ISSUE 13
October 2018

theValenceGroup

Chemicals M&A Review

Highlights

- Consolidation has precipitated a sharp decline in number of $1bn+ independent specialty chemical companies
- Buoyed by M&A and resilient profitability, specialty chemical trading multiples continue to outperform and are now trading at almost double commodity/diversified peers
- More broadly, average chemical company trading multiples remain at 2017 levels with limited signs of weakening as profits and GDP growth in main markets remain robust
- M&A transaction volumes have reached a near eight-year high

IN THIS ISSUE

New York
Tel: +1 212 847 7340

London
Tel: +44 (0) 207 291 4670

www.ValenceGroup.com

The Carlyle Group | GIC
have acquired the Specialty Chemicals business of
AkzoNobel
since renamed
Nouryon
The Valence Group acted as Financial Advisor to Carlyle

Solenis
a portfolio company of
Clayton Dubilier & Rice
has announced its merger with the Paper and Water Chemicals business of
BASF
The Valence Group acted as Financial Advisor to Solenis

US Silica
has acquired
EP Minerals
a porfolio company of
Golden Gate Capital
The Valence Group issued a Fairness Opinion to the Board of Directors of U.S. Silica

ITAÚSA
has sold
Elekeiroz
to
H.I.G. Capital
The Valence Group acted as Financial Advisor to Itaúsa

theValenceGroup

Specialty Chemicals Consolidation

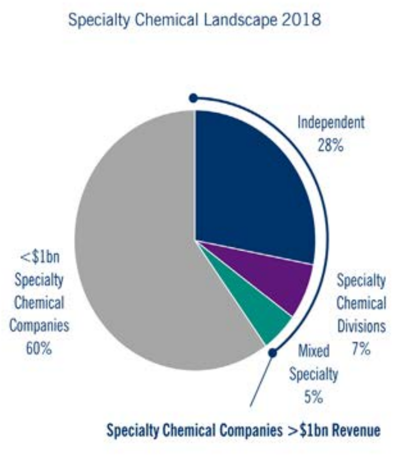
One the most undeniable trends across the chemical industry over the last 10 years has been the continuous level of consolidation across so-called specialty chemicals. There is no real definition of specialty chemicals and the term itself is rather meaningless now that Asian competition has so effectively devalued some product areas, but broadly speaking, it encompasses additives, high performance materials, performance-enhancing chemicals, custom chemicals, fine chemicals, formulated chemicals and sector-specific tailored chemistry (e.g. flavours, electronic chemicals etc). This wide range of sub-sectors has little in common, except that profit margin levels and stability are robust and there are significant barriers to entry such that the threat of new market entrants is generally limited. A more simplistic definition is an EBITDA/ revenue margin of greater than c. 18%, with stable growth and limited volatility.

It is precisely these latter qualities that have made the sector so attractive as an M&A target. Combined with competition from China and the Middle East in more established areas of plastics and base intermediates, US and European companies in particular have continued to build positions in specialties further downstream to protect their businesses. Additionally, incumbents in the sector have also expanded through acquisition to protect themselves and use consolidation to improve the market dynamics.

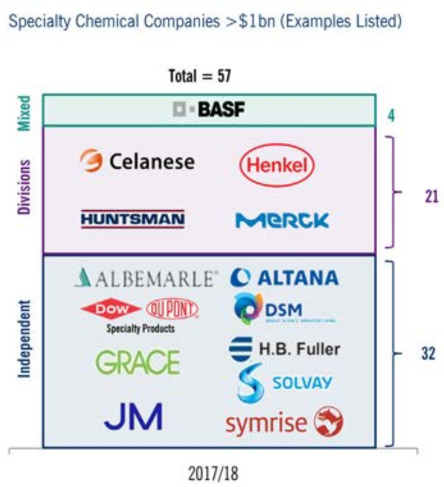
The result has been an increasing number of acquisitions in specialty chemicals in the last 10 years with some of the largest independent companies such as Rhodia, Valspar, Cytec and Taminco all being acquired. In principal, this is nothing new for the chemical industry which has witnessed consolidation over the last 50 years. Some sectors such as agrochemicals have almost completely consolidated.

However, the major difference now is that very few larger specialty chemical companies are being formed, limiting the availability of acquisition targets for further consolidation or downstream expansion. As shown in Figure 1, larger specialty chemical companies with revenue greater than $1bn constitute c. 40% of the specialty chemicals market. This includes independent companies as well as divisions of larger companies. Examples are shown in Figure 1.

Figure 1: Chemical Company Trading Multiples and Profits



Note: Excludes gases and agrochemicals

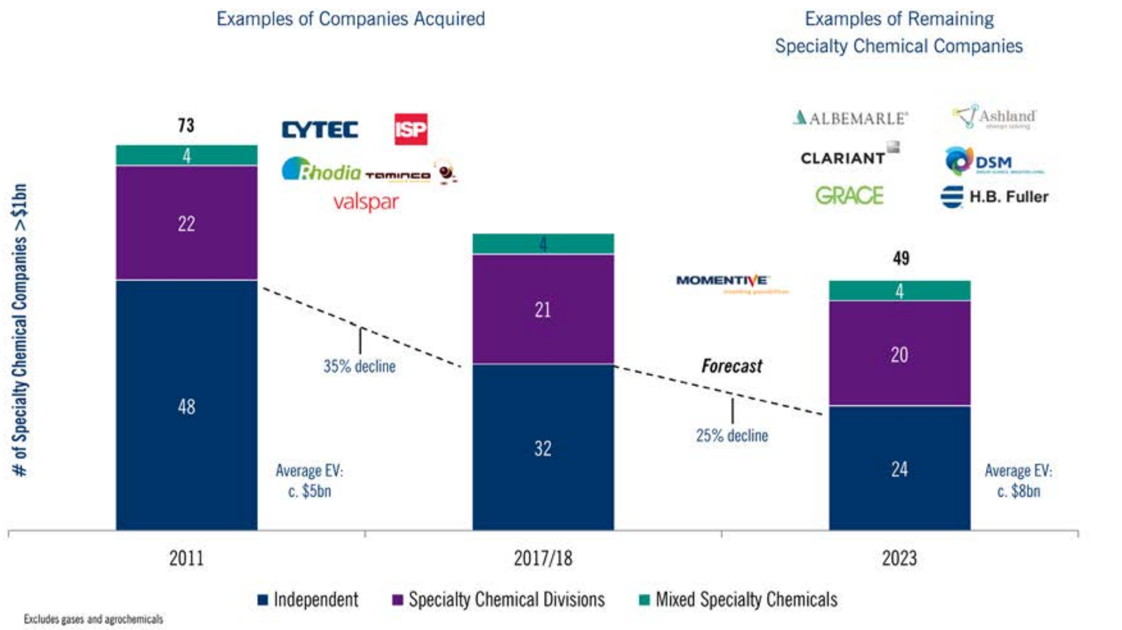


The remainder are many mid-sized companies and also an even longer "tail" of small specialty chemical companies. Many of the smaller companies remain privately owned. If the chart was displayed by overall profits, the larger companies would have a much bigger share of the market by virtue of better market/cost positions and more emphasis on profitability.

At first glance, the number of companies in Figure 1 looks reasonably healthy in terms of possible M&A targets for larger corporates or consolidation partners. However, Figure 2 shows a more disconcerting view. The actual number of large specialty chemical companies has declined significantly in the last 7-8 years with a 35% fall in the number of the $1bn+ independent specialty chemical companies, from almost 50 to now only 30. (We have deliberately excluded gases and agrochemical companies that have undergone major consolidation recently and would skew the numbers further). Moreover, as many of the smaller companies have been acquired, the average size by estimated enterprise value (EV) of the remaining companies has increased to c. $6bn.

Furthermore, when looking ahead and considering which companies are likely consolidators, acquisition/JV targets or potential business splits, our forecast is for another 25% decline in the number of larger specialty chemical companies in the next 5 years. The average EV of these remaining companies would be closer to $8bn. Therefore very soon, both the availability of actionable M&A in specialty chemicals in the $1-$10bn range will be severely diminished and those seeking acquisitions will have a narrow range of options. Indeed this consolidation and decline in the number of possible M&A transactions in the $1bn+ range of specialty chemicals has already been felt by many companies looking to expand.

Figure 2: Larger Specialty Chemicals M&A Evolution



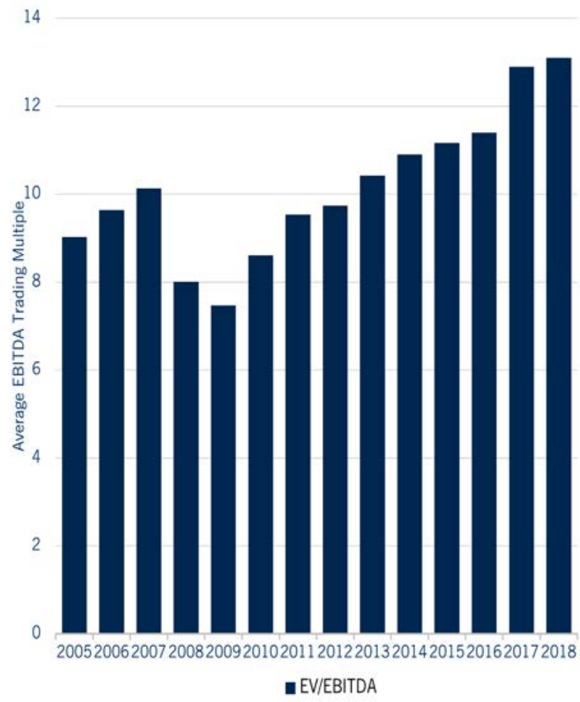
Not only has the availability of opportunities declined, but due to scarcity value and competitive intensity, trading and transaction multiples have increased especially for these specialty chemical companies. It is no longer a rarity to see EV/EBITDA multiples at or above 15x. Hence, not only are M&A options declining but those remaining opportunities are becoming more expensive. Certainly some of the current valuations are linked to stock market levels, but with high profits and limited acquisition options, valuations are unlikely to decline for many of these remaining specialty chemical companies.

Larger companies are already realising the difficulty in both finding and acquiring suitable targets in specialty chemicals. Once some of the remaining opportunities disappear either through consolidation or acquisition, we would expect M&A activity to possibly accelerate. Many companies will feel that to meet their longer term strategic objectives, it will be imperative to use M&A and with a reducing target base, there could be a scramble to acquire the best remaining assets – both large and small.

Specialty Chemical Valuations

It will come as no surprise to learn that public chemical company valuations in 2018 have remained at broadly the same level as last year (Figure 3). Profits remain strong across the sector as GDP has not faltered despite trade disputes and some countries threatening to start an emerging markets crisis. Costs have also stayed subdued and although the oil price has increased, this has mostly benefitted some US commodity suppliers, without significantly impacting US competitiveness or European cost positions. Clearly other factors such as US tax policy have helped to bolster US indices but overall there has been little evidence that any slowdown or market dynamics are changing meaningfully.

Figure 3: Chemical Company Trading Multiples



The Valence Group Analysis based on 59 mostly European and North American chemical companies.

Hence EV/EBITDA multiples have remained broadly in line with last year.

Yet the market is most definitely witnessing a further increase in specialty chemical valuations. As described in the previous section, M&A is a key driver of valuation as more companies chase fewer specialty chemical opportunities and the value of the remaining companies is boosted. Also, as stock prices have continued to increase, any fluctuation in profitability is viewed harshly by the market, thereby benefitting the companies with more stable earnings streams such as specialty chemicals.

What is remarkable is that the difference has become so pronounced, and Figure 4 shows the marked divergence between valuations across the chemical industry. During 2018, high end specialty chemical companies traded at almost double the level of their commodity and diversified peers. Even mid-tier specialty chemical companies traded higher with an average EV/EBITDA of 13x.

By way of example of the divergence, a comparison of several companies and sub-sectors is informative. In Figure 5 we show how average EBITDA multiples across example relevant sub-sectors have rapidly diverged. Sectors such as Electronic Chemicals and Flavours & Fragances have seen rapidly increasing share prices and multiples over the last few years. This can only partially be justified by profit growth.

On the contrary, commodity and diversified companies have seen share prices either increase or remain flat, but multiples have traded slightly down as profits have risen.

Figure 4: Chemicals Sector Trading Multiples

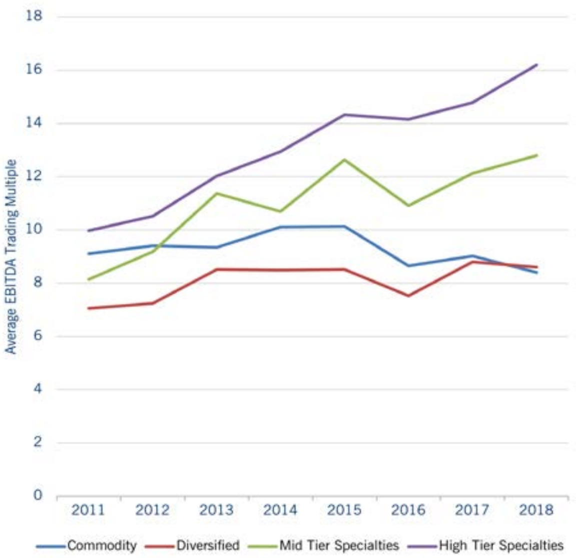
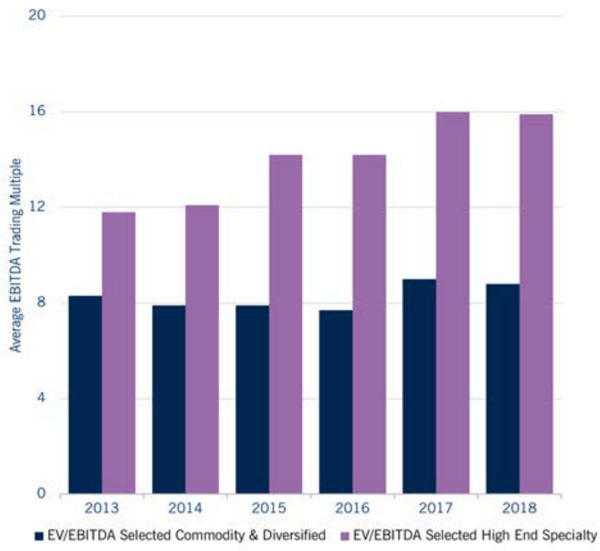


Figure 5: Sub-Sector Trading Multiple Example



The Valence Group Analysis based on 59 mostly European and North American chemical companies.

Some would argue that this divergence is not justified by business fundamentals as companies such as Covestro, LBI and others are all benefitting from high margins. But, investors are focused on stability of earnings growth and possible M&A takeovers, resulting in almost a dislocation of chemical sub-sector valuations. A mixture of M&A expectations (and scarcity), profit expectations and aversion to volatility in earnings have all combined to deliver this increasing difference between specialty and commodity chemical multiples.

The specialty chemical valuation levels are unlikely to alter much in the short to mid-term, but commodity valuations could show pronounced movements. There is some indication that the commodity cycle in some products (e.g. isocyanates and methyl methacrylate) is coming off recent highs and this could impact valuations across many companies. At this stage, share price declines have been gradual for most companies and valuations (EBITDA multiple) have not changed significantly.

theValenceGroup

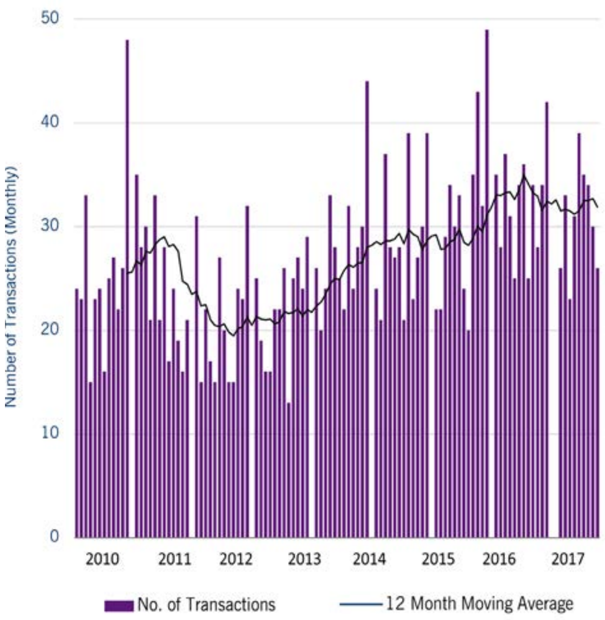
Chemicals M&A Review

However if price declines continue, we would expect a change in valuation – either up or down depending on how investors view the future cycle and the impact on earnings. It could actually be that as share prices decrease, valuations for commodity chemical companies increase as investors look to the future and the next upside.

Transactions

The last six months has seen the chemical M&A monthly transaction volume stay at an eight-year high with only vague signs of any possible decline. As shown in Figure 6, volumes have increased steadily since 2012. The current forecast for the remainder of 2018 is for the number of transactions to remain at a high level.

Figure 6: Monthly Chemicals M&A Volume



In the last few years there has been a notable shift in the number of deals in Asia. Specifically there has recently been a steady decline in the number of China-based transactions, especially when compared to earlier in the decade. Although the reason is unclear, it could be linked to the recent government environmental policy which has restricted many smaller chemical company operations (for air quality reasons) or put many companies on notice due to proximity to urban areas. Alternatively, a slowing Chinese economy could be playing a part and will be investigated in the next Newsletter in 2019.

Overall, the outlook is for a strong Q4 2018, with several large possible M&A moves in the pipeline and also several mid-sized transactions. The most recent larger deals had a combined EV of more than $10bn demonstrating the strength and appetite of the market.

Korean Consortium (KCC, Wonik and SJL) – Momentive
UCL – Arysta Lifescience (Platform/Element)
BASF – Bayer Crop Science
Cabot Micro – KMG
KKR - LCY

Although 2019 is unlikely to see much change in the chemicals M&A market, we expect some of the larger public specialty companies to succumb to successful takeovers so it could be a year of change.

Chemicals M&A Review

The Valence Group, LLC, is a member of FINRA, SIPC.

This is a market commentary and is intended neither as investment advice nor recommendtion for specific securities.

TVG Ltd, authorised and regulated by the Financial Conduct Authority (FRN: 505298.), has approved this as non independent research in connection with its distribution in the United Kingdom. This research is for our clients only. This document is not independent and should not be relied on as an impartial or objective assessment of its subject matter. Given the foregoing, this document is deemed to be a marketing communication and, as such, designed to promote the independence of investment research and TVG Ltd, is not subject to any prohibition on dealing ahead of dissemination of this document as it would be if it were independent investment research.

© 2018 The Valence Group, LLC

© TVG Ltd

theValenceGroup

The Valence Group is a specialist investment bank offering M&A advisory services exclusively to companies and investors in the chemicals, materials and related sectors.

The Valence Group team includes a unique combination of professionals with backgrounds in investment banking, strategic consulting and senior management within the chemicals and materials industries, all focused exclusively on providing M&A advisory services to the chemicals and materials sector.

The firm's offices are located in New York and London.

ChemicalInvest
a joint venture of
DSM CVC Capital Partners
is selling
FIBRANT
to
HSC
The Valence Group acted as Financial Advisor to ChemicalInvest

SK Capital
has acquired the Fire Safety and Oil Additives businesses of
ICL
The Valence Group acted as Financial Advisor to SK Capital

EP Minerals
a portfolio company of
Golden Gate Capital
has acquired the Bleaching Clay & Mineral Adsorbents business of
BASF
The Valence Group acted as Financial Advisor to Golden Gate

Quaker
is acquiring
Houghton
from
Gulf
The Valence Group issued a Fairness Opinion to the Board of Directors of Quaker Chemical

NMC New Mountain Capital LLC
has partnered with
Gelest
The Valence Group acted as Financial Advisor to New Mountain Capital

Niacet
has been sold to
SK Capital
The Valence Group acted as Financial Advisor to Niacet

Rockwood Thebe
have sold
Safripol
to
KAP
The Valence Group acted as Financial Advisor to Safripol

Evonik
has acquired the Silica business of
Huber
The Valence Group acted as Financial Advisor to Evonik

canexus
has been sold to
Chemtrade
The Valence Group acted as Financial Advisor to Canexus

Dow
has sold
Safechem
to
cbpe capital
The Valence Group acted as Financial Advisor to Dow

Evonik
has acquired the Performance Materials business of
Air Products
The Valence Group acted as Financial Advisor to Evonik

INEOS
has sold its Expadable Polystyrene business to
synthos
The Valence Group acted as Financial Advisor to INEOS

theValenceGroup

---

eurazeo
has acquired
nouacap
a portfolio company of
ARDIAN
The Valence Group acted as Financial Advisor to Eurazeo

Arsenal Capital Partners
has acquired
Pacific Urethanes
The Valence Group acted as Financial Advisor to Arsenal

SCS
SPECIALTY COATING SYSTEMS™
a portfolio company of
BERWIND
has been sold to
KISCO
The Valence Group acted as Financial Advisor to Berwind

Arsenal Capital Partners
has sold
ROYAL ADHESIVES & SEALANTS
to
AMERICAN SECURITIES
The Valence Group acted as Financial Advisor to Arsenal

---

nubiola
has been sold to
FERRO
The Valence Group acted as Financial Advisor to Nubiola

INEOS SOLVAY
has sold certain Chlorvinyls businesses as a remedy to secure European Commission approval of INOVYN, their planned PVC JV, to
INTERNATIONAL CHEMICAL INVESTORS GROUP
The Valence Group acted as Financial Advisor to INEOS/Solvay

DSM
has sold, via a JV with a critical offtake contract, a collection of businesses to
CVC Capital Partners
The Valence Group acted as Financial Advisor to DSM

DOW
has sold its Sodium Borohydride business to
Vertellus
a portfolio company of
WIND POINT PARTNERS
The Valence Group acted as Financial Advisor to Dow

---

cbpe capital
has sold
Warwick Chemicals
to
Lubrizol
The Valence Group acted as Financial Advisor to CBPE Capital

Arsenal Capital Partners
a portfolio company of
ACCELLA
has sold its Plastisols business to
PolyOne
The Valence Group acted as Financial Advisor to Arsenal

HSC CORPORATION
(Zhangjiagang, China)
has been sold to
CYG长园
ChangYuan Group
(Shenzen, China)
The Valence Group acted as Financial Advisor to HSC

Permira
has acquired
CABB
from
Bridgepoint
The Valence Group acted as Financial Advisor to Permira

TESSENDERLO GROUP
has sold its Compounds business to
MITSUBISHI CHEMICAL
The Valence Group acted as Financial Advisor to Tessenderlo

Solutia
has been sold to
EASTMAN
The Valence Group acted as Independent Advisor to the Board of Directors of Solutia

---

ARKEMA
has sold its Tinstabilizer business to
pmc
The Valence Group acted as Financial Advisor to Arkema

Arsenal Capital Partners
and
FOOSUNG
have sold
NOVOLYTE technologies
to
BASF
The Valence Group acted as Financial Advisor to Arsenal