CHEMICAL INSIGHTS

Seismic Shock

When industry giants merge or are acquired, they create ripple effects that affect the entire value chain

A few years ago, we wrote a white paper that included a review of recent chemical "mega-deals" and how they were reshaping the industry. Written just after the end of the Great Recession, the white paper defined "mega-deals" as being between $3 and $20 billion in value, and predicted a resurgence in such large transactions as the economy and M&A activity recovered. And large chemical transactions did rebound – with a vengeance. After a dismal 2009, and with the exceptions of 2012 and 2013 (years characterized by the European sovereign debt crisis and the threat of a government shutdown in the U.S.), the number of billion dollar plus deals per year has averaged in the high teens. More significantly, valuation multiples for these mega-deals have steadily risen, from about 10 times EBITDA in 2010 to over 14 times currently.

Large transactions are sometimes viewed as "transformational," that is, they fundamentally alter the character of their industry. With such deals becoming more common, in this issue of our newsletter, we take a closer look at what "transformational" really means. When two large chemical companies merge, the media usually focuses on valuation and multiples, the rationale for the deal, and how the new company is going to organize its approach to the market. But it's not just about the two parties to the deal: a transformational deal has effects that ripple throughout the whole industry, significantly affecting nearly all competitors, suppliers, and customers.

Primary competitors of the merged company have to step up their game…

The most immediate effects of a transformational deal are on the acquirer's nearest competitors, which previously may have been market leaders. If the new, merged company — by virtue of the deal — has become the largest in its market, the newly displaced second and third rank players may not have lost their relative market shares, but they have lost market "clout": for instance, price leadership or the ability to get the best terms from suppliers. The new market leader may benefit from enhanced economies of scale: new purchasing and pricing power, brand strength, synergies from the elimination of duplicated overhead, and savings from more efficient manufacturing and distribution. To maintain their competitiveness in light of such new competitive pressures, the displaced firms may seek to protect their market position or even reclaim the #1 spot through their own M&A activity – either through making acquisitions or being acquired themselves.

An almost textbook example of this situation is playing out now in the seed and agricultural chemical industry – recently a hotbed of M&A activity. In 2015, Monsanto, which for years has been the world's largest seed company and a major provider of agrochemicals, aggressively courted Syngenta in order to strengthen its crop protection business. Syngenta rejected Monsanto twice and instead accepted a $43 billion offer from ChemChina in February. Additionally, Dow and DuPont are set to merge and spin-off their combined seeds and pesticide businesses into a company that would be larger than Monsanto in the ag markets. With its market leadership at stake, Monsanto is clearly under pressure to do something dramatic. In May, it received an offer to be acquired by Bayer for $62 billion, but Monsanto's board rejected the offer as too low. However, that rejection may only mark the beginning of an ongoing negotiation, since Monsanto's management openly acknowledged the strategic advantages of an alliance with Bayer, specifically with its CropScience Division.

Chemical Industry Announced Transactions > $1 Billion: 2008-2016

Year	Number	Value ($ Billions)	Average EBITDA Multiple
2016 (through May)	5	$63.9	14.5
2015	18	$334.0	13.1
2014	22	$138.7	12.8
2013	7	$11.4	9.7
2012	11	$23.3	9.4
2011	17	$67.1	10
2010	19	$51.2	8.1
2009	2	$3.9	5.6
2008	8	$50.2	9.6

Smaller companies are not exempt from disruptive effects…

While the media may focus on the drama generated by deals involving the largest companies in an industry, the disruptive effects of large transactions affect all industry participants, not just the largest players. The increased levels of competition among the industry leaders resulting from a transformative deal trickle down to middle market and smaller companies, making the benefits of scale, proprietary technologies, geographic or niche market focus, and customer service more important than ever before. These pressures in themselves will generate increased M&A activity. In short, a really big transaction is likely to be the catalyst for a lot of smaller deals. Expect that the large players are going to compete vigorously for quality mid-size and small companies, and the mid-size players themselves are going to merge or acquire small players that can enhance their competitive position.

As an example, consider the paint & coatings industry. The large transformative deal that is likely to act as the catalyst for additional activity was announced in March when Valspar, the fifth largest coatings producer in the world, agreed to be acquired by Sherwin-Williams, the second largest (after PPG).[1] Expected to close by the end of the year, the transaction was valued at $11.3 billion, a 41% premium over Valspar's 30 day average stock price and 15 times Valspar's estimated 2016 EBITDA.[2] The merger will create a new #1 player in the industry globally.

The transaction is remarkable in that it's likely to be the last "transformative" deal in coatings for some time. As many know, the paints and coatings industry has been consolidating for decades and is already highly concentrated. Prior to the announcement, it may have appeared that all the transformational deals in coatings that could occur, had occurred. And in fact, because there is remarkably little overlap between the companies, the combination of Valspar and Sherwin-Williams may be the only deal among the majors that would survive scrutiny from the anti-trust regulators. What this means is that the other multi-nationals and major nationals, particularly PPG, Akzo, and RPM, are not going to easily reclaim a leading position through a single large deal. But they undoubtedly will be casting an acquisitive eye downstream to the middle market to make multiple smaller deals. Not that they haven't already been active in the middle market space, but we expect that the pace of activity will intensify over the next year or so.

This is good news for potential sellers, because increased competition for acquisitions between the majors, as well as a growing scarcity of high-quality opportunities among mid-sized companies, will continue to support high valuations, which are already elevated by the low cost of capital and the appetite for growth in a slowly recovering economy.

---

[1] Company rankings measured by global coatings revenues. Source: company reports and Grace Matthews.

[2] Source: Sherwin-Williams reports.

So which specific sectors of the coatings market are likely to experience stepped up activity? In architectural coatings, there are shrinking opportunities domestically, mostly because 85% of the market is already controlled by four (or three if you count Sherwin-Williams and Valspar as one) global companies, and another 10% is represented by a few established national brands or major regionals. It's possible that one of the major firms may attempt to acquire one of the smaller national brands. Benjamin Moore has a very strong brand and would appear to be a logical candidate, but it's owned by Berkshire Hathaway (whose chairman Warren Buffet's favorite holding period is forever) and its independent dealer distribution channel is being eroded by the big box retailers. The situation is different internationally, where as much as 40% of the global market is served by thousands of small national or regional brands. For this reason, we expect most of the transactions relating to architectural coatings will take place across international borders. However, the opportunities for overhead absorption, greater purchasing power, and plant consolidation still bodes well for the remaining small and mid-sized domestic companies that are considering a sale.

Where we expect the real action to occur is going to be in OEM and industrial specialty coatings. When the Sherwin-Williams/Valspar deal closes, these markets will be more evenly divided between Sherwin-Williams/Valspar, PPG, Akzo, Axalta, BASF, and a few others. Also, with the exception of certain segments like automotive coatings, the OEM/industrial markets are more segmented in terms of end-use applications and more fragmented in terms of the number of industry participants. This scenario allows small players to target specific niches and offer product quality and customer service comparable to the large players. In other words, this is an ideal market for M&A. To be sure, industrial coatings M&A was active even before the Sherwin-Williams/Valspar deal was announced, with PPG, RPM, and a few others being especially acquisitive. Notable deals within the past year include Valspar's acquisition of Quest Specialty Chemicals' automotive and industrial coatings business, PPG's purchase of IVC Industrial Coatings, and Hempel's acquisition of Jones-Blair.

Suppliers and distributors …

The effects on the suppliers to the parties of a large transaction are less obvious, are never announced, and typically don't occur until some time after the transaction has closed. Large firms strive to optimize their supply chain, and often develop lists of "preferred" suppliers, taking into consideration pricing, discounts, order turnaround, distribution points, shipping costs, and other terms. When a large firm makes a major acquisition or is itself acquired, the equations for optimum supply chain management and efficiencies are changed as the supplier lists of the combined companies are merged. In many respects, this is a zero sum game (at best) for suppliers: some may see significant increases in order sizes and/or frequency, but others will be forced to make concessions on pricing and terms, or perhaps will lose a major customer altogether. And even the "winners" may face pricing pressure in order to serve, and keep, the customer.

Distributors face a similar situation, with both winners and losers when one of their large suppliers is a party to a transaction. The upstream supplier – i.e., the merged company – will want to rationalize distribution by eliminating overlap and awarding business to the distributor that will maximize its profits, usually the one that is best positioned to get the product to the most end users at the least cost. This is why a value-added component is increasingly critical to distributors as a market differentiator.

Conclusion

While we've focused on the agricultural chemicals and coatings industry, the dynamics of a "transformational" deal can be applied to any chemical sector. The takeaway is when such a transaction is announced, it pays to think deeply about the implications of the deal across the industry's entire value chain. Transformational deals are disruptive – sometimes in ways that are not immediately apparent – and they always create new business risks, but also opportunities, for all the companies in the industry.

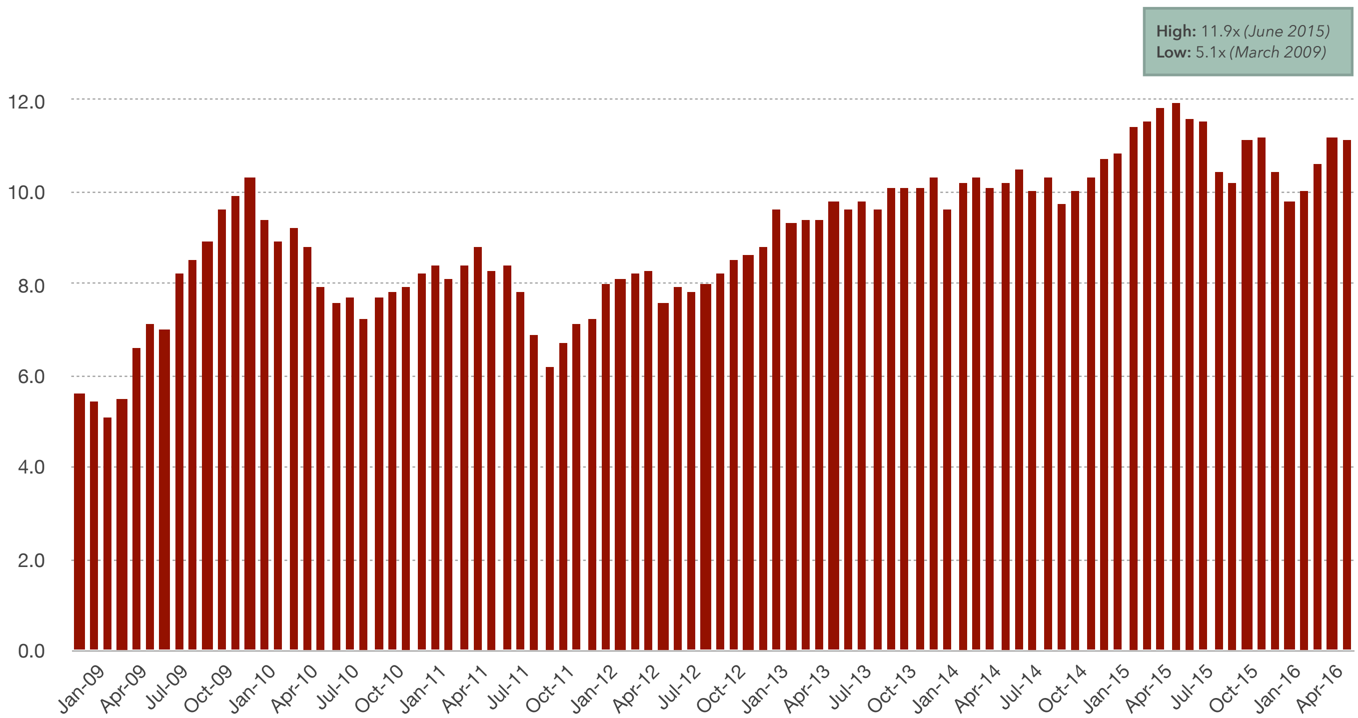
Select Announced Chemical Transactions > $1 Billion: 2014-2016

Transaction values in $US billions

Announced	Acquirer / Target	Target Description	Transaction Value	TEV / Sales*	TEV / EBITDA*
May-16	Evonik / Air Products' Performance Materials Division	Curing agents, catalysts and specialty additives	$3.8	3.7x	15.8x
Mar-16	WL Ross Holding / Nexeo Solutions	Distributor of chemicals and plastics	$1.7	NA	8.4x
Mar-16	Sherwin Williams / Valspar	Paints and coatings	$11.3	2.6x	16.2x
Feb-16	ChemChina / Syngenta	Seeds and agricultural chemicals	$46.2	3.2x	16.6x
Jan-16	ChemChina / KraussMaffei Group	Machinery and systems for producing and processing plastics and rubber	$1.0	NA	NA
Dec-15	Sinopec / Sibur (10% stake)	Gas processing and petrochemicals	$13.4	NA	NA
Dec-15	Dow / Dupont Merger	Diversified chemicals	$142.4	1.7x	10.1x
Nov-15	Pfizer / Allergan	Biopharmaceuticals	$188.9	9.6x	24.7x
Nov-15	L'Air Liquide / Airgas	Industrial, medical, and specialty gases	$13.1	2.4x	13.4x
Oct-15	Lotte Chemical / Samsung's chemicals business	Synthetic resin and synthetic marble	$2.3	NA	NA
Oct-15	Equate Petrochemical Company / MEGlobal	Ethylene glycol	$6.4	NA	NA
Sep-15	Kraton Performance Polymers / Arizona Chemical	Pine chemicals	$1.4	1.6x	7.4x
Aug-15	Berry Plastics / Avintiv	Specialty materials used in hygiene products, face masks, surgical gowns, and disinfectant	$3.9	2.0x	17.1x
Jul-15	Solvay / Cytec	Specialty materials and chemicals	$6.2	3.1x	14.7x
Jul-15	Platform Specialty Products / Alent	Specialty chemicals and engineered materials for electronics, automotive and industrial markets	$2.3	2.3x	13.8x
Jun-15	Apollo / OM Group	Metal-based chemistries	$1.0	1.0x	11.8x
May-15	Magna Resources / PT Chandra Asri Petrochemical	Ethylene, propylene, butadene, polyethyene and polypropylene	$1.8	0.8x	16.8x
Apr-15	Teva Pharmaceutical Industries / Mylan	Pharmaceuticals	$40.0	NA	NA
Apr-15	Shell / Shell BG Group	Energy	$70.0	NA	NA
Mar-15	Hanwha Group / Samsung General Chemicals	Petrochemicals	$1.5	NA	NA
Feb-15	Tronox / FMC's Soda Ash business	Alkali chemicals	$1.6	2.2x	NA
Jan-15	Shire / NPS Pharma	Drugs for gastrointestinal disorders	$5.2	NA	NA
Dec-14	Merck / Cubist Pharmaceuticals	Pharmaceuticals	$9.5	NA	NA
Dec-14	Saint-Gobain / Sika (52 % voting right; 16% share capital)	Specialty chemicals	$2.8	NA	NA
Dec-14	Otsuka Pharmaceutical / Avanir	Biopharmaceuticals	$3.5	18.6x	NA
Nov-14	Perrigo / Omgea Pharma	OTC healthcare drugs	$4.5	2.9x	15.2x
Nov-14	Halliburton / Baker Hughes	Oilfield services and products	$38.0	1.6x	9.0x
Oct-14	PPG / Comex	Architectural and industrial coatings	$2.3	2.3x	NA
Oct-14	Platform Specialty Products / Arysta LifeScience	Agrochemicals and biological products	$3.5	NA	NA
Sep-14	Arkema / Bostik	Adhesives	$2.2	NA	14.2x
Sep-14	Merck / Sigma-Aldrich	Biochemicals and equipment products	$17.0	6.3x	21.3x
Sep-14	Eastman Chemical / Taminico Corp	Specialty chemicals	$1.8	1.5x	7.1x
Sep-14	FMC Corporation / Cheminova	Pesticides	$1.8	NA	NA
Jul-14	Albemarle / Rockwood Holdings	Various specialty chemicals	$6.2	NA	NA
May-14	Flint Hills Resources / PetroLogistics	Specialty chemicals	$2.1	2.7x	8.9x
May-14	Bayer's Consumer Healthcare / Merck's Consumer Healthcare	Pharmaceutical products for medical needs	$14.2	5.9x	21.0x
Apr-14	Eli Lilly and Company / Novartis Animal Health	Animal medicines	$5.4	NA	NA
Apr-14	Permira Advisors / CABB Group	Specialty chemicals	$1.1	NA	NA
Apr-14	Symrise / Diana Group	Specialty chemicals	$1.8	2.9x	14.0x
Apr-14	Koch Industries (Goldman Sachs) / Flint Group	Specialty chemicals	$3.1	1.0x	6.8
Apr-14	Sun Pharma / Ranbaxy Laboratories	Pharmaceuticals	$3.2	NA	NA
Feb-14	Imerys / Amcol International	Building materials	$1.6	1.6x	10.3x

** TEV = Total Enterprise Value (equity value, plus funded debt, minority interests and preferred shares; less cash and cash equivalents)*

Grace Matthews Chemical Index: Enterprise Value / EBITDA



Source: Grace Matthews & Capital IQ

The Grace Matthews Chemicals Index tracks the Enterprise Value / EBITDA ratios ("EV/EBITDA multiples" or just "EBITDA multiples")[3] of 44 publicly-traded chemical companies that span multiple markets and geographies. The index aggregates the latest reported financial data and stock prices, and tracks valuation trends and operating metrics across different industry sectors. Mean values of revenue and EBITDA multiples are equally weighted averages; mean growth percentages are based on the aggregate values of all companies in the index.

Grace Matthews Chemical Index Current Values

	Total Enterprise Value / Revenues	Total Enterprise Value / EBITDA	Gross Margin % Sales	EBITDA % Sales	Trailing Twelve Months Revenue Growth %	Trailing Twelve Months EBITDA Growth %
Mean	1.9x	11.0x	31.8%	17.3%	(8.22%)	2.59%
Median	1.7x	11.1x	31.6%	16.5%	(3.48%)	3.81%
High	4.0x	17.2x	56.7%	33.1%	105.59%	146.89%
Low	0.7x	5.0x	11.3%	8.4%	(26.64%)	(47.19%)

[3] "Enterprise Value" or "EV" is the sum of all invested capital in a company, including both the value of equity (market capitalization) and funded debt less cash and cash equivalents.

Grace Matthews: Select Chemicals and Materials Transactions

BACON ADHESIVES
a division of
CASS POLYMERS
has been acquired by
ROYAL ADHESIVES & SEALANTS

ENNIS-FLINT
has been acquired by
OLYMPUS PARTNERS

BASF The Chemical Company
has sold its global Polyolefin Catalysts business to
GRACE

americhem
has acquired
Vi-Chem CORPORATION

3M
has sold its pressurized polyurethane foam adhesives business to
ICP

DELOS CAPITAL
sold its portfolio company
California Products CORPORATION
to
Audax Group

CHEMQUEST CHEMICALS
has been acquired by
EDGEWATER CAPITAL PARTNERS

TAYLOR
Innovative Science. Applied Technology.
has been acquired by
DOMINUS CAPITAL

jb JONES-BLAIR
has been acquired by
HEMPEL

Silbond
has been acquired by
EVONIK INDUSTRIES

[redacted]
has acquired select assets of the Capcure business from
BASF The Chemical Company

Compass Chemical International
has been acquired by
ONE ROCK CAPITAL PARTNERS

PCHEM
has been acquired by
Weatherford

SPRAYLAT CORPORATION
has sold certain assets to
PPG

SYRGIS
has been acquired by
UNITED INITIATORS
driving your success

EQUA-CHLOR
has been acquired by
PPG

Audax Group
has sold its portfolio company
ColorMatrix
to
PolyOne

LORD
has sold its Resilient Floor Coatings Business to
AkzoNobel

LANDEC
INTELLIGENT MATERIALS
has acquired
LIFECORE BIOMEDICAL
from
WARBURG PINCUS

AkzoNobel
has acquired
Chemcraft

Grace Matthews Clients Listed First

Grace Matthews Overview

Grace Matthews is recognized globally as a leader in transaction advisory services for manufacturers and distributors throughout the chemical value chain. Grace Matthews' clients include privately held businesses, private equity funds, and large, multinational corporations.

Grace Matthews' practice is global in scope, and focuses on several areas: sell-side transactions for private companies, private equity holdings, and divestitures for multi-national corporations; buy-side work, typically for large, public companies or major multi-nationals and sponsor-backed chemical platforms; leveraged transactions involving raising debt and/or equity capital, strategic advisory analysis, and transaction fairness opinions. Areas of expertise include:

- Adhesives, Sealants, Tapes
- Catalysts, Petrochemicals
- Chemical Intermediates
- Construction Chemicals, Building Products
- Distribution, Equipment, Infrastructure
- Food Ingredients, Flavors, Fragrances
- High Purity, Electronic, Custom Synthesis
- Industrial Minerals, Inorganic Chemicals
- Oilfield & Water Treatment Chemicals
- Paints, Coatings, Inks
- Personal Care, Soaps, Medical Materials
- Plastics, Colorants, Additives
- Tolling, Private Label Products
- Additional Chemical Sectors, Other Industries

Grace Matthews is a privately held investment bank with successful chemical industry transactions dating back to the early 1990s. Grace Matthews principals have completed over 100 transactions involving global corporations such as AkzoNobel, 3M, Lubrizol, BASF, DuPont, Sherwin-Williams, PPG Industries, Ashland, Ceradyne, DSM, ICI, Borregaard, Air Products, Landec Corporation, The Home Depot, Hexion Specialty Chemicals, ITW, PolyOne, Weatherford, and Evonik, to name a few.

Contact Our Team

John Beagle
CEO & Chemical Practice Lead
jbeagle@gracematthews.com

Kevin Yttre
Managing Director
kyttre@gracematthews.com

Trent Myers
Vice President
tymers@gracematthews.com

Jon Glapa
Associate
jglapa@gracematthews.com

Sarah Toledano
Analyst
stoledano@gracematthews.com

Doug Mitman
Head of Investment Banking
dmitman@gracematthews.com

Andy Hinz
Managing Director
ahinz@gracematthews.com

Andrew Cardona
Vice President
acardona@gracematthews.com

Patrick Maag
Senior Analyst
pmaag@gracematthews.com

Michelle Tveten
Marketing Coordinator
mtveten@gracematthews.com

Ben Scharff
Managing Director
bscharff@gracematthews.com

Tom Osborne
Senior Executive
tosborne@gracematthews.com

Eric Sabelhaus
Senior Associate
esabelhaus@gracematthews.com

George Liu
Analyst
gliu@gracematthews.com

Headquarters
833 East Michigan Avenue
Suite 1420
Milwaukee, WI 53202

414.278.1120
www.gracematthews.com
info@gracematthews.com

Grace Matthews, Inc. (www.gracematthews.com) is an investment banking group providing merger, acquisition, and corporate finance advisory services for chemical companies both in the U.S. and internationally. Grace Matthews is global in scope and well known for its strong track record of success dating back to the early 1990s.