

# FPDA Membership Survey Results May 2013

#### Highlights

#### **Background:**

• The April survey had 38 respondents comprised of 30 distributors and 8 manufacturing firms.

#### **Highlights:**

- **FPDA Index** The April FPDA Index produced a reading of 56.8, up from March's reading of 54.0. The broader ISM index showed a reading of 50.7 in April, slowing from March's reading of 54.2.
- Our April survey results while still mixed showed an improving / less bad trend compared with the broadly disappointing March results.
- Though still below plan, both sales and orders returned to positive growth in the month (up 1-2% vs down 1-2% in March after adjusting for selling days) following two months of decline.
- Distributors and manufacturers trimmed inventory levels again in April following the cut to the full year outlook last month in addition to improving supplier lead-times.

#### **Summary Thoughts**

Our April survey results were less bad compared with the broadly disappointing March results. Though still below plan, both sales and order growth returned to positive territory following two months of y/y decline and backlogs stabilized following a sharp drop last month.

Assuming this positive momentum continues, these results seem to support the notion of stronger growth in the second half of the calendar year. May results should provide a somewhat cleaner look at trends as it is the first month this year with an equal number of selling days although unseasonably cold weather and tough comparisons will likely remain headwinds. June marks the beginning of a extended period of easing comparisons.

#### April FPDA Index

- The April FPDA Index produced a reading of 56.8, up from March's reading of 54.0. The broader ISM index showed a reading of 50.7 in April, slowing from March's reading of 54.2.
- 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.

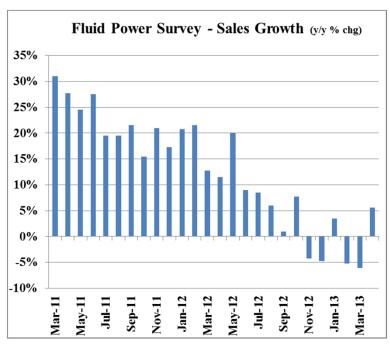
|                     |        |        |        |        |        |        |        |        | Fluid P | ower Inde | ex     |        |        |        |        |        |                  |                |                |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-----------|--------|--------|--------|--------|--------|--------|------------------|----------------|----------------|
|                     |        |        |        |        |        |        |        |        |         |           |        |        |        |        |        |        |                  |                |                |
| <u>Index</u>        | Jan-12 | Feb-12 | Mar-12 | Apr-12 | May-12 | Jun-12 | Jul-12 | Aug-12 | Sep-12  | Oct-12    | Nov-12 | Dec-12 | Jan-13 | Feb-13 | Mar-13 | Apr-13 | <b>Direction</b> | Rate of Change | Trend (months) |
| Sales               | 71.1   | 66.5   | 68.3   | 34.7   | 73.0   | 42.2   | 50.9   | 69.0   | 39.2    | 61.7      | 33.4   | 35.2   | 83.2   | 38.9   | 68.1   | 66.6   | Growing          | Slower         | 2              |
| Prices              | 77.5   | 65.3   | 68.3   | 59.2   | 51.5   | 56.3   | 61.7   | 65.5   | 63.5    | 69.9      | 59.7   | 57.7   | 66.5   | 58.6   | 52.6   | 54.9   | Increasing       | Faster         | 33             |
| Orders              | 75.8   | 62.7   | 53.3   | 44.8   | 60.5   | 46.2   | 40.7   | 56.0   | 24.2    | 68.0      | 41.5   | 45.1   | 74.8   | 32.0   | 47.9   | 71.4   | Growing          | From Slowing   | 1              |
| Backlog             | 67.6   | 63.8   | 57.5   | 58.1   | 47.7   | 42.0   | 41.8   | 43.0   | 33.3    | 34.4      | 37.8   | 35.1   | 66.7   | 61.3   | 37.9   | 48.4   | Slowing          | Slower         | 2              |
| Outlook             | 62.8   | 54.8   | 60.0   | 52.3   | 51.1   | 47.8   | 48.0   | 43.9   | 43.1    | 42.2      | 47.4   | 51.4   | 52.9   | 51.6   | 43.3   | 46.7   | Decreasing       | Slower         | 2              |
| Inventory           | 68.4   | 59.3   | 63.8   | 67.4   | 69.8   | 60.0   | 57.0   | 62.8   | 60.5    | 51.6      | 52.6   | 36.1   | 54.4   | 50.0   | 53.1   | 45.0   | Slowing          | From Growing   | 1              |
| Supplier Deliveries | 61.0   | 64.1   | 63.0   | 59.3   | 54.2   | 50.6   | 50.6   | 53.4   | 48.0    | 54.9      | 54.3   | 61.7   | 54.0   | 58.3   | 47.5   | 51.7   | Slowing          | From Growing   | 1              |
| Employment          | 81.7   | 61.9   | 69.5   | 60.8   | 70.6   | 68.9   | 61.4   | 58.3   | 56.2    | 60.0      | 56.1   | 52.7   | 53.0   | 55.3   | 53.3   | 49.2   | Slowing          | From Growing   | 1              |
| Accounts Receivable | 38.2   | 45.1   | 45.0   | 41.9   | 43.0   | 37.8   | 42.9   | 47.7   | 43.4    | 43.8      | 42.1   | 45.8   | 45.6   | 40.3   | 46.7   | 46.6   | Slowing          | Slower         | 33             |
| Overall FPDA Index  | 71.6   | 62.9   | 63.6   | 53.4   | 65.6   | 53.6   | 52.1   | 59.9   | 45.6    | 59.3      | 47.6   | 46.2   | 63.9   | 46.9   | 54.0   | 56.8   | Growing          | Faster         | 2              |
| Memo: ISM PM Index  | 54.1   | 52.4   | 53.4   | 54.8   | 53.5   | 49.7   | 52.6   | 49.6   | 51.5    | 51.7      | 49.5   | 50.2   | 53.1   | 54.2   | 54.2   | 50.7   | Growing          | Slower         | 5              |

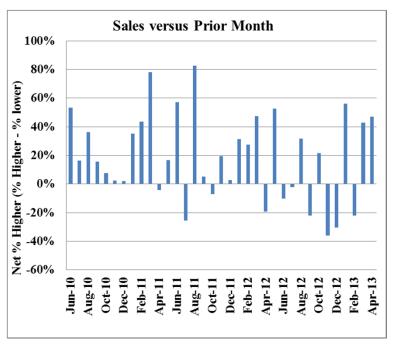
#### April Results Are Less Bad But Still Below Plan

• Our work indicates fluid power sales were less bad in April compared to March with a net 13% of participants reporting results were worse than expected in the month vs. the net 41% in March. Average sales growth was 6% in April compared with a 6% decline in March. Sales growth rates in the both months are impacted by selling day discrepancies with one additional selling day in April and one fewer selling day in March. Adjusting for this suggests April growth was roughly 1-2% compared to a decline of 1-2% in March.

|      |            | Ι          | luid Po    | wer In     | dustry     | - Mon      | thly Sa    | ales G     | owth       |            |      |            |
|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------|------------|
|      |            |            |            |            | 0          | verall     |            |            |            |            |      |            |
|      | <u>Jan</u> | <u>Feb</u> | <u>Mar</u> | <u>Apr</u> | <b>May</b> | <u>Jun</u> | <u>Jul</u> | Aug        | <u>Sep</u> | <u>Oct</u> | Nov  | <u>Dec</u> |
| 2009 | -19%       | -18%       | -24%       | -24%       | -28%       | -30%       | -29%       | -29%       | -24%       | -24%       | -13% | -9%        |
| 2010 | 1%         | 5%         | 18%        | 25%        | 23%        | 32%        | 28%        | 42%        | 28%        | 32%        | 38%  | 28%        |
| 2011 | 32%        | 29%        | 31%        | 28%        | 25%        | 28%        | 20%        | 20%        | 22%        | 17%        | 21%  | 17%        |
| 2012 | 21%        | 22%        | 13%        | 12%        | 20%        | 9%         | 9%         | 6%         | 1%         | 8%         | -4%  | -5%        |
| 2013 | 4%         | <b>-5%</b> | -6%        | 6%         |            |            |            |            |            |            |      |            |
|      |            |            |            |            | Dist       | ributor    | 'S         |            |            |            |      |            |
|      | <u>Jan</u> | <u>Feb</u> | <u>Mar</u> | <u>Apr</u> | <u>May</u> | <u>Jun</u> | <u>Jul</u> | <u>Aug</u> | <u>Sep</u> | <u>Oct</u> | Nov  | <u>Dec</u> |
| 2009 | -16%       | -17%       | -22%       | -22%       | -27%       | -29%       | -29%       | -28%       | -24%       | -25%       | -14% | -14%       |
| 2010 | -6%        | -2%        | 12%        | 17%        | 18%        | 25%        | 23%        | 38%        | 22%        | 22%        | 31%  | 21%        |
| 2011 | 28%        | 28%        | 33%        | 27%        | 31%        | 27%        | 23%        | 25%        | 29%        | 20%        | 28%  | 24%        |
| 2012 | 26%        | 24%        | 16%        | 10%        | 21%        | 10%        | 13%        | 6%         | 5%         | 13%        | 2%   | -2%        |
| 2013 | 1%         | -6%        | -5%        | 6%         |            |            |            |            |            |            |      |            |
|      |            |            |            |            | Manu       | facture    | ers        |            |            |            |      |            |
|      | <u>Jan</u> | <b>Feb</b> | <u>Mar</u> | <u>Apr</u> | <b>May</b> | <u>Jun</u> | <u>Jul</u> | Aug        | <u>Sep</u> | <u>Oct</u> | Nov  | <b>Dec</b> |
| 2009 | -21%       | -18%       | -26%       | -27%       | -28%       | -32%       | -29%       | -29%       | -24%       | -22%       | -12% | -4%        |
| 2010 | 9%         | 11%        | 24%        | 32%        | 28%        | 39%        | 33%        | 46%        | 34%        | 42%        | 44%  | 28%        |
| 2011 | 35%        | 31%        | 30%        | 29%        | 18%        | 28%        | 17%        | 14%        | 14%        | 14%        | 15%  | 11%        |
| 2012 | 17%        | 19%        | 10%        | 13%        | 19%        | 8%         | 5%         | 6%         | -3%        | 3%         | -10% | -8%        |
| 2013 | 7%         | -5%        | -7%        | 5%         |            |            |            |            |            |            |      |            |

#### Monthly Sales Growth – April 2013



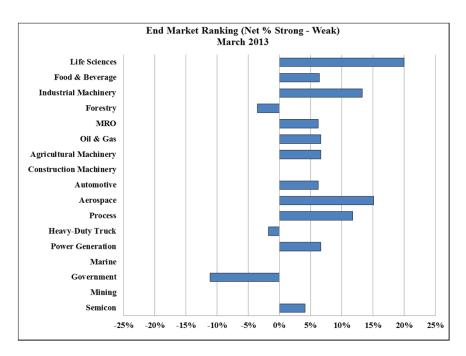


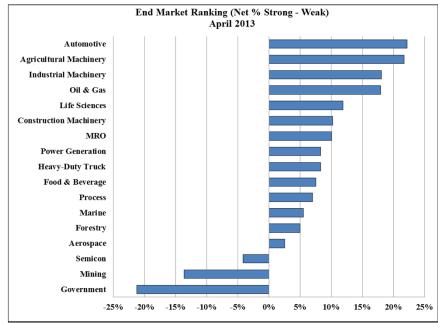
|                             | Percent Positive / Negative Growth |        |               |               |        |               |               |        |               |        |               |               |               |        |               |               |
|-----------------------------|------------------------------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|--------|---------------|---------------|---------------|--------|---------------|---------------|
|                             | Jan-12                             | Feb-12 | <u>Mar-12</u> | <u>Apr-12</u> | May-12 | <u>Jun-12</u> | <u>Jul-12</u> | Aug-12 | <b>Sep-12</b> | Oct-12 | <u>Nov-12</u> | <b>Dec-12</b> | <u>Jan-13</u> | Feb-13 | <u>Mar-13</u> | <u>Apr-13</u> |
| Positive Sales Growth       | 74%                                | 84%    | 83%           | 64%           | 90%    | 74%           | 73%           | 57%    | 51%           | 59%    | 43%           | 41%           | 53%           | 26%    | 36%           | 71%           |
| Flat Sales                  | 5%                                 | 9%     | 3%            | 5%            | 2%     | 5%            | 7%            | 22%    | 14%           | 9%     | 8%            | 16%           | 18%           | 18%    | 18%           | 11%           |
| Negative Sales Growth       | 21%                                | 7%     | 15%           | 31%           | 7%     | 21%           | 20%           | 22%    | 35%           | 31%    | 49%           | 43%           | 29%           | 56%    | 45%           | 18%           |
| Net % (Positive - Negative) | 54%                                | 77%    | 68%           | 33%           | 83%    | 53%           | 53%           | 35%    | 16%           | 28%    | -5%           | -3%           | 24%           | -29%   | -9%           | 52%           |

|                           | Results vs. Expectations |        |        |        |        |        |               |               |        |        |        |        |               |        |               |        |
|---------------------------|--------------------------|--------|--------|--------|--------|--------|---------------|---------------|--------|--------|--------|--------|---------------|--------|---------------|--------|
|                           | <u>Jan-12</u>            | Feb-12 | Mar-12 | Apr-12 | May-12 | Jun-12 | <u>Jul-12</u> | <b>Aug-12</b> | Sep-12 | Oct-12 | Nov-12 | Dec-12 | <u>Jan-13</u> | Feb-13 | <u>Mar-13</u> | Apr-13 |
| Better than expected      | 46%                      | 33%    | 28%    | 25%    | 35%    | 20%    | 26%           | 21%           | 11%    | 28%    | 8%     | 16%    | 32%           | 11%    | 15%           | 16%    |
| In line with expectations | 33%                      | 51%    | 50%    | 52%    | 51%    | 50%    | 40%           | 51%           | 51%    | 31%    | 41%    | 38%    | 35%           | 31%    | 29%           | 57%    |
| Worse than expected       | 21%                      | 16%    | 23%    | 23%    | 14%    | 30%    | 34%           | 28%           | 38%    | 41%    | 51%    | 46%    | 32%           | 57%    | 56%           | 27%    |
| Net % (Better - Worse)    | 26%                      | 16%    | 5%     | 2%     | 21%    | -9%    | -8%           | -7%           | -27%   | -13%   | -43%   | -30%   | 0%            | -46%   | -41%          | -13%   |

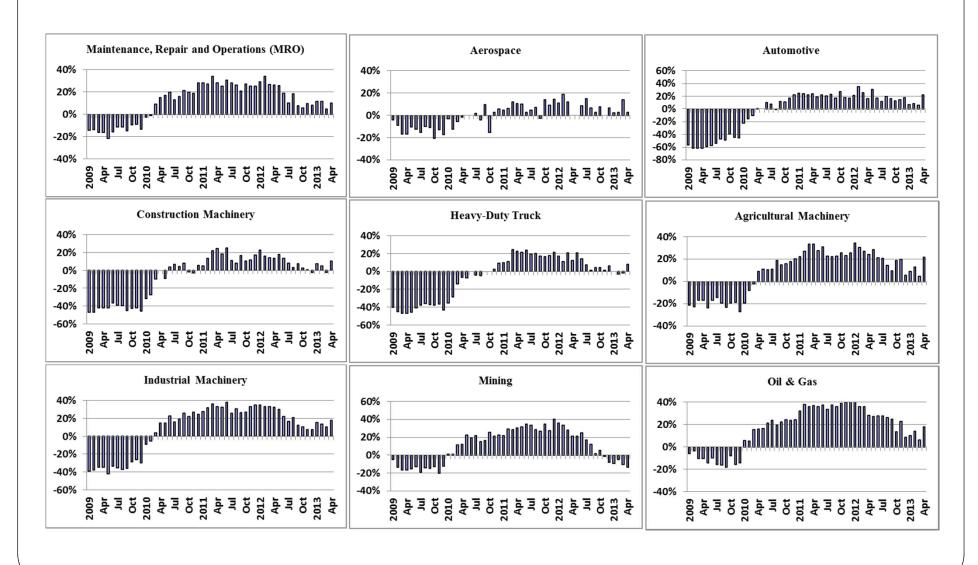
#### **End Market Momentum Improves in April**

• End market trends improved modestly in April with fourteen of seventeen end markets in positive territory vs. just eleven in March. Automotive, ag equipment, industrial machinery and oil & gas head the list of top performing markets while government, mining, and semicon were noted as the weakest markets and the only markets ranked in negative territory. Sequentially, ag equipment, automotive, and construction equipment accelerated the most the most significantly while aerospace, semicon, government, and life sciences slowed the most from March. Longer term end market trends can be found on the next several slides.

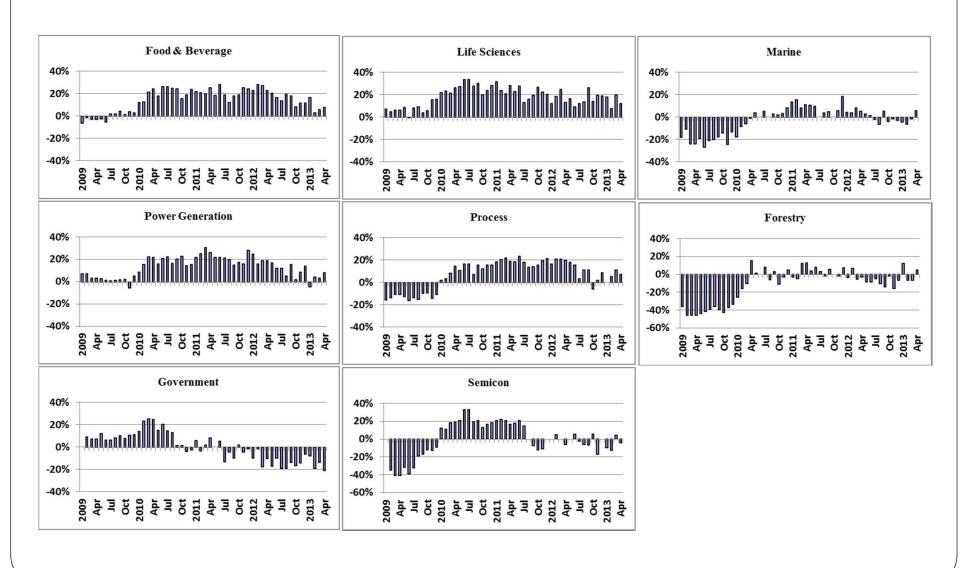




#### **End Market Trends**



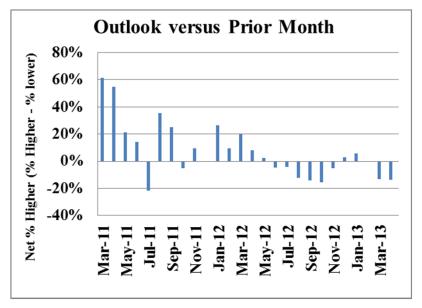
#### **End Market Trends**



#### 2013 Outlook Unchanged Following March Cut

• Fluid power distributors and manufacturers both left the full year outlook unchanged following a 200bp cut last month. The average forecast of 2% growth for the year is comprised of distributors up 5% and manufacturers flat. This implies growth of roughly 3% for the remainder of the year following the 1% average decline through

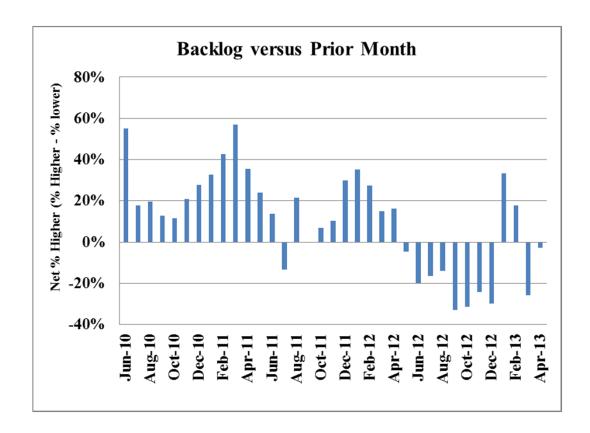
April.



|                    |                       |                       | Flui          | d Power (     | Outlook |               |               |               |               |               |               |
|--------------------|-----------------------|-----------------------|---------------|---------------|---------|---------------|---------------|---------------|---------------|---------------|---------------|
|                    | 2011                  | 2012                  |               |               |         | 2             | 2013 Outl     | ook           |               |               |               |
| Sales Growth (y/y) | <b>Actual Results</b> | <b>Actual Results</b> | <u>Aug-12</u> | <u>Sep-12</u> | Oct-12  | <u>Nov-12</u> | <u>Dec-12</u> | <u>Jan-13</u> | <u>Feb-13</u> | <u>Mar-13</u> | <u>Apr-13</u> |
| Overall            | 32%                   | 8%                    | 7%            | 8%            | 8%      | 6%            | 5%            | 4%            | 4%            | 2%            | 2%            |
| Distributors       | 31%                   | 8%                    | 6%            | 7%            | 8%      | 7%            | 5%            | 4%            | 7%            | 5%            | 5%            |
| Manufacturers      | 32%                   | 8%                    | 9%            | 9%            | 7%      | 5%            | 6%            | 3%            | 2%            | 0%            | 0%            |

#### April Shows Improvements but Still Down Year-over-Year

• Backlogs continued to decline sequentially in April, inline with trends we saw in March and a reversal from the growing backlog trends we saw in January and February. Historically, backlogs grow sequentially in March/April due to project seasonality.



# Order and Backlog Growth Trends

|     |              |            | Fluid Po   | wer In     | dustry     | - Mont     | thly O     | rder G     | rowth      |            |     |            |     |      |            | 13         | uid Pov    | wer Ind    | ustry -    | Month      | ıly Bac    | klog ( | Growth     | ì        |
|-----|--------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-----|------------|-----|------|------------|------------|------------|------------|------------|------------|------------|--------|------------|----------|
|     |              |            |            |            | 0          | verall     |            |            |            |            |     |            |     |      |            |            |            |            | O          | verall     |            |        |            |          |
|     | <u>Jan</u>   | <u>Feb</u> | <u>Mar</u> | <u>Apr</u> | <b>May</b> | <u>Jun</u> | <u>Jul</u> | <u>Aug</u> | <u>Sep</u> | <u>Oct</u> | Nov | <u>Dec</u> |     |      | <u>Jan</u> | <u>Feb</u> | <u>Mar</u> | <u>Apr</u> | <u>May</u> | <u>Jun</u> | <u>Jul</u> | Aug    | <u>Sep</u> | (        |
| 201 | 0 9%         | 16%        | 30%        | 31%        | 29%        | 34%        | 27%        | 40%        | 29%        | 26%        | 23% | 18%        | 2   | 2010 |            |            |            |            |            | 24%        | 29%        | 37%    | 37%        | 3        |
| 201 | 1 25%        | 31%        | 29%        | 23%        | 19%        | 28%        | 23%        | 18%        | 24%        | 25%        | 20% | 18%        | 2   | 2011 | 25%        | 32%        | 40%        | 31%        | 25%        | 29%        | 25%        | 17%    | 24%        | 2        |
| 201 | <b>2</b> 14% | 18%        | 6%         | 10%        | 10%        | 5%         | 5%         | 5%         | -2%        | 3%         | -2% | -6%        | 2   | 2012 | 22%        | 18%        | 15%        | 16%        | 10%        | 8%         | 7%         | 6%     | 4%         | -        |
| 201 | 3 1%         | -5%        | -11%       | 3%         |            |            |            |            |            |            |     |            | 2   | 2013 | 1%         | -2%        | -5%        | -6%        |            |            |            |        |            |          |
|     |              |            |            |            | Dist       | ributor    | rs         |            |            |            |     |            |     |      |            |            |            |            | Dist       | ributor    | rs         |        |            |          |
|     | <u>Jan</u>   | <u>Feb</u> | <u>Mar</u> | <u>Apr</u> | May        | <u>Jun</u> | <u>Jul</u> | Aug        | Sep        | Oct        | Nov | <u>Dec</u> |     |      | <u>Jan</u> | <u>Feb</u> | <u>Mar</u> | <u>Apr</u> | <b>May</b> | <u>Jun</u> | <u>Jul</u> | Aug    | <u>Sep</u> | <u>(</u> |
| 201 | 0 1%         | 12%        | 29%        | 30%        | 28%        | 28%        | 20%        | 34%        | 29%        | 25%        | 28% | 27%        | 2   | 2010 |            |            |            |            |            | 29%        | 24%        | 29%    | 37%        | 2        |
| 201 | 1 25%        | 31%        | 30%        | 29%        | 27%        | 33%        | 25%        | 29%        | 30%        | 25%        | 21% | 21%        | 2   | 2011 | 22%        | 35%        | 39%        | 36%        | 37%        | 32%        | 29%        | 36%    | 33%        | 2        |
| 201 | <b>2</b> 13% | 19%        | 10%        | 8%         | 5%         | 1%         | 8%         | 6%         | 1%         | -4%        | -1% | -1%        | 2   | 2012 | 30%        | 22%        | 24%        | 25%        | 11%        | 11%        | 12%        | 7%     | 9%         | -        |
| 201 | 3 3%         | -7%        | -6%        | 5%         |            |            |            |            |            |            |     |            | 2   | 2013 | 0%         | -2%        | -2%        | -6%        |            |            |            |        |            |          |
|     |              |            |            |            | Manu       | factur     | ers        |            |            |            |     |            |     |      |            |            |            |            | Manu       | factur     | ers        |        |            |          |
|     | <u>Jan</u>   | <u>Feb</u> | Mar        | Apr        | May        | <u>Jun</u> | <u>Jul</u> | Aug        | Sep        | Oct        | Nov | <u>Dec</u> |     |      | <u>Jan</u> | <u>Feb</u> | <u>Mar</u> | <u>Apr</u> | May        | <u>Jun</u> | <u>Jul</u> | Aug    | <u>Sep</u> | 9        |
| 201 | <b>0</b> 18% | 21%        | 31%        | 32%        | 30%        | 41%        | 34%        | 46%        | 29%        | 26%        | 17% | 17%        | 2   | 2010 |            |            |            |            |            | 20%        | 34%        | 45%    | 37%        | 4        |
| 201 | 1 25%        | 31%        | 29%        | 18%        | 12%        | 24%        | 20%        | 7%         | 19%        | 23%        | 19% | 14%        | 2   | 2011 | 28%        | 30%        | 41%        | 27%        | 14%        | 25%        | 22%        | -1%    | 16%        | 1        |
| 201 | <b>2</b> 15% | 17%        | 3%         | 12%        | 15%        | 10%        | 2%         | 5%         | -5%        | 10%        | -3% | -11%       | 2   | 2012 | 13%        | 13%        | 7%         | 7%         | 10%        | 6%         | 3%         | 6%     | -1%        |          |
| 201 | 3 -1%        | -3%        | -15%       | 2%         |            |            |            |            |            |            |     |            | 2   | 2013 | 1%         | -1%        | -8%        | -6%        |            |            |            |        |            |          |
|     |              |            |            |            |            |            |            |            |            |            |     |            | · — |      |            |            |            |            |            |            |            |        |            | _        |

Sep Oct Nov

37% 34% 32%

24% 22% 26%

4% -1% -3%

Sep Oct Nov

37% 24% 23%

33% 26% 29%

9% -4% -3%

Sep Oct Nov

37% 45% 41%

16% 19% 23%

-1% 3% -4%

<u>Dec</u>

25%

19%

-3%

<u>Dec</u>

20%

27%

<u>Dec</u>

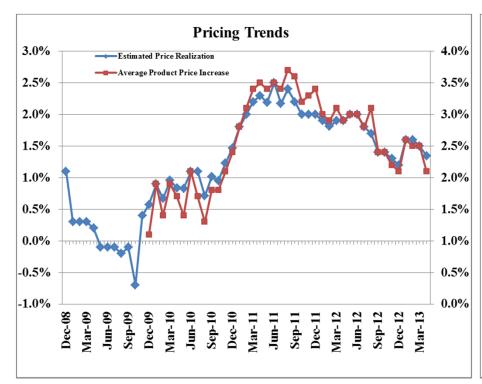
30%

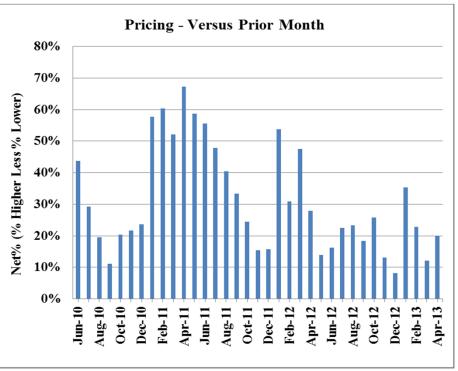
12%

-6%

#### Price Contribution Remains Positive

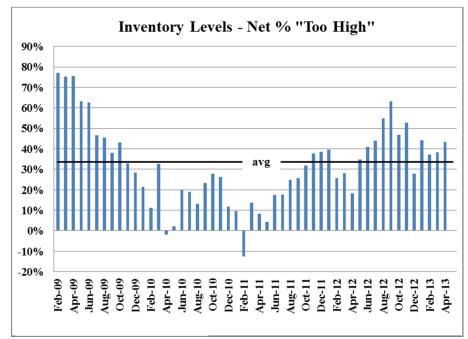
• Product prices are estimated up about 2.1% year-over-year with two-thirds or about 1.3% of this increase being realized. Sequentially, a net 20% of participants reported higher prices in April (23% higher; 73% same; 3% lower) which compares to a net 12% reporting higher prices in March.

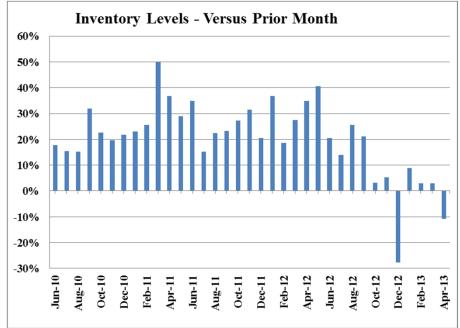




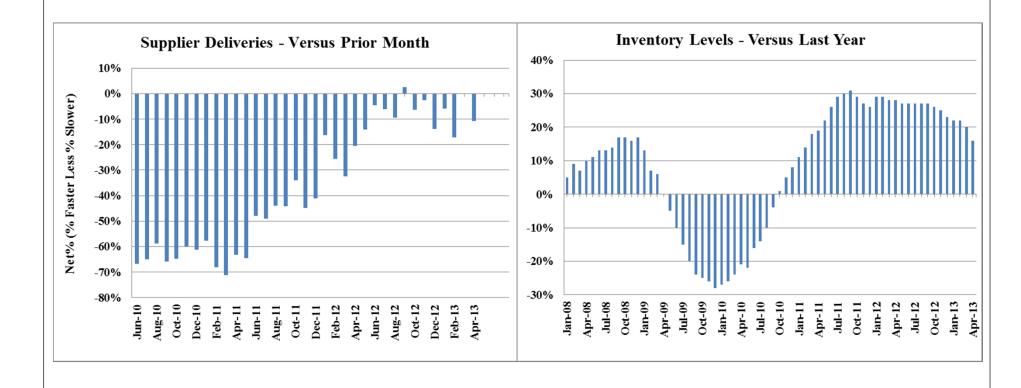
#### Inventories See Another Pull Back

Inventories showed another pull back in April following three months of stabilization after a sharp decline in December. A net 11% of participants reported lower inventory levels compared to last month (24% higher; 41% same; 11% lower) vs. a net 3% reporting higher inventory in March. Inventory sentiment was also slightly more pessimistic as a net 43% of participants categorize their inventory levels as "too high" compared with 38% in March. This is moderately above the long-run average of 34%.

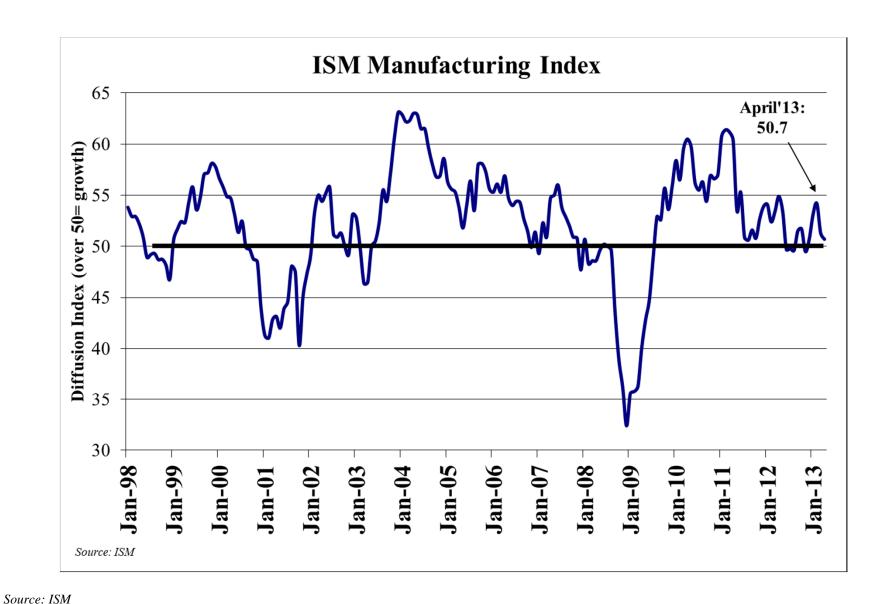




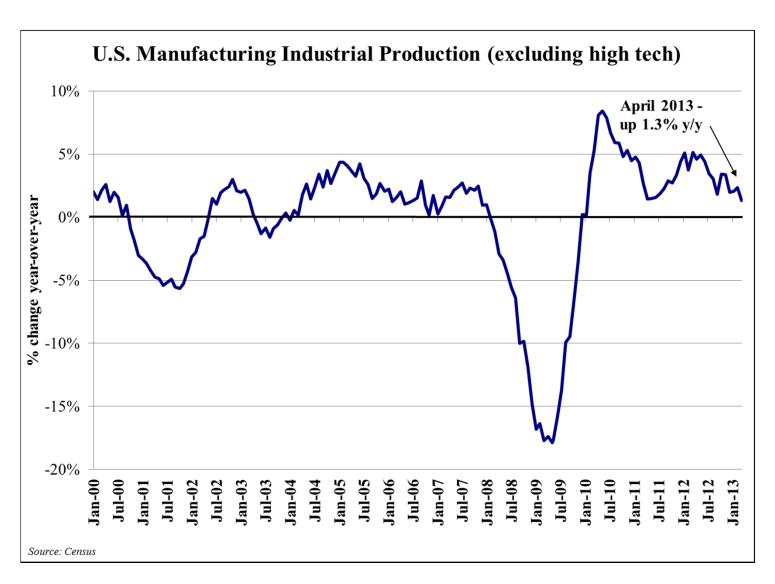
#### **Inventory Levels**



#### ISM Continues Slow Down in April, Still Positive

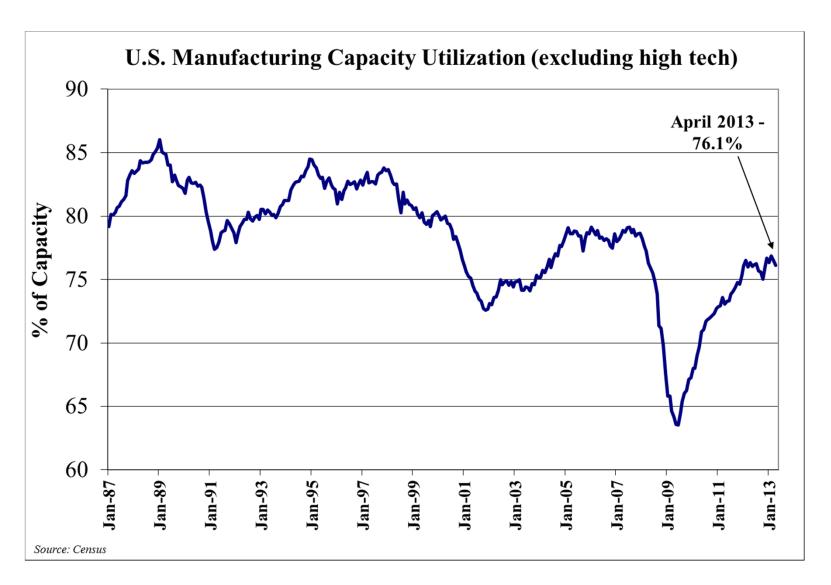


#### Manufacturing IP: Up 1.3% in April, Growth Slowing



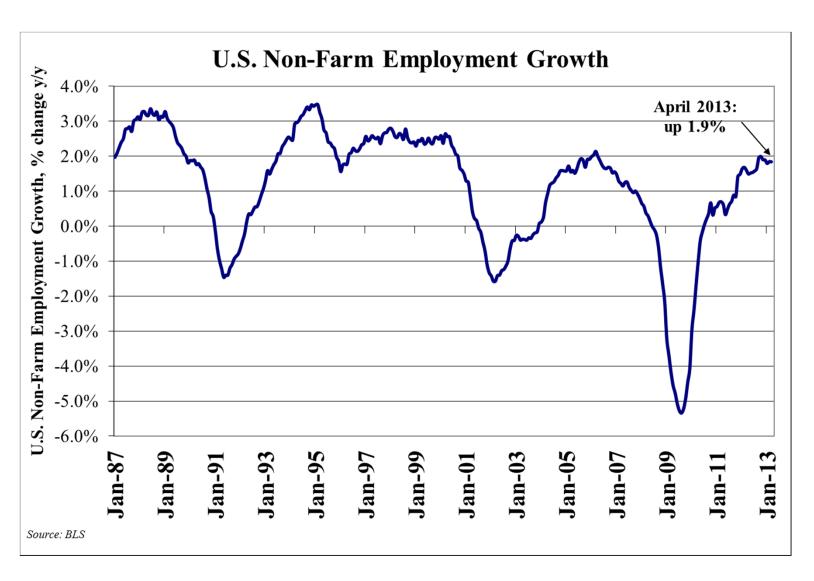
Source: federalreserve.gov

#### Capacity Utilization: Ticks Down in April



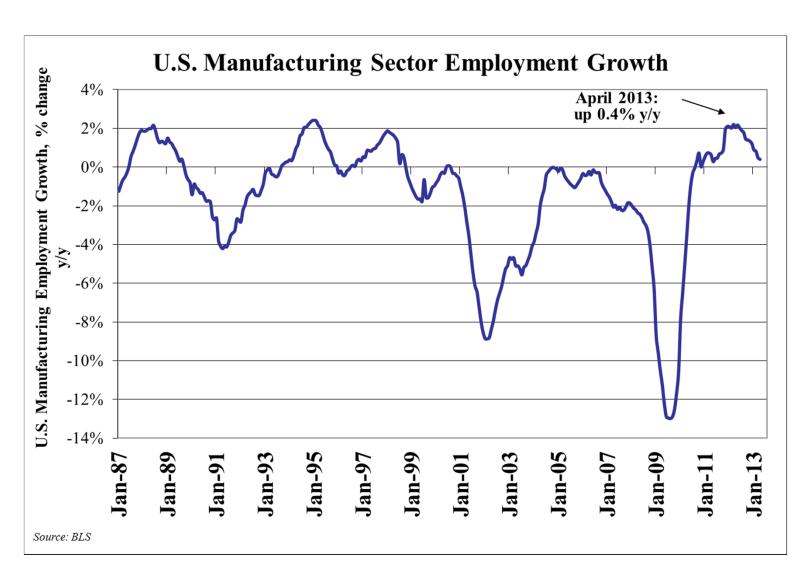
Source: federalreserve.gov

#### Non-Farm Employment - Steady Growth in April



Source: bls.gov

#### Manufacturing Employment - Growth Slowing in April



Source: bls.gov

# Manufacturing End Market Trends

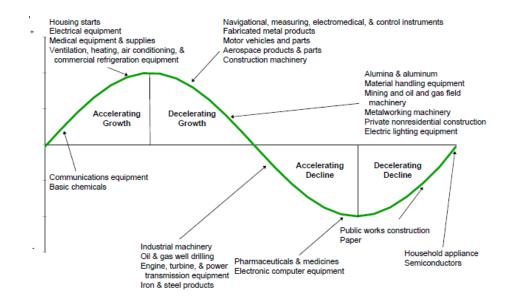
| ISM Manufacturing End Market Momentum  Major End Market  Mar-12 Apr-12 May-12 Jun-12 Jul-12 Aug-12 Sep-12 Oct-12 Nov-12 Dec-12 Jan-13 Feb-13 Mar-13 Apr-13 |                   |                   |                   |                       |                   |                       |                   |                   |                       |                       |                   |              |                   |                   |
|--|-------------------|-------------------|-------------------|-----------------------|-------------------|-----------------------|-------------------|-------------------|-----------------------|-----------------------|-------------------|--------------|-------------------|-------------------|
| Major End Market   | Mar-12            | Apr-12            | May-12            | Jun-12                | Jul-12            | Aug-12                | Sep-12            | Oct-12            | Nov-12                | Dec-12                | Jan-13            | Feb-13       | Mar-13            | Apr-13            |
| Apparel, leather and allied products   | <b>↑</b>          | <b>↑</b>          | 1                 | <b></b>               | <b>↓</b>          | <b>↑</b>              | 1                 | 1                 | <b></b>               | <b></b>               | 1                 | 1            | 1                 | 1                 |
| Chemical products  | <b>↓</b>          | 1                 | 1                 | $\downarrow$          | $\downarrow$      | <b>↑</b>              | $\downarrow$      | 1                 | $\downarrow$          | <b>↓</b>              | <b>1</b>          | <b> </b>     | $\downarrow$      | <b>↑</b>          |
| Computer and electronic products   | <b>↓</b>          | 1                 | 1                 | $\downarrow$          | $\downarrow$      | <b>↓</b>              | $\downarrow$      | $\downarrow$      | 1                     | 1                     | <b>1</b>          | <b>\</b>     | 1                 | 1                 |
| Electrical equipment, appliances, components   | <b>↑</b>          | <b>↑</b>          | 1                 | 1                     | 1                 | ↓                     | $\downarrow$      | ↓                 | 1                     | $\downarrow$          | <b>1</b>          | <b>1</b>     | <b>↑</b>          | 1                 |
| Fabricated metal products  | <b>↑</b>          | <b>↑</b>          | 1                 | 1                     | <b>↑</b>          | <b> </b>              | 1                 | <b>↓</b>          | <b>↓</b>              | <b>\</b>              | <b>1</b>          | <b>↑</b>     | <b>↑</b>          | 1                 |
| Food, beverage and tobacco products  | 1                 | <b>↑</b>          | ↓                 | <b>↓</b>              | <b>↑</b>          | 1                     | <b>↑</b>          | 1                 | 1                     | 1                     | <b>1</b>          | <b>1</b>     | <b>↑</b>          | ↓                 |
| Furniture and related products   | 1                 | 1                 | 1                 | 1                     | 1                 | <b>↓</b>              | 1                 | 1                 | 1                     | 1                     | 1                 | <b>↑</b>     | <b>↑</b>          | 1                 |
| Machinery  | <b>↑</b>          | <b>↑</b>          | 1                 | 1                     | <b>↓</b>          | <b> </b>              | $\downarrow$      | <b>↓</b>          | <b>↓</b>              | <b>↓</b>              | <b>↑</b>          | <b>↑</b>     | $\downarrow$      | 1                 |
| Miscellaneous manufacturing  | <b>↑</b>          | <b>↑</b>          | 1                 | 1                     | <b>↓</b>          | <b>↑</b>              | <b>↑</b>          | <b>↑</b>          | <b>\</b>              | <b>\</b>              | <b>1</b>          | <b>↑</b>     | <b>↑</b>          | $\leftrightarrow$ |
| Nonmetallic mineral products   | 1                 | 1                 | 1                 | $\downarrow$          | $\downarrow$      | <b>↓</b>              | $\downarrow$      | $\downarrow$      | <b>↓</b>              | <b>↓</b>              | <b>\</b>          | <b>1</b>     | 1                 | $\leftrightarrow$ |
| Paper products   | 1                 | <b>↑</b>          | 1                 | $\downarrow$          | $\downarrow$      | 1                     | <b>↑</b>          | 1                 | 1                     | 1                     | $\leftrightarrow$ | <b>1</b>     | <b>↑</b>          | 1                 |
| Petroleum and coal products  | 1                 | 1                 | ↓                 | <b>↓</b>              | 1                 | 1                     | <b>↑</b>          | 1                 | 1                     | 1                     | <b>↑</b>          | <b>1</b>     | $\downarrow$      | $\leftrightarrow$ |
| Plastics and rubber products   | 1                 | 1                 | ↓                 | $\downarrow$          | 1                 | $\longleftrightarrow$ | $\leftrightarrow$ | 1                 | $\downarrow$          | <b>↓</b>              | <b>↑</b>          | <b>1</b>     | 1                 | $\leftrightarrow$ |
| Primary metals   | 1                 | 1                 | 1                 | 1                     | $\leftrightarrow$ | 1                     | <b>↑</b>          | ↓                 | <b>↓</b>              | 1                     | <b>↑</b>          | <b>1</b>     | <b>↑</b>          | $\downarrow$      |
| Printing, related support activities   | 1                 | 1                 | 1                 | 1                     | <b>↓</b>          | 1                     | <b>↑</b>          | $\leftrightarrow$ | <b>↓</b>              | $\leftrightarrow$     | <b>↑</b>          | <b>1</b>     | <b>↑</b>          | 1                 |
| Textile mills  | $\leftrightarrow$ | $\leftrightarrow$ | <b>↑</b>          | $\longleftrightarrow$ | $\downarrow$      | ↓                     | 1                 | $\leftrightarrow$ | $\longleftrightarrow$ | $\longleftrightarrow$ | <b>1</b>          | $\downarrow$ | $\leftrightarrow$ | $\leftrightarrow$ |
| Transportation equipment   | 1                 | 1                 | ↓                 | $\downarrow$          | $\downarrow$      | <b>↓</b>              | $\downarrow$      | <b>↓</b>          | <b>↓</b>              | <b>↓</b>              | <b>1</b>          | <b>1</b>     | 1                 | 1                 |
| Wood product   | 1                 | $\downarrow$      | $\leftrightarrow$ | $\leftrightarrow$     | <b>1</b>          | $\leftrightarrow$     | 1                 | ↓ ↓               | <b>↓</b>              | 1                     | <b>1</b>          | 1            | 1                 | ↓ ↓               |
| Statistics   | Mar-12            | Apr-12            | May-12            | Jun-12                | Jul-12            | Aug-12                | Sep-12            | Oct-12            | Nov-12                | Dec-12                | Jan-13            | Feb-13       | Mar-13            | Apr-13            |
| % Better   | 83%               | 89%               | 72%               | 39%                   | 33%               | 44%                   | 61%               | 44%               | 33%                   | 39%                   | 72%               | 83%          | 78%               | 56%               |
| Unchanged  | 6%                | 6%                | 6%                | 11%                   | 6%                | 11%                   | 6%                | 11%               | 6%                    | 11%                   | 6%                | 0%           | 6%                | 28%               |
| % Worse  | 11%               | 6%                | 22%               | 50%                   | 61%               | 44%                   | 33%               | 44%               | 61%                   | 50%                   | 22%               | 17%          | 17%               | 17%               |
| Net % of Industries Improving  | 72%               | 83%               | 50%               | -11%                  | -28%              | 0%                    | 28%               | 0%                | -28%                  | -11%                  | 50%               | 67%          | 61%               | 39%               |
| PMI  | 53.4              | 54.8              | 53.5              | 49.7                  | 49.8              | 49.6                  | 51.5              | 51.7              | 49.5                  | 50.7                  | 53.1              | 54.2         | 51.3              | 50.7              |

Source: ISM

#### Industrial Sector – Phase of Cycle

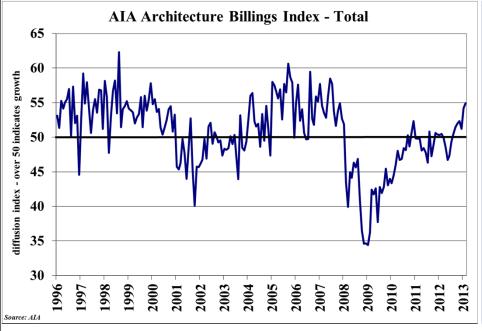
- The table to the right highlights the MAPI business cycle forecasts for 24 different industrial related end markets.
- In 2012, 15 of the 24 industries are grew. With Housing, motor vehicles & parts, engines/turbines/power transmission growing the most. Four industries (electronic computer equipment most severe) declined. The remaining four industries remained flat.
- In 2013, most industries are expected to be relatively flat, with the exclusion of significant growth in housing/aerospace and moderate declines in industrial machinery and engine/turbine/power transmissions.
- In 2014 housing and aerospace products and parts are expected to increase meaningfully again. Other significant increases include electric lighting equipment and communications equipment. Moderate increases / flat are expected for the rest of the end markets.

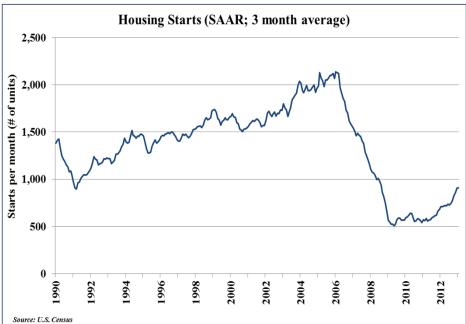
#### **Industrial Sector by Phase of Cycle**



Source: MAPI

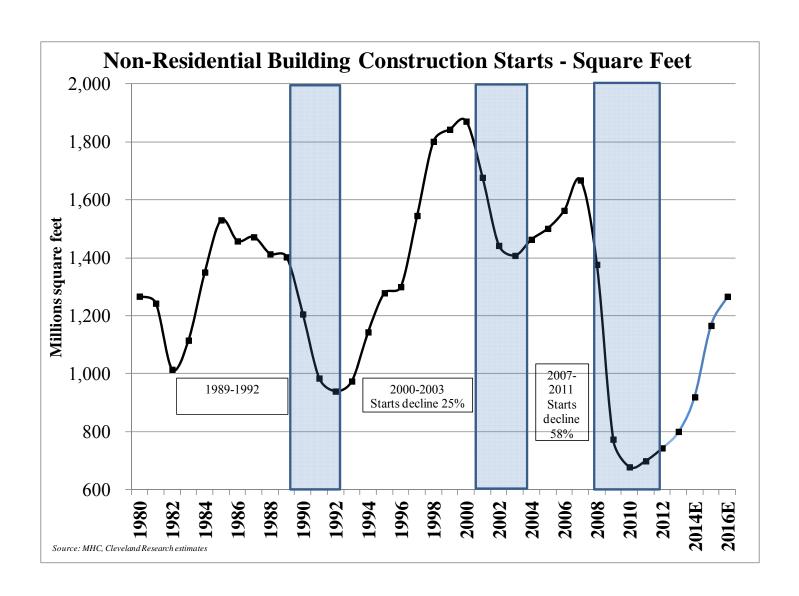
#### **Construction Indicators**





Source: U.S. Census Bureau; AIA; Company Reports

#### Non-Res Construction Starts: Forecast Up 8% in 2013



#### Higher 2013 Non-Res Forecast

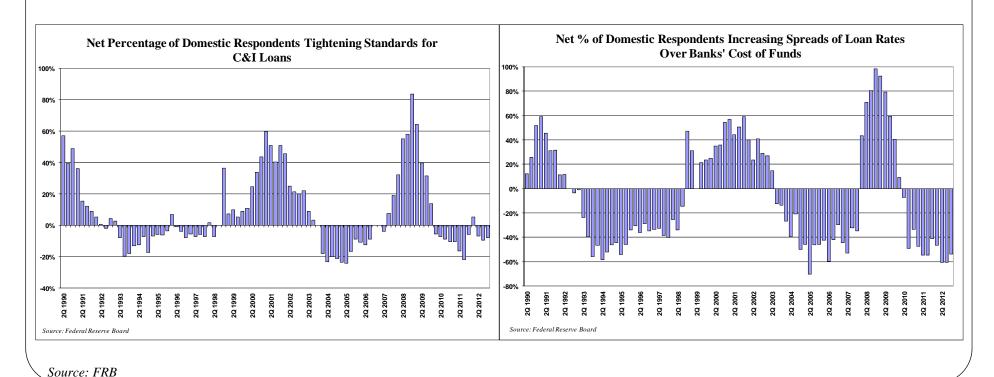
• McGraw Hill raised its 2013 non-residential construction starts forecast in 1Q. Non-res building starts now up 6% in dollars (5% in 4Q update) and 8% in square feet (6% in 4Q update). McGraw Hill raised the forecast for warehouses, office & bank buildings, and parking garages and automotive services by 3% or more, and actually raised its forecast in all but 4 categories (amusement, hospitals, manufacturing, religious). Non-building starts (bridges, highways) are slightly less worse - now down 10% vs down 11% prior.

| McGraw-Hill Construction Starts History and Forecast |         |         |         |         |         |         |         |         |  |  |  |  |  |
|--|---------|---------|---------|---------|---------|---------|---------|---------|--|--|--|--|--|
| U.S. Starts Forecast (Value \$mm)                    | 2008    | 2009    | 2010    | 2011    | 2012    | 2013E   | 2014E   | 2015E   |  |  |  |  |  |
| Amusement, Social and Recreational Bldgs             | 0%      | -14%    | -4%     | -8%     | -13%    | 8%      | 17%     | 30%     |  |  |  |  |  |
| Dormitories  | 16%     | -5%     | 1%      | -15%    | -1%     | -4%     | 8%      | 10%     |  |  |  |  |  |
| Government Service Buildings                         | 7%      | 15%     | -32%    | -14%    | -13%    | -3%     | 7%      | 12%     |  |  |  |  |  |
| Hospitals and Other Health Treatment                 | 23%     | -33%    | 16%     | -7%     | -12%    | 4%      | 15%     | 23%     |  |  |  |  |  |
| Hotels and Motels                                    | -9%     | -64%    | -28%    | 58%     | 12%     | 12%     | 22%     | 33%     |  |  |  |  |  |
| Manufacturing Plants, Warehouses, Labs               | 44%     | 10%     | -5%     | 74%     | -31%    | 8%      | 16%     | 28%     |  |  |  |  |  |
| Miscellaneous Nonresidential Buildings               | 19%     | 16%     | 29%     | -29%    | -15%    | 4%      | 12%     | 20%     |  |  |  |  |  |
| Office and Bank Buildings                            | -15%    | -28%    | -18%    | -3%     | -9%     | 10%     | 22%     | 35%     |  |  |  |  |  |
| Parking Garages and Automotive Services              | -21%    | -47%    | 9%      | 26%     | 14%     | 11%     | 25%     | 19%     |  |  |  |  |  |
| Religious Buildings                                  | -5%     | -7%     | -29%    | -10%    | -20%    | 2%      | 16%     | 18%     |  |  |  |  |  |
| Schools, Libraries, and Labs (nonmfg)                | 9%      | -17%    | -3%     | -11%    | -15%    | -3%     | 15%     | 27%     |  |  |  |  |  |
| Stores and Restaurants                               | -27%    | -40%    | -5%     | 3%      | 10%     | 13%     | 19%     | 29%     |  |  |  |  |  |
| Warehouses (excl. manufacturer owned)                | -22%    | -58%    | -16%    | 23%     | 18%     | 13%     | 28%     | 38%     |  |  |  |  |  |
| Nonresidential Building Starts (\$mm)                | 242,186 | 168,877 | 163,054 | 165,048 | 153,369 | 161,978 | 183,771 | 227,415 |  |  |  |  |  |
| % change y/y   | 1%      | -30%    | -3%     | 1%      | -7%     | 6%      | 13%     | 24%     |  |  |  |  |  |
| Nonresidential Building Starts (sqr ft)              | 1,377   | 773     | 678     | 699     | 743     | 800     | 919     | 1,166   |  |  |  |  |  |
| % change y/y   | -18%    | -44%    | -12%    | 3%      | 6%      | 8%      | 15%     | 27%     |  |  |  |  |  |
| Single Family Housing Starts (units, 000)            | 1,203   | 951     | 978     | 905     | 1,147   | 1,409   | 1,967   | 2,478   |  |  |  |  |  |
| % change y/y   | -42%    | -21%    | 3%      | -7%     | 27%     | 23%     | 40%     | 26%     |  |  |  |  |  |
| Nonbuilding Starts (bridges, highways, etc, \$mm)    | 152,486 | 144,769 | 149,055 | 147,850 | 152,850 | 138,200 | 133,400 | 137,900 |  |  |  |  |  |
| % change y/y   | 9%      | -5%     | 3%      | -1%     | 3%      | -10%    | -3%     | 3%      |  |  |  |  |  |

Source: MHC (1Q13 fcst)

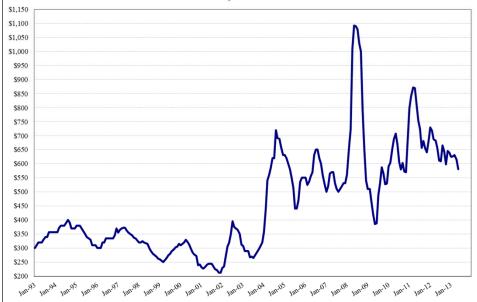
#### Credit – C&I Loan Demand Improves as Lending Standards Loosen

- The 4Q12 Senior Loan Officer survey saw a further loosening of loan standards. A net 8% of loan officers reported easier credit standards in 4Q12 compared with a net 10% in 3Q.
- Bank rate spreads contracted again in 4Q12 with a net 54% of loan officers reporting lower lending spreads, up from a net 60% in 3Q.
- Demand for commercial and industrial loans deteriorated in 4Q as a net 6% of loan officers reported weaker demand for commercial and industrial loans, down from the net 8% of loan officers reporting stronger demand for loans in 3Q.

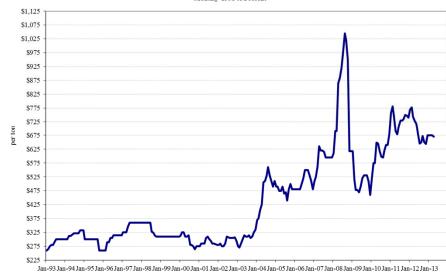


#### Commodity Price Trends – Steel

#### Domestic Hot Rolled Sheet Prices Monthly 1993 to Present



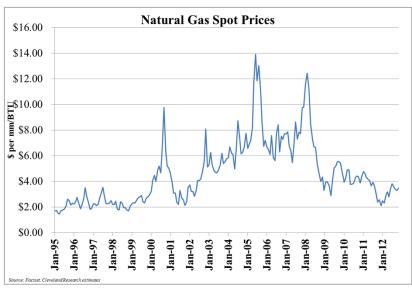
#### Domestic Reinforcing Bar (Rebar) Prices Monthly 1993 to Present

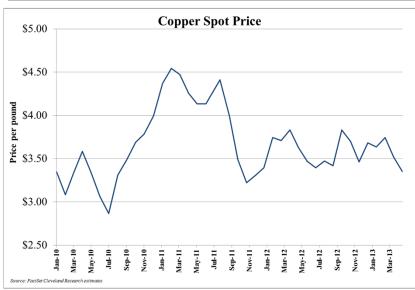


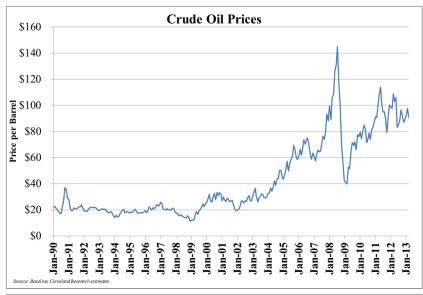
Source: Steel Business Briefing, Cleveland Research estimates

Source: Steel Business Briefing; Energy Information, Baseline

#### **Commodity Price Trends**



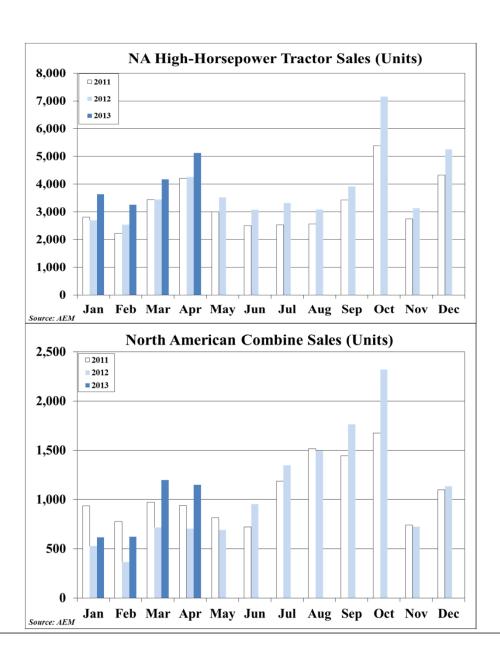






Source: Steel Business Briefing; Energy Information, Baseline, Metalprices

## Ag Indicators



Source: AEM

# Automotive Trends – Improving

|       |          |         |               | N. American Li | ght Vehicle Producti      | on Trends |          |           |                |                           |
|-------|----------|---------|---------------|----------------|---------------------------|-----------|----------|-----------|----------------|---------------------------|
|       |          | Qua     | rterly Unit P | roduction      |                           | Quart     | erly Uni | t Product | tion % C       | Change y/y                |
|       | Chrysler | Ford    | GM            | Big 3 Total    | Total NA Light<br>Vehicle | Chrysler  | Ford     | GM        | Big 3<br>Total | Total NA<br>Light Vehicle |
| 1Q10  |          | 557,080 | 667,599       | 1,602,012      | 2,886,870                 | 56%       | 63%      | 89%       | 71%            | 72%                       |
| 2Q10  | 429,664  | 619,503 | 731,277       | 1,734,000      | 3,080,788                 | 288%      | 49%      | 102%      | 95%            | 73%                       |
| 3Q10  | 413,490  | 554,112 | 733,082       | 1,700,684      | 2,995,300                 | 47%       | 18%      | 49%       | 37%            | 29%                       |
| 4Q10  | 361,830  | 577,859 | 702,554       | 1,642,243      | 2,966,740                 | 9%        | 4%       | 24%       | 13%            | 8%                        |
| 1Q11  | 487,789  | 640,182 | 786,061       | 1,914,032      | 3,363,464                 | 29%       | 15%      | 18%       | 19%            | 17%                       |
| 2Q11  | 513,283  | 683,450 | 821,779       | 2,018,512      | 3,100,093                 | 19%       | 10%      | 12%       | 16%            | 1%                        |
| 3Q11  | 523,422  | 608,429 | 749,178       | 1,881,029      | 3,393,594                 | 27%       | 10%      | 2%        | 11%            | 13%                       |
| 4Q11  | 504,278  | 636,619 | 738,657       | 1,879,554      | 3,458,920                 | 39%       | 10%      | 5%        | 14%            | 17%                       |
| 1Q12  | 589,023  | 651,408 | 861,711       | 2,102,142      | 4,035,736                 | 21%       | 2%       | 10%       | 10%            | 20%                       |
| 2Q12  | 621,215  | 689,929 | 837,634       | 2,148,778      | 3,967,691                 | 21%       | 1%       | 2%        | 6%             | 28%                       |
| 3Q12  | 554,850  | 641,068 | 760,974       | 1,956,892      | 3,694,890                 | 6%        | 5%       | 2%        | 4%             | 9%                        |
| 4Q12  | 586,800  | 710,200 | 774,900       | 2,071,900      | 3,892,000                 | 16%       | 12%      | 5%        | 10%            | 13%                       |
| 1Q13  | 549,400  | 744,300 | 808,600       | 2,102,300      | 4,041,600                 | -7%       | 14%      | -6%       | 0%             | 0%                        |
| 2Q13E | 619,000  | 772,100 | 836,500       | 2,227,600      | 4,171,400                 | 0%        | 12%      | 0%        | 4%             | 5%                        |

Source: Wards Auto

## Heavy Truck Net Orders – Turn Slightly Positive in April

