Highlights

- Chemicals M&A hits almost $250bn – by far the highest on record and buoyed by “mega deals”
- 2017 chemicals M&A expected to remain well above recent history as companies aggressively target M&A opportunities
- Businesses continue to divest intermediate chemicals as competition from China rises
- Analysis shows companies who conduct significant M&A are rewarded with increased EBITDA multiples

The Valence Group acted as financial advisor to:

- Canexus, has agreed to be acquired by Chemtrade
- Evonik Industries, is acquiring the Silica business of Huber
- Rockwood, and management have sold Safranpol to KAP
- Evonik Industries, has acquired the Performance Materials Business of Air Products
- INEOS, has sold its expandable polystyrene business to Synthos
- Ardian, has acquired from Ardian
- The Valence Group acted as financial advisor to Eurazeo
Chemicals M&A 2016 Review

Chemicals M&A 2016-17 Review

The past year has proved to be another record breaking year for chemicals M&A. The value of chemicals acquisitions in 2016 for the first time topped $240bn (Figure 1). Although this included the ChemChina-Syngenta, Bayer-Monsanto and Linde-Praxair transactions that boosted the figures significantly, there were also a broad range of other notable deals that demonstrated the underlying demand. Indeed just five of the other top deals amounted to c. $40bn:

- Evonik - Air Products Performance Materials
- Sherwin Williams – Valspar
- Westlake – Axiall
- BASF – Chemetall
- Potash Corp - Agrium

Although the larger “mega-deals” dominated the headlines, what was often overlooked was the sheer scale and size of M&A across all of chemicals which, excluding the three largest deals, reached almost $100bn. This level of activity is testament to the demand and willingness of companies to invest substantial resources to secure transactions and extract maximum synergies. Conversely, it also points to the lack of growth in the industry and the continued need to move further downstream to acquire targets with better growth prospects and/or in sectors with higher barriers to entry. The recent BASF, Lanxess and Lonza deals fall into this category.

Unsurprisingly, the number of transactions (Figure 2) has also risen again demonstrating the need and desire to fund M&A. Volumes rose sharply at the end of 2016 with December being the strongest month on record.
The end of the year always shows a peak in deal activity as companies want to finalise transactions prior to the new year for tax, accounting and wider strategic and tactical reasons. The entire last quarter of 2016 was exceptionally robust and the strongest ever for chemicals M&A, verifying that demand is being fuelled by more than simply year end closing.

Multiples paid (x EBITDA) have also remained close to recent highs (Figure 3). Both transaction and trading multiples have tracked higher, especially in the second half of the year. Companies are not only prepared to pay for resilient businesses with above GDP growth but are more confident of optimising cost synergies while also maximising revenue synergies.

It is however a little misleading to compare transaction and trading multiples over longer time periods as a significant number of transactions in the last few years have been in higher end specialities and certainly more than in the first half of the decade. Average multiples have been boosted accordingly. The move toward higher end specialty transactions can also be seen in Figure 4, which plots the acquisitions by type in 2016 and provides a broad comparison against the last years. There has been an inexorable move “upward” in the chart as more transactions are classed performance or highly differentiated products and thus command higher EBITDA multiples. Even commodity chemical businesses are transacting at higher multiples in recent years with few deals in the previously typical 4-6x EBITDA range (red dots in lower shaded area of Figure 4).

We expect 2017 to remain buoyant with similar volumes of M&A activity. Although we would forecast fewer mega deals and the overall value of M&A will almost certainly decline this
year, the impetus and underlying demand to make acquisitions will be undiminished. All the same factors driving deal flow still exist and, barring some economic shock, we forecast the number of deals in 2017 to be comparable to 2016 and the value of chemicals M&A to be c. $100-130bn (i.e. between 2014-2015 totals).

Additionally, we would expect that some of the larger and mid-size specialty chemicals companies will be acquired in 2017. In 2016 Chemtura and Valspar succumbed to acquisition by larger competitors and our forecast is that two or three more specialty chemical companies will be targets as the chemical industry continues to restructure/consolidate. Expect to see some well-known chemical company names disappear.

Sector Focus - Intermediates

Chinese competition has been so intense across many intermediates that the profitability of some products has declined markedly with little scope of a return to previous healthy levels. Indeed, the Chinese owned capacity build up in certain products has probably altered the market permanently, with the prospect of many of the established suppliers likely to exit in the near to mid term.

Figure 5 shows the capacity change in many key intermediates over the last 10 years. Chinese owned production expansion has been most marked in those products with a downstream strategic rationale such as 1,4 butanediol (BDO) and caprolactam (spandex and nylon respectively). However, other products are also under threat of Chinese encroachment with the implications for profitability in these product lines. Already BDO, adipic acid and caprolactam have witnessed severe margin compression as a result of uncontrolled Chinese production, and the question is whether other intermediates are likely to follow the same fate.

A closer examination of the profit dynamics has shown that when Chinese owned capacity starts to exceed 20-25% of global production capacity then profitability in the product line is severely reduced. The three products mentioned earlier...
Chemicals M&A 2016 Review

are already over this limit explaining the declining margins. Several other products are now reaching this tipping point. In our view, the product areas of isocyanates, styrene and phenol are all vulnerable in the mid-term but other products such as MEG are could also soon be significantly less profitable.

Undoubtedly other factors influence intermediates profitability such as logistics barriers, technology and quality requirements. But experience has shown that when local Chinese producers gain the relevant production know-how, any central government led operating constraints are often ignored, leading to oversupply and the predictable decline in pricing. This is especially true when there are several local Chinese plants, as these producers tend to remain in the market maximising volumes irrespective of the profit margins. Chinese central government influence is often exaggerated.

The implication for current intermediates producers is that they need to either protect their positions through forward integration, feedstock advantage, logistics or technology, or alternatively consider divestment. There is a belief among some chemical companies that China has limited desire to expand further in chemicals but this is unlikely to be true. For many current intermediates producers the best option will be a divestment to maximise value now rather than risk potential profit decline in the next few years. The recent history of those products already impacted by Chinese producers should serve as a cautionary tale.

M&A – Value Creation

As discussed above and at the Valence Group Chemicals M&A conference last September in New York, the demand for acquisitions in chemicals continues unabated. Multiple factors including structural change in the industry, lack of growth and resilient profitability are all combining to underpin M&A in chemicals in the mid-term. However, whether M&A creates value is a question that numerous studies suggest is less obvious. This is a view also held by many senior executives. Although one can argue that the type, size and synergy of a transaction are all key to delivering value, it is still a widely held view that undertaking M&A is inherently risky from a value creation perspective.

We strongly believe that well executed M&A is a major source of value creation. At the simplest level there are two basic sources of value from cost and revenue synergies. Each of these increase profitability either by lowering the overall cost base through elimination of duplication, or by increasing sales and marketing effectiveness. It is often possible to quantify many of these synergies and it is surely the case that in the last 10 years, chemical companies’ ability to extract cost synergies from a transaction have increased significantly. On the other hand, increasing revenue from combined companies is often harder to analyse despite distinct improvements in R&D, new product development and corresponding sales. Nevertheless, it is generally agreed that M&A in the chemicals industry is becoming less risky especially for the mid-sized (c. EV $200-$700m) bolt-on type transaction.

But a critical question is how the stock markets and shareholders view M&A and whether companies which conduct multiple transactions are rewarded with an increasing share price and multiple. Our analysis is displayed in Figures 6-7 and it unmistakeably demonstrates that M&A is a significant source of value creation for owners/sharholders. Companies that have conducted multiple M&A have outperformed their more conservative peers by nearly 20%, corresponding to a multiple uplift from c. 10x to 12.5x (EV/EBITDA). Even companies that have that have followed a more limited M&A path have outperformed businesses that have avoided acquisitions. Companies that have a track record of consistent M&A following a strategic goal, such as Balchem, benefit the most. M&A is handsomely rewarded by stock markets and shunning acquisitions could prove costly for company performance.
The analysis shown in Figures 6 and 7 is based on 30 companies chosen from a balanced mix of commodity, diversified and performance chemicals. Each group contains companies from sectors such as flavours and fragrances, additives, coatings, commodities and catalysts to mitigate any sector specific effects. In total 30 companies were chosen but the results of the analysis remained similar with a higher number of data points or by changing some of the companies. Hence, despite an element of subjectivity in the groupings, the results are significant and verify that M&A does create shareholder value through increasing EBITDA multiples.

The fundamental driver of EBITDA multiple uplift is the stock market’s expectation of profit growth from the larger company (see previous Newsletters), as well as the expectation that additional M&A will continue to deliver enhanced profitability. For companies with a successful track record of conducting M&A, this expectation is especially enhanced, leading to valuation levels well above the peer average and creating superior shareholder returns.
Chemicals M&A 2016 Review

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

© 2017 The Valence Group, LLC
© TVG Ltd
The Valence Group

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 Valence Group acted as financial advisor to Golden Gate Capital.

Golden Gate Capital has acquired SNOW PHIPPS from Custom Chemicals Inc.
The Valence Group acted as financial advisor to Golden Gate Capital.

The Valence Group acted as financial advisor to PolyOne and issued a Fairness Opinion to PolyOne's Board of Directors.

PolyOne has acquired ChemSolutions BV from Kemira.

Kemira has acquired DEX Plastomers from Borealis.
The Valence Group acted as financial advisor to DSM and ExxonMobil.

The Valence Group acted as financial advisor to Houghton.

Houghton has acquired Gulf from AltaMaz Custom Chemicals Inc.
The Valence Group acted as financial advisor to Houghton.

The Valence Group acted as financial advisor to CABB.

CABB has acquired Building Block Chemicals from Cytec.
The Valence Group acted as financial advisor to Cytec.

Cytec has sold substantially all its assets to Vertex.
The Valence Group acted as financial advisor to Vertex.

The Valence Group acted as financial advisor to TA Associates.

TA Associates has sold Microban and barr to Arsenal Capital Partners.
The Valence Group acted as financial advisor to TA Associates.

Arkema has sold its Tin Stabilizer Business to Arsenal Capital Partners.
The Valence Group acted as financial advisor to Arkema.

Arsenal Capital Partners and HEG Capital have sold Novolyte Technologies and BASF Tin to PMC.
The Valence Group acted as financial advisor to Arsenal Capital.

PMC has been sold to Eastman.
The Valence Group acted as independent advisor to the Board of Directors of Solutia.

Solutia has been sold to Arsenal Capital Partners.
The Valence Group acted as financial advisor to Arsenal Capital.

Arsenal Capital Partners has sold its Building Block Chemicals Division to Houghton.
The Valence Group acted as financial advisor to Houghton.

Houghton has been sold to AEA Portfolio Company.
The Valence Group acted as financial advisor to Houghton.

The Valence Group acted as financial advisor to IGM Resins.

IGM Resins has been sold to Arsenal Capital Partners.
The Valence Group acted as financial advisor to Arsenal Capital.

Arsenal Capital Partners and NOVOLYTE TECHNOLOGIES have sold the U.S. Aluminium Hot Rolling Oils business of Houghton.
The Valence Group acted as financial advisor to Arsenal Capital.

Houghton has been sold to Eastman.
The Valence Group acted as financial advisor to Eastman.

Eastman has sold its PVC and Chlor Alkali businesses to IGM Resins.
The Valence Group acted as financial advisor to IGM Resins.

IGM Resins has acquired ChemSolutions BV from Niacet.
The Valence Group acted as financial advisor to IGM Resins.

Niacet has acquired ColorMatrix from Anchor Group.
The Valence Group acted as financial advisor to Niacet.

Niacet has acquired KEMFINE from Arsenal Capital Partners.
The Valence Group acted as financial advisor to Niacet.

Arsenal Capital Partners and NOVOLYTE TECHNOLOGIES have sold the U.S. Aluminium Hot Rolling Oils business of Houghton.
The Valence Group acted as financial advisor to Arsenal Capital.

Houghton has been sold to AEA Portfolio Company.
The Valence Group acted as financial advisor to Houghton.

The Valence Group acted as financial advisor to TA Associates.

TA Associates has sold Microban and barr to Arsenal Capital Partners.
The Valence Group acted as financial advisor to TA Associates.

Arkema has sold its Tin Stabilizer Business to Arsenal Capital Partners.
The Valence Group acted as financial advisor to Arkema.

Arsenal Capital Partners and HEG Capital have sold Novolyte Technologies and BASF Tin to PMC.
The Valence Group acted as financial advisor to Arsenal Capital.

PMC has been sold to Eastman.
The Valence Group acted as independent advisor to the Board of Directors of Solutia.

Solutia has been sold to Arsenal Capital Partners.
The Valence Group acted as financial advisor to Arsenal Capital.

Arsenal Capital Partners has sold its Building Block Chemicals Division to Houghton.
The Valence Group acted as financial advisor to Houghton.

Houghton has been sold to AEA Portfolio Company.
The Valence Group acted as financial advisor to Houghton.

The Valence Group acted as financial advisor to IGM Resins.

IGM Resins has been sold to Arsenal Capital Partners.
The Valence Group acted as financial advisor to Arsenal Capital.

Arsenal Capital Partners and NOVOLYTE TECHNOLOGIES have sold the U.S. Aluminium Hot Rolling Oils business of Houghton.
The Valence Group acted as financial advisor to Arsenal Capital.

Houghton has been sold to AEA Portfolio Company.
The Valence Group acted as financial advisor to Houghton.

The Valence Group acted as financial advisor to TA Associates.

TA Associates has sold Microban and barr to Arsenal Capital Partners.
The Valence Group acted as financial advisor to TA Associates.

Arkema has sold its Tin Stabilizer Business to Arsenal Capital Partners.
The Valence Group acted as financial advisor to Arkema.

Arsenal Capital Partners and HEG Capital have sold Novolyte Technologies and BASF Tin to PMC.
The Valence Group acted as financial advisor to Arsenal Capital.

PMC has been sold to Eastman.
The Valence Group acted as independent advisor to the Board of Directors of Solutia.

Solutia has been sold to Arsenal Capital Partners.
The Valence Group acted as financial advisor to Arsenal Capital.

Arsenal Capital Partners has sold its Building Block Chemicals Division to Houghton.
The Valence Group acted as financial advisor to Houghton.

Houghton has been sold to AEA Portfolio Company.
The Valence Group acted as financial advisor to Houghton.

The Valence Group acted as financial advisor to IGM Resins.

IGM Resins has been sold to Arsenal Capital Partners.
The Valence Group acted as financial advisor to Arsenal Capital.