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	
Better than expected	20%	21%	21%	29%	25%	26%	28%	24%	22%	21%	29%	26%	13%	20%	
In line with expectations	55%	54%	54%	52%	53%	49%	47%	47%	51%	40%	47%	57%	59%	50%	
Worse than expected	25%	26%	25%	19%	23%	26%	25%	29%	27%	39%	23%	18%	28%	28%	
Net % (Better - Worse)	-4%	-5%	-4%	10%	2%	0%	3%	-5%	-5%	-18%	6%	8%	-14%	-8%	

Source: Cleveland Research, AEI.

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



Ag Equipment Dealer Survey - Sales Versus Expectations 15% 10% -15% -20% Apr-14 May-14 Jun-14 Jul-14 Aug-14 Sep-14 Oct-14 Nov-14 Dec-14 Jan-15 Feb-15 Mar-15 Feb-14 Mar-14

	N. American Farm Equipment Dealer Survey - Average Dealer Revenue Growth Trends														
% of Dealers Reporting	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	
Positive Sales Growth	45%	49%	39%	50%	46%	42%	37%	37%	40%	27%	33%	26%	13%	20%	
Flat Sales	17%	22%	20%	12%	18%	21%	22%	18%	14%	16%	16%	57%	59%	50%	
Negative Sales Growth	37%	29%	40%	39%	36%	37%	42%	46%	46%	58%	51%	18%	28%	28%	
Net % Reporting Growth	8%	20%	-1%	11%	11%	5%	-5%	-9%	-6%	-31%	-19%	8%	-14%	-8%	
Average % Change y/y	0%	-2%	-4%	-2%	-4%	-4%	-5%	-6%	-9%	-9%	-5%	-11%	-12%	-8%	

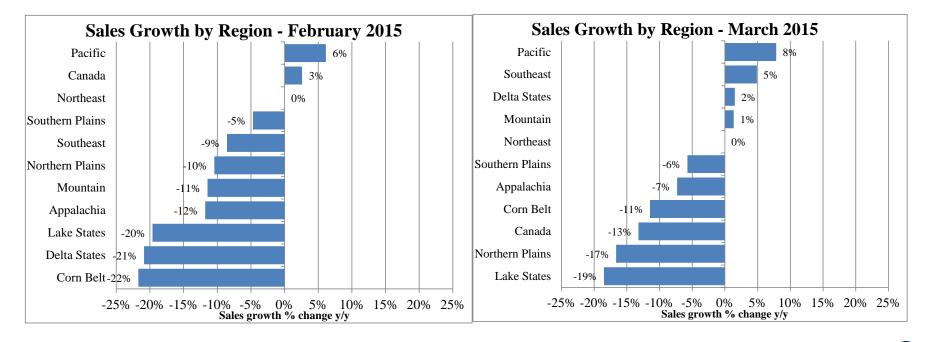
Source: Cleveland Research

	Optimism/Sentiment vs. Last Month														
% of Dealers Reporting	% of Dealers Reporting Feb-14 Mar-14 Apr-14 May-14 Jun-14 Jul-14 Aug-14 Sep-14 Oct-14 Nov-14 Dec-14 Jan-15 Feb-15 Mar-1														
More Optimistic	24%	26%	24%	25%	23%	13%	12%	16%	8%	9%	12%	12%	9%	14%	
Same	50%	51%	44%	45%	42%	45%	50%	46%	48%	38%	39%	52%	50%	42%	
Less Optimistic	26%	23%	32%	30%	35%	42%	38%	38%	44%	53%	49%	36%	41%	43%	
Net % Dealer Optimism	-1%	3%	-9%	-5%	-11%	-28%	-26%	-22%	-36%	-44%	-37%	-25%	-31%	-29%	

Source: Cleveland Research

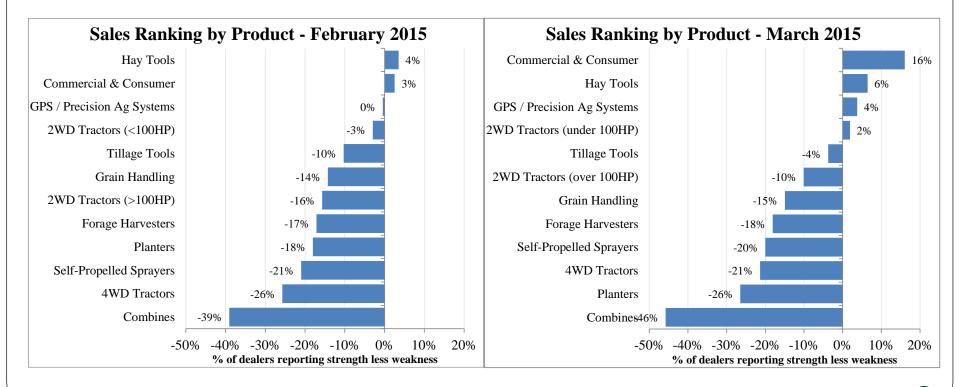
#### **Monthly Sales Growth by Region**

- Four of eleven regions showed positive average monthly sales growth in March vs only two in February. The Pacific Northwest continues to be the strongest reported region of the country, while the Lake States, Northern Plains, Canada, and Corn Belt are reporting the largest revenue declines.
- Compared to last month, Corn Belt states saw sales declines moderate, while Canada saw the most pronounced slowing in demand. Looking at sales trends over the last three months (to remove volatility by region) sales growth deteriorated the most across the Mountain states, Appalachia, and Southern Plains states.

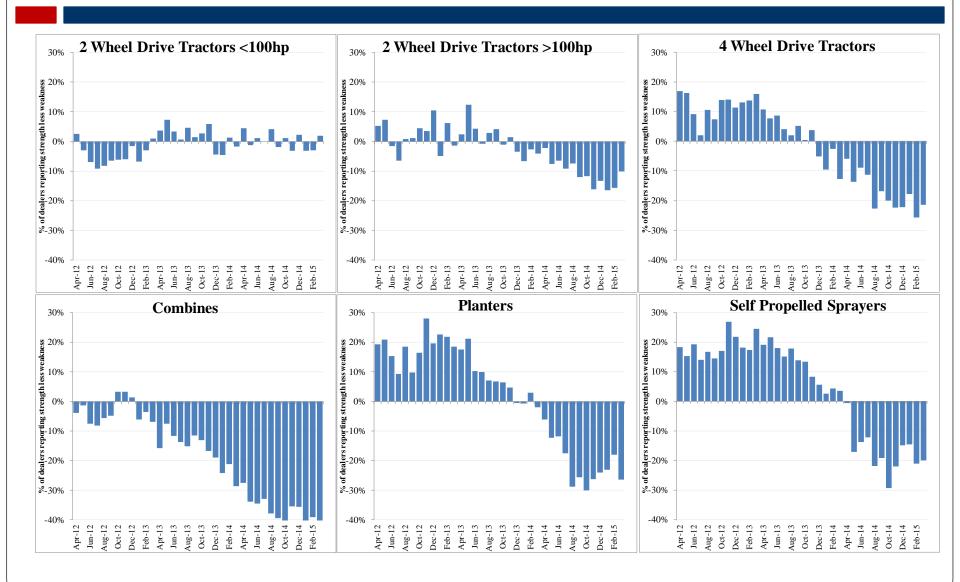


#### **Equipment Category Sales Trends**

- Commercial/Consumer Equipment and Hay Tools continue to show strength in demand, while combines, 4wheel drive tractors, and planters are reported as the weakest product categories.
- Relative to last month, Commercial/Consumer Equipment accelerated the most, with dealers noting better weather as behind the improved sales trends. Planters and combines showed the most significant deterioration in demand from February levels.

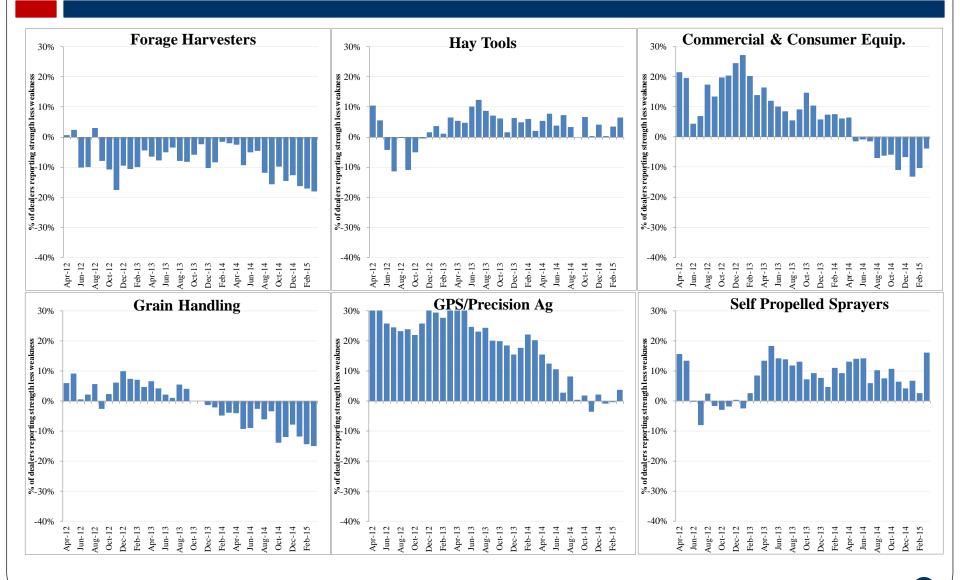


#### **Equipment Category Sales Trends**



Source: Farm Equipment Magazine Survey

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



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

- We cannot keep our vertical tillage equipment in stock selling everything we can get our hands on. Application equipment was also strong this month (as expected during this time).
- Lots of uncertainty in our area about what can be planted profitably. There has been lots of equipment sold over the last few years so guys can get by. There is still money out there if there is a good deal, but farmers can be patient. We need moisture here to have a decent hay season.
- The downturn is more pronounced in the YOY numbers because of the big presell deliveries that we had in March 2014.
- *I think that we have gotten off to a very good start and I do not think that we can maintain the pace.*
- Hard to tell with early spring sales. If it dries out earlier, business will decline. If it continues to rain, we could have an outstanding year.
- Even with such a great year last year, the outlook is still good. The milk prices are creeping up slowly so our farmers will sustain this year also. We have found many of our customers were adding buildings last year so machinery sales should remain steady.
- The dairy business is in turmoil
- Ag lenders are reluctant to make operating loans
- Used inventories across NA are way high.
- Less optimistic due to weather, large inventory of used machines on dealer lots, lack of rain.
- *farmers are being very careful about buying, and feel that 2016 could be worse for income*
- The longer we go without moisture the bigger problem it will become. Manufacturers don't think they need to discount to sell. The Titan cloud continues to hang over everyone in the farm equipment business in the Midwest. If they have to liquidate that is going to affect the used market drastically. What do you put in a late model combine or tractor when you know Titan has 25 of them and may have them on a auction next month?
- we are in a correction mode. grain prices and cost of production prices do not look favorable for the equipment business
- Very much less pricing and what pricing is being done, the customers are pricing as much as to states away. I've always said that you can always find a cheaper price if you a willing to go far away from home.

Source: Farm Equipment Magazine Survey

#### **Monthly Order Trends**

#### **Overall Orders**

• Incoming orders declined 12% y/y on average in March, up from the 15% decline in February. Kubota dealers reported the largest order decline at down 22% on average, while New Holland dealers reported the smallest order decline in the month at down 8% on average.

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

• A net 54% of dealers are planning to order fewer combines for 2015 in comparison to 2014, the smallest proportion of dealers ordering less since August last year.

	N. American Farm Equipment Dealer Survey - Average Orders Growth														
% Change y/y	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	
AGCO	-4%	0%	-1%	-5%	-8%	-3%	-7%	-4%	-2%	-17%	-8%	-16%	-2%	-19%	
John Deere	-1%	-5%	-6%	-5%	-8%	-11%	-7%	-14%	-17%	-14%	-10%	-11%	-20%	-12%	
New Holland	-3%	-4%	-8%	-5%	-8%	-5%	-7%	-4%	-5%	-15%	-6%	-5%	-16%	-8%	
Case IH	-1%	-7%	-4%	-6%	-8%	-9%	-14%	-11%	-18%	-21%	-19%	-18%	-17%	-17%	
Kubota	-2%	-3%	-7%	-8%	-6%	-4%	-9%	-9%	-4%	-16%	-8%	-7%	-17%	-22%	
Shortlines/Other	0%	-1%	-2%	-5%	-9%	-4%	-7%	-9%	-12%	-17%	-6%	-14%	-17%	-18%	
Total	-2%	-4%	-5%	-4%	-8%	-9%	-9%	-10%	-15%	-16%	-12%	-12%	-15%	-12%	

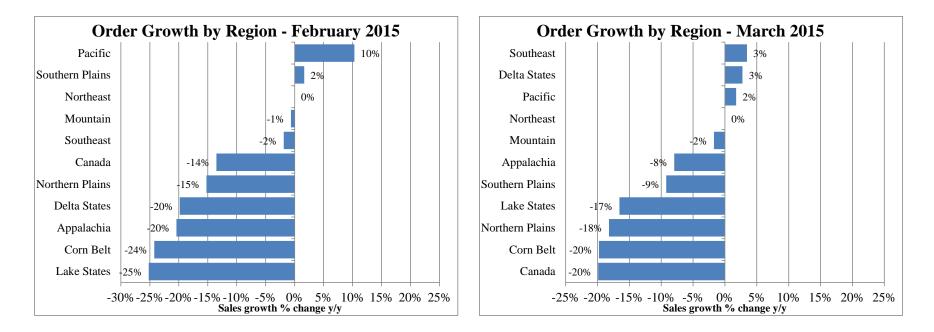
Source: Cleveland Research, AEI

N	New Combine Order Intentions vs. Last Year														
% of Dealers Ordering.	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15								
More	4%	3%	5%	1%	7%	6%	6%								
Same	30%	29%	23%	34%	26%	26%	34%								
Less	66%	68%	72%	65%	67%	69%	60%								
Net % (More-Less)	-62%	-64%	-67%	-63%	-60%	-63%	-54%								

Source: Cleveland Research, AEI

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

- The Southeast, Delta States, and Pacific Northwest are the only regions reporting order growth in March, while Canada, the Corn Belt, and Northern Plains reported the largest order declines this month.
- Over the last three months, order growth has improved the most across the Pacific Northwest and Southern Plains regions, while most other regions order declines have been relatively consistent with prior trend.



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

- The average dealer sales forecast for 2015 is sales down 13% y/y, up from the 15% decline forecast last month. Deere dealers raised the 2015 sales growth outlook by the most relative to last month's forecast to down 8% for the year vs down 18% last month.
- The second table below details the industry outlooks from Deere, Case IH/New Holland and AGCO.

			20	)15 Outlo	ok		
% change y/y	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15
AGCO	6%	0%	-9%	0%	-10%	-11%	-12%
John Deere	-12%	-14%	-9%	-9%	-11%	-18%	-8%
New Holland	9%	-8%	-10%	-3%	-6%	-11%	-10%
Case IH	-12%	-11%	-16%	-11%	-14%	-17%	-17%
Kubota	7%	-6%	-14%	-6%	-11%	-13%	-17%
Shortlines/Other	1%	-4%	-16%	-9%	-7%	-10%	-19%
Overall	-9%	-11%	-10%	-8%	-11%	-15%	-13%

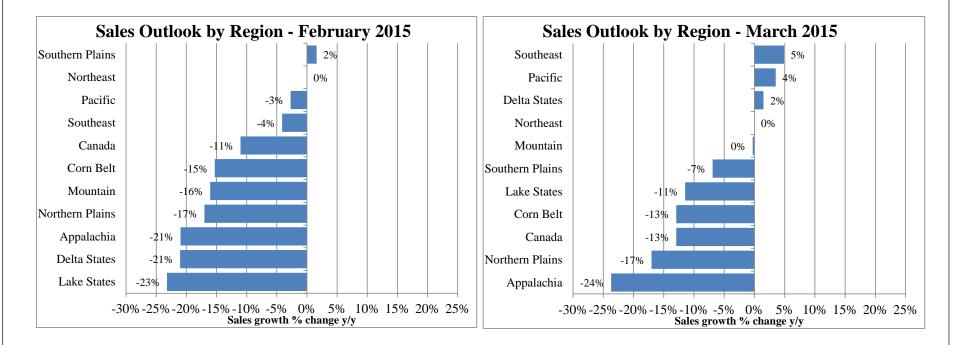
Source: Cleveland Research, AEI

	2015 Ag	g Equipment Outlook - Deere, AGCO, CNI	1
Geography	Deere	<b>CNH Industrial</b>	AGCO Corp.
N. America	Down 25-30%	Tractors (0-5%); Combines (25-30%)	Down 5-10% (HHP down over 20%)
Western Europe	Down ~10%	Tractors (0-5%), Combines (5-10%)	Down 5-10%
Latin America	Down ~10-15%	Tractors (10-15%), Combines (15-20%)	Down ~10%
CIS or ROW	Down Significantly	na	na
Asia	Down Slightly	Tractors 0-5%, Combines (10-15%)	na

Source: Company reports, CRC estimates

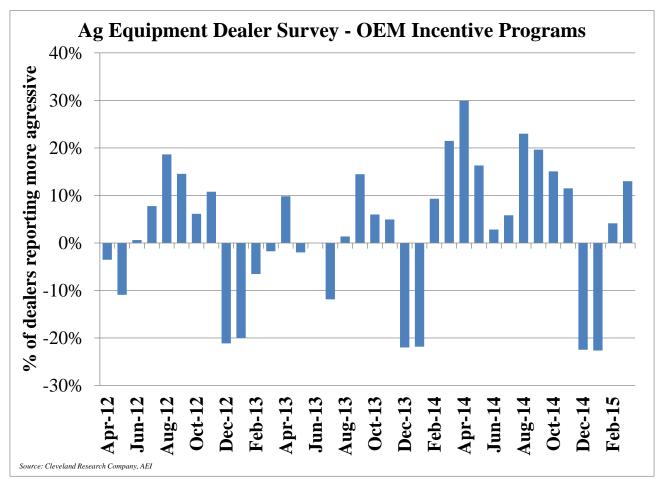
#### **2015 Sales Outlook Continued**

• Dealers in the Southeast and Pacific Northwest forecast low to mid single digit sales growth for 2015, while dealers across the remainder of the country forecast sales declines ranging from down low single digits to down almost 25% for the year. Dealers in the Corn Belt continue to forecast sales down 10-15% for the year.



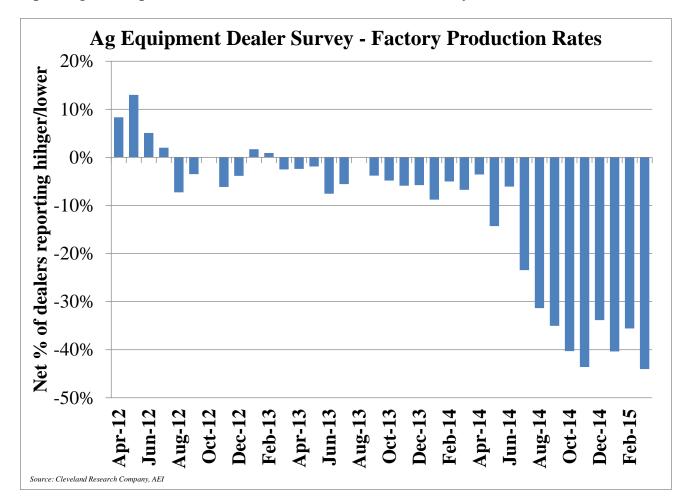
#### **Current Manufacturer Incentive Programs**

• A net 13% of dealers report that manufacturers were more aggressive with incentives in March, up from the net 4% in February. The relative magnitude of incentives are reported to be relatively low as underlying equipment demand remains weak.



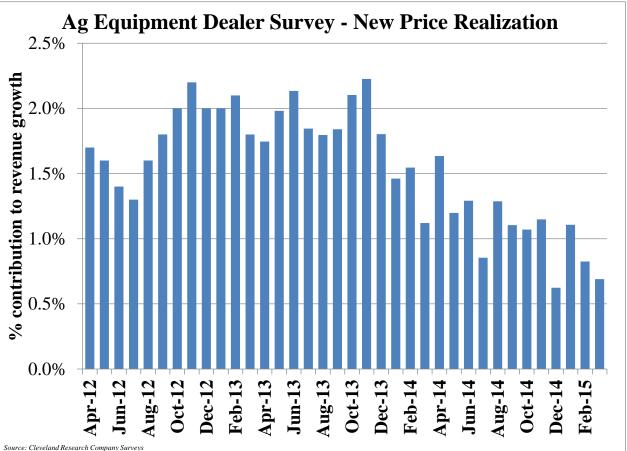
#### **Factory Production**

• A net 44% of dealers report that factory production was down in March, which compares to the net 36% of dealers reporting lower production volume last month and relatively consistent with the last several months.



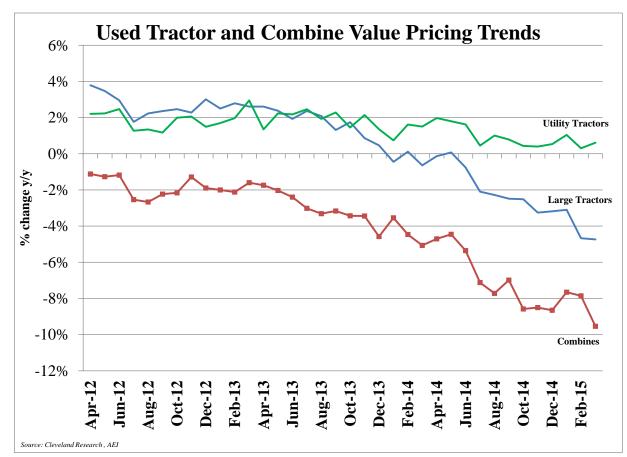
#### **Pricing Trends**

• Dealers report new equipment price increases contributed just under ~1% to total revenues in March, down slightly from both last month and January. Dealers in Canada report price increases are being implemented due to the significant change in exchange rates so far this year.



#### **Used Equipment Pricing**

- Used combine values are reported at down 10% y/y, a further decline from the 8% y/y decline reported on average in February. Large tractor values are reported down 5% y/y on average, inline with the average reported last month.
- Small tractor values are trending slightly higher y/y due to higher relative demand from the livestock sector.

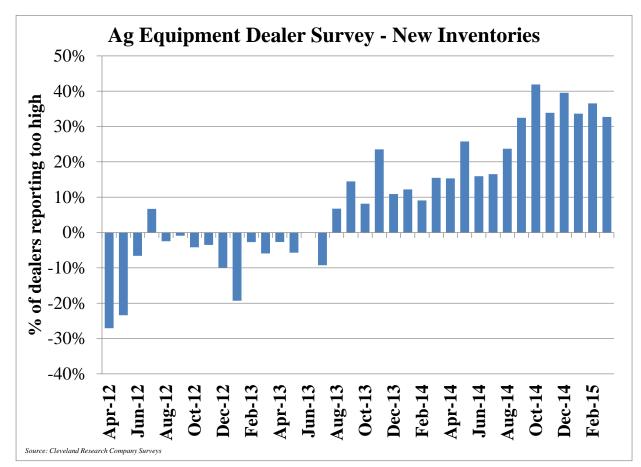


Source: Farm Equipment Magazine Survey

### **New Equipment Inventory Levels**

#### New Equipment Inventories Remain "Too High"

- A net 33% of dealers report new inventory as "too high" compared to a net 37% last month, remaining within a consistent range over the prior six months.
- Many dealers report selling used equipment over new remains a priority in the near-term.

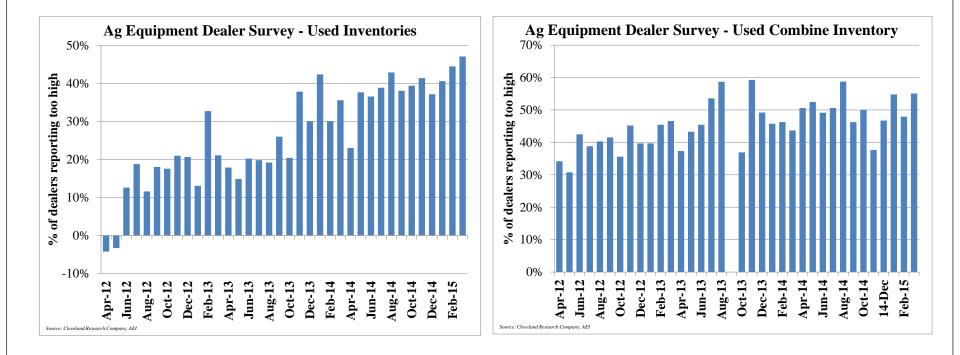


Source: Farm Equipment Magazine Survey

#### **Used Equipment Inventory Levels**

#### **Used Equipment Inventories Continue to Rise**

- A net 47% of dealers reported used equipment inventory as "too high" this month, above the net 44% last month and again setting a new high in our survey history.
- The % of dealers reporting used combines are too high rose again in March, but has continued to trend within a range of 40-55% of dealers reporting excess combine inventory.



#### North American Farm Equipment Industry Retail Sales

[				Units			FARM EQUI				nge year-ove	er-vear		
L				Cints	Total	Row Crop				70 Chai	ige year-ove	Total	Row Crop	)
	< 40 HP	Utility	<b>Row Crop</b>	4-Wheel	Tractor	& 4WD	Combines	< 40 HP	Utility	<b>Row Crop</b>	4-Wheel	Tractor	& 4WD	Combines
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	7,623	6,903	4,919	960	20,405	5,879	1,538	-7%	10%	13%	7%	3%	12%	36%
Jan-14	4,755	4,152	3,303	631	12,841	3,934	824	1%	2%	12%	-7%	3%	8%	33%
Feb-14	5,308	3,745	2,423	575	12,051	2,998	526	4%	1%	-6%	-14%	0%	-8%	-15%
Mar-14	10,108	5,110	3,155	655	19,028	3,810	899	22%	3%	-9%	-7%	9%	-9%	-25%
Apr-14	14,163	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%
Dec-14	8,142	7,520	3,749	514	19,925	4,263	931	7%	9%	-24%	-46%	-2%	-27%	-39%
Jan-15	5,382	4,506	3,124	220	13,232	3,344	384	13%	9%	-5%	-65%	3%	-15%	-53%
Feb-15	5,305	3,250	1,955	348	10,858	2,303	399	0%	-13%	-19%	-39%	-10%	-23%	-24%
Mar-15	9,735	4,851	2,547	500	17,633	3,047	470	-4%	-5%	-19%	-24%	-7%	-20%	-48%

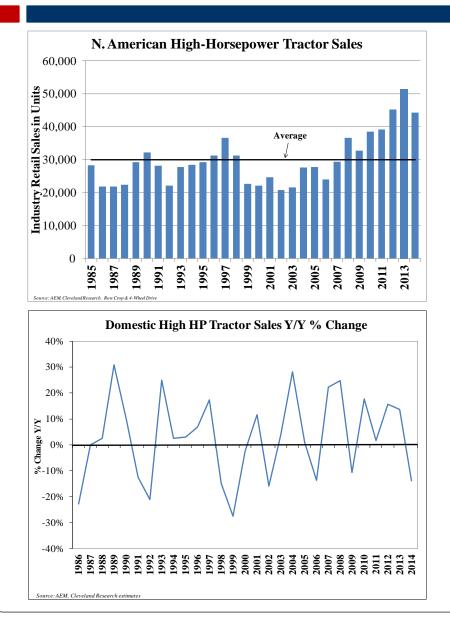
Source: AEM; Cleveland Research Company estimates. High hp tractors are row crop & 4-wheel drive.

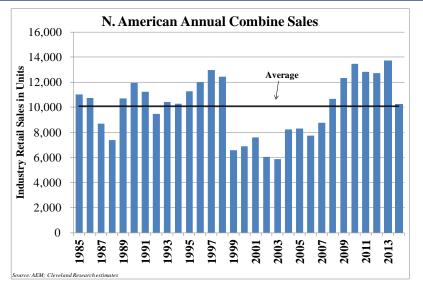
## North American Farm Equipment Industry Inventory

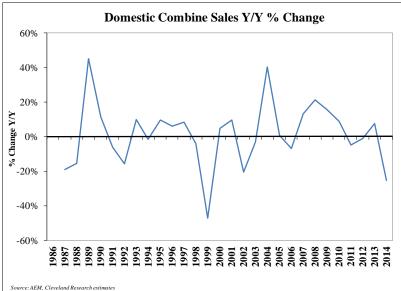
					NORTH	AMERICAN	FARM EQU	IPMENT INV	ENTORY					
			Inv	entory (Uni	ts)					Invent	ory to 12-m	o. Sales		
-					Total	Row Crop						Total	Row Crop	
	< 40 HP	Utility	Row Crop	4-Wheel	Tractor	& 4WD	Combines	<40HP	Util	RC	4-WD	Tractor	& 4WD	Comb
Feb-13	72,473	30,842	11,375	1,850	116,540	13,225	2,186	68%	50%	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%	36%	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%
Nov-14	67,691	37,110	14,840	1,652	121,293	16,492	2,046	55%	55%	38%	24%	51%	36%	19%
Dec-14	69,876	35,550	14,638	1,426	121,490	16,064	1,674	57%	52%	39%	22%	51%	36%	16%
Jan-15	73,716	35,405	13,934	1,439	124,494	15,373	1,713	59%	51%	37%	24%	53%	35%	17%
Feb-15	78,177	36,676	13,981	1,436	130,270	15,417	1,820	63%	54%	37%	25%	55%	36%	19%

Source: AEM; Cleveland Research Company estimates

#### **Annual Agricultural Equipment Industry Sales (1985 - 2014)**

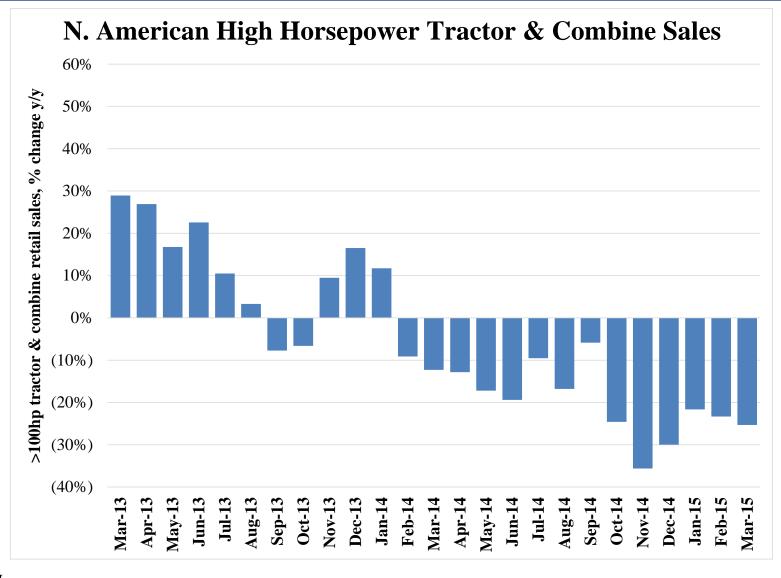






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#### North America Large Ag Equipment Sales



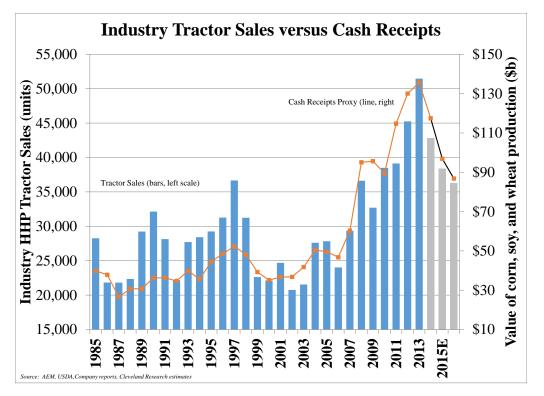
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Source: AEM

#### **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 13% 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 cash receipts proxy (using the 3 largest crops - corn, soybeans, wheat).

The updated April USDA report was largely unchanged for both 2013/14 and 2014/15, with a minor downward revision to the average soybean price outlook and a small increase to wheat. The correlation between equipment sales and cash receipts has historically provided a good proxy for next year's equipment demand.



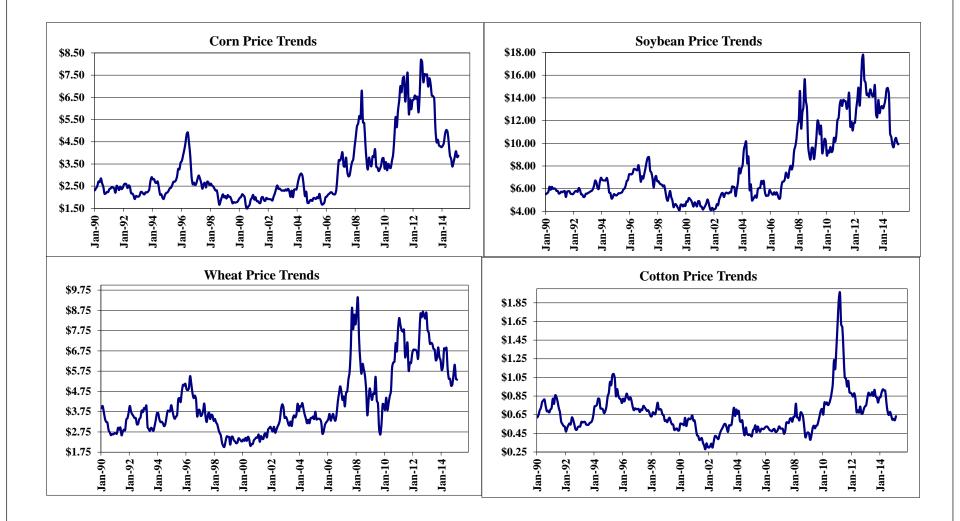


## **Commodity Prices – Simplified Cash Receipts Proxy**

			τ	JSDA - Worl	d Agricultura	l Supply and	Demand Estim	ates (bu millio	ns)			
			CORN - I	DOMESTIC					COR	N - 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	10,755	10,353	730	11,111	821	7.4%	\$6.89	2012/13	23,416	23,680	4,520	19.1%
2013/14	13,829	11,537	1,917	13,454	1,232	9.2%	\$4.46	2013/14	25,131	25,987	5,545	21.3%
2014/15								2014/15				
February	14,216	11,895	1,750	13,645	1,827	13.4%	\$3.40-3.90	February	24,810	26,507	5,638	21.3%
March	14,216	11,895	1,800	13,695	1,777	13.0%	\$3.50-3.90	March	24,746	26,549	5,517	20.8%
April	14,216	11,845	1,800	13,645	1,827	13.4%	\$3.55-3.85	April	24,835	26,512	5,592	21.1%
					Corn F	utures Price:	\$3.90					
Change m/m	0	-50	0	-50	50	0.4%	\$0.00	Change m/m	89	-37	75	0.3%
Change y/y	387	308	-117	191	595	4.2%	(\$0.76)	Change y/y	-296	525	47	-0.2%
		5	OYBEANS	- DOMESTI	С				SOYBE	ANS - INTER	NATIONAL	
Year	Production	Domestic Use	Exports	Total Use	End Stocks	Stocks/Use	Avg Price	Year	Production	Total Use	End Stocks	Stocks/Use
2012/13	3,042	1,794	1,317	3,111	141	4.5%	\$14.40	2012/13	6,833	7,803	1,968	25.2%
2013/14	3,358	1,831	1,647	3,478	92	2.6%	\$13.00	2013/14	7,068	8,200	2,345	28.6%
2014/15								2014/15				
February	3,969	1,911	1,790	3,701	385	10.4%	\$9.45-10.95	February	7,607	8,691	2,895	33.3%
March	3,969	1,911	1,790	3,701	385	10.4%	\$9.45-10.95	March	7,607	8,690	2,905	33.4%
April	3,969	1,931	1,790	3,721	370	9.9%	\$9.60-10.60	April	7,622	8,685	2,921	33.6%
					Soybean F	utures Price:	\$9.82					
Change m/m	0	20	0	20	-15	-0.5%	(\$0.10)	Change m/m	15	-5	16	0.2%
Change y/y	611	100	143	243	278	7.3%	(\$2.90)	Change y/y	555	485	576	5.0%
			WHEAT	DOMESTIC					WHE	AT - INTERN	ATIONAL	
Year	Production	Domestic Use	Exports	Total Use	End Stocks	Stocks/Use	Avg Price	Year	Production	Total Use	End Stocks	Stocks/Use
2012/13	2,252	1,388	1,012	2,400	718	29.9%	\$7.77	2012/13	21,944	23,590	5,734	24.3%
2013/14	2,135	1,255	1,176	2,431	590	24.3%	\$6.87	2013/14	24.177	24,620	6,299	25.6%
2014/15	_,	-,	-,	_,			+ + + + + + + + + + + + + + + + + + + +	2014/15	,	,	-,_,	
February	2,026	1,184	900	2,084	692	33.2%	\$5.85-6.15	February	24,615	25,075	6,577	26.2%
March	2,026	1,185	900	2,085	691	33.1%	\$5,90-6,10	March	24,604	25,069	6,574	26.2%
April	2,026	1,197	880	2,077	684	32.9%	\$6.00-6.10	April	24,666	25,105	6,562	26.1%
r	,	,		,	Wheat F	utures Price:	\$5.37	r	,	-,	- ,	
Change m/m	0	12	-20	-8	-7	-0.2%	\$0.05	Change m/m	62	36	-12	-0.1%
Change y/y	-109	-58	-296	-354	94	8.7%	(\$0.82)	Change y/y	490	485	263	0.6%
					FARME	R CROP RECI	EPTS PROXY					
		Production:				Average Price			Cr	op Cash Rec	eipts*	
Year	Corn	Soybeans	Wheat		Corn	Soybeans	Wheat	Corn	Soybeans	Wheat	Total	% change y/
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	10,755	3,042	2,252		\$6.89	\$14.40	\$7.77	\$74,102	\$43,805	\$17,498	\$135,405	4%
2013/14	13,829	3,358	2,135		\$4.46	\$13.00	\$6.87	\$61,677	\$43,654	\$14,667	\$119,999	-11%
2014/15												
February	14,216	3,969	2,026		\$3.65	\$10.20	\$6.00	\$51,888	\$40,484	\$12,156	\$104,528	-13%
March	14,216	3,969	2,026		\$3.70	\$10.20	\$6.00	\$52,599	\$40,484	\$12,156	\$105,239	-12%
April	14,216	3,969	2,026		\$3.70	\$10.10	\$6.05	\$52,599	\$40,087	\$12,257	\$104,943	-13%

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

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



Source: USDA, FactSet

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

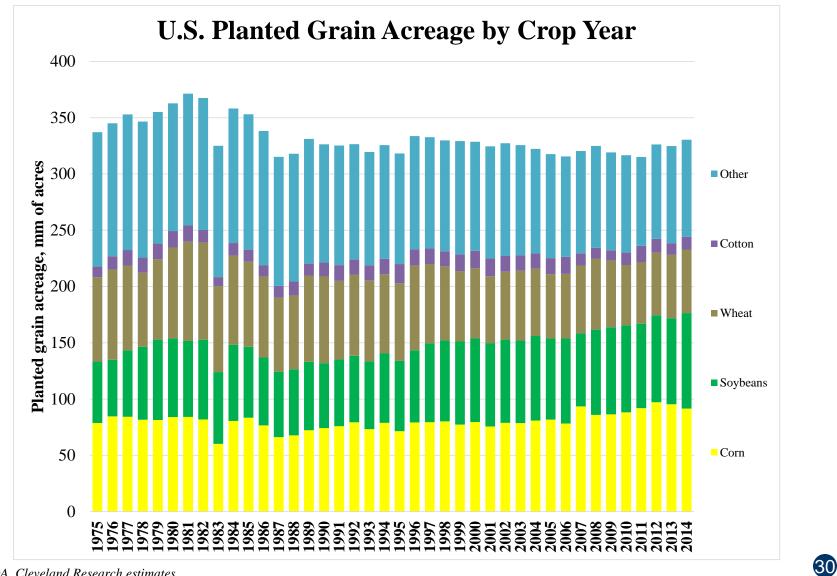
		US Cor	n, Soy, and	l Wheat Su	pply and D	emand - L	ong Term	Annual F	orecast 20	)15					
US Corn Balance Sheet - USDA Long Tern	n Forecast (	Feb 2015)													
Millions of bushels	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Planted	88	92	97	95	91	88	90	90	90	90	90	89	89	89	89
Harvested	81	84	87	88	83	80	82	82	82	82	82	81	81	81	81
Yield (bu/acre)	153	147	123	159	173	167	169	171	173	175	177	179	181	183	185
Beginning Stocks (MM bu)	1,708	1,128	989	821	1,236	2,008	1,733	1,738	1,753	1,773	1,748	1,753	1,703	1,683	1,668
Production (MM bu)	12,447	12,360	10,780	13,925	14,407	13,445	13,940	14,105	14,270	14,355	14,520	14,595	14,760	14,920	15,085
Imports (MM bu)	28	29	162	35	25	25	25	25	25	25	25	25	25	25	25
Total Supply (MM bu)	14,183	13,517	11,931	14,781	15,668	15,478	15,698	15,868	16,048	16,153	16,293	16,373	16,488	16,628	16,778
Feed & Residual (MM Bu)	4,792	4,557	4,329	5,300	5,375	5,225	5,375	5,500	5,600	5,650	5,700	5,750	5,800	5,875	5,925
Food, Seed, & Industrial (excl. Ethanol)	1,407	1,428	1,403	1,435	1,385	1,420	1,435	1,440	1,450	1,455	1,465	1,470	1,480	1,485	1,495
Ethanol & By-Products	5,021	5,000	4,648	5,000	5,150	5,200	5,150	5,100	5,075	5,075	5,075	5,100	5,125	5,150	5,200
Exports	1,835	1,543	731	1,900	1,750	1,900	2,000	2,075	2,150	2,225	2,300	2,350	2,400	2,450	2,500
Total Use	13,054	12,528	11,111	13,635	13,660	13,745	13,960	14,115	14,275	14,405	14,540	14,670	14,805	14,960	15,120
Ending Stocks	1,128	989	820	1,146	2,008	1,733	1,738	1,753	1,773	1,748	1,753	1,703	1,683	1,668	1,658
Ending Stocks/Use	8.6%	7.9%	7.4%	8.4%	14.7%	12.6%	12.4%	12.4%	12.4%	12.1%	12.1%	11.6%	11.4%	11.1%	11.0%
Weeks Carryover	4.5	4.1	3.8	4.4	7.6	6.6	6.5	6.5	6.5	6.3	6.3	6.0	5.9	5.8	5.7
Average Farm Price (\$/bu)	\$5.18	\$6.22	\$6.89	\$4.55	\$3.50	\$3.40	\$3.50	\$3.50	\$3.50	\$3.55	\$3.55	\$3.60	\$3.65	\$3.70	\$3.75
Value of Production	\$64,475	\$76,879	\$74,274	\$63,359	\$50,425	\$45,713	\$48,790	\$49,368	\$49,945	\$50,960	\$51,546	\$52,542	\$53,874	\$55,204	\$56,569
% change y/y	39%	19%	-3%	-15%	-20%	-9%	7%	1%	1%	2%	1%	2%	3%	2%	2%
U.S. Soybean Balance Sheet - USDA Long			,												
Millions of bushels	2010/11	2011/12	2012/13	2013/14	2014/15		2016/17			2019/20		2021/22	2022/23	2023/24	2024/25
Planted	77	75	77	77	84	84	79 79	78	78	79 79	79	79 79	79 79	79 79	79 79
Harvested	77	74	76	76	83	83	78	77	77	78	78	78	78	78	78
Yield Per Harvested Acre (Bushels)	44	42	40	43	48	46	47	47	47	48	48	49	49	50	50
Beginning Stocks	151	215	169	140	92	450	519	396	282	243	238	232	237	241	244
Production	3,329	3,094	3,034	3,289	3,958	3,820	3,630	3,620	3,655	3,715	3,750	3,810	3,845	3,885	3,920
Imports	14	16	36	90	15	15	15	15	15	15	15	15	15	15	15
Total Supplies	3,495	3,325	3,239	3,519	4,065	4,285	4,164	4,031	3,952	3,973	4,003	4,057	4,097	4,141	4,179
Crush	1,648	1,703	1,689	1,700	1,780	1,835	1,850	1,850	1,855	1,880	1,900	1,925	1,940	1,960	1,975
Exports	1,501	1,362	1,320	1,600	1,720	1,820	1,810	1,790	1,745	1,745	1,760	1,785	1,805	1,825	1,845
Seed & Residual	131	88	90	95	115	111	109	109	109	110	111	111	111	111	111
Total Use	3,280	3,155	3,099	3,395	3,615	3,766	3,769	3,749	3,709	3,735	3,771	3,821	3,856	3,896	3,931
Ending Stools	215	169	140	124	450	519	396	282	243	238	232	237	241	244	248
Ending Stocks Stocks/Use	215 6.6%	5.4%	140 4.5%	124 3.7%	450 12.4%	13.8%	396 10.5%	282 7.5%	243 6.6%	238 6.4%	6.2%	6.2%	6.3%	244 6.3%	248 6.3%
Average Price (\$/bu)	\$11.30	\$12.50	4.3% \$14.40	\$13.10	\$10.00	\$8.50	\$8.55	\$8.80	\$9.10	\$9.20	\$9.30	\$9.35	<b>\$9.40</b>	\$9.45	\$9.55
Value of Production	\$37,620	\$38,669	\$43,690	\$43,086	\$39,580	\$32,470	\$31,037	\$31,856	\$33,261	\$9.20	\$34,875	\$35,624	\$36,143	\$36,713	\$37,436
% change y/y	\$37,020 17%	\$38,009 3%	\$43,090 13%	\$43,080 -1%	-8%	-18%	-4%	331,830 3%	\$55,201 4%	334,178 3%	\$34,873 2%	\$33,024 2%	\$30,143 1%	\$30,713 2%	\$37,430 2%
/o change y/y	1 / 70	570	1370	-1 70	-070	-1070	-+ 70	J 70	4 70	J 70	∠ 70	2 70	1 70	2 70	2 70

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

	U	S Corn, So	y, and Whe	at Supply a	and Deman	d - Long T	erm Annu	al Foreca	st 2015 (co	ontinued)					
U.S. Wheat Balance Sheet - USDA Long	Term Foreca	st (Feb 201	5)												
Millions of bushels	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Planted	54	54	56	56	57	56	53	53	53	53	53	52	52	52	52
Harvested	48	46	49	45	46	47	45	45	45	45	45	44	44	44	44
Yield Per Harvested Acre (Bushels)	46	44	46	47	44	46	46	47	47	47	48	48	49	49	49
Beginning Stocks	976	862	743	718	590	644	700	680	663	654	653	666	662	661	663
Production	2,207	1,999	2,266	2,130	2,026	2,155	2,075	2,075	2,090	2,105	2,125	2,115	2,135	2,145	2,165
Imports	97	112	123	170	170	150	155	160	165	170	175	180	185	190	195
Total Supplies	3,279	2,974	3,131	3,018	2,786	2,949	2,930	2,915	2,918	2,929	2,953	2,961	2,982	2,996	3,023
Food	926	941	945	950	960	967	974	981	988	995	1,002	1,009	1,016	1,023	1,030
Seed	71	76	73	74	76	72	71	71	71	71	70	70	70	70	70
Feed&residual	129	162	388	220	180	190	180	170	170	170	170	170	180	180	190
Exports	1,291	1,051	1,007	1,180	925	1,020	1,025	1,030	1,035	1,040	1,045	1,050	1,055	1,060	1,065
Total Use	2,417	2,231	2,414	2,424	2,141	2,249	2,250	2,252	2,264	2,276	2,287	2,299	2,321	2,333	2,355
Ending Stocks	862	743	718	593	644	700	680	663	654	653	666	662	661	663	668
Stocks/Use	35.7%	33.3%	29.7%	24.5%	30.1%	31.1%	30.2%	29.4%	28.9%	28.7%	29.1%	28.8%	28.5%	28.4%	28.4%
Average Price (\$/bu)	\$5.70	\$7.24	\$7.77	\$6.87	\$5.90	\$5.00	\$4.65	\$4.75	\$4.80	\$4.80	\$4.80	\$4.80	\$4.85	\$4.85	\$4.85
Value of Production	\$12,579	\$14,475	\$17,607	\$14,631	\$11,953	\$10,775	\$9,649	\$9,856	\$10,032	\$10,104	\$10,200	\$10,152	\$10,355	\$10,403	\$10,500
% change y/y	16%	15%	22%	-17%	-18%	-10%	-10%	2%	2%	1%	1%	0%	2%	0%	1%
	Tota	l Acreage a	nd Value o	f U.S. Corn	n, Soy and V	Wheat Pro	duction - I	USDA Feb	ruary 201	5 Projecti	ion				
Total Corn, Soy, Wheat	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Planted (mm acres)	219	221	230	228	232	228	222	221	221	221	221	220	220	220	220
Harvested (mm acres)	206	204	213	209	213	211	205	204	204	204	204	204	204	204	204
Yield (bu/acre)	87	86	76	93	96	92	96	97	98	99	100	101	102	103	104
Production	17,983	17,453	16,080	19,344	20,391	19,420	19,645	19,800	20,015	20,175	20,395	20,520	20,740	20,950	21,170
Average Price (\$/bu)	\$6.38	\$7.45	\$8.43	\$6.26	\$5.00	\$4.58	\$4.55	\$4.60	\$4.66	\$4.72	\$4.74	\$4.79	\$4.84	\$4.88	\$4.94
Value of Production	\$114,675	\$130,024	. ,	\$121,076	\$101,958	\$88,958	\$89,475	\$91,080	\$93,238	\$95,242	\$96,621	\$98,318	\$100,372	\$102,321	\$104,505
% change y/y	28%	13%	4%	-11%	-16%	-13%	1%	2%	2%	2%	1%	2%	2%	2%	2%

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



Source: USDA, Cleveland Research estimates