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Harris Williams & Co. Ltd Niederlassung Frankfurt (German branch) is registered in the Commercial Register (Handelsregister) of the Local Court (Amtsgericht) of Frankfurt am Main, Germany, under registration number HRB 96687, having its business address at Bockenheimer Landstrasse 33-35, 60325 Frankfurt am Main, Germany. Permanent Representative (Ständiger Vertreter) of the Branch Niederlassung: Mr. Jeffery H. Perkins.

# CHEMICALS AND SPECIALTY MATERIALS INDUSTRY UPDATE

## INTRODUCTION

Harris Williams & Co. is pleased to present our chemicals and specialty materials industry update for March 2015. This report provides commentary and analysis on current market trends and merger and acquisition dynamics within the global chemicals and specialty materials industry.

With favorable fundamentals and supportive debt and equity capital markets, we expect M&A activity in the chemicals and specialty materials market to remain strong throughout 2015. Both strategic and financial buyers are eager to capitalize on high-quality opportunities.

We hope you find this edition helpful and encourage you to contact us directly if you would like to discuss our perspective on current industry trends or our relevant industry experience.

## OUR PRACTICE

Harris Williams & Co. is a leading advisor to the chemicals and specialty materials industry. Our significant experience covers a broad range of business models, market segments, and applications.

### Business Types

- Manufacturers
- Distributors
- Outsourced Solutions
- Other Service Providers

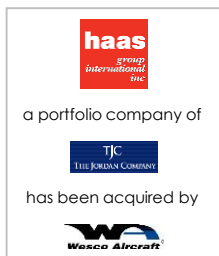
### End Markets

- Aerospace
- Agricultural
- Automotive
- Consumer
- Industrial
- Life Sciences
- Oil & Gas
- Other

### Applications

- Adhesives, Sealants, & Elastomers
- Aerosols
- Cleaning & Preparation
- Films
- Paints & Coatings
- Water Treatment
- Other

## HARRIS WILLIAMS & CO. DEAL SPOTLIGHT



### Haas Group

Harris Williams & Co. advised Haas Group, a portfolio company of The Jordan Company, on its sale to Wesco Aircraft, a portfolio company of The Carlyle Group. Haas is a leading global provider of chemical supply chain management solutions to the commercial aerospace, airline, military, energy, and other markets.



### Q Holding Company

The firm also advised Q Holding Company (Q), a portfolio company of Industrial Growth Partners, on its sale to 3i Group. Q is a leading global manufacturer of highly-engineered, precision-molded elastomeric components.

## CONTENTS

- [WHAT WE'RE READING](#)
- [ECONOMIC UPDATE](#)
- [PUBLIC COMPARABLES](#)
- [PUBLIC MARKETS](#)
- [SELECT M&A ACTIVITY](#)

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## WHAT WE'RE READING

**PLASTICS: INDUSTRY'S FORTUNES ARE UNCERTAIN****IHS Chemical Week** 3/13/2015

The fall in crude oil prices and its impact on shale oil and gas production, as well as increased consumer spending in the United States, a weak euro, and slower GDP growth in China, are factors that will continue to influence supply-demand fundamentals for plastics worldwide. Over the last nine months, plastics producers have been struggling with reduced visibility caused by a series of economic developments. Changed geopolitical scenarios and revisions to GDP growth forecasts together with volatility in feedstock prices and exchange rates—at times working in union, at times working in opposition—have complicated the short- and medium-term outlooks for plastics.

Read the full article [here](#).**SEN. UDALL FACES SCRUTINY OVER SWEEPING CHEMICAL BILL****The Washington Post** 3/11/2015

Tom Udall and a Senate colleague have introduced a bill that would overhaul 40-year-old federal regulations that govern the nation's chemical industry. The bill would require the Environmental Protection Agency to make its assessments about chemical safety solely on risk to public health and the environment, and would increase fines on chemical companies that break the law from \$25,000 to \$37,500 per violation. The American Chemical Council—the national trade group for chemical companies such as Dow and DuPont—endorsed the bill, as did the National Environment Defense Fund. Udall has faced criticism from environmental activists, who see the bill as favorable for large chemical companies who have donated tens of thousands of dollars to his campaigns.

Read the full article [here](#).**PRIVATE EQUITY FIRMS FLEX MUSCLES IN LARGE CHEMICAL DEALS****Dow Jones & Company** 3/2/2015

Strong competition for high-quality deals coupled with favorable dynamics in the chemicals market have led private equity firms with limited chemicals experience to seek out investments in the industry. Backed in part by a thesis of sustained low natural gas prices, more generalist firms are competing for marquis chemicals assets. The opportunity to put significant capital to work in highly attractive transactions has grown more compelling given greater competition for smaller deals.

Read the full article [here](#).**PAINTS AND COATINGS: BRIGHT OUTLOOK, ENHANCED FUNCTIONS****IHS Chemical Week** 2/27/2015

Producers and analysts expect the global paints and coatings market to grow steadily in 2015 after a solid 2014. Global growth in paints and coatings consumption is forecast to average 6% per year through 2018, with growth generally higher in the emerging world, according to IHS Chemical. Steady improvement in the North American construction sector will be a key growth driver for many coatings producers and their suppliers, while outside the United States, emerging markets remain a key source of growth despite some areas slackening.

Read the full article [here](#).**GLOBAL OLEOCHEMICALS MARKET TO TOUCH \$30 BILLION BY 2020****Business Standard** 12/1/2014

Driven by rapid growth in various end markets including personal care, food additives, surfactants, and pharmaceuticals, the global oleochemicals market is expected to reach \$30 billion by 2020, according to a new study by Grand View Research Inc. Demand for oleochemicals is further supported by volatility in petrochemicals prices as well as enhanced concern for the environmental impact of chemical production.

Read the full article [here](#).

## ECONOMIC UPDATE

### GROSS DOMESTIC PRODUCT

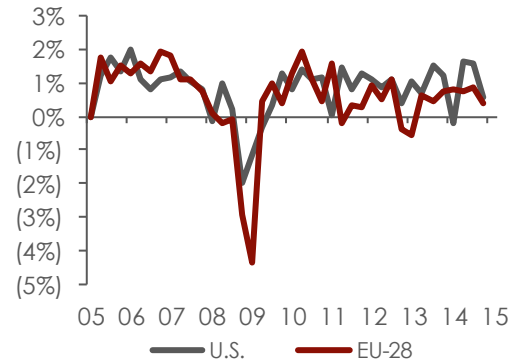
U.S.

- Real GDP increased by 0.6% in Q4 2014 (annual rate of 2.2%) led by strong exports and personal consumption.
- Even factoring in a dismal first quarter, full-year GDP in 2014 grew 2.4%, the best annual performance since 2010, and at an annual rate of 4.1% over the last nine months.

EU-28

- Seasonally adjusted GDP in the EU-28 for Q4 2014 rose by 0.4% in Q4 2014, with 1.3% annualized growth.

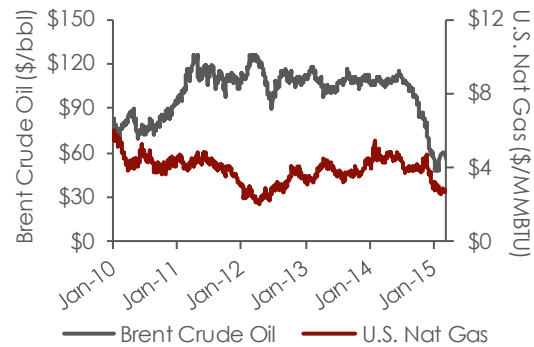
**GDP**  
(Quarter-Over-Quarter Growth)



### OIL & NATURAL GAS

- Global oil prices continued their decline in early 2015 as low demand growth for oil in Europe and Asia, combined with increasing supplies in the United States and the Middle East, have driven prices down to the lowest levels since early 2009.
- Depressed natural gas prices continue to spur growth, as reduced feedstock costs support new capital investment.
- Taken together, although the ratio of oil prices to natural gas has declined, it is still favorable and should continue to support U.S. petrochemical production.

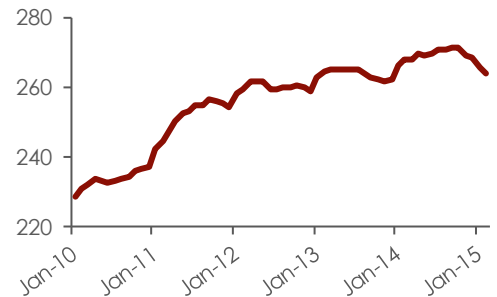
**Oil & Natural Gas Price Trends**



### CHEMICAL MANUFACTURING PRODUCERS PRICE INDEX

- Following a sustained trend of positive growth, the chemical manufacturing producers price index has declined over the past six months, driven by lower oil prices as well as other reduced costs for various inputs.
  - The index declined 0.6% in February compared to January, and is down 2.7% from its peak in September 2014.
- Looking ahead, industry analysts expect chemical sales to increase by nearly 4% in 2015 due to relatively lower pricing along with favorable GDP growth.

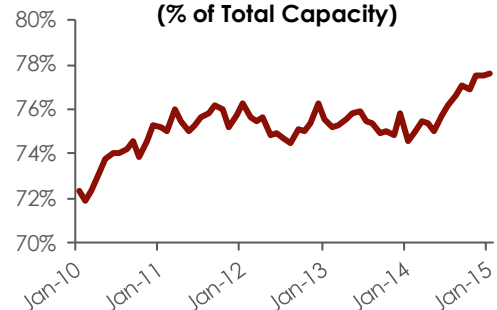
**Chemical Manufacturing Producer Price Index (PPI)**



### CHEMICAL CAPACITY UTILIZATION

- Capacity utilization in the chemicals industry continues to expand in 2015 as relatively low feedstock costs and improving economic conditions support demand.
- Given rising utilization and supportive conditions, major chemical producers have signaled the prospect for new capacity to be added over the near- to mid-term, particularly in the gulf coast region for U.S. producers.

**Chemical Capacity Utilization (% of Total Capacity)**



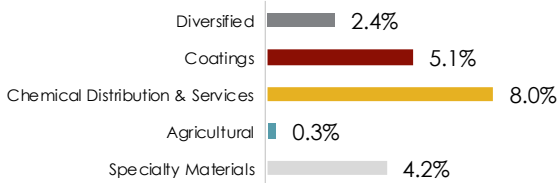
## PUBLIC COMPARABLES

As of March 16, 2015 (\$ in millions, except per share amounts)

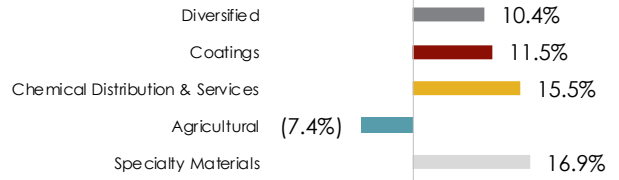
	Stock Performance			TEV	3 Year Revenue CAGR	2014			Price / Earnings		TEV / EBITDA			Free Cash Flow Conversion <sup>1</sup>	Net Debt / EBITDA
	Current Price	% of LTM High	Mkt Cap			Revenue	EBITDA	Margin	2015E	2016P	LTM	2015E	2016P		
<b>Diversified</b>															
BASF SE	\$92.55	99.2%	\$89,995	\$105,156	0.0%	\$73,035	\$12,652	17.3%	16.5x	15.1x	9.8x	9.3x	8.7x	46.6%	1.1x
E. I. du Pont de Nemours and Company	77.07	95.6%	69,780	73,734	1.5%	35,266	6,934	19.7%	19.7x	17.6x	11.7x	11.4x	10.6x	68.0%	0.5x
The Dow Chemical Company	47.03	85.6%	54,446	73,910	(1.0%)	58,262	9,100	15.6%	16.5x	13.4x	8.1x	8.5x	7.6x	56.5%	1.6x
Eastman Chemical Co.	69.24	76.5%	10,292	17,723	9.8%	9,525	2,061	21.6%	9.8x	8.9x	8.6x	7.9x	7.4x	71.2%	3.6x
Ashland Inc.	126.90	97.1%	8,790	10,809	0.2%	6,080	1,101	18.1%	16.9x	14.1x	17.0x	9.1x	8.3x	59.9%	1.8x
Celanese Corporation	55.53	83.7%	8,491	10,689	0.8%	6,915	1,546	22.4%	10.6x	9.7x	8.2x	7.6x	7.1x	75.9%	1.3x
FMC Corp.	60.09	74.8%	8,011	9,647	10.7%	4,122	906	22.0%	16.4x	13.4x	11.4x	10.8x	9.3x	73.5%	1.8x
Albemarle Corporation	52.79	69.2%	5,921	6,494	(3.9%)	2,535	566	22.3%	15.1x	13.0x	14.0x	7.2x	6.6x	74.2%	0.8x
Clariant AG	17.98	95.6%	5,722	7,101	3.2%	6,122	834	13.6%	16.1x	13.5x	8.2x	8.4x	7.6x	60.9%	1.5x
<b>Median</b>		<b>85.6%</b>			<b>0.8%</b>			<b>19.7%</b>	<b>16.4x</b>	<b>13.4x</b>	<b>9.8x</b>	<b>8.5x</b>	<b>7.6x</b>	<b>68.0%</b>	<b>1.5x</b>
<b>Mean</b>		<b>86.4%</b>			<b>2.4%</b>			<b>19.2%</b>	<b>15.3x</b>	<b>13.2x</b>	<b>10.8x</b>	<b>8.9x</b>	<b>8.1x</b>	<b>65.2%</b>	<b>1.5x</b>
<b>Coatings</b>															
PPG Industries Inc.	\$230.08	96.7%	\$31,302	\$34,224	5.1%	\$15,277	\$2,402	15.7%	19.8x	17.5x	14.1x	12.4x	11.6x	74.7%	1.2x
The Sherwin-Williams Company	288.14	98.9%	27,343	29,108	8.3%	11,134	1,522	13.7%	25.5x	22.3x	19.6x	15.8x	14.2x	86.5%	1.2x
Akzo Nobel NV	70.55	99.9%	18,122	20,327	(0.8%)	14,285	2,082	14.6%	18.5x	16.3x	11.3x	9.6x	8.9x	64.8%	0.8x
The Valspar Corporation	85.89	94.5%	6,978	8,493	4.3%	4,538	702	15.5%	18.2x	15.8x	12.0x	11.4x	10.5x	83.3%	2.2x
RPM International Inc.	48.08	92.5%	6,431	7,700	8.7%	4,465	603	13.5%	19.1x	16.5x	13.7x	11.5x	10.3x	84.7%	1.8x
<b>Median</b>		<b>96.7%</b>			<b>5.1%</b>			<b>14.6%</b>	<b>19.1x</b>	<b>16.5x</b>	<b>13.7x</b>	<b>11.5x</b>	<b>10.5x</b>	<b>83.3%</b>	<b>1.2x</b>
<b>Mean</b>		<b>96.5%</b>			<b>5.1%</b>			<b>14.6%</b>	<b>20.2x</b>	<b>17.7x</b>	<b>14.2x</b>	<b>12.2x</b>	<b>11.1x</b>	<b>78.8%</b>	<b>1.4x</b>
<b>Chemical Distribution &amp; Services</b>															
Brenntag AG	\$55.60	99.3%	\$9,094	\$10,670	4.8%	\$9,972	\$871	8.7%	21.5x	19.8x	14.4x	12.6x	11.8x	85.4%	1.7x
IMCD N.V.	32.50	95.6%	1,720	1,994	16.5%	1,367	133	9.7%	20.2x	18.6x	16.6x	15.6x	14.6x	96.9%	1.9x
Quaker Chemical Corporation	85.03	90.9%	1,131	1,150	3.8%	765	97	12.6%	19.6x	18.1x	11.7x	11.3x	10.5x	86.3%	0.1x
Aceto Corp.	21.92	92.2%	638	708	6.7%	525	49	9.3%	18.0x	NA	13.7x	NA	NA	97.8%	1.4x
<b>Median</b>		<b>93.9%</b>			<b>5.8%</b>			<b>9.5%</b>	<b>19.9x</b>	<b>18.6x</b>	<b>14.1x</b>	<b>12.6x</b>	<b>11.8x</b>	<b>91.6%</b>	<b>1.5x</b>
<b>Mean</b>		<b>94.5%</b>			<b>8.0%</b>			<b>10.1%</b>	<b>19.8x</b>	<b>18.8x</b>	<b>14.1x</b>	<b>13.2x</b>	<b>12.3x</b>	<b>91.6%</b>	<b>1.3x</b>
<b>Agricultural</b>															
Monsanto Company	\$117.91	91.6%	\$57,022	\$62,071	9.7%	\$15,515	\$4,565	29.4%	19.8x	17.1x	13.3x	12.2x	11.2x	77.6%	1.1x
Syngenta AG	336.50	96.1%	30,686	32,768	4.4%	15,070	2,858	19.0%	17.5x	15.5x	11.4x	11.2x	10.1x	79.2%	0.7x
Potash Corp. of Saskatchewan, Inc.	42.55	90.3%	27,680	31,337	(7.7%)	6,555	3,010	45.9%	15.6x	14.4x	11.8x	9.3x	8.8x	59.6%	1.3x
The Mosaic Company	46.90	87.1%	17,158	18,633	(3.0%)	9,023	2,196	24.3%	13.5x	12.2x	8.1x	7.2x	6.7x	59.6%	0.7x
Agrium Inc.	143.95	98.3%	16,242	19,993	1.7%	16,324	1,765	10.8%	14.3x	12.4x	13.4x	8.5x	7.6x	(31.8%)	2.3x
Intrepid Potash, Inc.	11.64	66.0%	885	957	(3.4%)	363	89	24.4%	72.3x	34.3x	9.7x	9.6x	7.9x	37.1%	0.8x
<b>Median</b>		<b>90.9%</b>			<b>(0.6%)</b>			<b>24.4%</b>	<b>16.5x</b>	<b>14.9x</b>	<b>11.6x</b>	<b>9.4x</b>	<b>8.4x</b>	<b>59.6%</b>	<b>1.0x</b>
<b>Mean</b>		<b>88.2%</b>			<b>0.3%</b>			<b>25.6%</b>	<b>25.5x</b>	<b>17.7x</b>	<b>11.3x</b>	<b>9.7x</b>	<b>8.7x</b>	<b>46.9%</b>	<b>1.2x</b>
<b>Specialty Materials</b>															
Compagnie de Saint-Gobain S.A.	\$41.15	88.7%	\$24,416	\$32,490	(0.8%)	\$41,103	\$4,986	12.1%	15.6x	13.2x	7.4x	6.8x	6.2x	64.9%	1.4x
Evonik Industries AG	32.37	99.1%	15,968	15,642	(4.0%)	12,909	2,256	17.5%	17.6x	15.4x	8.7x	7.2x	6.5x	34.9%	NM
Solvay SA	134.60	99.6%	11,852	12,902	10.7%	10,172	2,133	21.0%	17.2x	14.8x	5.5x	6.4x	5.9x	59.2%	0.4x
Avery Dennison Corporation	52.69	96.3%	4,768	5,674	2.9%	6,354	691	10.9%	15.9x	13.9x	8.6x	8.0x	7.4x	77.6%	1.3x
PolyOne Corporation	37.64	86.8%	3,354	4,140	12.5%	3,858	446	11.6%	17.2x	14.6x	11.6x	8.8x	8.0x	74.0%	1.8x
Rogers Corporation	81.71	98.9%	1,505	1,334	3.8%	613	110	17.9%	21.5x	17.8x	10.9x	NA	NA	75.8%	NM
<b>Median</b>		<b>97.6%</b>			<b>3.3%</b>			<b>14.8%</b>	<b>17.2x</b>	<b>14.7x</b>	<b>8.6x</b>	<b>7.2x</b>	<b>6.5x</b>	<b>69.4%</b>	<b>1.4x</b>
<b>Mean</b>		<b>94.9%</b>			<b>4.2%</b>			<b>15.2%</b>	<b>17.5x</b>	<b>15.0x</b>	<b>8.8x</b>	<b>7.4x</b>	<b>6.8x</b>	<b>64.4%</b>	<b>1.2x</b>
<b>Overall Median</b>		<b>95.0%</b>			<b>3.5%</b>			<b>16.5%</b>	<b>17.3x</b>	<b>15.1x</b>	<b>11.5x</b>	<b>9.3x</b>	<b>8.5x</b>	<b>73.7%</b>	<b>1.3x</b>
<b>Overall Mean</b>		<b>91.2%</b>			<b>3.5%</b>			<b>17.7%</b>	<b>19.2x</b>	<b>15.8x</b>	<b>11.5x</b>	<b>9.8x</b>	<b>9.0x</b>	<b>67.1%</b>	<b>1.4x</b>

PUBLIC MARKETS

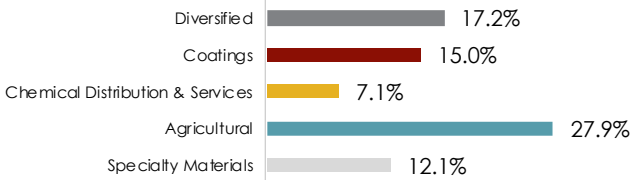
3-YEAR REVENUE CAGR (2011 – 2014)



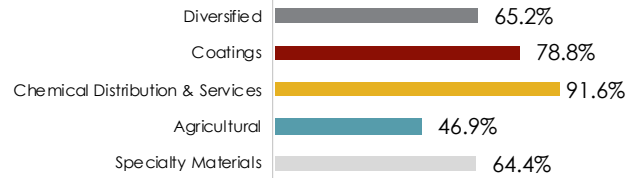
3-YEAR EBITDA CAGR (2011 – 2014)



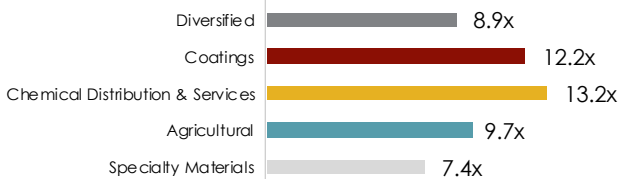
AVERAGE EBITDA MARGIN (2015E)



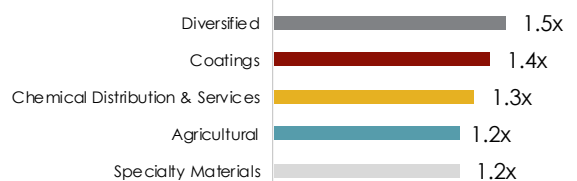
FREE CASH FLOW CONVERSION (2015E)



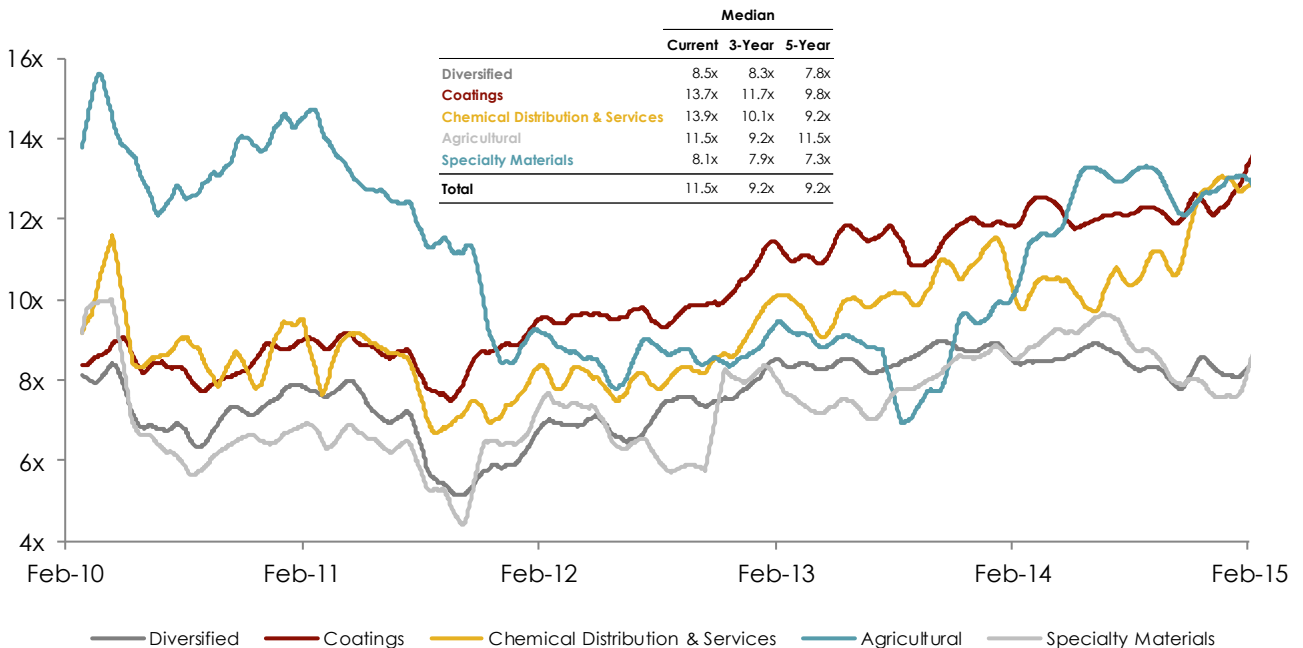
TOTAL ENTERPRISE VALUE / 2015E EBITDA



NET DEBT / LTM EBITDA



PUBLIC COMPARABLES (30-DAY ROLLING AVERAGE OF MEDIAN TEV / LTM EBITDA)



## SELECT M&A ACTIVITY

Closed Date	Target	Target Business Description	Acquirer
3/16/2015 (Announced)	Citadel Plastics	Citadel Plastics Holdings, Inc. is a holding company which through its subsidiaries manufactures and distributes thermoplastic compounds and thermoset resins.	A. Schulman, Inc.
2/10/2015	U.S. Water Services, Inc.	U.S. Water Services, Inc. provides chemicals and equipment for water management and treatment to industrial customers in North America.	ALLETE, Inc.
2/9/2015	Charter NEX Films Inc.	Charter NEX Films Inc. engages in engineering, extruding, and manufacturing monolayer, coextruded, and barrier blown films for packaging applications.	Pamplona Capital Management
2/3/2015	ANGUS Chemical Company	ANGUS Chemical Company manufactures and distributes nitroalkanes and their derivatives.	Golden Gate Capital
2/2/2015	Bostik, Inc.	Bostik, Inc. designs, manufactures, and markets adhesives and sealants for industrial, construction, and consumer markets in the United States.	Arkema S.A.
1/12/2015	Rockwood Holdings, Inc.	Rockwood Holdings, Inc. develops, manufactures, and markets various specialty chemicals for industrial and commercial applications primarily in Germany, the United States, and Europe.	Albemarle Corporation
12/18/2014	Q Holding Co.	Q Holding Co. manufactures highly engineered elastomeric components for use in medical, automotive, and industrial applications.	3i Group plc
12/11/2014	Commonwealth Laminating & Coating, Inc.	Commonwealth Laminating & Coating, Inc., manufactures and markets solar control window films, industrial coatings, adhesives, and laminates.	Eastman Chemical Co.
12/5/2014	Taminco Corporation	Taminco Corporation, together with its subsidiaries, produces and distributes alkylamines and alkylamine derivatives in the United States, Belgium, and internationally.	Eastman Chemical Co.
12/1/2014	Solvay USA Inc. (Eco Services business)	Solvay's Eco Services business offers research and development, and production of chemicals and plastics.	CCMP Capital Advisors, LLC
11/4/2014	PPC Industries, Inc.	PPC Industries, Inc. is engaged in the extrusion, converting, and printing of polyethylene bags, films, and tubing for food and industrial packaging applications.	Kohlberg & Company
11/2/2014	Consortio Comex, S.A. de C.V.	Consortio Comex, S.A. de C.V., together with its subsidiaries, manufactures, markets, and distributes paints, coatings, and water-proofing products in North America.	PPG Industries Inc.
9/5/2014	Flint Group S.A.	Flint Group S.A. manufactures and distributes inks, pressroom chemistry, flexographic plates and sleeves, consumables, and colorants.	Goldman Sachs Capital Partners
7/31/2014	Emerald Performance Materials, LLC	Emerald Performance Materials, LLC produces and markets specialty chemicals for food and industrial applications.	American Securities
7/31/2014	Solenis International LP	Solenis International LP supplies specialty chemicals for process, functional, and water treatment applications to the pulp, paper, mining, food and beverage, and general manufacturing industries.	Clayton, Dubilier & Rice, Inc.
7/30/2014	Spectrum Corporation	Spectrum Corporation blends, compounds, packs, and markets specialty lubricants.	Phillips 66
2/28/2014	Haas Group International Inc.	Haas Group International Inc., provides chemical supply chain management, product distribution, logistics/warehousing, and hazardous communication solutions.	Wesco Aircraft Holdings, Inc.



## OUR FIRM

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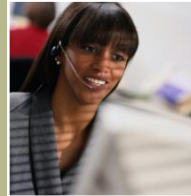
Aerospace, Defense  
& Government  
Services



Building Products  
& Materials



Business  
Services



Consumer



Energy  
& Power



Healthcare  
& Life Sciences



Industrials



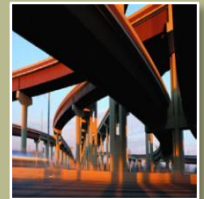
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Media & Telecom



Transportation  
& Logistics



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## SOURCES

Bureau of Economic Analysis  
Bureau of Labor Statistics  
Business Standard  
Capital IQ  
Dow Jones & Company  
Federal Reserve Economic Research & Data  
IHS Chemical Week  
The Wall Street Journal  
The Washington Post

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Harris Williams & Co. ([www.harriswilliams.com](http://www.harriswilliams.com)) is a preeminent middle market investment bank focused on the advisory needs of clients worldwide. The firm has deep industry knowledge, global transaction expertise, and an unwavering commitment to excellence. Harris Williams & Co. provides sell-side and acquisition advisory, restructuring advisory, board advisory, private placements, and capital markets advisory services.

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