# Ag Egulpment Intelligience 

## June 2015 Dealer Sentiments \& Business Conditions Update

## Monthly Ag Equipment Intelligence North American Dealer Survey

## Background:

- We are pleased to announce the results of the June 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 June survey had 95 respondents representing combined annual revenues of roughly $\$ 3.8$ 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.

## Highlights / Summary Thoughts

- Sales - Average dealer sales were reported down $9 \%$ y/y in May, relatively inline with the $10 \%$ average decline dealers reported in April. A net $13 \%$ of dealers missed their sales budget in May. Commercial and consumer lawn equipment remains the only area of strength, while most large equipment demand remains very weak.
- Orders -Orders were reported down $17 \% \mathrm{y} / \mathrm{y}$ on average in May, up from the $19 \%$ decline reported last month but a notable deterioration from the first quarter pace.
- Outlook - The full year dealer average sales growth forecast remains unchanged at down $13 \%$ for the year, with a net $32 \%$ of dealers forecasting a sales decline for the year, similar to the April survey results.
- Inventory - A net $40 \%$ of dealers report new equipment inventories are too high, inline with the April survey and remaining at the high end of our survey history. Used inventories do appear to have improved in May, with only $34 \%$ of dealers reporting inventory was too high vs $43 \%$ in April.
- Pricing - Used large tractor pricing is reported down $4 \%$ on average, inline with the April survey results, while utility tractor used pricing improved slightly in the month to up almost $1 \% \mathrm{y} / \mathrm{y}$. Used combine prices remain weak at down $8 \%$ on average, deteriorating from a $7 \%$ decline reported last month.


## Monthly Sales Growth

- Average dealer sales were reported down $9 \% \mathrm{y} / \mathrm{y}$ in May, relatively inline with the $10 \%$ average decline dealers reported in April. A net 13\% of dealers missed their sales budget in May, with more dealers reporting sales were worse than expected than we have seen since November 2014.
- A net $26 \%$ of dealers report they are less optimistic about overall business conditions, the $13^{\text {th }}$ consecutive month of deterioration in optimism.

| 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 | Apr-15 | May-15 |
| AGCO | 0\% | -2\% | -3\% | 1\% | -3\% | 4\% | -3\% | 4\% | 5\% | 5\% | -13\% | -12\% | 3\% | -8\% | -5\% | 3\% |
| John Deere | 2\% | 0\% | -3\% | -2\% | -3\% | -6\% | -4\% | -6\% | -11\% | -8\% | -3\% | -10\% | -21\% | -8\% | -12\% | -15\% |
| New Holland | -2\% | -2\% | -4\% | -10\% | 2\% | -2\% | -3\% | 0\% | 0\% | -9\% | -1\% | -4\% | -6\% | -5\% | -3\% | -6\% |
| Case IH | -2\% | -6\% | -5\% | -1\% | -10\% | -5\% | -9\% | -13\% | -15\% | -14\% | -6\% | -19\% | -11\% | -13\% | -17\% | -12\% |
| Kubota | -3\% | 1\% | -1\% | -1\% | 2\% | 0\% | -2\% | 1\% | 1\% | -8\% | -6\% | -10\% | 5\% | -16\% | 0\% | -1\% |
| Shortlines/Other | 0\% | 0\% | 1\% | 3\% | -2\% | 3\% | 5\% | 5\% | 5\% | -1\% | 1\% | -8\% | -14\% | -13\% | -15\% | 7\% |
| Total | 0\% | -2\% | -4\% | -2\% | -4\% | -4\% | -5\% | -6\% | -9\% | -9\% | -5\% | -11\% | -12\% | -8\% | -10\% | -9\% |

Source: Cleveland Research, AEI


Source: Cleveland Research, AEI.

## Monthly Sales Growth Continued




| \% 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 | Apr-15 | May-15 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Positive Sales Growth | 45\% | 49\% | 39\% | 50\% | 46\% | $42 \%$ | $37 \%$ | 37\% | $40 \%$ | 27\% | 33\% | 26\% | 13\% | 20\% | 27\% | 24\% |
| Flat Sales | 17\% | 22\% | 20\% | 12\% | 18\% | 21\% | 22\% | 18\% | 14\% | 16\% | 16\% | $57 \%$ | 59\% | 50\% | 11\% | 39\% |
| Negative Sales Growth | 37\% | 29\% | 40\% | 39\% | 36\% | 37\% | 42\% | 46\% | 46\% | 58\% | 51\% | 18\% | 28\% | 28\% | 62\% | 37\% |
| Net \% Reporting Growth | 8\% | 20\% | -1\% | 11\% | 11\% | 5\% | -5\% | -9\% | -6\% | -31\% | -19\% | 8\% | -14\% | -8\% | -35\% | -13\% |
| Average \% Change y/y | 0\% | -2\% | -4\% | -2\% | -4\% | -4\% | -5\% | -6\% | -9\% | -9\% | -5\% | -11\% | -12\% | -8\% | -10\% | -9\% |


| Optimism/Sentiment vs. Last Month |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \% 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 | Apr-15 | May-15 |
| More Optimistic | 24\% | 26\% | 24\% | 25\% | 23\% | 13\% | 12\% | 16\% | 8\% | 9\% | 12\% | 12\% | 9\% | 14\% | 14\% | 13\% |
| Same | 50\% | 51\% | 44\% | 45\% | 42\% | 45\% | 50\% | 46\% | 48\% | 38\% | 39\% | 52\% | 50\% | 42\% | 47\% | 48\% |
| Less Optimistic | 26\% | 23\% | 32\% | 30\% | 35\% | 42\% | 38\% | 38\% | 44\% | 53\% | 49\% | 36\% | 41\% | 43\% | 40\% | 39\% |
| Net \% Dealer Optimism | -1\% | 3\% | -9\% | -5\% | -11\% | -28\% | -26\% | -22\% | -36\% | -44\% | -37\% | -25\% | -31\% | -29\% | -26\% | -26\% |

Source: Cleveland Research

## Monthly Sales Growth by Region

- Sales trends remain varied by geography, with weak sales growth rates persisting across much of the corn belt, lake states, and south eastern regions in May. Relative to last month, sales growth showed improvement across the Pacific Northwest and Appalachia.




## Equipment Category Sales Trends

- Commercial and consumer lawn equipment continues to show strengthening in demand, with a net $21 \%$ of dealers reporting higher sales in this category in May, the highest level seen over the last several years. Hay tools showed improvement in demand related to April, while most other product categories continue to show very weak demand trends (combines, planters, and sprayers in particular).




## Equipment Category Sales Trends



## Equipment Category Sales Trends (Continued)



## Most Interesting Commentary - Monthly Sales and Outlook

- Lack of spring goods EOP sales from fall 2014. Continued down turn in grain markets is our largest issue this spring. Lack of good planting weather and reduction of Gov 179 tax benefit
- We would have had a great month but we had record rainfall in the State of Oklahoma and none of our customers were able to work. That includes lawn/landscape people. farmers. ranchers and construction people.
- We are selling used but new tractors over a 100 hp are big zero
- We just don't know where the bottom is
- managing our used inventory means probably selling less new.
- There is high inventory of used across North America.
- Our focus is on used .. need to reduce used inventory in order to take more trades
- It reminds me of the 80's when farmers were not interested no matter how cheap a price you offered.
- The lack of concern by the major manufactures is surprising. Deere came out and said this would be one their best years of the last five. They feel they can weather the down turn by manufacturing less. I am more concerned about 2016 than 2015 as we may have a big surplus of ag commodities, driving down the need for equipment further


## Monthly Order Trends

- Orders were reported down $17 \%$ y/y on average in May, up from the $19 \%$ decline reported last month but a notable deterioration from the first quarter pace.
- Combine orders remain very weak with only $5 \%$ of dealers reporting higher new combine orders in May, and $73 \%$ ordering fewer combines.

| \% 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 | Apr-15 | May-15 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGCO | -4\% | 0\% | -1\% | -5\% | -8\% | -3\% | -7\% | -4\% | -2\% | -17\% | -8\% | -16\% | -2\% | -19\% | -11\% | -5\% |
| John Deere | -1\% | -5\% | -6\% | -5\% | -8\% | -11\% | -7\% | -14\% | -17\% | -14\% | -10\% | -11\% | -20\% | -12\% | -20\% | -22\% |
| New Holland | -3\% | -4\% | -8\% | -5\% | -8\% | -5\% | -7\% | -4\% | -5\% | -15\% | -6\% | -5\% | -16\% | -8\% | -10\% | -17\% |
| Case IH | -1\% | -7\% | -4\% | -6\% | -8\% | -9\% | -14\% | -11\% | -18\% | -21\% | -19\% | -18\% | -17\% | -17\% | -25\% | -23\% |
| Kubota | -2\% | -3\% | -7\% | -8\% | -6\% | -4\% | -9\% | -9\% | -4\% | -16\% | -8\% | -7\% | -17\% | -22\% | -24\% | -18\% |
| Shortlines/Other | 0\% | -1\% | -2\% | -5\% | -9\% | -4\% | -7\% | -9\% | -12\% | -17\% | -6\% | -14\% | -17\% | -18\% | -16\% | -10\% |
| Total | -2\% | -4\% | -5\% | -4\% | -8\% | -9\% | -9\% | -10\% | -15\% | -16\% | -12\% | -12\% | -15\% | -12\% | -19\% | -17\% |

Source: Cleveland Research, AEI

| New Combine Order Intentions vs. Last Year |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \% of Dealers Ordering. | Sep-14 | Oct-14 | Nov-14 | Dec-14 | Jan-15 | Feb-15 | Mar-15 | Apr-15 | May-15 |
| More | $\mathbf{4 \%}$ | $\mathbf{3 \%}$ | $\mathbf{5 \%}$ | $\mathbf{1 \%}$ | $\mathbf{7 \%}$ | $\mathbf{6 \%}$ | $\mathbf{6 \%}$ | $\mathbf{3 \%}$ | $\mathbf{5 \%}$ |
| Same | $\mathbf{3 0 \%}$ | $\mathbf{2 9 \%}$ | $\mathbf{2 3 \%}$ | $\mathbf{3 4 \%}$ | $\mathbf{2 6 \%}$ | $\mathbf{2 6 \%}$ | $\mathbf{3 4 \%}$ | $\mathbf{3 5 \%}$ | $\mathbf{2 2 \%}$ |
| Less | $\mathbf{6 6 \%}$ | $\mathbf{6 8 \%}$ | $\mathbf{7 2 \%}$ | $\mathbf{6 5 \%}$ | $\mathbf{6 7 \%}$ | $\mathbf{6 9 \%}$ | $\mathbf{6 0 \%}$ | $\mathbf{6 2 \%}$ | $\mathbf{7 3 \%}$ |
| Net \% (More- Less) | $\mathbf{- 6 2 \%}$ | $\mathbf{- 6 4 \%}$ | $\mathbf{- 6 7 \%}$ | $\mathbf{- 6 3 \%}$ | $\mathbf{- 6 0 \%}$ | $\mathbf{- 6 3 \%}$ | $\mathbf{- 5 4 \%}$ | $\mathbf{- 5 9 \%}$ | $\mathbf{- 6 8 \%}$ |

Source: Cleveland Research, AEI

## Order Trends by Region

- The Pacific Northwest and Delta States regions remain relatively strong compared to the Southeast and Corn Belt regions, which continue to report $+25 \%$ order declines.




## Average Dealer Sales Outlook

- The full year dealer average sales growth forecast remains unchanged at down $13 \%$ for the year, with a net $32 \%$ of dealers forecasting a sales decline for the year, similar to the April survey results.
- The second table below details the industry outlooks from Deere, Case IH/New Holland and AGCO.

| \% change $\mathrm{y} / \mathrm{y}$ | Sep-14 | Oct-14 | Nov-14 | Dec-14 | Jan-15 | Feb-15 | Mar-15 | Apr-15 | May-15 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGCO | 6\% | 0\% | -9\% | 0\% | -10\% | -11\% | -12\% | -5\% | -3\% |
| John Deere | -12\% | -14\% | -9\% | -9\% | -11\% | -18\% | -8\% | -15\% | -18\% |
| New Holland | 9\% | -8\% | -10\% | -3\% | -6\% | -11\% | -10\% | -4\% | -9\% |
| Case IH | -12\% | -11\% | -16\% | -11\% | -14\% | -17\% | -17\% | -14\% | -18\% |
| Kubota | 7\% | -6\% | -14\% | -6\% | -11\% | -13\% | -17\% | -10\% | -12\% |
| Shortlines/Other | 1\% | -4\% | -16\% | -9\% | -7\% | -10\% | -19\% | -10\% | -4\% |
| Overall | -9\% | -11\% | -10\% | -8\% | -11\% | -15\% | -13\% | -13\% | -13\% |

Source: Cleveland Research, AEI

| 2015 Ag Equipment Outlook - Deere, AGCO, CNH |  |  |  |
| :--- | :---: | :---: | :---: |
| Geography | Deere | CNH Industrial | AGCO Corp. |
| N. America | Down~25\% | 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~15-20\% | Tractors (15-20\%), Combines (20-25\%) | Down~15\% |
| CIS or ROW | Down Significantly | na | na |
| Asia | Down Modestly | Tractors (10-15\%), Combines (10-15\%) | na |

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## 2015 Sales Outlook Continued

- The 2015 sales forecast remains mixed by region, with the Southern Plains States and Pacific Northwest expecting to show growth for the year, while the Corn Belt, Lake States, and Mountain States are the weakest regions in the U.S.




## Current Manufacturer Incentive Programs

- OEM incentive programs were reported by dealers to be more aggressive again in May by a net $16 \%$ of dealers vs a net $23 \%$ of dealers in April.



## Factory Production

- A net $40 \%$ of dealers report OEM production rates are declining, similar to the last several month trend.



## Pricing Trends

- Dealers report several OEMs pushed through small price increases in recent months, which pushed up the average new equipment price realization across the dealer sample to $1-1.5 \%$ over the last two months. Tier 4 final emissions related price increases are also noted as driving higher pricing recently.



## Used Equipment Pricing

- Used large tractor pricing is reported down 4\% on average, inline with the April survey results, while utility tractor used pricing improved slightly in the month to up almost $1 \% \mathrm{y} / \mathrm{y}$.
- Used combine prices remain weak at down $8 \%$ on average, falling from a $7 \%$ decline reported last month.




## New Equipment Inventory Levels

- A net $40 \%$ of dealers report new equipment inventories are too high, inline with the April survey and remaining at the high end of our survey history.



## Used Equipment Inventory Levels

- Used equipment inventories do appear to have improved in May, with only $34 \%$ of dealers reporting inventory was too high vs $43 \%$ in April. Anecdotally, many dealers report their efforts to sell used inventory instead of new has been helpful in recent months, but inventories are still too heavy in specific product categories.
- The used combine inventory remains too high with over a net $50 \%$ of dealers reporting inventories are above where they would like them.



| NORTH AMERICAN FARM EQUIPMENT RETAIL SALES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Units |  |  |  |  |  |  | \% change year-over-year |  |  |  |  |  |  |
|  | $<40 \mathrm{HP}$ | Utility | Row Crop | 4-Wheel | $\begin{aligned} & \text { Total } \\ & \text { Tractor } \end{aligned}$ | $\begin{gathered} \text { Row Crop } \\ \text { \& 4WD } \end{gathered}$ | Combines | $<40$ HP | Utility | Row Crop | 4-Wheel | $\begin{gathered} \text { Total } \\ \text { Tractor } \end{gathered}$ | $\begin{aligned} & \text { Row Crop } \\ & \text { \& 4WD } \end{aligned}$ | Combines |
| 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 | 14,191 | 6,010 | 3,752 | 745 | 24,698 | 4,497 | 996 | 2\% | 7\% | -13\% | -12\% | 0\% | -13\% | -13\% |
| May-14 | 16,828 | 6,586 | 2,928 | 474 | 26,816 | 3,402 | 669 | -2\% | 6\% | -16\% | -14\% | -2\% | -16\% | -24\% |
| Jun-14 | 15,198 | 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\% |
| Apr-15 | 16,624 | 6,461 | 3,131 | 430 | 26,646 | 3,561 | 664 | 17\% | 8\% | -17\% | -42\% | 8\% | -21\% | -33\% |
| May-15 | 16,028 | 5,643 | 1,994 | 260 | 23,925 | 2,254 | 549 | -5\% | -14\% | -32\% | -45\% | -11\% | -34\% | -18\% |

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

| NORTH AMERICAN FARM EQUIPMENT INVENTORY |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Inventory (Units) |  |  |  |  |  |  | Inventory to 12-mo. Sales |  |  |  |  |  |  |
|  | $<40 \mathrm{HP}$ | Utility | Row Crop | 4-Wheel | $\begin{gathered} \text { Total } \\ \text { Tractor } \end{gathered}$ | $\begin{aligned} & \text { Row Crop } \\ & \text { \& 4WD } \end{aligned}$ | Combines | $<40 \mathrm{HP}$ | Util | RC | 4-WD | $\begin{gathered} \text { Total } \\ \text { Tractor } \end{gathered}$ | $\begin{aligned} & \text { Row Crop } \\ & \text { \& 4WD } \end{aligned}$ | Comb |
| 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\% |
| Mar-15 | 81,662 | 37,881 | 14,179 | 1,346 | 135,068 | 15,525 | 2,040 | 66\% | 56\% | 39\% | 24\% | 58\% | 37\% | 22\% |
| Apr-15 | 80,348 | 37,047 | 13,193 | 1,353 | 131,941 | 14,546 | 2,116 | 64\% | 54\% | 37\% | 26\% | 56\% | 35\% | 24\% |

Source: AEM; Cleveland Research Company estimates

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








## Long Term Commodity Price Trends



## Commodity Trends - Long Run Supply and Demand Projections

| US Cor |  |  | 2012/13 | heat | nd | and - | g Ter | nua | cast |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 |
| Millions of bushels | 2010/11 | 2011/12 |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 Term 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 | 77 | 75 | 77 | 77 | 84 | 84 | 79 | 78 | 78 | 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 Stocks | 215 | 169 | 140 | 124 | 450 | 519 | 396 | 282 | 243 | 238 | 232 | 237 | 241 | 244 | 248 |
| Stocks/Use | 6.6\% | 5.4\% | 4.5\% | 3.7\% | 12.4\% | 13.8\% | 10.5\% | 7.5\% | 6.6\% | 6.4\% | 6.2\% | 6.2\% | 6.3\% | 6.3\% | 6.3\% |
| Average Price (\$/bu) | \$11.30 | \$12.50 | \$14.40 | \$13.10 | \$10.00 | \$8.50 | \$8.55 | \$8.80 | \$9.10 | \$9.20 | \$9.30 | \$9.35 | \$9.40 | \$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 | \$34,178 | \$34,875 | \$35,624 | \$36,143 | \$36,713 | \$37,436 |
| \% change $\mathrm{y} / \mathrm{y}$ | 17\% | 3\% | 13\% | -1\% | -8\% | -18\% | -4\% | 3\% | 4\% | 3\% | 2\% | 2\% | 1\% | 2\% | 2\% |

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

| US Corn, Soy, and Wheat Supply and Demand - Long Term Annual Forecast 2015 (continued) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| U.S. Wheat Balance Sheet - USDA Long Term 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 | 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\% |
| Total Acreage and Value of U.S. Corn, Soy and Wheat Production - USDA February 2015 Projection |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 | \$135,571 | \$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




[^0]:    Source: Company reports, CRC estimates

