Where will we see the next wave of consolidation in chemicals?

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Point of view for chemicals

As part of the EY organization's deal origination effort,[1] we have had numerous conversations with senior executives and experts in the chemical sector over the last 24 months. In many of those conversations, we were asked about our view on the significant M&A activity in the chemical sector (e.g., in agriculture and industrial gases) and where or how we believe this M&A activity would continue. The following point of view for chemicals tries to answer the question of where we will see the next wave of consolidation in the chemical sector. This point of view is not meant to be an academic piece of work, but rather a practitioner view based on our sector knowledge and experience.

[1] The EY deal origination team analyzes sectors and companies that our organization believes to be facing significant transformational change. For such companies, the team assesses the competitive environment and develops strategic options for the companies being concerned in order to sustainably grow in categories and markets with attractive fundamentals.

Our approach

In this point of view for chemicals, we have tried to answer the question of where the next wave of consolidation – i.e., increased M&A activity in the chemical sector – may take place. To answer that question, we have reviewed the strategic rationale behind large chemical transactions that have taken place over the last 15 years. Over this period, it was evident that companies with expected lagging financial performance were more likely to conduct M&A than companies with strong growth and profitability characteristics. That does not mean that companies without performance issues are not pursuing transformational transactions at all. However, they seem to be less likely to pursue transformational transactions than companies facing performance issues.

We have therefore tried to identify those chemical companies for which the capital markets are predicting top-line growth or profitability to lag behind peers. Such companies could potentially be under increasing strategic pressure to pursue large, transformational transactions in order to improve top-line growth and/or profitability. As a next step, we have looked at the attractiveness of certain chemical subsectors in terms of growth, profitability and asset intensity (capex as a percentage of sales). Our assumption is that companies looking for additional growth and margin improvements will focus on transactions in those subsectors that have attractive growth and profitability characteristics and pose a good strategic fit with their existing business.

> Chemical companies pursuing a geographical expansion strategy have primarily looked at targets in Asia-Pacific and other developing countries. In contrast, chemical companies focused on gaining market share via M&A often looked at targets in more mature regions such as Western Europe and North America.

Dr.-Ing. Frank Jenner
EY Global Chemical Industry Leader

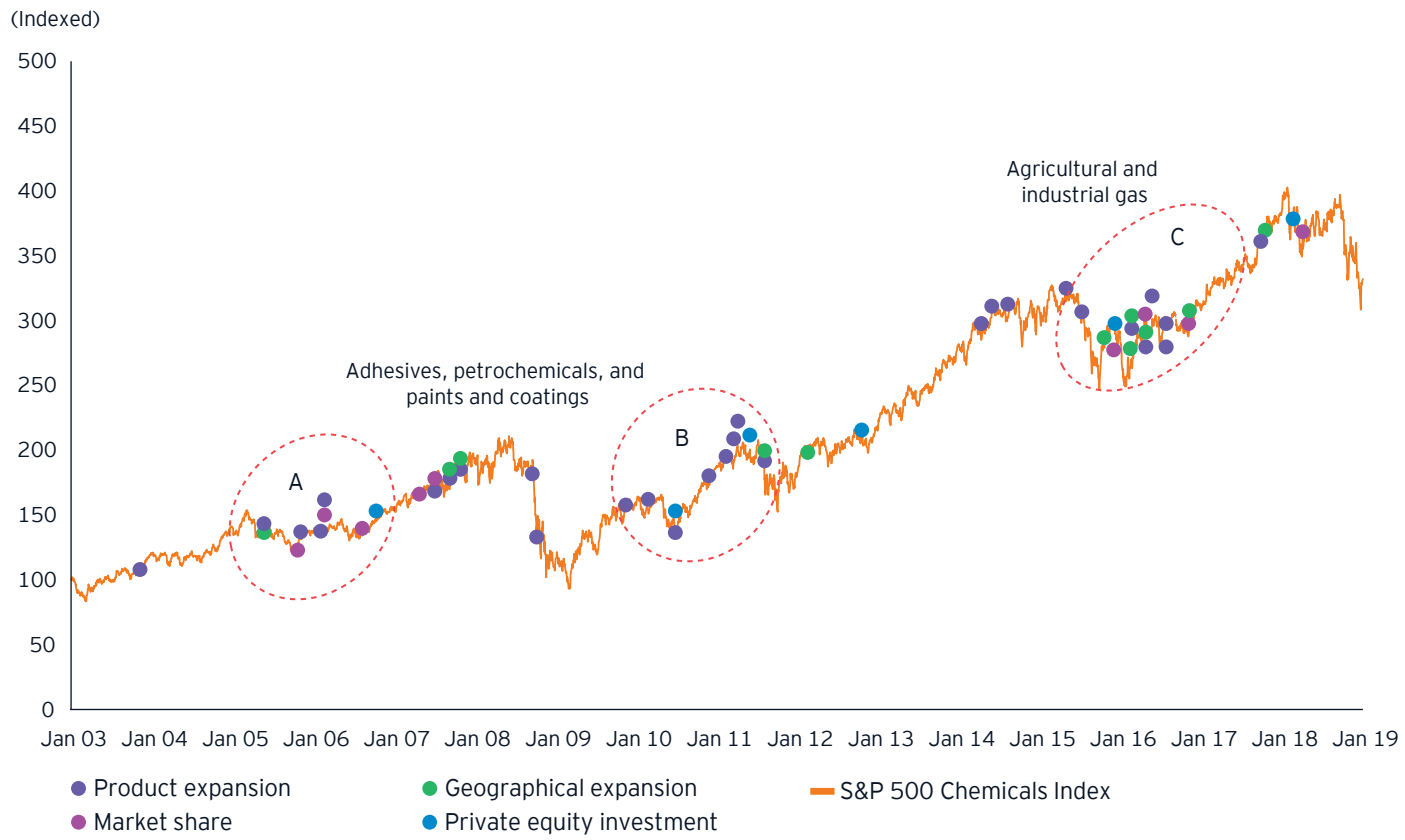
Over the last 15 years, the chemical industry has experienced a significant increase in M&A activity globally. Over this time period, the number of transactions with a value over €3 billion was approximately three times as high as in the preceding 15 years (1988–2002). The strategic rationale for such large and transformational transactions has often focused on product expansion into higher-margin segments, geographical expansion or market share gains. Large transactions occurred in mature regions (e.g., the US, Western Europe, Japan) as well as growth regions (e.g., China, India, Thailand, Indonesia, South Africa, Eastern Europe).

It is noteworthy that transactions that targeted geographical expansion often took place in growth regions such as Asia-Pacific and Eastern Europe, while transactions that focused on market share gains often took place in more mature regions, including Western Europe and North America. Furthermore, for transactions that were primarily driven by product expansion into higher-margin segments, it can be observed that the geographic focus of such transactions was driven by the respective end-market profile (e.g., electronic chemicals in Southeast Asia).

From an end-market perspective, there have been clusters of transactions in selected chemical subsegments. The most recent transaction clusters took place between 2016 and 2018 in the agricultural and industrial gas subsectors. Additionally, two further transaction clusters were observed between 2005 and 2006 and between 2010 and 2012.

The end-market focus on those earlier transaction clusters was in the adhesives, petrochemicals, and paints and coatings subsectors. It is interesting to note that there have been several takeover attempts and M&A discussions about transformational transactions in paints and coatings in recent years.

Figure 1: Share price development and transaction rationale for major chemical companies (2003–18)



Source: Mergermarket, Capital IQ

Note: The red-dotted circles A and B highlight two transaction clusters in the adhesives, petrochemicals, and paints and coatings subsectors in 2005–06 and 2010–12, respectively. The red-dotted circle C highlights the most recent transaction cluster in the agricultural and industrial gas subsectors in 2015–16. Please note, not all transactions included in the red-dotted circles took place in the highlighted subsector.

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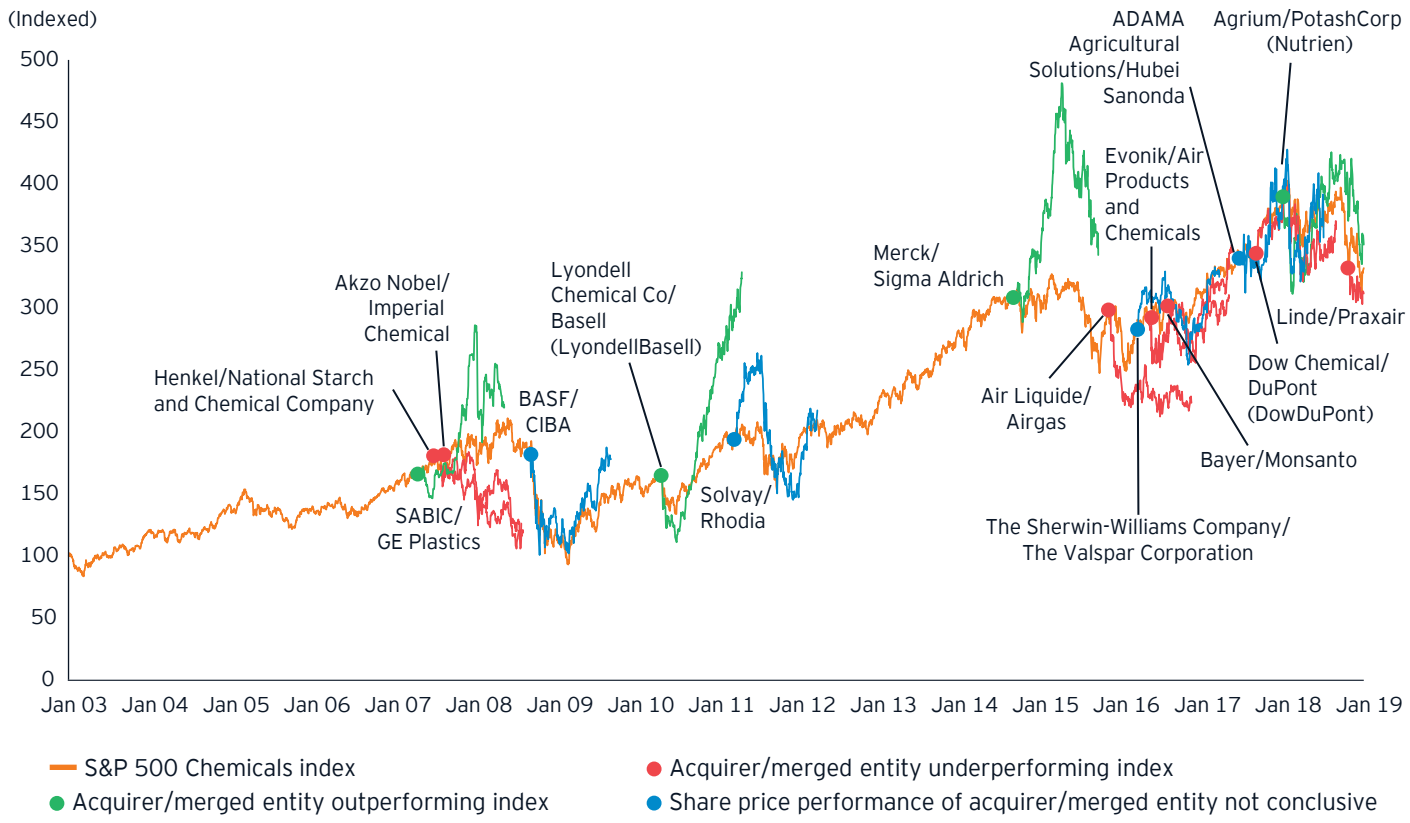
The sector remains hungry for high-growth, high-margin segments, so we do not foresee any drop-off in M&A activity in the short to medium term.

David S. Strauss
Transaction Advisory Services Chemical Leader – Americas

Looking at 15 large deals between 2003 and 2019 from a deal value perspective, most of the recently acquiring entities (i.e., 2016–18) have underperformed the broader S&P 500 Chemicals Index within the first year after announcing the transaction. One may argue that the reasons for such share price developments need to be assessed on a case-by-case basis and that the strategic rationale and ultimate reflection in the share price performance for most of the large, transformational transactions will only fully materialize in the long term (i.e., after one year post-announcement). However, looking at the entire time period from 2003 to 2019 – at least within the first year post-announcement – there does not seem to be a strong correlation between pursuing large, transformational transactions and outperforming the S&P 500 Chemicals Index.

While there may be macroeconomic and geopolitical reasons for M&A activity to temporarily slow down, we expect the trend of increasing M&A activity in the chemical sector to continue given the strategic search for high-growth and high-margin segments. We expect companies that lack healthy growth prospects and the ability to organically focus on high-margin segments, as well as companies under strategic pressure, to pursue large, transformational transactions. Figure 3 (on page 9) illustrates the historical and expected growth and profitability profile of selected chemical companies based on reported financials and broker consensus. Looking at the historical growth and current profitability profile of major chemical companies and how the capital markets expect this to develop in the future, we believe there is a risk that certain companies may fall behind their peers. Those companies will need to address the issues negatively impacting their growth and profitability profiles. While it could be argued that these are only two dimensions of a more complex strategic assessment, we assume that companies with the strategic need to improve their growth and profitability profile will play a major role in the next wave of consolidation in certain chemical subsectors.

Figure 2: One-year share price performance (outperformance/underperformance) vis-à-vis the S&P 500 Chemicals Index for selected chemical companies involved in large deals between 2003 and 2019



Source: Mergermarket, Capital IQ

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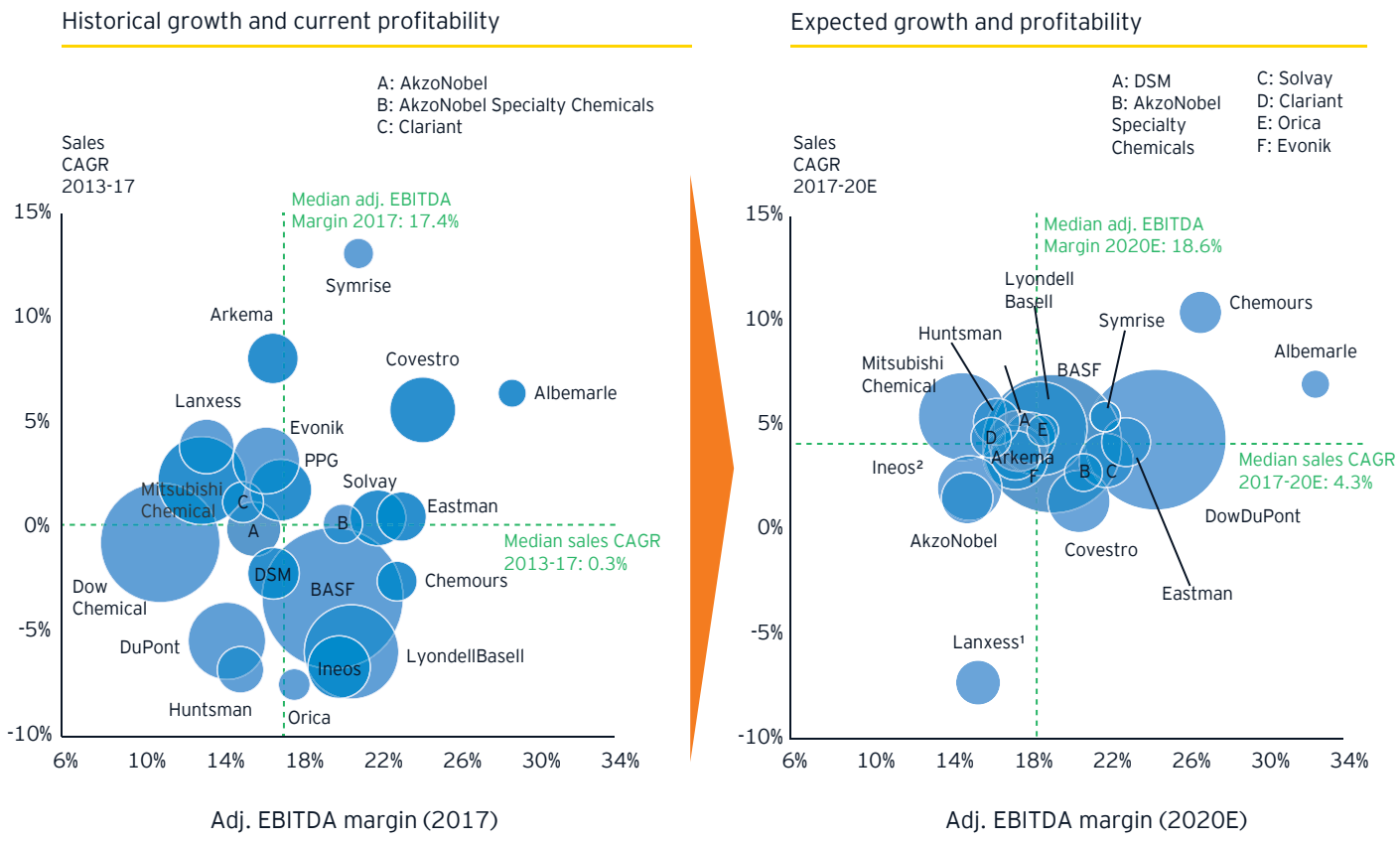
We believe sectors such as food ingredients, personal care and construction/paints and coatings will be subsectors in which we will see an increase in M&A activity.

Klaus Ort
Transaction Advisory Services Chemical Leader – Germany, Switzerland and Austria

While it is interesting to better understand which chemical companies might face the strategic need of facilitating large, transformational transactions, it is also important to form a view on those chemical subsectors where this increased M&A activity may take place. In addition to the individual growth prospects of each subsector and the assumed across-the-cycle EBITDA margin levels, we consider the asset intensity of each subsector (e.g., capex as a percentage of sales over the cycle) to be an important metric that drives the attractiveness of subsectors. Using a 10-year average provides illustrative guidance on a normalized cycle-average financial metric. Hence, the growth, margin and asset intensity (capex as a percentage of sales) levels shown in Figure 4 (on page 11) are subjective and should be regarded as purely illustrative. However, we have tried to evaluate different sources and views from various sector experts in order to further develop this illustrative overview. Utilizing this methodology to provide directional guidance, we expect that subsectors such as food ingredient chemicals, personal care chemicals, construction chemicals, and paints and coatings will lag behind the broader sector and therefore be candidates for potential increased M&A activity. Some of those subsectors also benefit from very robust fundamental trends, including personalized nutrition and natural vs. artificial food colorants.

Figure 3: Growth profitability benchmarking for selected chemical companies based on broker consensus – bubble sizes depict 2017 revenue of the company in USD millions and expected 2020 revenue of the company in USD millions



[1] Sales reflects the de-consolidation of Arlanxeo segment

[2] 2019 estimated figures considered

Source: Company data and broker reports

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Growth and profitability, whether through new markets or access to innovation, are what’s putting M&A on the C-suite agenda, particularly at companies that are struggling more than average in financial performance.

Jens-Christian Fritz, CFA
Transaction Advisory Services – Head of Origination for Germany, Switzerland and Austria

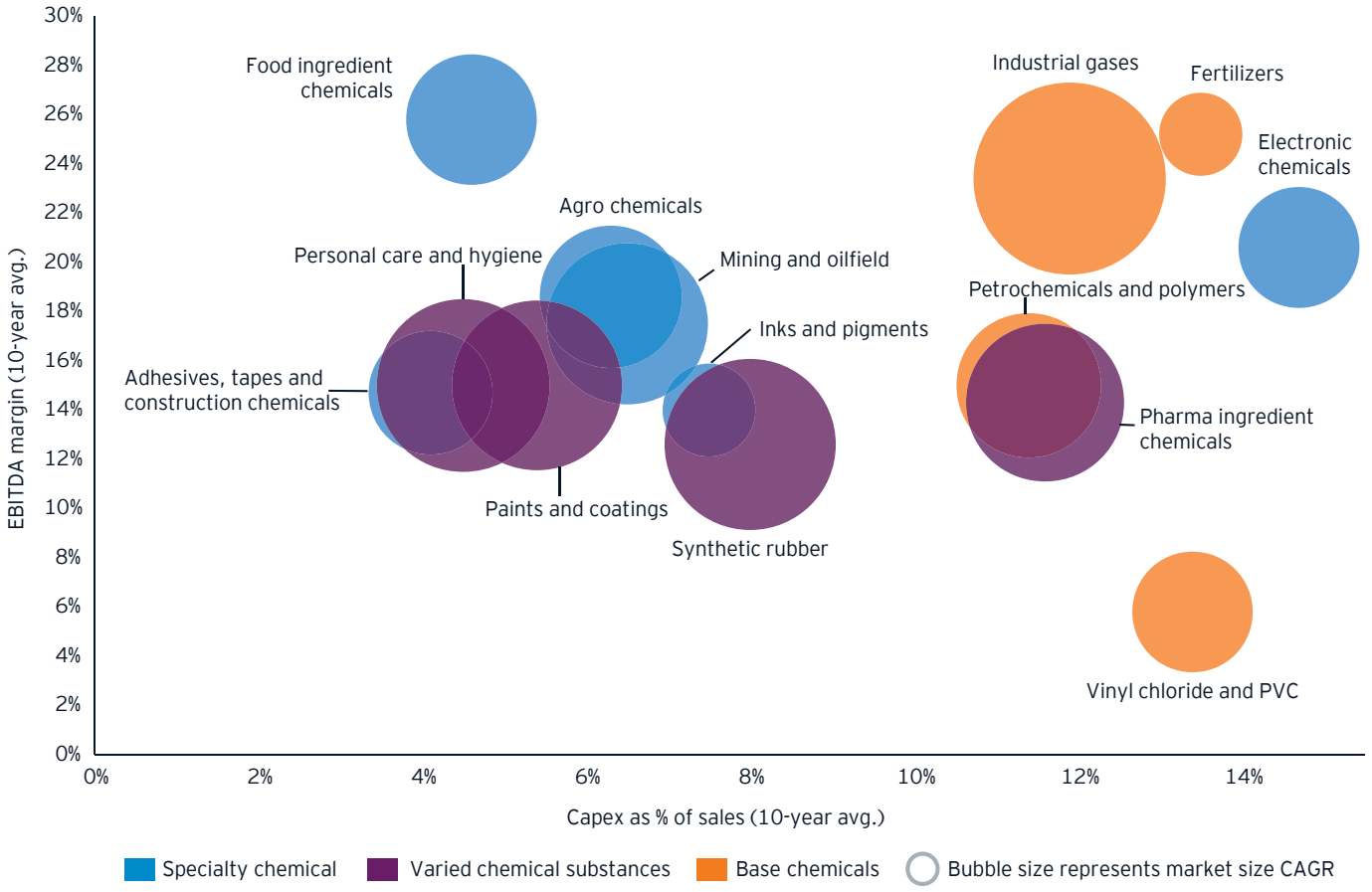
Our analysis suggests that chemical companies will focus on transactions that offer attractive growth and profitability prospects:

1. **Growth:** gaining additional exposure to growing geographies and end markets
2. **Profitability:** selectively entering high-margin subsectors and product categories

The search for growth and profitability does not only mean that companies try to focus on attractive geographies, end markets and product categories, but they also improve and further develop their business offerings via strategic transactions. We believe these strategic transactions may also aim at obtaining access to advanced technologies and innovations, which could extend the specialty product life cycle and hence improve a sustainable growth and profitability path.

Our point of view based on our analysis is that we expect the next wave of consolidation and increased M&A activity to take place in subsectors such as food ingredient chemicals, personal care chemicals, paints and coatings, and construction chemicals. We believe that this M&A activity will be primarily driven by companies with lagging financial performance looking for additional growth and profitability improvements in chemical subsectors that have a good strategic fit to their existing business.

Figure 4: Attractiveness map for selected chemical subsectors based on profitability (EBITDA margin), market growth and asset intensity (capex as percentage of sales)



Source: BCG report and EY analysis

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