# THE FPDA $\Theta$ MOTION \& CONTROL NETWORK 

# Fluid Power Survey Results August 2014 

## Highlights

## Background:

- The July survey had 40 respondents comprised of 31 distributors and 9 manufacturing firms.


## Summary Thoughts:

- Sales in our fluid power survey grew 7\% in the July accelerating from $6 \%$ growth in June as underlying demand continues to improve driven by strong oil \& gas activity. The 2014 outlook of 5-6\% implies growth of 7-8\% in the remaining 5 months of the year which appears reasonable given improved sales, order and backlog growth rates but we expect weakening ag markets to limit additional upside to the calendar 2014 outlook.


## Highlights:

- The July FPDA Index produced a reading of 64.9 (best reading since May-2012) up meaningfully from June’s reading of 59.0. The broader ISM improved to 57.1, better than the 55.3 reading in June.
- Our fluid power survey indicates sales improved in July growing 7\%, up from $6 \%$ growth in June as sales exceeded expectations for the first time since May-2012.
- 2014 outlook remained unchanged with sources forecasting 5-6\% growth in 2014 implying 7-8\% in the remaining 5 months after $\sim 4 \%$ growth YTD. Further upside to the outlook is likely limited by weakening ag markets.


## July FPDA Index

- The July FPDA Index produced a reading of 64.9 (best reading since May-2012) up meaningfully from June’s reading of 59.0. The broader ISM improved to 57.1 better than the 55.3 reading in June.
- The FPDA Index is similar in construction to the widely followed ISM Purchasing Manager’s Index. These are both seasonally adjusted diffusion indexes which measure the month-to-month change in each of the categories listed below. A reading of 50 indicates no change and the further above or below 50 indicates a faster or slower rate of change.

| Fluid Power Index |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Index | Feb-13 | Mar-13 | Apr-13 | May-13 | Jun-13 | Jul-13 | Aug-13 | Sep-13 | Oct-13 | Nov-13 | Dec-13 | Jan-14 | Feb-14 | Mar-14 | Apr-14 | May-14 | Jun-14 | Jul-14 | Direction | Rate of Change | Trend (months) |
| Sales | 38.9 | 68.1 | 66.6 | 43.1 | 35.5 | 55.0 | 60.9 | 38.2 | 77.3 | 33.0 | 59.6 | 70.8 | 56.4 | 57.8 | 63.9 | 48.5 | 59.4 | 72.2 | Growing | Faster | 2 |
| Prices | 58.6 | 52.6 | 54.9 | 52.4 | 54.6 | 66.1 | 57.2 | 58.2 | 61.6 | 65.9 | 63.9 | 79.8 | 60.4 | 57.6 | 55.7 | 57.3 | 58.4 | 60.6 | Growing | Faster | 50 |
| Orders | 32.0 | 47.9 | 71.4 | 37.9 | 34.2 | 57.9 | 56.1 | 44.1 | 71.3 | 37.0 | 55.0 | 77.7 | 50.6 | 59.4 | 56.0 | 54.0 | 56.3 | 71.6 | Growing | Faster | 8 |
| Backlog | 61.3 | 37.9 | 48.4 | 47.1 | 38.5 | 44.9 | 41.1 | 41.3 | 52.2 | 47.2 | 53.0 | 67.6 | 65.7 | 59.5 | 61.1 | 59.5 | 54.0 | 63.9 | Growing | Faster | 8 |
| Outlook | 51.6 | 43.3 | 46.7 | 62.1 | 38.5 | 43.8 | 47.7 | 42.7 | 52.2 | 50.0 | 62.9 | 63.5 | 56.6 | 57.5 | 52.8 | 50.0 | 55.0 | 58.5 | Growing | Faster | 10 |
| Inventory | 50.0 | 53.1 | 45.0 | 40.9 | 46.2 | 45.1 | 47.7 | 51.2 | 55.3 | 39.2 | 48.6 | 55.1 | 55.4 | 60.0 | 65.3 | 58.6 | 56.5 | 58.8 | Growing | Faster | 7 |
| Supplier Deliveries | 58.3 | 47.5 | 51.7 | 46.8 | 54.0 | 53.5 | 55.5 | 57.7 | 58.7 | 58.7 | 62.2 | 51.9 | 55.9 | 53.7 | 52.6 | 65.9 | 62.2 | 59.4 | Growing | Slower | 14 |
| Employment | 55.3 | 53.3 | 49.2 | 51.1 | 42.5 | 49.9 | 53.2 | 53.5 | 55.1 | 54.8 | 55.3 | 61.7 | 60.5 | 56.7 | 57.6 | 56.5 | 60.9 | 62.5 | Growing | Faster | 12 |
| Accounts Receivable | 40.3 | 46.7 | 46.6 | 50.0 | 41.0 | 45.0 | 43.0 | 46.5 | 45.5 | 47.2 | 45.6 | 39.7 | 46.1 | 47.5 | 40.5 | 47.2 | 45.2 | 45.6 | Slowing | Faster | 14 |
| Overall FPDA Index | 46.9 | 54.0 | 56.8 | 44.0 | 42.5 | 52.3 | 54.7 | 49.0 | 63.6 | 44.5 | 56.1 | 63.5 | 55.8 | 57.5 | 59.1 | 56.7 | 59.0 | 64.9 | Growing | Faster | 7 |
| Memo: ISM PMI Index | 54.2 | 54.2 | 50.7 | 49.0 | 50.9 | 55.4 | 55.7 | 56.2 | 56.4 | 57.3 | 57.0 | 51.3 | 53.2 | 53.7 | 54.9 | 55.4 | 55.3 | 57.1 | Growing | Faster | 14 |

## July Sales Accelerate as Oil \& Gas Activity Remains Strong

Sales in our July fluid power survey grew 7\%, accelerating from the 6\% growth in June led by still strong oil \& gas activity. Notably, sales exceeded expectations for the first time since May 2012 with a net $10 \%$ of participants reporting sales beat expectations up from the net $6 \%$ who reported sales below expectations in June. In addition to strong oil \& gas activity sources report construction activity improved in July.



## Monthly Sales Growth - July 2014

|  | Total |  |  |  |  |  | Distributors |  |  |  |  |  |  | Manufacturers |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |  | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |  | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| January | -19\% | 1\% | 32\% | 21\% | 4\% | 3\% | January | -16\% | -6\% | 28\% | 26\% | 1\% | 3\% | January | -21\% | 9\% | 35\% | 17\% | 7\% | 3\% |
| February | -18\% | 5\% | 29\% | 22\% | -5\% | 1\% | February | -17\% | -2\% | 28\% | 24\% | -6\% | 3\% | February | -18\% | 11\% | 31\% | 19\% | -5\% | -1\% |
| March | -24\% | 18\% | 31\% | 13\% | -6\% | 4\% | March | -22\% | 12\% | 33\% | 16\% | -5\% | 5\% | March | -26\% | 24\% | 30\% | 10\% | -7\% | 3\% |
| April | -24\% | 25\% | 28\% | 12\% | 6\% | 3\% | April | -22\% | 17\% | 27\% | 10\% | 6\% | 1\% | April | -27\% | 32\% | 29\% | 13\% | 5\% | 4\% |
| May | -28\% | 23\% | 25\% | 20\% | -2\% | 5\% | May | -27\% | 18\% | 31\% | 21\% | -3\% | 4\% | May | -28\% | 28\% | 18\% | 19\% | -1\% | 6\% |
| June | -30\% | 32\% | 28\% | 9\% | -1\% | 6\% | June | -29\% | 25\% | 27\% | 10\% | -1\% | 7\% | June | -32\% | 39\% | 28\% | 8\% | 0\% | 6\% |
| July | -29\% | 28\% | 20\% | 9\% | -3\% | 7\% | July | -29\% | 23\% | 23\% | 13\% | -2\% | 8\% | July | -29\% | 33\% | 17\% | 5\% | -4\% | 6\% |
| August | -29\% | 42\% | 20\% | 6\% | -3\% |  | August | -28\% | 38\% | 25\% | 6\% | -5\% |  | August | -29\% | 46\% | 14\% | 6\% | -2\% |  |
| September | -24\% | 28\% | 22\% | 1\% | 1\% |  | September | -24\% | 22\% | 29\% | 5\% | 1\% |  | September | -24\% | 34\% | 14\% | -3\% | 1\% |  |
| October | -24\% | 32\% | 17\% | 8\% | 2\% |  | October | -25\% | 22\% | 20\% | 13\% | 1\% |  | October | -22\% | 42\% | 14\% | 3\% | 2\% |  |
| November | -13\% | 38\% | 21\% | -4\% | 1\% |  | November | -14\% | 31\% | 28\% | 2\% | 2\% |  | November | -12\% | 44\% | 15\% | -10\% | -1\% |  |
| December | -9\% | 28\% | 17\% | -5\% | 5\% |  | December | -14\% | 21\% | 24\% | 4\% | 4\% |  | December | -4\% | 28\% | 5\% | -8\% | 5\% |  |


|  | May-13 | Jun-13 | Jul-13 | Aug-13 | Sep-13 | Oct-13 | Nov-13 | Dec-13 | Jan-14 | Feb-14 | Mar-14 | Apr-14 | May-14 | Jun-14 | Jul-14 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Positive Sales Growth | 35\% | 42\% | 42\% | 43\% | 34\% | 47\% | 47\% | 54\% | 69\% | 59\% | 62\% | 59\% | 53\% | 67\% | 76\% |
| Flat Sales | 15\% | 11\% | 12\% | 11\% | 10\% | 19\% | 12\% | 16\% | 11\% | 14\% | 18\% | 16\% | 18\% | 14\% | 7\% |
| Negative Sales Growth | 50\% | 47\% | 46\% | 46\% | 56\% | 34\% | 41\% | 30\% | 20\% | 27\% | 21\% | 24\% | 29\% | 19\% | 17\% |
| Net \% (Positive - Negative) | -15\% | -5\% | -4\% | -2\% | -22\% | 13\% | 6\% | 24\% | 49\% | 32\% | 41\% | 35\% | 24\% | 48\% | 59\% |
| Results vs. Expectations |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | May-13 | Jun-13 | Jul-13 | Aug-13 | Sep-13 | Oct-13 | Nov-13 | Dec-13 | Jan-14 | Feb-14 | Mar-14 | Apr-14 | May-14 | Jun-14 | Jul-14 |
| Better than expected | 11\% | 13\% | 12\% | 9\% | 12\% | 28\% | 11\% | 25\% | 18\% | 11\% | 25\% | 19\% | 21\% | 21\% | 38\% |
| In line with expectations | 45\% | 36\% | 39\% | 46\% | 21\% | 38\% | 54\% | 43\% | 53\% | 42\% | 38\% | 54\% | 42\% | 52\% | 34\% |
| Worse than expected | 45\% | 51\% | 49\% | 46\% | 67\% | 34\% | 35\% | 33\% | 29\% | 47\% | 38\% | 27\% | 37\% | 27\% | 28\% |
| Net \% (Better - Worse) | -34\% | -38\% | -37\% | -37\% | -56\% | -6\% | -24\% | -8\% | -11\% | -36\% | -13\% | -8\% | -16\% | -6\% | 10\% |

## Orders and Backlog Continue to Trend Positively

July orders were up $7 \%$, better than the $5 \%$ last month while backlogs grew $5 \%$, up from $3 \%$ in June.



## Order and Backlog Growth Trends

|  | Total |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ |
| January |  | $9 \%$ | $25 \%$ | $14 \%$ | $1 \%$ | $6 \%$ |
| February |  | $16 \%$ | $31 \%$ | $18 \%$ | $-5 \%$ | $5 \%$ |
| March |  | $30 \%$ | $29 \%$ | $6 \%$ | $-11 \%$ | $3 \%$ |
| April | $-25 \%$ | $31 \%$ | $23 \%$ | $10 \%$ | $3 \%$ | $4 \%$ |
| May | $-29 \%$ | $29 \%$ | $19 \%$ | $10 \%$ | $-1 \%$ | $4 \%$ |
| June | $-33 \%$ | $34 \%$ | $28 \%$ | $5 \%$ | $0 \%$ | $5 \%$ |
| July | $-26 \%$ | $27 \%$ | $23 \%$ | $5 \%$ | $-1 \%$ | $\mathbf{7 \%}$ |
| August | $-26 \%$ | $40 \%$ | $18 \%$ | $5 \%$ | $-1 \%$ |  |
| September | $-17 \%$ | $29 \%$ | $24 \%$ | $-2 \%$ | $1 \%$ |  |
| October | $-21 \%$ | $26 \%$ | $25 \%$ | $3 \%$ | $4 \%$ |  |
| November | $-3 \%$ | $23 \%$ | $20 \%$ | $-2 \%$ | $1 \%$ |  |
| December | $-4 \%$ | $18 \%$ | $18 \%$ | $-6 \%$ | $3 \%$ |  |


| Distributors |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ |
| January |  | $1 \%$ | $25 \%$ | $13 \%$ | $3 \%$ | $6 \%$ |
| February |  | $12 \%$ | $31 \%$ | $19 \%$ | $-7 \%$ | $4 \%$ |
| March |  | $29 \%$ | $30 \%$ | $10 \%$ | $-6 \%$ | $4 \%$ |
| April | $-25 \%$ | $30 \%$ | $29 \%$ | $8 \%$ | $5 \%$ | $3 \%$ |
| May | $-27 \%$ | $28 \%$ | $27 \%$ | $5 \%$ | $-2 \%$ | $5 \%$ |
| June | $-30 \%$ | $28 \%$ | $33 \%$ | $1 \%$ | $-2 \%$ | $7 \%$ |
| July | $-28 \%$ | $20 \%$ | $25 \%$ | $8 \%$ | $1 \%$ | $\mathbf{9 \%}$ |
| August | $-26 \%$ | $34 \%$ | $29 \%$ | $6 \%$ | $-1 \%$ |  |
| September | $-20 \%$ | $29 \%$ | $30 \%$ | $1 \%$ | $3 \%$ |  |
| October | $-21 \%$ | $25 \%$ | $25 \%$ | $-4 \%$ | $4 \%$ |  |
| November | $-2 \%$ | $28 \%$ | $21 \%$ | $-1 \%$ | $-1 \%$ |  |
| December | $-10 \%$ | $27 \%$ | $21 \%$ | $5 \%$ | $5 \%$ |  |


| Manufacturers |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ |
| January |  | $18 \%$ | $25 \%$ | $15 \%$ | $-1 \%$ | $5 \%$ |
| February |  | $21 \%$ | $31 \%$ | $17 \%$ | $-3 \%$ | $6 \%$ |
| March |  | $31 \%$ | $29 \%$ | $3 \%$ | $-15 \%$ | $2 \%$ |
| April | $-25 \%$ | $32 \%$ | $18 \%$ | $12 \%$ | $2 \%$ | $5 \%$ |
| May | $-31 \%$ | $30 \%$ | $12 \%$ | $15 \%$ | $0 \%$ | $3 \%$ |
| June | $-37 \%$ | $41 \%$ | $24 \%$ | $10 \%$ | $2 \%$ | $3 \%$ |
| July | $-24 \%$ | $34 \%$ | $20 \%$ | $2 \%$ | $-2 \%$ | $5 \%$ |
| August | $-26 \%$ | $46 \%$ | $7 \%$ | $5 \%$ | $-1 \%$ |  |
| September | $-14 \%$ | $29 \%$ | $19 \%$ | $-5 \%$ | $0 \%$ |  |
| October | $-20 \%$ | $26 \%$ | $23 \%$ | $10 \%$ | $4 \%$ |  |
| November | $-4 \%$ | $17 \%$ | $19 \%$ | $-3 \%$ | $4 \%$ |  |
| December | $3 \%$ | $17 \%$ | $1 \%$ | $-11 \%$ | $1 \%$ |  |


| Distributors |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ |
| January |  |  | $22 \%$ | $30 \%$ | $0 \%$ | $1 \%$ |
| February |  |  | $35 \%$ | $22 \%$ | $-2 \%$ | $2 \%$ |
| March |  |  | $39 \%$ | $24 \%$ | $-2 \%$ | $4 \%$ |
| April |  |  | $36 \%$ | $25 \%$ | $-6 \%$ | $4 \%$ |
| May |  | $29 \%$ | $37 \%$ | $11 \%$ | $-3 \%$ | $4 \%$ |
| June | $24 \%$ | $29 \%$ | $11 \%$ | $-6 \%$ | $5 \%$ |  |
| July | $29 \%$ | $36 \%$ | $7 \%$ | $-5 \%$ | $\mathbf{6 \%}$ |  |
| August | $37 \%$ | $33 \%$ | $9 \%$ | $-6 \%$ |  |  |
| September | $24 \%$ | $26 \%$ | $-4 \%$ | $1 \%$ |  |  |
| October | $23 \%$ | $29 \%$ | $-3 \%$ | $-2 \%$ |  |  |
| November | $20 \%$ | $27 \%$ | $2 \%$ | $\mathbf{2 \%}$ |  |  |
| December |  |  |  |  |  |  |


| Manufacturers |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ |
| January |  |  | $28 \%$ | $13 \%$ | $1 \%$ | $1 \%$ |
| February |  |  | $30 \%$ | $13 \%$ | $-1 \%$ | $3 \%$ |
| March |  |  | $41 \%$ | $7 \%$ | $-8 \%$ | $1 \%$ |
| April |  |  | $27 \%$ | $7 \%$ | $-6 \%$ | $3 \%$ |
| May |  |  | $14 \%$ | $10 \%$ | $0 \%$ | $2 \%$ |
| June | $20 \%$ | $25 \%$ | $6 \%$ | $-7 \%$ | $2 \%$ |  |
| July | $34 \%$ | $22 \%$ | $3 \%$ | $-3 \%$ | $\mathbf{4 \%}$ |  |
| August | $45 \%$ | $-1 \%$ | $6 \%$ | $-1 \%$ |  |  |
| September | $37 \%$ | $16 \%$ | $-1 \%$ | $1 \%$ |  |  |
| October | $45 \%$ | $19 \%$ | $3 \%$ | $0 \%$ |  |  |
| November | $41 \%$ | $23 \%$ | $-4 \%$ | $1 \%$ |  |  |
| December | $30 \%$ | $1 \%$ | $-6 \%$ | $1 \%$ |  |  |

## Oil \& Gas Activity Remains Strong

## End Market Highlights - Strength Led by Oil \& Gas

End market trends improved in July as 15 out of 17 end markets ranked in positive territory up from 14 in June as all end markets with the exception of forestry improved on a sequential basis. Oil \& gas remained the strongest reported end market followed by aerospace and MRO while government and mining were the two weakest reported markets. Anecdotally, we are hearing of better activity in metals markets which supports the sequential improvement in July mining trends.



## End Market Trends









## End Market Trends



Source: FPDA Survey

## Product Category Ranking

All nine product categories were higher in July, with hose products \& assemblies, valves and connectors reported as the strongest product categories while motors, filtration and power units were reported as the relative weakest in the month.


## 2014 Outlook

Sources Continue to Forecast 5-6\% Growth in 2014, Upside Likely Limited by Deteriorating Ag Markets
Sources in our August fluid power survey continue to forecast 5-6\% growth in 2014 implying sales will accelerate to up $7-8 \%$ following $\sim 4 \%$ growth through the first seven months. Supporting the implied acceleration are strengthening order and backlog trends which both posted the strongest YTD growth in July, up 7\% (up 5\% in June) and 5\% (up $3 \%$ in June), respectively as orders from construction accelerated. At this time implied 2 H acceleration (largely driven by oil \& gas) appears reasonable but upside to the 2014 outlook will likely be muted by the deterioration of ag markets specifically among OEM's.

Deteriorating N. America ag markets are primarily driven by lower farmer cash receipts expected in 2014 and meaningful reductions in Section 179/Bonus Deprecation levels which have incentivized a large number of farmers to purchase new equipment each year. Further compounding the issue is the significant amount of used inventory created by the tax incentivized purchasing over the last decade. Due to these headwinds our capital equipment team is forecasting N. America ag equipment revenues to be down ~15\% in 2014 and DE recently lowered its 2014(fiscal) Ag \& Turf revenue forecast to down $10 \%$ (previously down 7\%). Additionally, DE announced on 8-15-14 it will be laying off 600 employees at its ag equipment factories in response to current market demand.

| Fluid Power Outlook |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2012 | 2013 | 2014 Outlook |  |  |  |  |  |  |  |  |  |  |
| Sales Growth (y/y) | Actual Results | Actual Results | Sept-13 | Oct-13 | Nov-13 | Dec-13 | Jan-14 | Feb-14 | Mar-14 | Apr-14 | May-14 | Jun-14 | Jul-14 |
| Overall | 8\% | 0\% | 3\% | 4-5\% | 4-5\% | 5-6\% | 5-6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |
| Distributors | 8\% | 0\% | 4\% | 5\% | 4-5\% | 6\% | 7\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |
| Manufacturers | 8\% | 0\% | 3\% | 4\% | 3\% | 5\% | 4\% | 6\% | 5\% | 5\% | 5\% | 5\% | 5\% |

## Price Contribution Trends

## Price Realization Deteriorates in July

We are hearing average product price increases were $1.5 \%$ in July, below the $2.0 \%$ in June as price realization also deteriorated to $0.9 \%$, down from $1.1 \%$ in June.



## Inventory Trends

## July Inventories Move Up

Inventory levels grew a little in July with a net $18 \%$ of sources reporting higher inventories in the month up from $13 \%$ last month. At this time distributors appear less comfortable with current levels as a net $39 \%$ reported inventories were "too high" jumping up from the $25 \%$ in June, and above the long run average of $33 \%$.



## Inventory Levels




## Macroeconomic Indicators

ISM, Industrial Production, Capacity Utilization, Non-Res Construction Forecasts, Resi Construction Indicators, Commodity Prices, Heavy Truck \&

Automotive Data

## Manufacturing IP:

## Up 4.8\% y/y in July



## Capacity Utilization:

Up to 78.1\% in July


Non-Farm Employment:
Up 1.9 \% y/y in July


Manufacturing Employment:
Up 1.5\% in July


## AIA Billings Index -

 Billings Improve in July
## AIA Architecture Billings Index



## McGraw Hill

## Updates Forecast

- McGraw Hill recently increased its 2014 non-residential building starts forecast (in dollars) to up $9 \% \mathrm{y} / \mathrm{y}$ from $8 \%$ growth 90 -days ago, and the up $12 \% \mathrm{y} / \mathrm{y}$ forecast for non-residential building starts in square footage is unchanged. The most positive revisions are in the religious buildings, office/bank buildings, warehouses, dorms, government buildings, and hospitals categories, while the forecast for hotels/motels and parking garages declined the most from the prior forecast. The current forecast anticipates growth in non-residential building starts will accelerate in 2015 and 2016, to $14 \%$ and $16 \%$ growth, respectively. The chart on the next page details the current forecast from McGraw Hill.


## Non-Res Starts: Forecast

| U.S. Starts Forecast (Value \$mm) | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014E | 2015E | 2016E | 2017E |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Amusement, Social and Recreational Bldgs | 0\% | -14\% | -4\% | -12\% | -17\% | 28\% | 6\% | 18\% | 24\% | 1\% |
| Dormitories | 16\% | -5\% | 1\% | -15\% | 5\% | -7\% | 3\% | 8\% | 8\% | 9\% |
| Government Service Buildings | 7\% | 15\% | -32\% | -14\% | -9\% | -24\% | -6\% | 13\% | 11\% | 14\% |
| Hospitals and Other Health Treatment | 23\% | -33\% | 16\% | -7\% | -3\% | -4\% | 4\% | 14\% | 17\% | 10\% |
| Hotels and Motels | -9\% | -64\% | -28\% | 58\% | 25\% | 31\% | 11\% | 21\% | 12\% | -7\% |
| Manufacturing Plants, Warehouses, Labs | 44\% | 10\% | -5\% | 74\% | -25\% | 42\% | 7\% | 8\% | 14\% | 3\% |
| Miscellaneous Nonresidential Buildings | 19\% | 16\% | 29\% | -29\% | -10\% | 1\% | 7\% | 15\% | 14\% | 5\% |
| Office and Bank Buildings | -15\% | -28\% | -18\% | -3\% | 0\% | 21\% | 18\% | 19\% | 16\% | 11\% |
| Parking Garages and Automotive Services | -21\% | -47\% | 9\% | 26\% | 22\% | 25\% | 12\% | 12\% | 8\% | 1\% |
| Religious Buildings | -5\% | -7\% | -29\% | -10\% | -10\% | -5\% | 1\% | 10\% | 12\% | 17\% |
| Schools, Libraries, and Labs (nonmfg) | 9\% | -17\% | -3\% | -11\% | -12\% | 1\% | 4\% | 11\% | 23\% | 17\% |
| Stores and Restaurants | -27\% | -40\% | -5\% | 3\% | 15\% | 6\% | 15\% | 21\% | 17\% | 4\% |
| Warehouses (excl. manufacturer owned) | -22\% | -58\% | -16\% | 23\% | 27\% | 33\% | 27\% | 12\% | 8\% | -3\% |
| Nonresidential Building Starts (\$mm) \% change $y / y$ | $\begin{gathered} \hline 242,186 \\ 1 \% \end{gathered}$ | $\begin{gathered} \hline 168,877 \\ -30 \% \end{gathered}$ | $\begin{gathered} \hline 162,640 \\ -4 \% \end{gathered}$ | $\begin{gathered} \hline 165,654 \\ 2 \% \end{gathered}$ | $\begin{gathered} \hline 158,222 \\ -4 \% \end{gathered}$ | $\begin{gathered} 174,082 \\ 10 \% \end{gathered}$ | $\begin{gathered} \hline 189,473 \\ 9 \% \end{gathered}$ | $\begin{gathered} \hline 216,522 \\ 14 \% \end{gathered}$ | $\begin{gathered} \hline 251,990 \\ 16 \% \end{gathered}$ | $\begin{gathered} \hline 271,614 \\ 8 \% \end{gathered}$ |
| Nonresidential Building Starts (sqr ft) | 1,377 | 773 | 678 | 703 | 774 | 845 | 943 | 1,076 | 1,220 | 1,269 |
| \% change y/y | -18\% | -44\% | -12\% | 4\% | 10\% | 9\% | 12\% | 14\% | 13\% | 4\% |
| Single Family Housing Starts | 1,203 | 951 | 978 | 905 | 1,146 | 1,424 | 1,762 | 2,248 | 2,687 | 2,614 |
| \% change $\mathrm{y} / \mathrm{y}$ | -42\% | -21\% | 3\% | -7\% | 27\% | 24\% | 24\% | 28\% | 20\% | -3\% |
| Nonbuilding Starts (bridges, highways, etc, \$mm) | 152,486 | 144,769 | 148,329 | 150,515 | 162,823 | 144,800 | 129,300 | 135,100 | 146,900 | 162,700 |
| \% change $\mathrm{y} / \mathrm{y}$ | 9\% | -5\% | 2\% | 1\% | 8\% | -11\% | -11\% | 4\% | 9\% | 11\% |

Source: MHC (1Q14 fcst)

Heavy Truck Orders Tick
Up to ~30k Units in July


## Light Vehicle Production up 4\% y/y in July



## Light Vehicle Retail Sales <br> ~16.4mm SAAR in July



## Appendix

Long term end market trends

## Industrial Survey <br> End Market Trends




Source: CRC survey


## Industrial Survey <br> End Market Trends



## Industrial Survey <br> End Market Trends




## Industrial Survey <br> End Market Trends




## Electrical Survey End Market Trends



## Electrical Survey End Market Trends






## Disclosures

Important disclosures can be found at: www.cleveland-research.com/clients/disclosures


## Disclosures

Buy: The stock's return is expected to exceed the market due to superior fundamentals and positive catalysts.
Underperform: The stock's total return is expected to underperform the market due to weak fundamentals and a lack of catalysts.
Neutral: The stock is expected to be in line with the market due to full valuation and/or a lack of catalysts.
Valuation and Risk: Price targets are established under various valuation methods including P/E, P/S, EV/EBITDA on financial estimates based on forward earnings. Price targets are not established for every stock. The price target's effectiveness may be affected by various outside factors. Risk assessments can be found in the most recent research on these stocks.
Other Disclosures: We, Joe Calvello, Erika Wolford and Matthew McCann certify that the views expressed in the research report(s) accurately reflect our personal views about the subject security(s). Further we certify that no part of our compensation was, is, or will be directly or indirectly related to the specific recommendations or views contained in the research report(s). The analysts responsible for the preparation of this report have no ownership stake in this company. Cleveland Research Company provides no investment banking services of any type on this or any company.
Proprietary research and Information contained herein which forms the basis for findings or opinions expressed by Cleveland Research Company may be used by Cleveland Research for other purposes in the course of compensated consulting and other services rendered to third parties.
The information transmitted is intended only for the person or entity to which it is addressed. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information by persons or entities other than the intended recipient is prohibited. If you received this in error, please contact the sender and delete the material from any computer.
Member FINRA/SIPC.

