

# **Market Update**

## **Global Chemicals Group**

**Q3 2016**

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#### Sources:

*Bloomberg; Capital IQ; Mergermarket; FactSet MergerStat; FT; Thomson Reuters; Baker & McKenzie; analyst reports; press releases; public filings*

## YTD 2016 Global Chemicals M&A Activity

Although political and macroeconomic uncertainty around the world slowed deal volumes in Q3 2016, it did not forestall deal value from jumping significantly versus the prior quarter. Deal value in Q3 2016 was primarily driven by large cross-border deals, including Germany-based Bayer AG's \$65 billion acquisition of U.S. agrochemicals giant Monsanto Company and Canada-based energy delivery company Enbridge, Inc.'s \$41 billion takeover of U.S.-based Spectra Energy Corp. The Bayer-Monsanto deal represented the largest deal of the quarter. In spite of seeing the lowest number of transactions, September still became the highest-valued month as a result of the Bayer-Monsanto and Enbridge-Spectra Energy deals.

Through the first three quarters of this year, cross-border deal-making produced four of the top five largest transactions. Acquirers announced 1,275 cross-border deals in Q3 2016 worth \$373 billion, reflecting a drop of ~15% in volume, but nearly a ~65% increase in value, versus Q2 2016. That being said, on a YTD basis, cross-border transactions accounted for total deal value of \$924 billion, reflecting a year-over-year drop of ~9%. The Baker & McKenzie Cross-Border M&A Index, which monitors international M&A activity on a quarterly basis using a baseline score of 100 points, rocketed to 238 points in Q3 2016, up ~23% from its score of 194 points in Q2 2016. Cross-border transactions in Q3 2016 represented ~44% of deal value and ~34% of deal volume, versus ~41% and ~36%, respectively, in Q3 2015. Of particular note, acquisitions from EU companies of North American targets hit a record-high value of \$105 billion from 121 transactions, an increase of ~32% from Q3 2015.

Multinational strategic buyers continue to view acquisitions across different geographies as a key way to drive growth and profitability, resulting in competitive global sale processes and fairly robust valuation multiples across numerous sectors, including industrials, chemicals, healthcare, food & beverage and tech. The push to complete blockbuster transactions has been fueled by renewed market confidence, low-cost financing, low organic growth rates and greater comfort in securing accretive synergies.

Over the first three quarters of the year, North America realized the highest deal value and volume by major region, accounting for nearly half of transaction value globally. However, North American deal-making is still lagging its pace over the past two record-breaking years. Many mega-deals continue to

flounder due to disagreements over value and anti-trust pressures, among other reasons. That being said, the middle-market had a good quarter and continues to hold firm in spite of ongoing political uncertainty, mixed credit availability and changing market and regulatory dynamics. But, with the U.S. election now behind us, dealmakers are cautiously optimistic about the outlook for middle-market and large M&A transactions for the rest of 2016 and early 2017.

Over the past quarter, chemicals & materials, energy & power generation and technology have been the key sectors powering deal value. The chemicals sector, in particular, had the most significant jump in global deal value from Q1 2016 to Q3 2016, with M&A in the sector climbing to \$417 billion, up more than 40%, largely fueled by mega-deals, such as the aforementioned Bayer-Monsanto transaction and Potash Corp.'s \$19 billion takeover of Agrium Inc.

Chemicals M&A activity has continued unabated this year due to major structural and strategic realignment, a high degree of shareholder activism, low organic growth and strong cash positions. Chemicals companies are pursuing M&A to push through additional cost savings, to realize enhanced economies of scale and to unearth new revenue growth opportunities. Additional motivations for M&A include a desire to move further downstream, to better handle fierce competition from China and to drive productivity growth. Although chemicals companies have seen nice cash flows, they have a limited number of internal investment options that are expected to drive high returns. Further, productivity gains have slowed, and new product development has become less efficient. The demand for quality businesses with sustainable competitive advantages has become more pronounced among both strategic and financial buyers, with transaction multiples edging up to ~15x for companies with strong cash flow, margins, growth prospects and management teams. Factors that are mitigating interest in chemicals M&A include high valuations in the sector; lack of suitable targets; ongoing macroeconomic, political and regulatory risk; and the emergence of better organic growth options, including servicing the shale and oil & gas sector.

Overall, given prevailing structural changes and market trends, we expect chemicals M&A to remain strong in the medium term, as companies continue to pursue portfolio optimization though enhanced M&A activity.



Richard O'Reilly, CFA, is a chemicals analyst who writes for Revere Associates. He previously served as Associate Director at S&P in its U.S. Equity Research – Chemicals Division.

#### Notes:

*This section reflects the views of Richard O'Reilly, CFA, who writes for Revere Associates. Mr. O'Reilly is not employed or compensated by Lincoln International, and the views set forth in this section are those of Mr. O'Reilly and should not be assumed to reflect the views of Lincoln International.*

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## Chemicals Industry Momentum Improved in Q3 2016

### Guest Columnist

Based on economic and industry reports through October, we believe business conditions for the U.S. chemical industry improved during the recent Q3 2016. Domestic economic activity rebounded with real GDP growth at a 2.9% annual pace, the fastest growth in more than two years, and up from the sluggish 1.1% average rate in H1 2016.

The expansion of the manufacturing sector appears to have strengthened since Q2 2016. Domestic construction and automobile markets also remained healthy, helping companies with exposure to those markets.

Ahead of the start of the earnings season for Q3 2016, we expected the industry to report solid but mixed results. With a few exceptions, most companies reported in line with analyst consensus EPS estimates. Basic chemicals and plastics makers experienced good demand, but were limited by lower selling prices versus the Q3 2015 period and rising feedstock costs this year. Margins in Q3 2016 for downstream and specialty chemical producers, such as paint makers, were generally helped by both good demand and still favorable cost comparisons for their input materials. Fertilizer producers' results were contained from further nutrient price declines resulting from challenging agricultural markets, although better conditions are forecasted for 2017.

The American Chemistry Council (ACC) in late October reported that its Chemicals Activity Barometer (CAB), a leading macroeconomic indicator based on chemical industry data, on a three-month moving average basis, had increased each month since Q2 2016. In October, the CAB was up 4.2% over the same time period last year, a marked increase over earlier comparisons and the largest year-over-year gain since August 2014.

The manufacturing sector, the largest customer base for the chemical industry, exhibited improved growth during Q3, and it followed with an even stronger pace in October, reaching a two-year high in growth, according to the monthly worldwide PMI business surveys.

The U.S. manufacturing sector also appears to have strengthened in recent months, following sluggish growth earlier in 2016. According to the Institute for Supply Management's monthly reports for manufacturing activity, U.S. manufacturing

activity in October expanded for the second consecutive month after one month of contraction in August, the first decline in six months. Manufacturing growth remains constrained due to a strong U.S. dollar and still weak demand abroad.

The ISM manufacturing reports indicated that the U.S. chemical industry was one of the manufacturing industries that expanded in October, following a contraction reported for September.

The Federal Reserve Board reported that industrial production grew at a 1.8% annual rate during Q3 2016 for its first quarterly increase since Q3 2015. Manufacturing output also increased in Q3 2016 following a decline in Q2. Output for the chemicals industry, however, eased in Q3.

Railcar loadings suggest that the pace of growth of shipments has also continued slowly in H2 2016 for the chemicals industry. According to the Association of American Railroads (AAR), U.S. chemicals railroad carloads for Q3 increased 0.4% from a year earlier, a slower pace of growth than earlier in 2016. Railcar loadings for October were off 3.1%, resulting in 1.3% growth for the first ten months of 2016. This growth is a pickup from the pace in 2015 when rail shipments increased only 0.4% for the full year. Railroads carry about 30% of industry shipments.

Selling prices for many key basic chemicals climbed during Q3 2016 following a rebound from their lows early in 2016. These higher prices should soon become cost headwinds to buyers such as specialty producers.

The domestic monthly contract prices for ethylene, the largest volume petrochemical monomer, in Q3 averaged 9% higher versus both Q2 and the same quarter of 2015. The monthly price bottomed this past January at the lowest since 2003 before rising due to a greater amount of industry supply outages and higher feedstock costs. The monthly price for September was 44% higher than it was at the beginning of 2016. We believe U.S. contract ethylene margins widened in Q3 on the higher prices despite higher average feedstock costs.

Domestic prices for most of the major derivative plastics were also higher during Q3 2016. Polyethylene prices rose in September after being unchanged since an increase in



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April; prices were unchanged in October. Polyethylene makers include Dow Chemical, LyondellBasell and Westlake Chemical. Polyvinyl chloride prices, which increased in the spring months on improved seasonal demand and rising ethylene costs, were unchanged during Q3. In response to higher input costs, producers, with some success, are currently pushing a price increase during October and November, ahead of the typical winter slowdown in construction demand. Vinyl producers include Westlake Chemical, now the second largest U.S. vinyl producer following its purchase of Axiall Corp. in August 2016.

Contract prices for propylene, the second largest volume monomer, increased 16% during Q3 2016 versus Q2 and were up by almost the same amount versus Q3 2015. Following a relatively large monthly increase in September to the highest since April 2015, prices eased for October and likely November. The current Q4 should be higher on average both sequentially and versus the same period in 2015. These sharply higher propylene prices are now resulting in increased prices for derivatives to buyers such as paint makers (including Sherwin-Williams, PPG Industries, Axalta and Valspar).

Inorganic prices have also increased in H2 2016. We believe that chlor-alkali prices have increased as caustic soda has risen since Q1 2016, breaking a trend of price weakness during 2015. Producers are pushing proposed caustic soda price hikes, including those for Q1 2017. Chlorine prices also rose modestly during Q3 2016 following a slightly larger increase for Q2 as producers had some success in price hikes announced since early in 2016. We believe that prices may be unchanged through the current seasonal slower Q4 and into early 2017. Olin Corp. and Westlake Chemical are major chlor-alkali makers.

Titanium dioxide pigment prices and margins, while still down from their peaks in 2012, have increased globally during 2016 for the first times in several years as producers have been able to implement various regional price increases on more favorable market fundamentals. Additional price hikes have been announced, including for 2017. The leading producers are Chemours (the former pigment business of DuPont) and Huntsman. The rise in selling prices will soon negatively impact users such as paint and plastics makers.





Glenn Fletcher is the COO of Catexel Limited, a leading authority on transition metal catalysts, accelerators and activators.

#### Previous Affiliations:

Paraogle Technologies, Rahu Catalytics, Lenzing, Tencel, Courtaulds Chemicals, PWC and Smith & Williamson

#### Education:

Loughborough University – BSc. in Economics

## Interview with the COO of Catexel Limited

*Lincoln International had the pleasure to speak with Mr. Glenn Fletcher (“Fletcher”), the COO of Catexel Limited (“Catexel” or the “Company”), on his role at the Company, the growth prospects of the firm, the global regulatory regime and the market dynamics going forward. The summary of the interview follows below.*

### Fletcher’s Background

Fletcher was born in Sheffield, South Yorkshire, a steel city in the industrial north of England. He graduated with a B.S. degree in Economics at Loughborough University in the United Kingdom. He proceeded to pursue a career in auditing, accounting and finance with PwC. He then moved from senior finance functions into operational roles within the chemicals and fibers sectors. As a Chartered Accountant by training and with 25 years in senior finance and operations roles working with leading firms, such as Courtaulds plc, Akzo Nobel BV and Lenzing AG, Fletcher is adept at recognizing and driving value for high-growth chemicals companies and has had significant exposure to M&A, financial markets, private equity and venture capital activities over the course of his career. He co-founded Catexel in 2011 with Paul Smith (“Smith”) and Dr. Ronald Hage (“Dr. Hage”) – and started working with Smith and Dr. Hage in 2007 when they together set up Rahu Catalytics Limited (“Rahu”), where Fletcher served as Finance and Operations Director. Fletcher played a pivotal role in the successful sale of Rahu in 2011. Rahu was set up to commercialize IP in the oxidation catalysis space and was successful in, among other things, developing iron-based catalysts for use in coatings. The co-founders sold Rahu’s iron-based catalyst IP for use in coatings, along with manufacturing contracts, to OM Group Inc. All other IP not part of the sale to OM Group Inc. was kept and formed the basis of Catexel, the successor company to Rahu.

### Fletcher’s Role at Catexel

At Catexel, Fletcher is responsible for a host of activities, ranging from finance to operations and strategy. He plays a vital role on the Board building shareholder value, driving growth initiatives and bolstering the ecosystem and culture that underpins Catexel’s success. His day-to-day responsibilities include securing access to financing, drafting and managing commercial contracts, assessing security of supply,

monitoring quality assurance, and ensuring regulatory compliance. Fletcher also is responsible for supply chain control and oversight, where he has built a network of industry partners that enable production of bespoke chemical synthesis possible on an industrial scale. He has developed a manufacturing, logistics and regulatory hub at Catexel that has helped it take on major global industrial challenges.

### Background on Catexel

Catexel is one of the industry’s fastest-growing companies, with a significant and growing slate of IP assets and pioneering technologies and is backed by Unilever Ventures. It develops world-class oxidation catalysts, accelerators and activators that enable industrial processes to run faster, cleaner and safer. As one of the leading authorities in oxidation catalysis, it has successfully commercialized numerous products with applications across a number of markets, including coatings, detergents & cleaning, textiles, pulp & paper, polysaccharides and epoxidation. Further, it is pursuing a number of new applications across markets such as water treatment, anti-microbial and radical polymerization. Catexel currently has 13 full-time employees. Its headquarters are based in the UK, with its main R&D facilities located in Leiden in The Netherlands. With an extensive partnership network around the globe, it is a Europe-based chemicals company with worldwide reach.

The Company is headed by Smith (CEO), Fletcher (COO) and Dr. Hage (CTO), along with David Greensmith (“Greensmith”) (Chairman and Non-Executive Director). Smith brings more than 35 years of industry experience to the helm, including work at large multi-national chemical companies such as Albright & Wilson, Brent International and Elementis Plc. He is well-connected and is known as a keen investor in innovative chemical technology companies. Dr. Hage is a world-renowned researcher and leading global expert in oxidation catalysis. He has developed breakthrough bleaching technologies based on manganese and iron oxidation catalysis and is a serial patent generator. Greensmith has held senior positions in the chemicals and pharmaceutical industries for four decades, including roles as CEO, Managing Director and COO of some of the sector’s leading firms, including ICI. Together, they have built a strong and nimble



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base team, with topnotch talent focused on delivering exceptional value-added solutions to customers. Furthermore, they have nurtured an ecosystem of external manufacturing and regulatory partners that enable Catexel to move quickly and agilely – a critical component of their success. Catexel has proven to be quite adept at selecting its industry partners given its knowledge of the industry and its proprietary research and sourcing techniques.

### Catexel's Position in the Value Chain

Catexel sits in the middle of the value chain as a technology-driven chemicals company that seeks to find innovative solutions to make industrial processes more efficient and eco-friendly. It engages third-party contract manufacturers to conduct custom synthesis of products under Catexel's stringent IP and quality assurance regime, and Catexel then distributes approved products to its customers worldwide from its European distribution hub. Catexel delivers product to Europe, the U.S., Latin America, and East Asia. As such, they not only provide innovative technologies, but help manage the global supply chain as well.

### Marketing Initiatives

It has been able to source customers based on its industry network, market knowhow and knowledge of where pain-points exist in industrial processes. Refinery Group, including Hattrick and Door 4, a leading brand development, marketing, communications, content marketing and digital agency, has also helped Catexel build its brand, market the Company and increase its profile in the market.

### R&D Capabilities

Catexel has developed extensive R&D resources in The Netherlands, led by Dr. Hage. It is a strong technical team that has filed around two dozen patent files and has built up a huge database of over 3,000 proprietary compounds. It has strong knowledge of the end application, leading to rapid commercialization of breakthrough technologies. The team does not tend to work in a linear fashion; rather, it opts to work across function areas, mapping chemical solutions across different applications, as appropriate. Given that the team knows how a given chemical can apply across applications and also is well-familiar with

where regulation is heading, the R&D team is quite proactive at driving development of innovative products. In Fletcher's words, they are adept at "joining the dots" to determine what to spend resources on given the regulatory landscape and shifting market demand.

### Product Offerings

Catexel has built up five technical platforms that encompass 14 separate catalysts that are used to make processes faster, more efficient and more eco-friendly. Catexel's products help its customers meet sustainability targets, realize efficiency goals and comply with global regulatory regimes, while boosting profits and quality. In a word, Catexel provides products that enable more efficient use of natural resources. For instance, one of its catalysts has been proven to reduce waste in a particular process by 50-fold and could be a game-changer in significantly improving the economics of the industry in question. Catexel is seeing strong tailwinds to its business given the need to find more eco-friendly, sustainable and profitable solutions.

Catexel has worked to encourage businesses to embrace change and adopt its innovative technologies that have a significant positive impact on industrial processes and the environment. Catexel has pioneered unique products, such as paint-drying techniques that enable the replacement of cobalt, an element under regulatory threat, while retaining cost efficiency and technical performance. Another example is industrial textiles, for which it has created low-temperature bleaching techniques that save considerable water and energy, while increasing asset utilization, product quality and product yield. Catexel is currently working with significant players in the I&I cleaning field. Other recent partnerships include its work with a number of the largest paint-makers in the world through its revolutionary paint-drying techniques.

Although its products drive considerable economic value, the Company is working with long-established and conservative industries, with entrenched processes. It takes time to help prospective customers adopt new, innovative processes. Catexel takes a collaborative, hands-on approach to help customers reformulate existing processes. The testing, formulation and optimization work takes time and effort, but once the efficacy is clear, businesses have embraced change and have adopted the solutions. Catexel has also developed a number of



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quantitative cost-saving models to demonstrate the value gains.

### Competitive Landscape

Catexel has no direct competitor in oxidation catalysts at the moment, which is both a curse and a blessing given the resources the Company has to deploy to educate customers on deploying alternative approaches, but Catexel continues to see momentum in this area. In Fletcher's view, Catexel's biggest competitors are current processes and legacy chemicals. Catexel is the pioneer, thought leader and educator in the marketplace.

### Global Regulatory Regimes

Catexel keeps abreast of changes in global regulatory regimes, including REACH in Europe, K-REACH in South Korea, China REACH and TSCA (run by the EPA) in the U.S., given its global customer base across Europe, East Asia, the U.S., Latin America and Southeast Asia. Generally, there are nine regulatory regimes around the world. Fletcher has noticed that global regulatory regimes are beginning the long and complicated process of reaching some level of harmonization in labelling and of setting higher standards in health, safety and environmental protection. Catexel's target markets are highly regulated. For instance, in the detergents area, the Company has developed solutions that exclude the use of phosphates. The Company focuses on making the "green greener," meaning that they look for ways to make it more lucrative to comply with regulations and

be even more eco-friendly. Catexel's products help save money by increasing efficiencies, reducing waste and providing cleaner solutions.

### Growth Initiatives at Catexel

Catexel has experienced robust growth, with all sectors growing nicely, with an extensive proprietary database of compounds, applications and processes, fueling continued growth in its existing and development markets. In particular, it has confidence in its coatings, low-temperature bleaching, industrial cleaning and anti-microbial products, where it is driving expanded uses and applications across its global customer base. It sees India as a huge potential market for its water treatment solutions. It is also developing an array of ground-breaking next-generation technologies that are helping to "lead the industry to where it needs to go next" according to Fletcher. The Company envisions continuing to create significant value for all stakeholders and to help the industry realize a better return overall. It is committed to encouraging responsibility, sustainability, eco-friendly solutions and economic gains up and down the supply chain. It is looking to drive a virtuous cycle in the industry, which is exactly where Fletcher wants the business to be. Catexel, from its founding, has embraced change, including shifting market dynamics and regulatory regime overhauls, as it sees both challenges and opportunities inherent in change. Catexel is looking forward to driving the industry forward and realizing rapid growth in the coming years.

During Q3 2016, deal-making for the chemicals sector remained robust. Globally, there were 190 chemicals M&A transactions announced or closed in Q3 2016.

In terms of deals with disclosed values, there were 6 large-cap transactions, defined as those over \$500 million in TEV. Selected notable large-cap transactions announced or closed this past quarter are shown on the right.

There were 44 chemicals deals with disclosed values in the middle market, defined as transactions under \$500 million in TEV. Selected middle-market chemicals transactions that were announced or closed this past quarter are shown on the right.

There were 140 chemicals deals for which transaction values were undisclosed.

#### Sources:

Bloomberg; Capital IQ; Mergermarket; FactSet MergerStat; Federal Reserve; analyst reports; press releases; public filings

## Q3 2016 Market Commentary and Selected Transactions

### Selected Large-Cap Transactions

- On August 11, 2016, **Grasim Industries (BSE: 500300)** agreed to acquire **Aditya Birla Nuvo (BSE: 500303)** for \$8.4 billion, representing an 8.3x LTM EBITDA and 2.3x LTM revenue multiple. The company is an industrial conglomerate with a chemicals division that produces fertilizers, agrochemicals and other allied chemicals products.
- On September 12, 2016, **Potash Corp. (TSX: POT)** agreed to acquire **Agrium Inc.** for \$18.6 billion, representing a 9.7x LTM EBITDA and a 1.3x LTM revenue multiple. The company produces crop nutrients and protection products, seeds and other agricultural products.
- On September 25, 2016, **Lanxess (FWB: LXS)** agreed to acquire **Chemtura Corporation (NYSE: CHMT)** for \$2.7 billion, representing an 8.3x LTM EBITDA and 1.5x LTM revenue multiple. Chemtura manufactures and markets performance-driven engineered industrial specialty chemicals.

### Selected Middle-Market Transactions

- On July 26, 2016, **PolyOne Corporation (NYSE: POL)** agreed to acquire **Gordon Holdings, Inc.** for \$85.5 million. The company manufactures thermoset composite laminates. It has now become part of PolyOne Advanced Composites. PolyOne expects the acquisition to add ~\$40 million to its revenues and be accretive to earnings in 2017.
- On August 3, 2016, **Innospec Inc. (NasdaqGS: IOSP)** agreed to acquire **Huntsman Corp's European Personal Care and Home Care Business** for \$225.0 million, representing a 1.0x LTM revenue multiple. The division manufactures organic and inorganic chemical products.
- On August 10, 2016, **KAP Industrial Holdings Limited (JSE: KAP)** agreed to acquire **Safripol (Pty) Ltd.** for \$308.2 million. Safripol manufactures polypropylene and high-density polyethylene in South Africa.
- On August 10, 2016, **Yara Fertilisers India** agreed to acquire **Tata Chemicals' Babrala Urea Plant and Distribution Business** in Uttar Pradesh for \$400.0 million, representing a 11.4x LTM EBITDA and 1.1x LTM revenue multiple. The division manufactures and distributes fertilizer products in India.
- On August 22, 2016, **Platinum Equity, LLC** agreed to acquire **Broadway Industrial Group's FPS and FCD Business** for \$111.0 million. The division offers foam plastics solutions and flow control devices.
- On September 15, 2016, **AFG Arbonia-Forster-Holding AG (SWX: AFGN)** agreed to acquire **Looser Holding AG (SWX: LOHN)** for \$388.6 million, representing a 12.3x LTM EBITDA and 1.2x LTM revenue multiple. Looser produces water and solvent-based coatings.

Of the 190 chemicals transactions in Q3 2016 globally, ~35% involved targets in North America, ~36% were in Europe, ~22% were in Asia Pacific, ~3% were in Latin America and ~4% were in Africa and the Middle East. Potash Corp. (TSX: POT), Grasim Industries (BSE: 500300) and Lanxess (FWB: LXS) had the largest transaction values in North America, Asia Pacific and Europe respectively, with total value of ~\$29.7 billion.

The most active buyers, by number of total disclosed transactions, were Clariant, LG Chemical, Qoppar Participacoes and Ravago, each with two closed or announced transactions in the quarter. Among deals with disclosed terms, the average TEV / EBITDA multiple was 13.5x.



**Notes:**

(1) *LI Specialty Chemicals Index* includes A. Schulman, Inc.; Air Liquide SA; Air Products and Chemicals, Inc.; Albemarle Corporation; Ashland Inc.; Cabot Corporation; Cambrex Corporation; Celanese Corporation; Chugoku Marine Paints, Ltd.; Clariant AG; Ecolab Inc.; Elementis plc; Evonik Industries AG; Ferro Corporation; Givaudan SA; H.B. Fuller Co.; Hitachi Chemical Co. Ltd.; International Flavors & Fragrances Inc.; Kansai Paint Co. Ltd.; Linde Aktiengesellschaft; NewMarket Corporation; Nippon Paint Holdings Co., Ltd.; Novozymes A/S; PolyOne Corporation; PPG Industries, Inc.; RPM International Inc.; Sanyo Chemical Industries Ltd.; Sensient Technologies Corporation; Shenzhen Capchem Technology Co., Ltd.; Symrise AG; The Valspar Corporation; Wacker Chemie AG; W.R. Grace & Co.; and Zhejiang Transfar Co., Ltd.

(2) *LI Diversified Chemicals Index* includes 3M Company; Akzo Nobel N.V.; Arkema S.A.; BASF SE; The Dow Chemical Company; E.I. du Pont de Nemours and Company; Eastman Chemical Co.; FMC Corp.; Hubei Yihua Chemical Industry Co., Ltd.; Huntsman Corporation; Kemira Oyj; Lanxess AG; Mitsubishi Chemical Holdings Corporation; Monsanto Company; Olin Corp.; Pidilite Industries Limited; SK Chemicals Co., Ltd.; Solvay SA; Tangshan Sanyou Chemical Industries Co., Ltd.; UPL Limited; and Xinjiang Zhongtai Chemical Co., Ltd.

(3) Large-cap group includes companies in the *LI Specialty Chemicals Index* with \$5.0 billion or greater in market capitalization

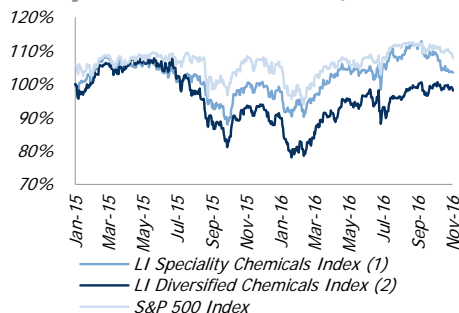
(4) Small-cap group includes companies in the *LI Specialty Chemicals Index* with less than \$5.0 billion in market capitalization

(5) *LI Chemicals Index* includes both the *LI Specialty Chemicals* and *LI Diversified Chemicals* indices; Lincoln estimates provided for chemicals companies in the index that have not yet published Q3 2016 results

# Q3 2016 Key Chemicals Market Statistics

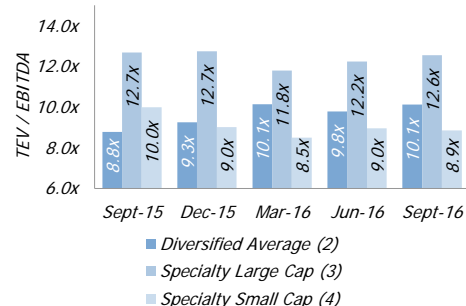
## Chemicals Public Market Performance

(January 2015 – November 2016)



## TEV / EBITDA Multiples

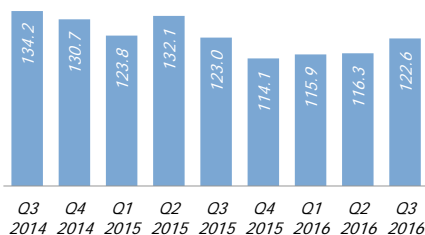
(Q3 2015 – Q3 2016)



## LI Chemicals Index - Revenue <sup>(5)</sup>

(Q3 2014 – Q3 2016)

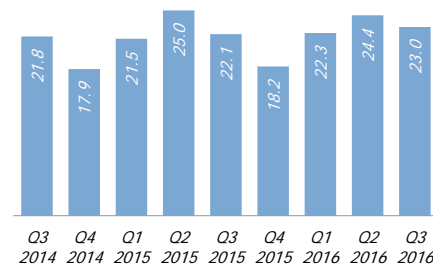
(\$ in billions)



## LI Chemicals Index - EBITDA <sup>(5)</sup>

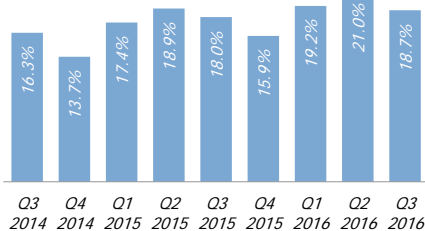
(Q3 2014 – Q3 2016)

(\$ in billions)



## LI Chemicals Index - EBITDA Margins <sup>(5)</sup>

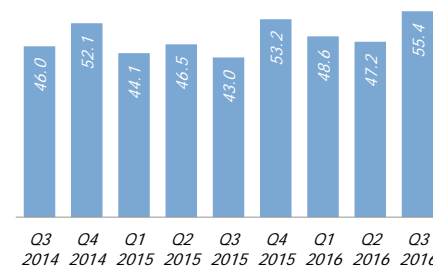
(Q3 2014 – Q3 2016)



## LI Chemicals Index - Cash on Balance Sheet <sup>(5)</sup>

(Q3 2014 – Q3 2016)

(\$ in billions)





## Highlighted Lincoln International Chemicals Transaction

### Lincoln International Represents Prime European Therapeutics S.p.A. ("Euticals") in its Sale to Albany Molecular Research Inc. (NASDAQ: AMRI)

Lincoln International, a leading global middle-market investment bank, served as the exclusive financial advisor to Prime European Therapeutics S.p.A. ("Euticals" or the "Company") and its shareholders in its sale to Albany Molecular Research Inc. (NASDAQ: AMRI) ("AMRI"), a global contract research and manufacturing organization focused on discovery and development services (DDS), active pharmaceutical ingredients (API) and drug product manufacturing (DPM). AMRI has locations across North America, Europe and Asia, with sales of more than \$500 million and with around 2,220 employees worldwide.

The transaction is valued at €315 million, consisting of shares of AMRI common stock, cash and a seller note, representing a TEV / EBITDA multiple of around 11x.

The shareholders of Euticals retained Lincoln International due to its deep knowledge of the sector and its longstanding relationships with majority investors, Clessidra Capital Partners and Mandarin Capital Partners. Lincoln International worked closely with the Company's Board of Directors and management team throughout the entire sale process from initial discussions through two-

way due diligence to a complex purchase agreement negotiation. Lincoln International assumed an integral role in the definition of the financial aspects of the deal, resulting in an efficient and successful process completed in a few months. The acquisition of Euticals positions AMRI as one of the largest independent developers and suppliers of API to the pharmaceutical industry and significantly expands AMRI's European footprint.

#### About Euticals

Founded in 1946, Euticals specializes in the custom synthesis and manufacturing of APIs, with global scale production capabilities and diversified manufacturing plants across Italy, Germany, France and the U.S., offering multiple technology platforms. Founded in 1984 and headquartered in Lodi, Italy, Euticals has approximately 840 employees and annual revenues of approximately €215 million. More information about Euticals can be obtained at [www.euticals.com](http://www.euticals.com).

For further information about the transaction, feel free to contact Saverio Rondelli or Federico Mennella at Lincoln International.

## Global Industry Groups

Aerospace & Defense  
Automotive & Truck  
Building & Infrastructure  
Business Services  
Chemicals  
Consumer  
Distribution  
Electronics  
Energy & Power  
Financial Institutions  
Food & Beverage  
Healthcare  
Industrials  
Packaging  
Technology & Media

## Global Locations

Amsterdam  
Beijing  
Chicago  
Dallas  
Frankfurt  
London  
Los Angeles  
Madrid  
Milan  
Moscow  
Mumbai  
New York  
Paris  
São Paulo  
Tokyo  
Vienna  
Zurich

## Advisory Services

Mergers & Acquisitions  
Debt Advisory  
Special Situations  
JV & Partnering  
Valuations & Opinions

# About Lincoln International

Lincoln International specializes in merger & acquisition advisory services, debt advisory services, private capital raising and restructuring advice on mid-market transactions. Lincoln International also provides fairness opinions, valuations and joint venture and partnering advisory services on a wide range of transaction sizes. With seventeen offices in the Americas, Asia and Europe, Lincoln International has strong local knowledge and contacts in key global economies. The firm provides clients with senior-level attention, in-depth industry expertise and integrated resources. By being focused and independent, Lincoln International serves its clients without conflicts of interest. More information about Lincoln can be obtained at [www.lincolninternational.com](http://www.lincolninternational.com).

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