

the Valence Group **Chemicals M&A Review**

Highlights

- Chemicals M&A volumes and valuations have picked up in the second half of 2019 despite slowing global growth
- Over 50% of the chemical industry is now consolidated and selected performance chemicals sectors are increasingly the main acquisition targets
- Outlook for M&A for 2020 remains robust as performance chemicals profits outperform and acquisitions become increasingly attractive

IN THIS ISSUE

Chemicals M&A Overview Sector M&A and Consolidation 2020 Chemicals M&A Outlook

New York Tel: +1 212 847 7340

London Tel: +44 (0) 207 291 4670

www.ValenceGroup.com





from

theValenceGroup Chemicals M&A Review

Chemicals M&A Overview

As we head into the last quarter of 2019, despite early predictions of slower growth, more volatile markets and possibly slower M&A markets, there is, at present, limited evidence of declining transaction activity. Chemical company EBITDA trading multiples remain at the levels of the last several years. Indeed, since the beginning of the year, share prices have risen moderately for some companies leading to a small rebound in trading multiples compared to Q1 2019.

Economic indicators are generally moving sideways or downwards in parts of Europe and China, with even the US showing initial signs of weakness. At present this seems to be limited mainly to the auto and related sectors which have seen very strong growth in the last few years, particularly in China. A pause in expansion is more than expected, especially with the uncertainty around diesel, electric and new emission and other standards globally. Nevertheless, with IMF forecasting global growth this year of only 3% (which is the lowest since 2008/9) and a meagre 1.7% for advanced economies, we would have expected to see a significant impact on M&A which has not materialized. Although overall we have seen marginally lower deal volumes, this is mostly in Asia and generally chemicals M&A volumes are still at the same high levels of the last 3-4 years as shown in Figure 1.

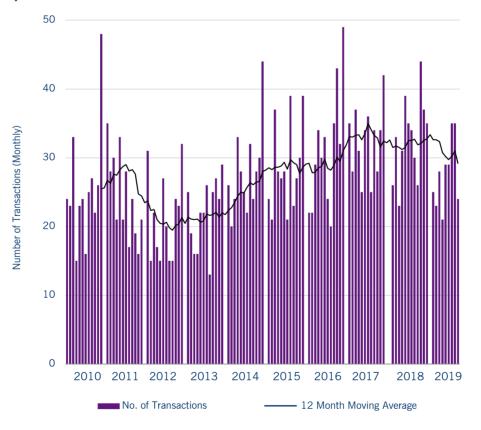


Figure 1: Monthly Chemicals M&A Volumes

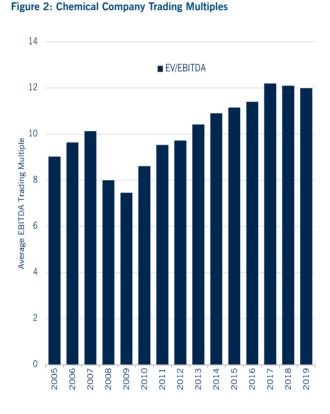
2 | Issue 15 November 2019

www.ValenceGroup.com

theValenceGroup Chemicals M&A Review

There is also no decline in chemicals M&A valuations in 2019 with only a moderately discernable softening from the recent higher levels. As shown in Figure 2, chemical company trading multiples have been broadly at the same level for the last few years at 12x EV/EBITDA. Diversified and commodity chemical companies in contrast have seen a slump in valuations in the last years as growth has slowed and profits have stagnated (this is mainly due to falling profits as we show in the last section).





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

Furthermore, average valuations have been above 11x now since 2013, indicating that these multiple levels are now entrenched across the industry. As noted previously, much of the value is driven by the higher (profit) growth companies which tend to be the higher and mid-tier specialities. Figure 3 clearly shows how specialty chemical valuations have increased by 40% in the last 10 years (both high and mid tier) and have largely underpinned the market valuation rise.

18 16 14 **Average EBITDA Trading Multiple** 12 10 8 6 2 2011 2012 2013 2014 2015 2016 2017 2018 2019 Mid Tier Specialties High Tier Specialties -Commodity The Valence Group analysis

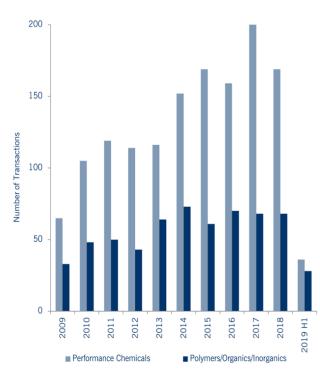
We have shown in previous analysis that profit growth is the major driver of valuation. However, an additional key factor is the continued industry move downstream through organic investment and more importantly acquisitions. The chemical industry has been restructuring for the last 10-15 years as companies move further away from commodity and intermediate chemicals, and this trend has been accelerating in the last few years. As we have noted in recent newsletters, European, Japanese and US companies are continuing to look for and make acquisitions in such areas of performance chemicals as food ingredients, specialty additives and surfactants. electronic chemicals composites. and

3 | Issue 15 November 2019

theValenceGroup

This move downstream has had two effects. Firstly, competition for higher quality performance chemicals businesses has become more intense pushing up transaction and trading multiples due to both scarcity and competitive intensity. Secondly, so-called underperforming companies (in terms of stock valuations) have been forced to improve valuations through targeted M&A themselves, either to consolidate their position or divest underperforming divisions. The overall consequence has been the continued rise in valuation of specialty/performance chemicals and, as shown in Figure 4, the almost continual increase in performance chemicals M&A. This entire industry restructuring will reinforce M&A volumes well into the next decade.

Figure 4: Number of Transactions by Sector



The Valence Group analysis

This year in particular has seen this M&A trend quickening, with most recent transactions all demonstrating the industry consolidation or move downstream:

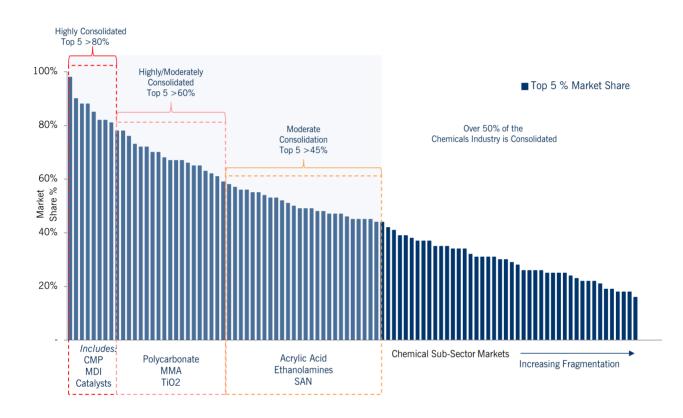
Indorama – Huntsman (upstream EO, PO and related products) Synthomer – Omnova DIC – BASF Pigments Firmenich – Robertet

Sector M&A and Consolidation

Up until the financial crash of 2008/09, there was a belief in the chemical industry that with the sheer scale and breadth of chemical products and companies, there would always be scope for acquisitions, further consolidation abundant growth opportunities through M&A. But, the expansion of Chinese production across intermediates and some performance chemicals, the growth of Middle East production and the shale gas revolution changed the industry dynamics fundamentally. The rapid realignment and shift over the last 10 years altered the structure of the industry. All this occurred in relatively slow growth economic environments, especially in developed regions. This combination, coupled with the greater focus on profit rather than capacity expansion, has created a highly consolidated industry with rapidly diminishing high quality acquisition options.

Our analysis of the industry shows that already nearly 50% of the major chemical products/sectors are consolidated. Figure 5 displays a representative extract of the c. 200 products/ segments that The Valence Group tracks and it shows that consolidation across the industry is far advanced with some areas such as MDI, CMP slurries and polycarbonate already limited to only a few major competitors. The only areas where there is a more fragmented supply base are in products where multiple Chinese manufacturers entered in the last 10-15 years or in selected performance chemicals. theValenceGroup

Figure 5: Chemical Industry Consolidation by Product / Market Segment



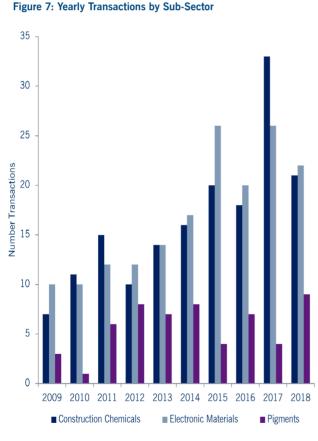
The Valence Group Analysis of 223 companies (extract)

Even in China, with tighter environmental controls and less financial latitude for Chinese companies, we have seen supply contraction. This degree of consolidation has resulted in more resilient profitability for many product areas but in slower economic environments, while at the same time constraining growth through acquisition (both for regulatory reasons and limited options). Therefore, with the industry consolidating rapidly across many sectors and larger companies moving downstream, there is significant competition for the more attractive targets. This has only served to accelerate M&A and, where possible, further consolidation, particularly in more fragmented performance chemicals sectors. Areas such as paints and coatings, electronic chemicals, food and feed ingredients, and flavors and fragrances are still undergoing consolidation as competitors and new entrants continue to build positions while opportunities are still available. Obviously, this level of activity has a limit and so companies are acting now before it is too late. For other commodities, base polymers and intermediates, the level of M&A is lower (with a few exceptions), as many of these products are already relatively concentrated or may be less attractive in terms of growth.

5 | Issue 15 November 2019

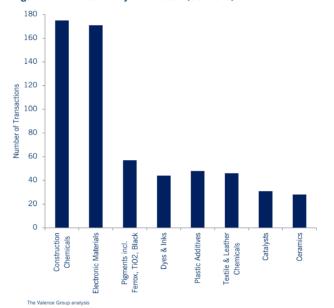
theValenceGroup

The more recent focus of M&A in performance chemicals is directed towards the higher growth and still fragmented areas. Figures 6, 7 and 8 amply emphasize how sectors such as construction chemicals (still highly fragmented) have witnessed increased M&A, whereas more mature sectors such as pigments and catalysts are now in the latter stages of consolidation. This is the pattern that we expect to continue for the next c. 5 years.

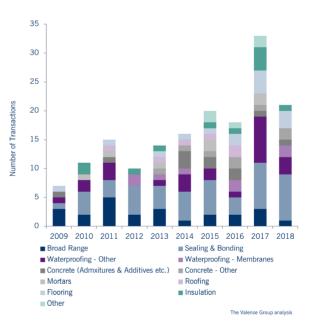


The Valence Group analysis

Figure 6: Transactions by Sub-Sector (Selective)







www.ValenceGroup.com



Chemicals M&A 2020 Outlook

The outlook for M&A will depend heavily on the global economic outlook, the evolution of trade disputes and chemical company profitability. Corporate results have been mixed in 2019, with larger bellwether companies such as BASF, Huntsman, Covestro and Eastman reporting weaker profits in the most recent quarters, partially balanced by more robust results in the specialty chemical sector. Diversified and commodity chemicals average EBITDA is shown in Figure 9 and there is distinct evidence in the first half of 2019 of declining profits.

In contrast, mid and high-tier specialty chemicals have maintained profits with even some degree of growth as illustrated in Figure 10. This combination of weaker upstream profits and better returns in performance chemicals will only serve to spur the industry realignment further, as companies continue to move downstream seeking less volatile profit growth. The implication for M&A is one of continued consolidation and acquisition of performance chemical companies irrespective of global economic outlook. Clearly, the chemicals industry is not isolated from global impacts, but the dynamics of the industry will continue to support M&A and therefore we would expect to see continued high volumes of M&A across chemicals.

Figure 9: Average Profit by Chemical Company Type

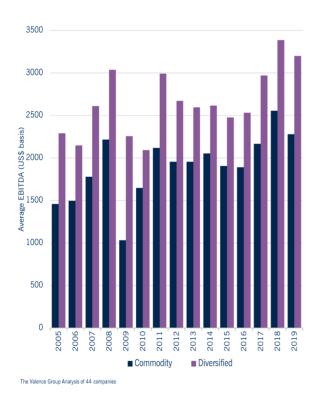
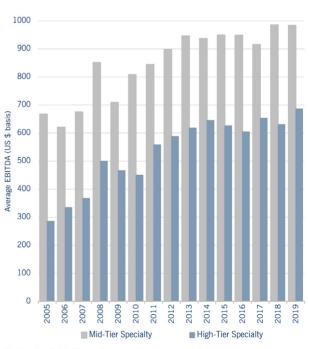


Figure 10: Average Profit by Chemical Company Type



The Valence Group Analysis of 52 companies



Additionally, with private equity still holding enormous financial "firepower", strong industry balance sheets and limited organic growth options, it will be difficult for companies to persist with share buy-backs or build-up of cash, so acquisitions and divestment of non-core businesses will continue as a major strategic avenue.

There is no evidence, even if global growth remains weak, that profitability will fall precipitously; and indeed with a US election year in 2020, we would expect some fiscal stimuli in US and perhaps also China. Under these latter circumstances, the outlook for 2020 for chemicals M&A is weighted more heavily on the upside. It appears the strong chemicals M&A market is set to continue.

The Valence Group, LLC, is a member of FINRA, SIPC. This is a market commentary and is intended neither as investment advice nor recommendation 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.

© 2019 The Valence Group, LLC © TVG Ltd

8 | Issue 15 November 2019



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.













The Chemicals M&A Specialists

London | New York

www.ValenceGroup.com