



THE ASSOCIATION FOR HOSE AND
ACCESSORIES DISTRIBUTION

**NAHAD Industry Trends Survey
February 2017**

Highlights / Summary Thoughts

Summary Thoughts:

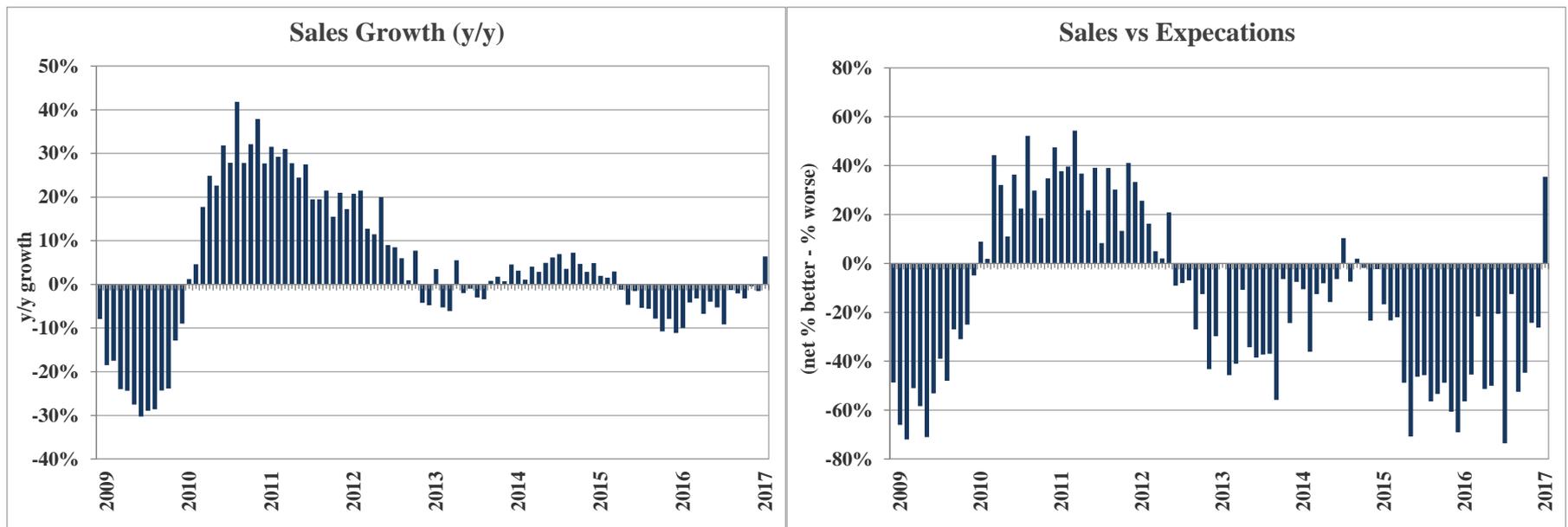
- This month's survey offers the first evidence of stronger activity following the broad post-election improvement in optimism. Although just one month, the broad-based improvement in sales and orders, improved backlog, and much improved inventory metrics suggests the pace of recovery could be more robust than we had previously expected following this long, drawn-out downturn.

Highlights:

- Sales improved in our fluid power survey turned positive for the first time since March 2015 and sales beat plan for the first time in over two years as sales grew 6% in January following a 2% decline in December.
- Evidence suggests we are entering a period of inventory rebuild as our measure of inventory sentiment hit the lowest reading since 2011 and inventories appear to have increased slightly month-over-month.
- Distributors and manufacturers have left their full year outlook for 2017 unchanged at up 5-6% on average. This up from an initial outlook of 3% and follows a decline of ~5% in 2016.

Sales Growth Turns Positive for First Time Since March 2015

Sales in January increased 6%, marking the first month of growth since March 2015. Growth in January was helped by an extra day and compares to a 2% decline in December which had one fewer day. Adjusting for the change in days suggests sales growth was ~2% for both months. A net 35% of participants beat plan in January vs. a net 26% that missed plan in December. This is the first time sales have exceeded plan since September 2014.



Monthly Sales Growth – January 2017

Monthly Sales Growth

	Total									Distributors									Manufacturers								
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2009	2010	2011	2012	2013	2014	2015	2016	2017	2009	2010	2011	2012	2013	2014	2015	2016	2017
January	-19%	1%	32%	21%	4%	3%	2%	-10%	6%	-16%	-6%	28%	26%	1%	3%	3%	-12%	7%	-21%	9%	35%	17%	7%	3%	1%	-8%	6%
February	-18%	5%	29%	22%	-5%	1%	2%	-4%		-17%	-2%	28%	24%	-6%	3%	2%	-3%		-18%	11%	31%	19%	-5%	-1%	2%	-6%	
March	-24%	18%	31%	13%	-6%	4%	3%	-3%		-22%	12%	33%	16%	-5%	5%	4%	-4%		-26%	24%	30%	10%	-7%	3%	2%	-2%	
April	-24%	25%	28%	12%	6%	3%	-1%	-7%		-22%	17%	27%	10%	6%	1%	2%	-9%		-27%	32%	29%	13%	5%	4%	-5%	-5%	
May	-28%	23%	25%	20%	-2%	5%	-5%	-4%		-27%	18%	31%	21%	-3%	4%	-6%	-4%		-28%	28%	18%	19%	-1%	6%	-4%	-4%	
June	-30%	32%	28%	9%	-1%	6%	-2%	-5%		-29%	25%	27%	10%	-1%	7%	-1%	-5%		-32%	39%	28%	8%	0%	6%	-2%	-5%	
July	-29%	28%	20%	9%	-3%	7%	-5%	-9%		-29%	23%	23%	13%	-2%	8%	-5%	-8%		-29%	33%	17%	5%	-4%	6%	-6%	-10%	
August	-29%	42%	20%	6%	-3%	4%	-6%	-1%		-28%	38%	25%	6%	-5%	3%	-2%	-1%		-29%	46%	14%	6%	-2%	4%	-9%	-2%	
September	-24%	28%	22%	1%	1%	7%	-8%	-2%		-24%	22%	29%	5%	1%	9%	-6%	-1%		-24%	34%	14%	-3%	1%	5%	-9%	-3%	
October	-24%	32%	17%	8%	2%	5%	-11%	-3%		-25%	22%	20%	13%	1%	4%	-11%	-6%		-22%	42%	14%	3%	2%	5%	-10%	-1%	
November	-13%	38%	21%	-4%	1%	3%	-8%	0%		-14%	31%	28%	2%	2%	2%	-6%	-4%		-12%	44%	15%	-10%	-1%	4%	-10%	3%	
December	-9%	28%	17%	-5%	5%	5%	-11%	-2%		-14%	21%	24%	4%	4%	6%	-14%	1%		-4%	28%	5%	-8%	5%	4%	-9%	-4%	

Percent Positive / Negative Growth

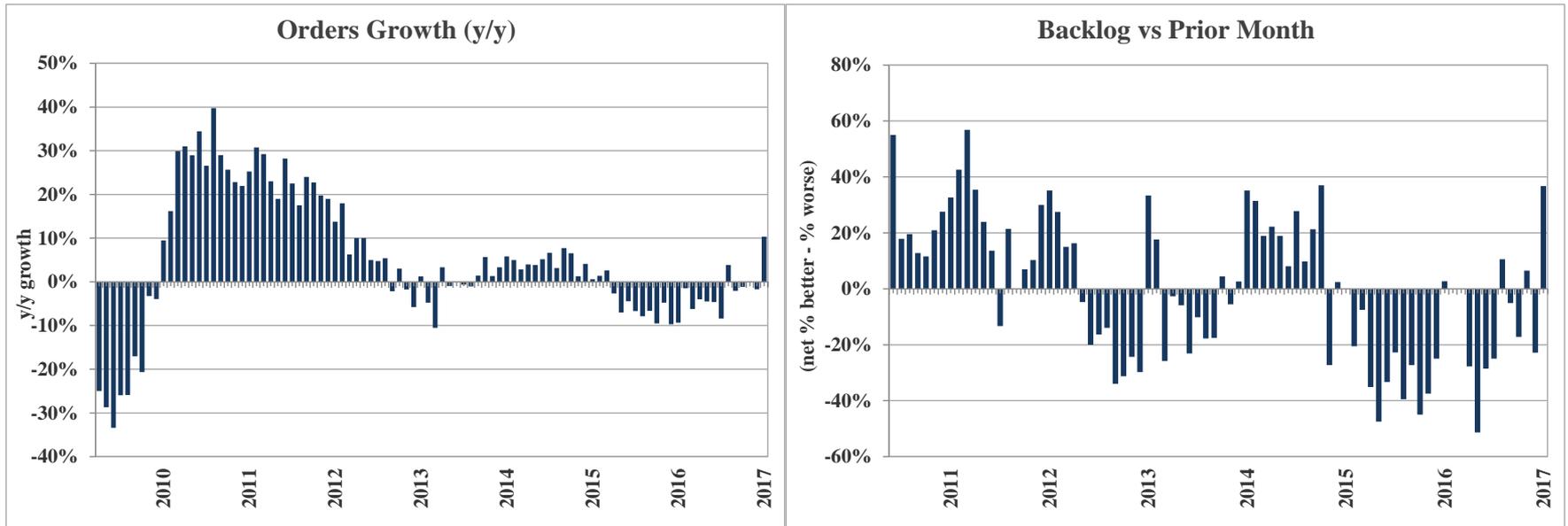
	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17
Positive Sales Growth	57%	44%	49%	38%	46%	31%	40%	26%	19%	23%	29%	15%	24%	20%	47%	13%	28%	24%	13%	41%	43%	33%	43%	40%	67%
Flat Sales	5%	22%	22%	15%	3%	22%	13%	6%	7%	3%	7%	3%	5%	20%	8%	21%	17%	18%	19%	15%	9%	17%	10%	4%	14%
Negative Sales Growth	38%	34%	30%	48%	51%	47%	48%	68%	74%	74%	64%	83%	71%	60%	44%	66%	56%	58%	69%	44%	49%	50%	47%	57%	19%
Net % (Positive - Negative)	19%	10%	19%	-10%	-6%	-17%	-8%	-41%	-56%	-51%	-36%	-68%	-44%	-37%	3%	-53%	-19%	-24%	-36%	-3%	-6%	-19%	-3%	-17%	48%

Results vs. Expectations

	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17
Better than expected	24%	21%	24%	17%	5%	12%	11%	10%	9%	7%	6%	5%	8%	9%	22%	5%	10%	24%	0%	33%	5%	8%	18%	15%	52%
In line with expectations	36%	35%	29%	17%	20%	29%	33%	23%	29%	37%	27%	21%	28%	36%	35%	38%	30%	32%	26%	23%	38%	39%	39%	44%	31%
Worse than expected	40%	44%	46%	66%	76%	59%	57%	67%	62%	56%	67%	74%	64%	55%	43%	56%	60%	44%	74%	45%	58%	53%	42%	41%	17%
Net % (Better - Worse)	-17%	-23%	-22%	-49%	-71%	-46%	-46%	-56%	-53%	-49%	-61%	-69%	-53%	-45%	-22%	-51%	-50%	-17%	-74%	-13%	-53%	-45%	-24%	-26%	35%

Orders & Backlogs Both Improve In January

Orders rose 10% in January following a 2% decline in December and a net 37% of manufacturers and distributors noted an increase in backlogs sequentially following a net 23% reporting a sequential decline in December.



Orders and Backlog Growth Trends

Monthly Order Growth

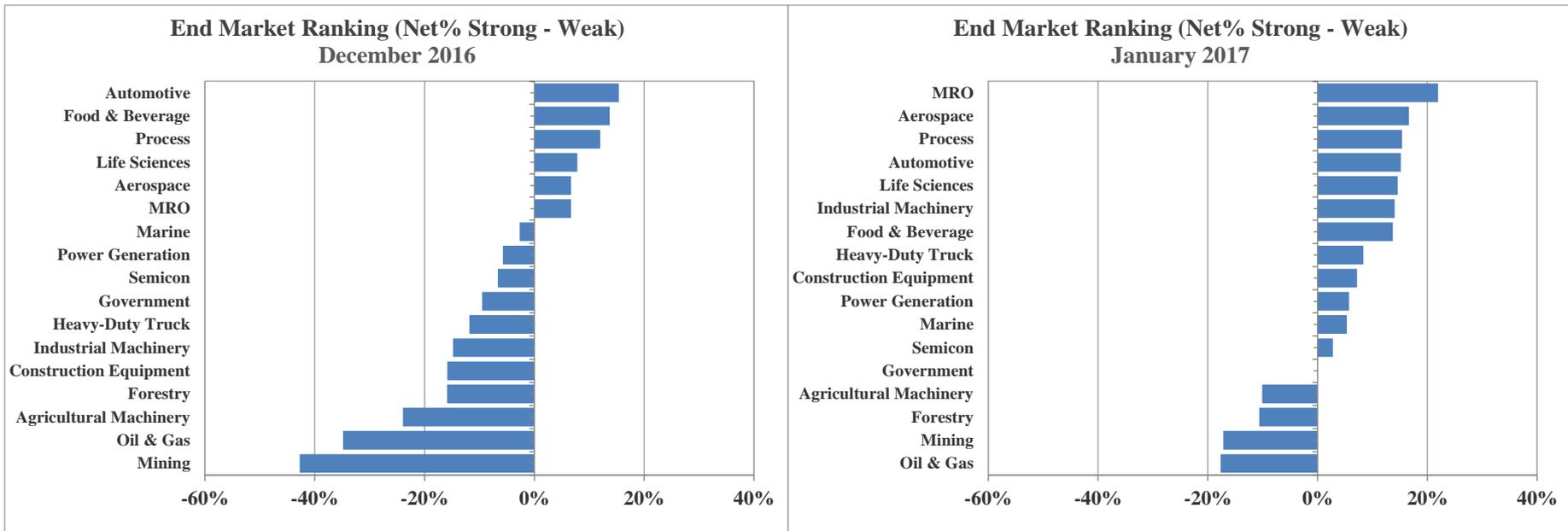
	Total								Distributors								Manufacturers									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2009	2010	2011	2012	2013	2014	2015	2016	2017	2009	2010	2011	2012	2013	2014	2015	2016
January	9%	25%	14%	1%	6%	1%	-8%	10%	1%	25%	13%	3%	6%	3%	-13%	10%	18%	25%	15%	-1%	5%	-2%	-5%	11%		
February	16%	31%	18%	-5%	5%	1%	-1%	12%	31%	19%	-7%	4%	4%	-2%	21%	31%	17%	-3%	6%	-1%	-1%					
March	30%	29%	6%	-11%	3%	3%	-6%	29%	30%	10%	-6%	4%	2%	-7%	31%	29%	3%	-15%	2%	3%	-6%					
April	-25%	31%	23%	10%	3%	4%	-3%	-4%	-25%	30%	29%	8%	5%	3%	0%	-6%	-25%	32%	18%	12%	2%	5%	-5%	-2%		
May	-29%	29%	19%	10%	-1%	4%	-7%	-4%	-27%	28%	27%	5%	-2%	5%	-10%	-2%	-31%	30%	12%	15%	0%	3%	-4%	-7%		
June	-33%	34%	28%	5%	0%	5%	-4%	-5%	-30%	28%	33%	1%	-2%	7%	-6%	-7%	-37%	41%	24%	10%	2%	3%	-2%	-2%		
July	-26%	27%	23%	5%	-1%	7%	-7%	-8%	-28%	20%	25%	8%	1%	9%	-9%	-8%	-24%	34%	20%	2%	-2%	5%	-5%	-9%		
August	-26%	40%	18%	5%	-1%	3%	-8%	4%	-26%	34%	29%	6%	-1%	3%	-7%	4%	-26%	46%	7%	5%	-1%	4%	-9%	4%		
September	-17%	29%	24%	-2%	1%	8%	-7%	-1%	-20%	29%	30%	1%	3%	11%	-7%	-2%	-14%	29%	19%	-5%	0%	5%	-7%	0%		
October	-21%	26%	25%	3%	4%	7%	-10%	-1%	-21%	25%	25%	-4%	4%	7%	-9%	-4%	-20%	26%	23%	10%	4%	6%	-10%	2%		
November	-3%	23%	20%	-2%	1%	1%	-5%	0%	-2%	28%	21%	-1%	-1%	2%	-3%	-3%	-4%	17%	19%	-3%	4%	1%	-6%	3%		
December	-4%	18%	18%	-6%	3%	4%	-10%	-2%	-10%	27%	21%	5%	4%	-8%	-2%	3%	17%	1%	-11%	1%	4%	-11%	-2%			

Monthly Backlog Growth

	Total								Distributors								Manufacturers										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2009	2010	2011	2012	2013	2014	2015	2016	2017	2009	2010	2011	2012	2013	2014	2015	2016	2017
January			25%	22%	1%	1%	3%	-6%	4%			22%	30%	0%	1%	3%	-7%	1%			28%	13%	1%	1%	2%	-5%	8%
February			32%	18%	-2%	3%	2%	-5%			35%	22%	-2%	2%	3%	-7%			30%	13%	-1%	3%	1%	-3%			
March			40%	15%	-5%	2%	2%	-7%			39%	24%	-2%	4%	3%	-9%			41%	7%	-8%	1%	1%	-4%			
April			31%	16%	-6%	4%	-1%	-8%			36%	25%	-6%	4%	0%	-14%			27%	7%	-6%	3%	-1%	-3%			
May			25%	10%	-2%	3%	-3%	-6%			37%	11%	-3%	4%	-4%	-5%			14%	10%	0%	2%	-1%	-6%			
June	24%	29%	8%	-7%	3%	-3%	-5%	29%	32%	11%	-6%	5%	-5%	-8%	20%	25%	6%	-7%	2%	-1%	-3%						
July	29%	25%	7%	-4%	5%	-7%	-6%	24%	29%	12%	-5%	6%	-10%	-2%	34%	22%	3%	-3%	4%	-4%	-10%						
August	37%	17%	6%	-3%	4%	-8%	-3%	29%	36%	7%	-5%	5%	-10%	-4%	45%	-1%	6%	-1%	2%	-5%	-2%						
September	37%	24%	4%	-3%	6%	-6%	-4%	37%	33%	9%	-6%	9%	-9%	-6%	37%	16%	-1%	1%	2%	-3%	-2%						
October	34%	22%	-1%	1%	6%	-8%	0%	24%	26%	-4%	1%	7%	-10%	1%	45%	19%	3%	0%	6%	-5%	0%						
November	32%	26%	-3%	0%	2%	-10%	-2%	23%	29%	-3%	-2%	3%	-12%	-5%	41%	23%	-4%	1%	1%	-8%	1%						
December	25%	19%	-3%	2%	6%	-6%	-2%	20%	27%	2%	2%	8%	-5%	-4%	30%	1%	-6%	1%	3%	-7%	0%						

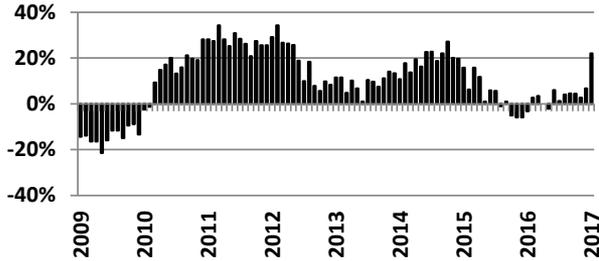
End Market Highlights

From an end market perspective, 12 out of 17 end markets ranked in positive territory in January up from 6 in December. MRO, aerospace, process and automotive were the top rated markets in the month while oil & gas and mining remain the weakest markets. Sequentially, all markets improved except auto and food & beverage with the largest gains coming from industrial machinery, mining, and construction equipment.

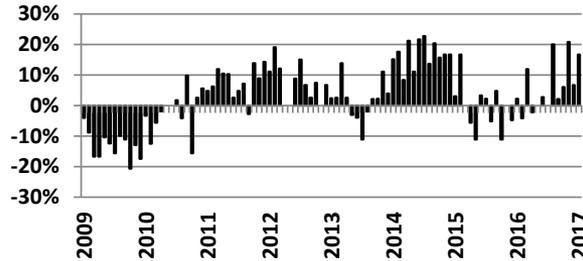


End Market Trends

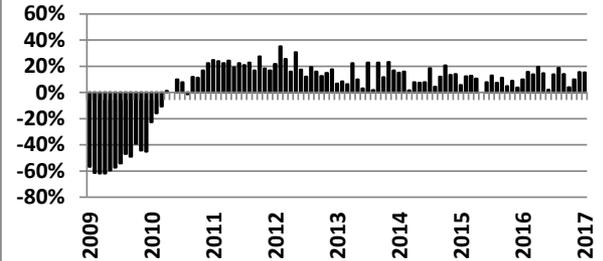
Maintenance, Repair and Operations (MRO)



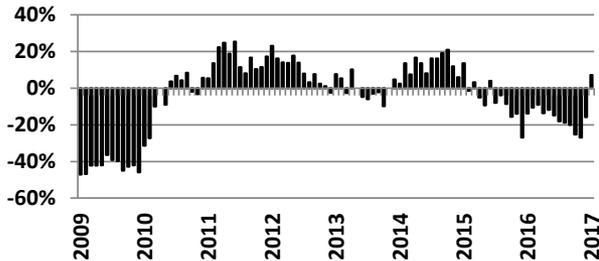
Aerospace



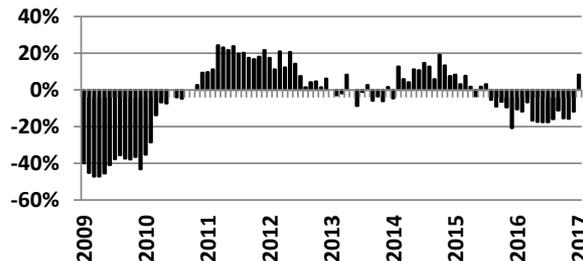
Automotive



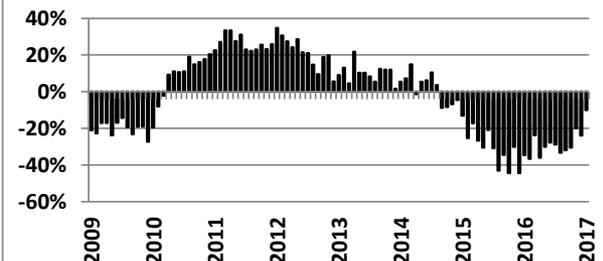
Construction Machinery



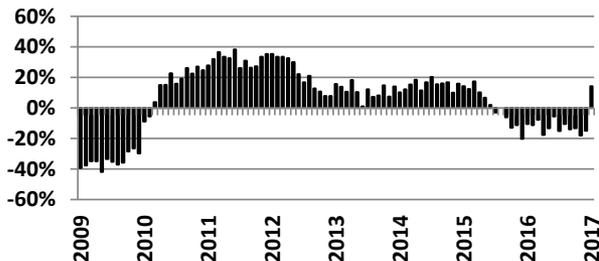
Heavy-Duty Truck



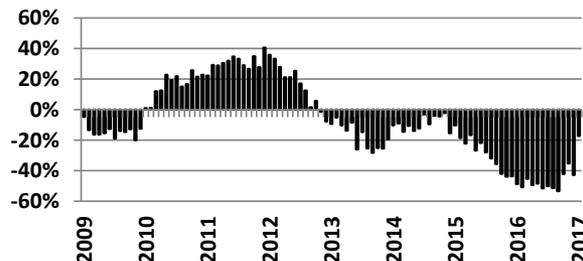
Agricultural Machinery



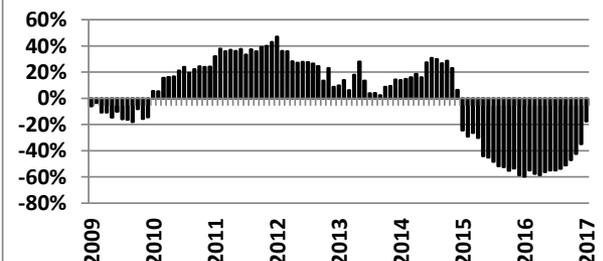
Industrial Machinery



Mining

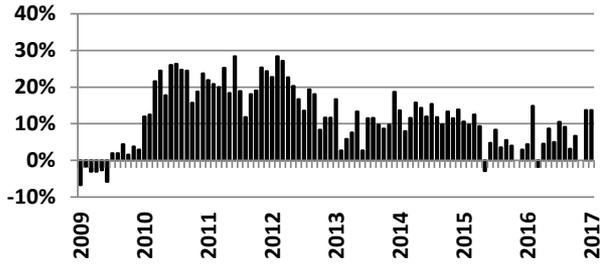


Oil & Gas

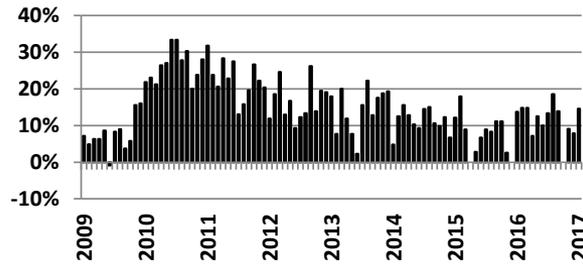


End Market Trends

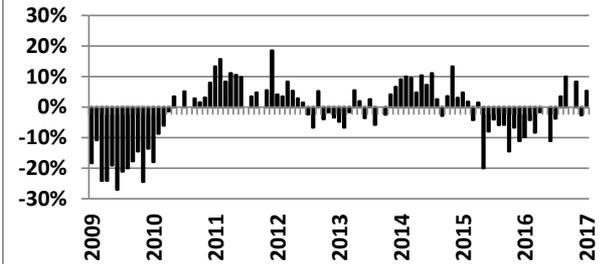
Food & Beverage



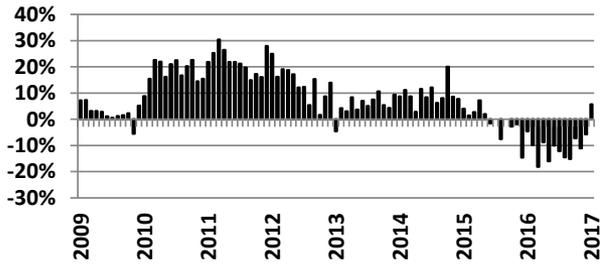
Life Sciences



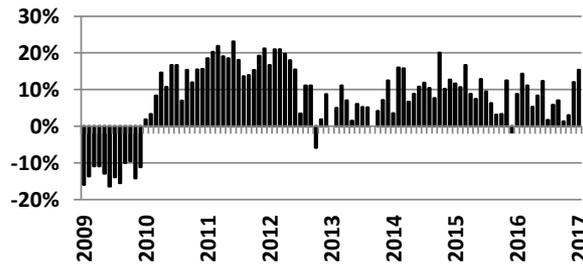
Marine



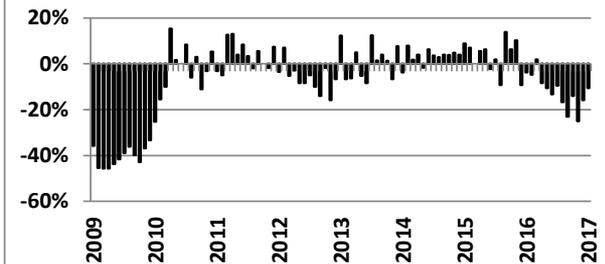
Power Generation



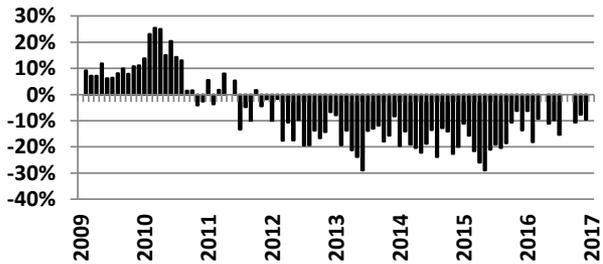
Process



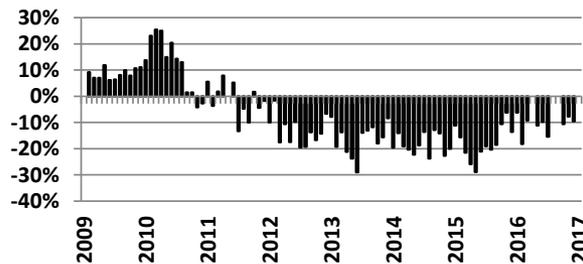
Forestry



Government



Semicon



End Market Trends – Heat Map

Fluid Power Survey - End Market Heat Map

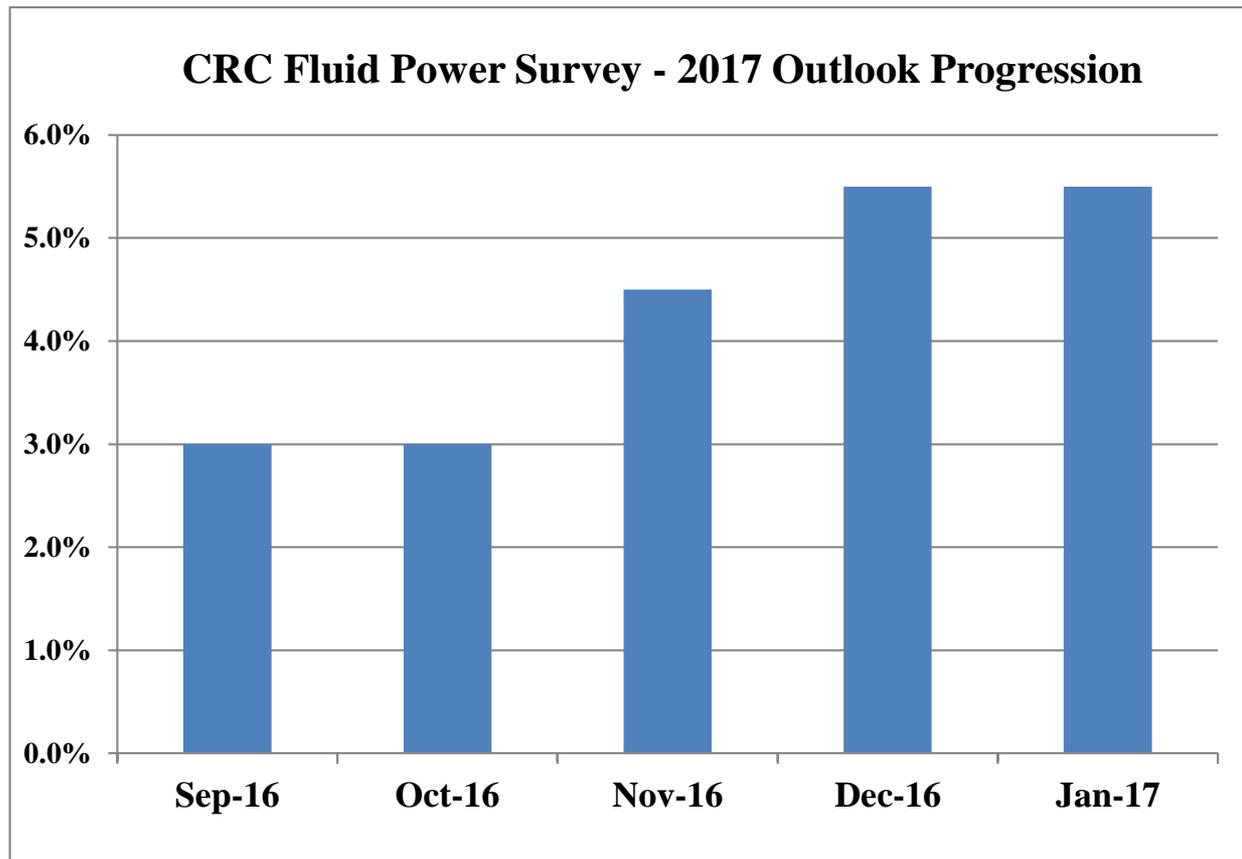
End Markets	2009												2010												2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Oil & Gas	-2%	-6%	-3%	-11%	-15%	-10%	-16%	-16%	-18%	-8%	-16%	-14%	6%	5%	15%	16%	17%	21%	24%	19%	22%	24%	24%	24%	33%	38%	36%	37%	36%	38%	33%	37%	36%	39%	40%	43%
Mining	-5%	-5%	-13%	-16%	-15%	-13%	-19%	-14%	-15%	-13%	-20%	-13%	1%	1%	12%	13%	23%	19%	22%	15%	17%	26%	21%	23%	21%	29%	29%	31%	32%	35%	33%	29%	27%	35%	28%	41%
Agricultural Machinery	-32%	-21%	-23%	-17%	-24%	-17%	-14%	-19%	-23%	-19%	-19%	-27%	-19%	-8%	-2%	9%	11%	11%	11%	19%	15%	16%	18%	20%	24%	27%	33%	33%	28%	31%	23%	22%	23%	26%	23%	26%
Government			9%	7%	12%	6%	6%	8%	10%	8%	11%	11%	14%	23%	25%	25%	15%	20%	14%	13%	1%	2%	-4%	-3%	6%	-4%	2%	8%	0%	5%	-13%	-5%	-10%	2%	-4%	-2%
Semicon			-35%	-41%	-31%	-39%	-32%	-19%	-17%	-12%	-13%	-9%	13%	11%	19%	19%	21%	33%	33%	19%	21%	13%	17%	19%	23%	22%	21%	17%	18%	21%	15%	0%	-7%	-12%	-11%	0%
Heavy-Duty Truck	-80%	-40%	-45%	-47%	-46%	-41%	-37%	-36%	-37%	-38%	-36%	-43%	-35%	-29%	-14%	-7%	-7%	0%	-4%	-5%	0%	0%	3%	6%	7%	11%	24%	23%	22%	24%	20%	20%	17%	17%	18%	22%
Construction Equipment	-82%	-47%	-47%	-42%	-42%	-36%	-38%	-40%	-45%	-43%	-42%	-46%	-31%	-27%	-10%	0%	-9%	4%	7%	4%	8%	-2%	-3%	6%	5%	14%	22%	25%	19%	25%	11%	8%	17%	10%	11%	17%
Industrial Machinery	-69%	-39%	-38%	-35%	-42%	-33%	-35%	-37%	-36%	-28%	-26%	-30%	-9%	-5%	4%	15%	15%	23%	16%	19%	26%	22%	27%	25%	27%	32%	27%	33%	33%	38%	26%	31%	27%	27%	33%	35%
Marine	-47%	-18%	-11%	-24%	-19%	-27%	-21%	-20%	-18%	-14%	-24%	-14%	-18%	-9%	-6%	-1%	4%	0%	5%	0%	3%	2%	3%	8%	15%	16%	8%	11%	11%	10%	0%	4%	5%	0%	6%	19%
Power Generation	17%	7%	7%	3%	1%	3%	1%	1%	2%	2%	-6%	-5%	9%	15%	23%	22%	16%	21%	23%	17%	20%	23%	14%	15%	22%	25%	30%	26%	22%	22%	21%	20%	15%	17%	16%	28%
MRO	-27%	-14%	-14%	-16%	-21%	-16%	-12%	-12%	-15%	-9%	-9%	-13%	-2%	-1%	9%	15%	17%	20%	13%	16%	21%	20%	19%	28%	28%	27%	34%	28%	25%	31%	28%	26%	21%	27%	25%	25%
Process	-28%	-16%	-14%	-11%	-13%	-16%	-14%	-15%	-10%	-10%	-14%	-11%	2%	3%	8%	15%	11%	17%	17%	7%	15%	12%	15%	16%	17%	20%	22%	19%	19%	23%	18%	14%	14%	15%	19%	21%
Aerospace	8%	-4%	-9%	-17%	-10%	-12%	-16%	-10%	-11%	-21%	-13%	-17%	-3%	-13%	-6%	-2%	0%	2%	4%	10%	-16%	3%	6%	5%	6%	12%	10%	10%	3%	5%	7%	-3%	14%	9%	14%	
Food & Beverage	-16%	-7%	-2%	-3%	-3%	-6%	2%	2%	4%	2%	4%	3%	12%	13%	22%	25%	18%	26%	26%	25%	25%	16%	19%	24%	21%	21%	20%	25%	18%	28%	19%	12%	18%	19%	25%	24%
Life Sciences	13%	7%	5%	6%	9%	-1%	8%	9%	4%	6%	16%	16%	22%	23%	21%	26%	27%	33%	33%	28%	30%	20%	24%	28%	32%	24%	21%	28%	23%	27%	13%	16%	20%	27%	22%	20%
Automotive	-98%	-57%	-61%	-62%	-60%	-57%	-54%	-47%	-49%	-39%	-44%	-45%	-23%	-16%	-11%	1%	0%	10%	8%	-1%	12%	11%	17%	22%	25%	24%	22%	24%	19%	22%	21%	23%	17%	28%	18%	17%
Forestry	-69%	-36%	-45%	-46%	-44%	-42%	-39%	-36%	-40%	-43%	-37%	-33%	-25%	-15%	-10%	15%	2%	0%	8%	-6%	3%	-11%	-3%	5%	-4%	-5%	13%	13%	4%	8%	3%	-2%	6%	0%	-2%	7%
Overall Average	-34%	-20%	-20%	-22%	-21%	-21%	-19%	-18%	-18%	-16%	-17%	-16%	-5%	-2%	6%	12%	11%	15%	15%	11%	15%	10%	13%	16%	18%	19%	23%	23%	20%	23%	16%	15%	14%	17%	16%	21%

End Markets	2012												2013												2014											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Oil & Gas	47%	33%	36%	28%	27%	28%	27%	26%	25%	13%	23%	9%	10%	14%	-11%	18%	28%	13%	4%	4%	2%	9%	9%	14%	14%	15%	16%	19%	16%	27%	31%	30%	27%	29%	23%	6%
Mining	36%	33%	28%	21%	21%	25%	17%	13%	2%	6%	-1%	-8%	-9%	-5%	7%	-14%	-8%	-26%	-15%	-25%	-28%	-25%	-19%	-10%	-9%	-14%	-11%	-14%	-12%	-3%	-10%	-4%	-4%	-2%	-15%	
Agricultural Machinery	35%	31%	27%	24%	29%	21%	21%	15%	10%	19%	20%	6%	9%	13%	-4%	22%	10%	10%	8%	5%	13%	12%	12%	2%	5%	7%	15%	-1%	5%	6%	10%	4%	-9%	-8%	-7%	-5%
Government	-10%	-2%	-18%	-11%	-17%	-10%	-19%	-19%	-14%	-17%	-14%	-7%	-8%	-19%	20%	-21%	-24%	-29%	-14%	-13%	-12%	-18%	-16%	-8%	-20%	-14%	-19%	-20%	-22%	-19%	-14%	-24%	-13%	-14%	-23%	-20%
Semicon	0%	5%	0%	-6%	0%	6%	-2%	-6%	-7%	6%	-17%	0%	-10%	-13%	15%	-4%	-11%	0%	-3%	3%	0%	6%	15%	13%	7%	13%	9%	13%	-4%	-6%	6%	-2%	8%	12%	5%	11%
Heavy-Duty Truck	17%	11%	21%	12%	21%	14%	8%	1%	4%	5%	1%	6%	0%	-3%	7%	8%	0%	-9%	-1%	3%	-6%	-4%	-6%	2%	-5%	13%	6%	4%	11%	11%	15%	13%	6%	19%	13%	8%
Construction Equipment	23%	16%	14%	14%	18%	14%	8%	3%	8%	2%	1%	-2%	8%	5%	4%	10%	0%	-5%	-6%	-3%	-2%	-10%	0%	5%	2%	14%	8%	17%	14%	8%	16%	16%	19%	21%	12%	6%
Industrial Machinery	35%	33%	33%	33%	30%	22%	17%	21%	13%	11%	8%	8%	16%	14%	-10%	18%	10%	1%	12%	7%	8%	15%	7%	14%	10%	12%	15%	18%	11%	17%	20%	15%	16%	17%	10%	16%
Marine	4%	4%	8%	5%	3%	1%	-2%	-7%	5%	-4%	-2%	-3%	-5%	-7%	13%	6%	2%	-4%	3%	-6%	0%	-2%	4%	7%	9%	10%	10%	5%	10%	7%	11%	3%	-3%	4%	13%	3%
Power Generation	25%	16%	19%	19%	17%	12%	12%	5%	15%	2%	9%	14%	-5%	4%	-6%	8%	4%	7%	5%	8%	11%	5%	4%	9%	9%	11%	9%	3%	12%	8%	12%	6%	8%	20%	9%	8%
MRO	29%	34%	27%	26%	26%	19%	10%	18%	8%	6%	10%	8%	-11%	11%	-2%	10%	7%	1%	10%	10%	7%	11%	14%	13%	11%	18%	14%	19%	16%	23%	23%	19%	22%	27%	20%	20%
Process	17%	21%	21%	20%	18%	15%	3%	11%	11%	-6%	2%	9%	0%	5%	6%	7%	1%	6%	5%	5%	0%	4%	7%	13%	4%	16%	16%	7%	9%	11%	12%	10%	8%	20%	10%	13%
Aerospace	11%	19%	12%	0%	0%	9%	15%	7%	3%	7%	0%	7%	2%	3%	7%	3%	-3%	-4%	-11%	-2%	2%	2%	11%	4%	15%	18%	8%	21%	11%	22%	23%	14%	20%	16%	17%	17%
Food & Beverage	23%	28%	27%	23%	20%	17%	14%	19%	18%	8%	12%	12%	17%	3%	6%	8%	13%	3%	11%	12%	10%	9%	10%	19%	14%	8%	12%	16%	14%	12%	15%	12%	10%	13%	11%	14%
Life Sciences	12%	19%	25%	13%	17%	9%	12%	13%	26%	14%	19%	19%	18%	8%	0%	12%	8%	2%	16%	22%	13%	18%	19%	19%	5%	13%	16%	13%	10%	9%	14%	15%	11%	10%	12%	7%
Automotive	22%	35%	25%	16%	31%	17%	12%	19%	16%	13%	15%	18%	7%	8%	0%	22%	10%	3%	23%	2%	23%	12%	23%	17%	15%	16%	2%	8%	7%	8%	18%	4%	12%	21%	13%	14%
Forestry	-4%	7%	-5%	-3%	-8%	-8%	-5%	-10%	-14%	-2%	-16%	-7%	12%	-7%	12%	5%	-5%	-8%	12%	1%	4%	1%	7%	8%	-4%	8%	2%	4%	-2%	6%	4%	3%	4%	4%	5%	4%
Overall Average	19%	20%	18%	14%	15%	12%	9%	8%	8%	5%	4%	5%	4%	2%	5%	7%	2%	-2%	3%	2%	3%	3%	5%	8%	5%	10%	7%	8%	6%	8%	13%	8%	8%	12%	8%	6%

End Markets	2015												2016												2017											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Oil & Gas	-24%	-29%	-26%	-30%	-44%	-45%	-48%	-52%	-53%	-55%	-54%	-59%	-60%	-55%	-58%	-59%	-56%	-55%	-55%	-54%	-51%	-47%	-42%	-35%	-18%											
Mining	-10%	-19%	-22%	-17%	-27%	-22%	-28%	-32%	-35%	-42%	-44%	-44%	-49%	-51%	-45%	-49%	-48%	-52%	-50%	-51%	-53%	-42%	-35%	-43%	-17%											
Agricultural Machinery	-13%	-25%	-17%	-27%	-31%	-21%	-31%	-43%	-34%	-44%	-30%	-44%	-35%	-37%	-24%	-36%	-30%	-28%	-29%	-33%	-32%	-30%	-20%	-24%	-10%											
Government	-11%	-16%	-22%	-26%	-29%	-21%	-19%	-20%	-19%	-11%	-6%	-14%	-6%	-18%	-9%	0%	-11%	-10%	-15%	0%	0%	-11%	-8%	-10%	0%	0%										
Semicon	6%	3%	5%	0%	-10%	-3%	-8%	-13%	-15%	-17%	-17%	-8%	0%	-7%	-9%	-3%	-9%	-10%	0%	5%	-4%	-8%	7%	-7%	3%	8%										
Heavy-Duty Truck	8%	3%	8%	2%	-3%	2%	3%	-5%	-9%	-6%	-10%	-21%	-11%	-12%	-7%	-17%	-17%	-18%	-18%	-16%	-11%	-15%	-16%	-12%	8%											
Construction Equipment	14%	-1%	3%	-5%	-9%	4%	-8%	-4%	-9%	-16%	-14%	-27%	-14%	-11%	-9%	-14%	-12%	-15%	-18%	-19%	-20%	-25%	-27%	-16%	7%											
Industrial Machinery	14%	12%	17%	10%	7%	2%	-3%	0%	-6%	-13%	-11%	-20%	-10%	-11%	-8%	-18%	-13%	-6%	-15%	-10%	-14%	-13%	-18%	-15%	14%											
Marine	5%	2%	-4%	2%	-20%	-8%	-4%	-6%	-6%	-14%	-7%	-11%	-10%	-4%	-8%	-2%	0%	-11%	-4%	4%	10%	0%	8%	-3%	5%	5%										
Power Generation	4%	1%	3%	7%	2%	-2%	0%	-8%	0%	-3%	-2%	-15%	-5%	-10%	-18%	-9%	-16%	-10%	-12%	-14%	-15%	-7%	-11%	-6%	6%											
MRO	16%	6%	16%	12%	1%	6%	6%	-1%	1%	-5%	-6%	-6%	-3%	3%	0%	-2%	6%	1%	4%	4%	4%	3%	7%	22%	22%											
Process	12%	11%	17%	9%	7%	13%	1																													

2017 Outlooks Unchanged

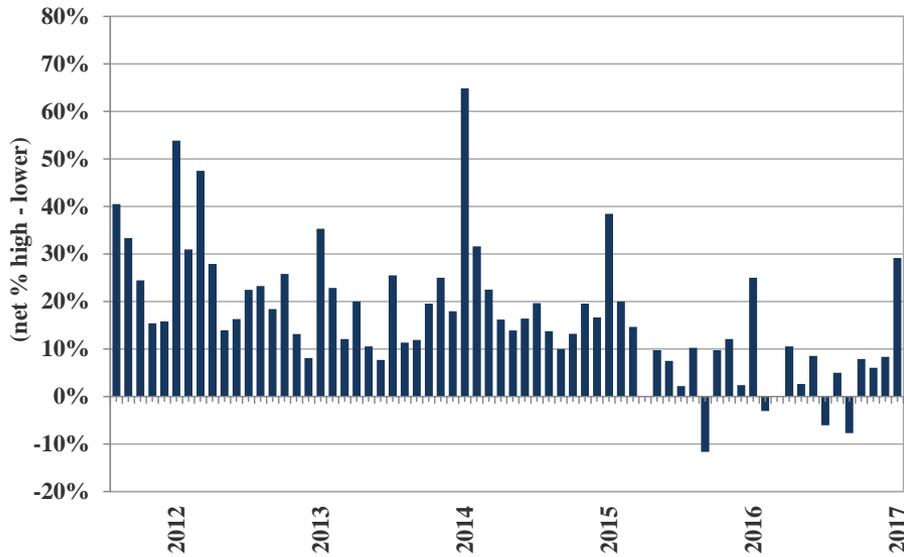
Distributors and manufacturers have left their full year outlook for 2017 unchanged at up 5-6% on average which follows a decline of ~5% in 2016. The stable outlook this month follows two consecutive months of improved outlooks from an initial forecast of 3% growth.



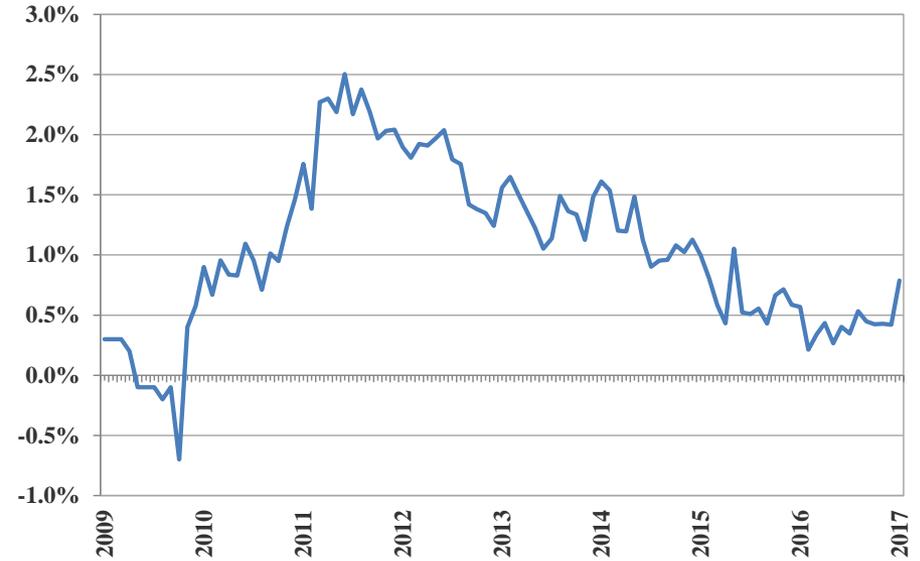
Price Contribution Trends

We estimate price contributed ~0.8% to the topline in January higher than recent months. Sequentially, a net 29% of participants (31% higher; 67% same; 2% lower) reported prices were higher in January vs December.

Price vs. Prior Month

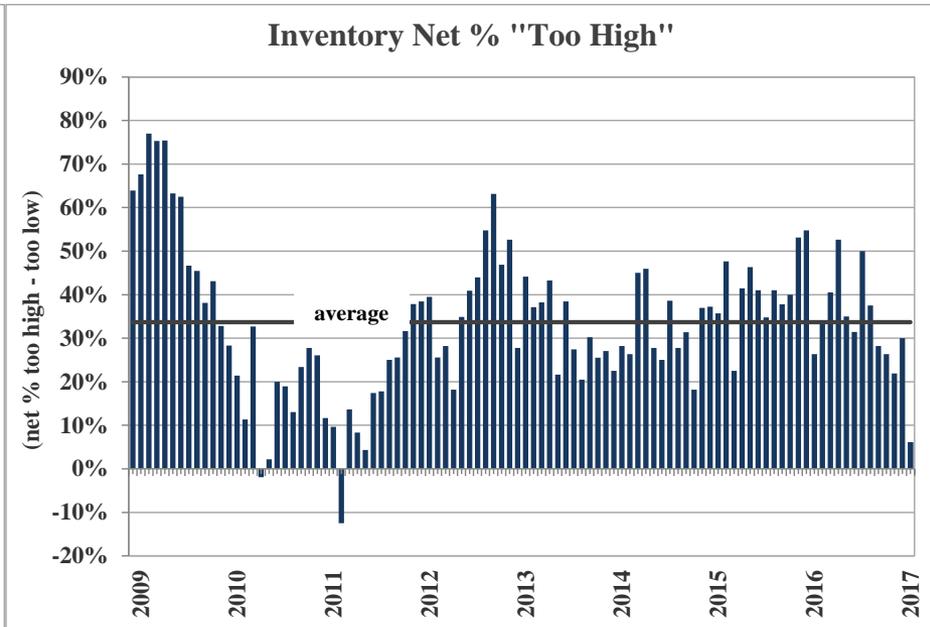
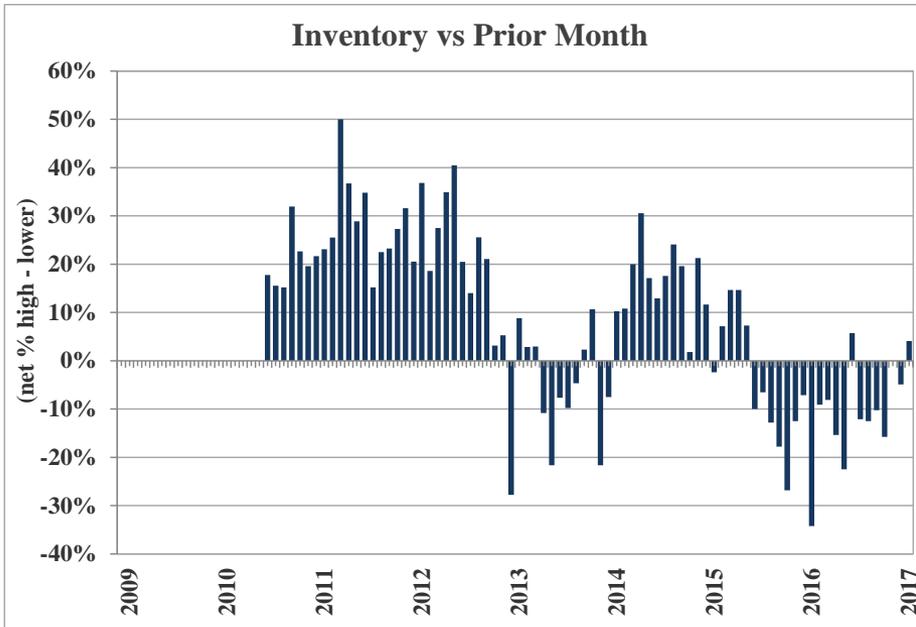


Estimated Price Realization



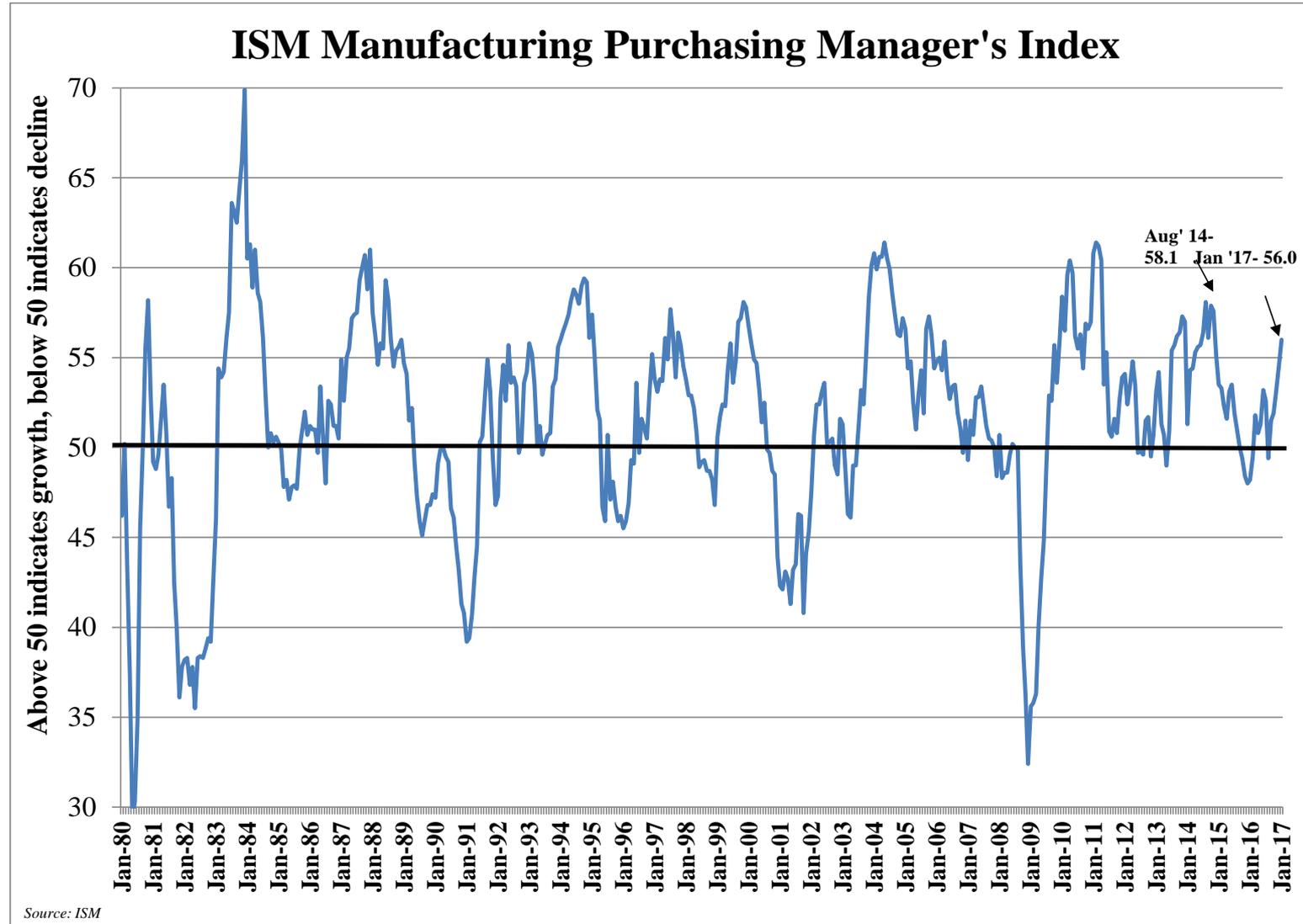
Inventory Trends Inflecting

Following roughly 18 months of inventory drawdown we are now seeing evidence suggesting we are entering a period of inventory rebuild. A net 6% of sources indicated inventories were “too high” in January down from 30% in December. This is the fifth consecutive month below the long run average of 34% and the lowest reading since 2011. Sequentially, a net 5% of contacts reported inventories were higher in January vs. a net 5% lower in December.



Macroeconomic Indicators

ISM Purchasing Manager Index: January ISM at 56.0, up from 54.7 in December



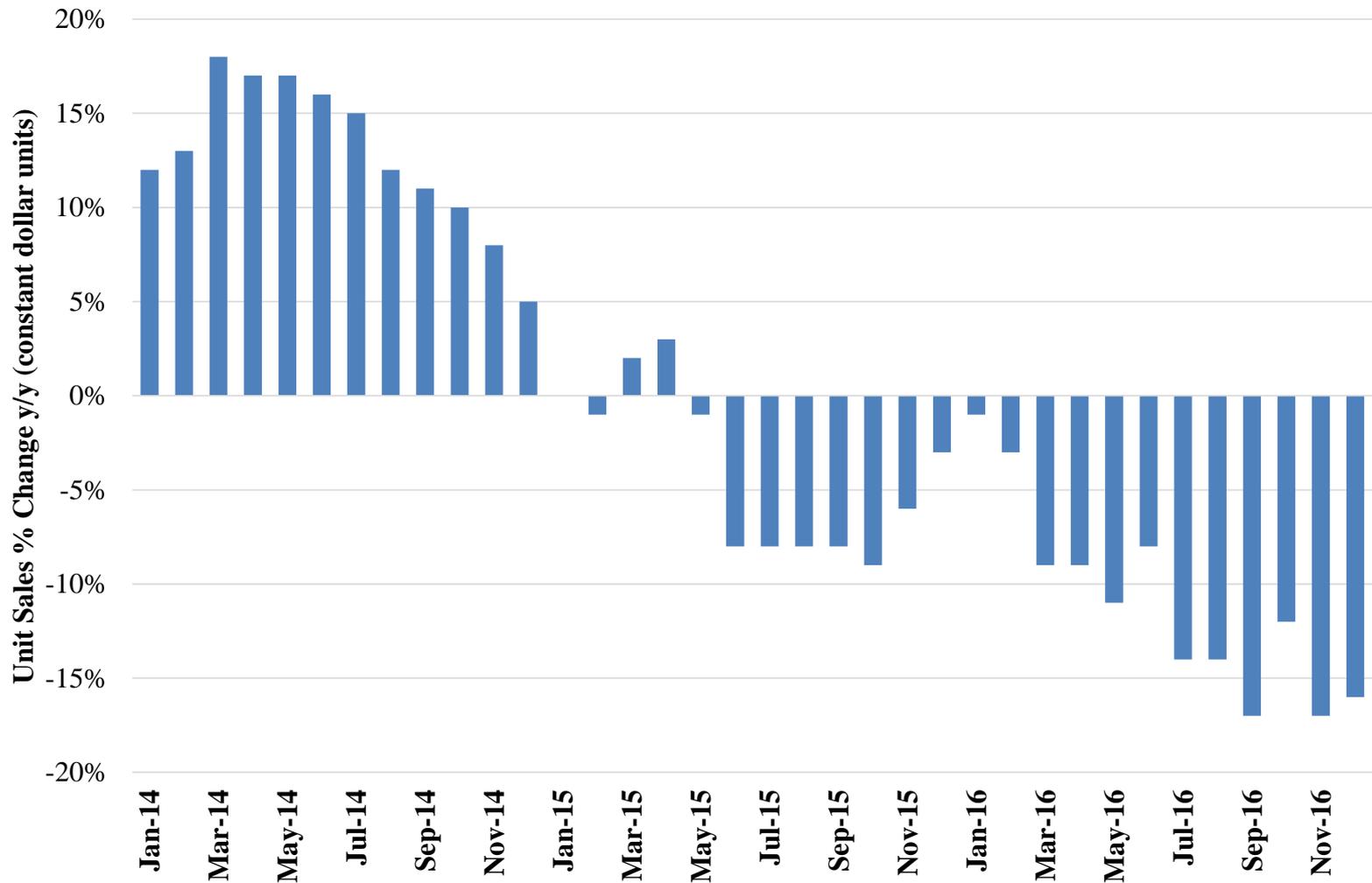
ISM Purchasing Manager Index: End Market Ranking

ISM Manufacturing End Market Momentum																									
Major End Market (rank order)	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17
Plastics and rubber products	↔	↔																							
Miscellaneous manufacturing	↑	↑	↓	↑	↑	↓	↑	↑	↔	↓	↓	↓	↑	↓	↓	↑	↑	↑	↑	↓	↓	↓	↑	↑	↑
Apparel, leather and allied products	↔					↔	↑	↑								↔									
Paper products	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↔	↑	↓	↑	↑	↑	↑	↑	↑	↓	↓	↑	↑	↑	↑
Chemical products	↑	↑	↑	↑	↑	↑	↑	↑	↔	↑	↓	↓	↓	↓	↓	↑	↑	↑	↑	↓	↓	↓	↑	↑	↑
Transportation equipment	↑	↑	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↑
Food, beverage and tobacco products	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↓	↓	↓	↑	↑	↑	↑	↑	↓	↓	↑	↑	↑
Machinery	↑	↑	↑	↑	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↔	↑	↑	↑	↑	↓	↓	↓	↑	↑	↑
Petroleum and coal products	↑	↔	↓	↔	↔	↓	↔	↓	↓	↓	↓	↔	↓	↓	↓	↓	↓	↓	↑	↑	↓	↓	↑	↑	↑
Primary metals	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↑	↑	↑	↑	↓	↓	↓	↑	↑	↑
Fabricated metal products	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↑	↑	↑	↑	↓	↓	↓	↑	↑	↑
Computer and electronic products	↑	↓	↓	↓	↓	↓	↔	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↑	↑	↑	↑	↑	↑	↑
Textile mills	↓	↓	↓	↓	↓	↔	↑	↑	↑	↑	↔	↑	↑	↑	↑	↑	↑	↑	↑	↓	↓	↑	↑	↑	↔
Printing, related support activities	↑	↑	↔	↑	↑	↔	↑	↔	↑	↑	↑	↑	↑	↓	↓	↑	↑	↑	↑	↑	↑	↑	↓	↓	↓
Electrical equipment, appliances, components	↑	↑	↓	↑	↑	↓	↑	↓	↓	↓	↓	↓	↑	↑	↓	↔	↑	↑	↑	↓	↓	↑	↑	↑	↓
Furniture and related products	↑	↑	↑	↑	↑	↓	↑	↑	↑	↑	↓	↔	↑	↑	↑	↑	↓	↔	↑	↓	↓	↑	↓	↓	↓
Wood product	↓	↔	↑	↑	↔	↑	↓	↔	↑	↓	↔	↓	↓	↔	↔	↑	↑	↑	↑	↔	↔	↓	↑	↑	↓
Nonmetallic mineral products	↓	↑	↑	↑	↑	↑	↑	↑	↑	↔	↑	↓	↓	↔	↑	↑	↑	↓	↑	↑	↑	↑	↑	↑	↓
Statistics	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17
% Better	78%	67%	61%	83%	78%	61%	61%	56%	33%	39%	28%	33%	44%	50%	67%	61%	67%	72%	61%	33%	39%	56%	61%	61%	67%
Unchanged	11%	17%	6%	6%	11%	17%	11%	11%	11%	11%	17%	11%	0%	11%	6%	17%	0%	11%	0%	6%	0%	0%	6%	6%	6%
% Worse	11%	17%	33%	11%	11%	22%	28%	33%	56%	50%	56%	56%	56%	39%	28%	22%	33%	17%	39%	61%	61%	44%	33%	33%	28%
Net % of Industries Improving	67%	50%	28%	72%	67%	39%	33%	22%	-22%	-11%	-28%	-22%	-11%	11%	39%	39%	33%	56%	22%	-28%	-22%	11%	28%	28%	39%
PMI	53.5	53.3	52.3	51.6	53.1	53.5	51.9	51.0	50.0	49.4	48.4	48.0	48.2	49.5	51.8	50.8	51.3	53.2	52.6	49.4	51.5	51.9	53.2	54.5	56.0

Source: Institute for Supply Management.

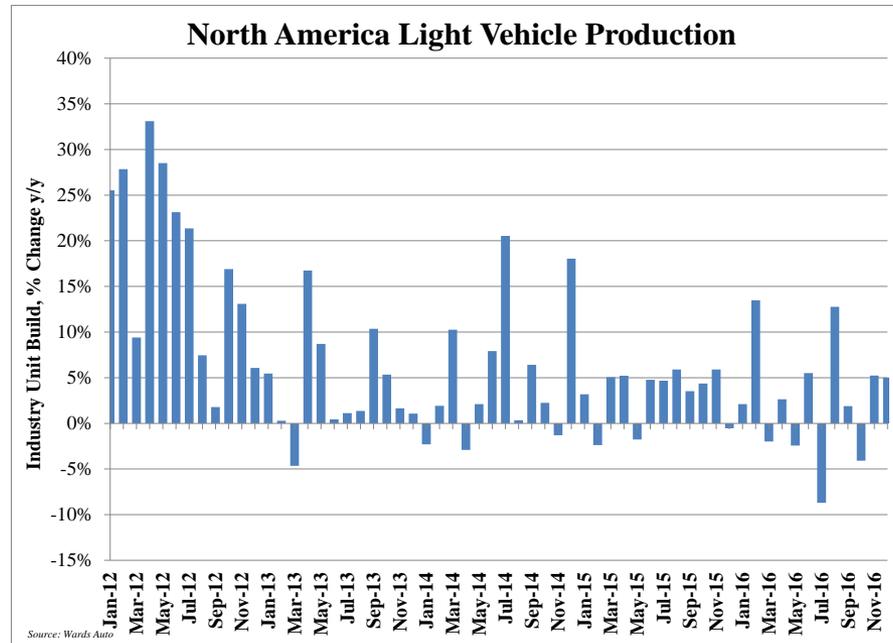
Construction Equipment: Caterpillar NA Sales Down 16%

Caterpillar N. America Construction Retail Sales



Source: Company reports, CRC estimates.

Automotive: Production Up 5% y/y in December



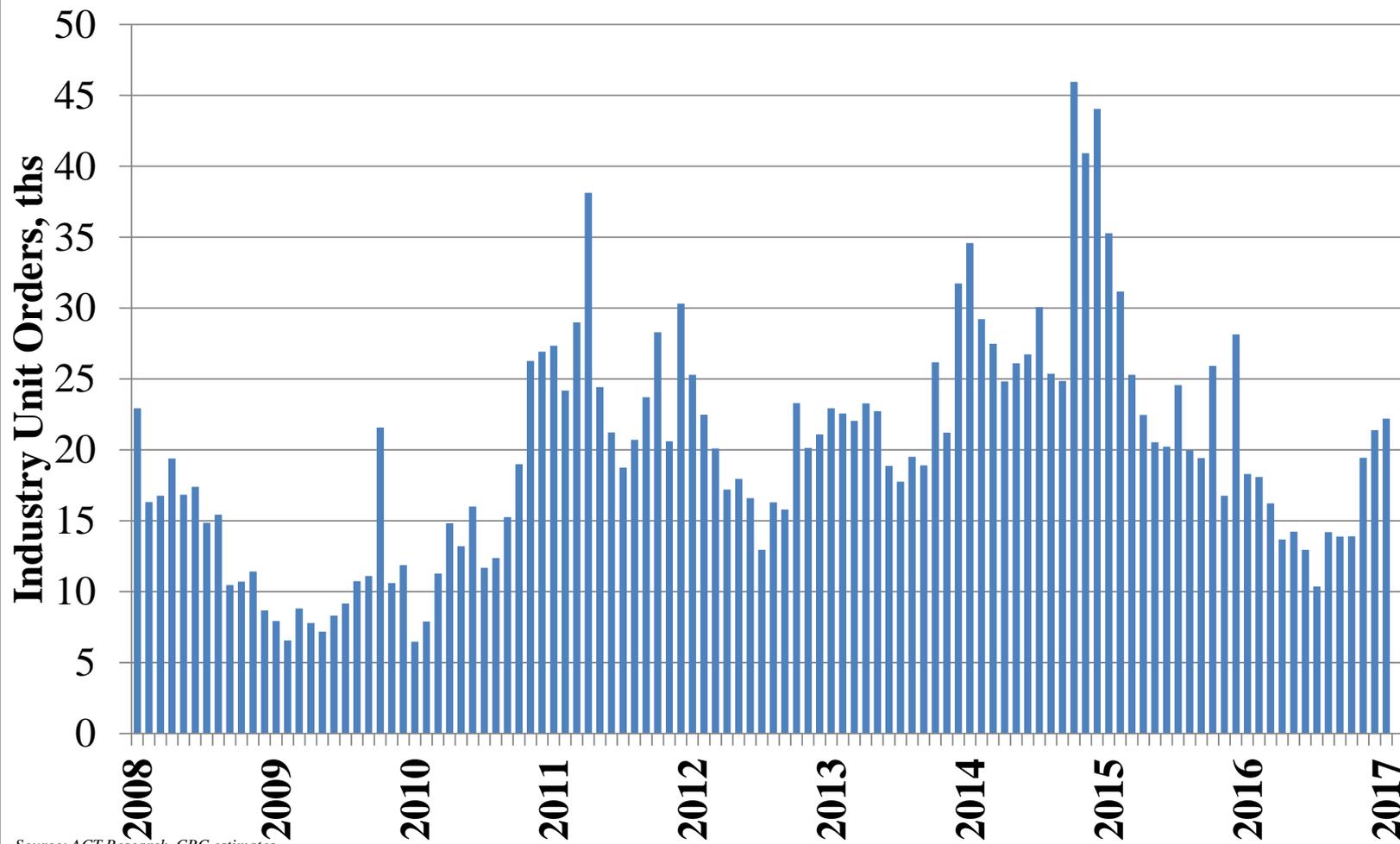
Wards Vehicle Production Outlook													
Units thousands	1Q16	2Q16	3Q16	4Q16	1Q17E	2Q17E	3Q17E	4Q17E	2014	2015	2016	2017E	2018E
United States	2997	3112	2955	2872	2992	2990	2740	2845	11,364	11,784	11,935	11,567	11,570
Canada	626	612	552	566	599	597	494	499	2,382	2,269	2,356	2,190	2,027
Mexico	803	859	896	899	958	1059	1022	1033	3,193	3,388	3,457	4,072	4,444
Total NAFTA Build	4,426	4,584	4,402	4,337	4,549	4,647	4,257	4,377	16,939	17,440	17,749	17,829	18,041
% change y/y													
United States	4%	1%	0%	0%	0%	-4%	-7%	-1%	5%	4%	1%	-3%	0%
Canada	16%	10%	-3%	-7%	-4%	-2%	-10%	-12%	1%	-5%	4%	-7%	-7%
Mexico	-5%	-2%	9%	7%	19%	23%	14%	15%	10%	6%	2%	18%	9%
Total NAFTA Build	4%	2%	1%	1%	3%	1%	-3%	1%	5%	3%	2%	0%	1%

Source: Wards, Cleveland Research. January 2017

Heavy Duty Truck:

Orders Up ~4%; Builds Forecast Down 12% in 2017

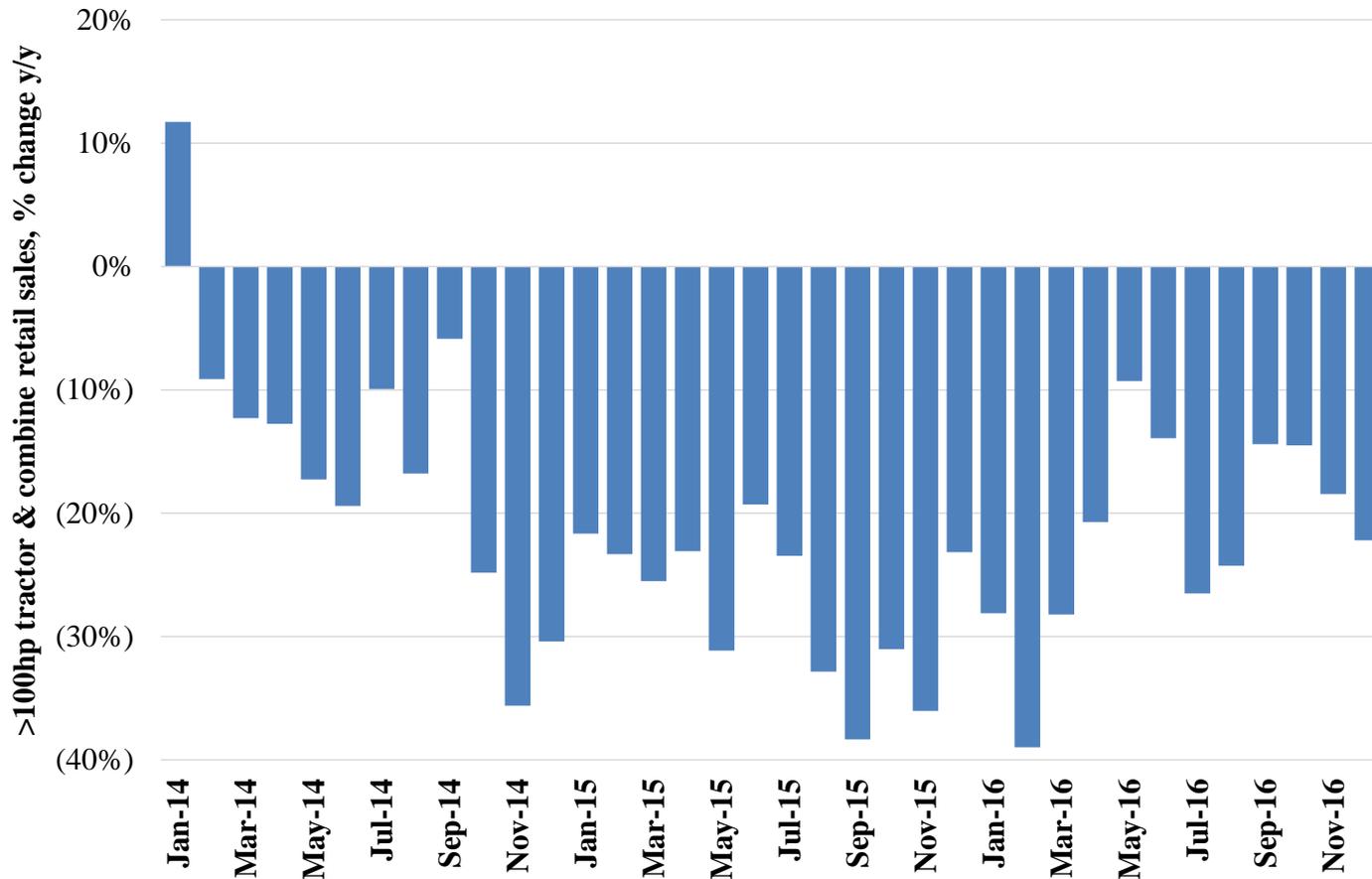
N. American Class 8 Industry Net Orders



Source: ACT Research, CRC estimates

Farm Equipment: Sales Forecast ↓ 15-20% in 2016

N. American High Horsepower Tractor & Combine Sales



Source: AEM, CRC estimates

Disclosures

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

<u>Rating</u>	<u>Percent</u>
Buy	17%
Neutral	81%
Underperform	2%

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.

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