M&A in chemicals

Short review of 2019 and how COVID-19 pandemic may impact M&A

October 2020

EY Parthenon

Building a better working world

Introduction

Global trade disputes, tightening environmental regulations and structural challenges in key end markets, such as automotive, have challenged the chemicals industry in recent years. Subsectors, such as paints and coatings and plastics manufacturing, have lost profitability and continued to increase debts. Chemicals businesses have to deal with cost pressure and uncertainty, both amplified by the COVID-19 pandemic.

Chemicals-related M&A seems to provide attractive opportunities despite complex deal surroundings. Based on learnings from the past and our the COVID-19 pandemic perspective, we give an outlook on what M&A in chemicals might look like in the second half of 2020 and beyond. Financial distress is historically a major M&A driver due to relatively attractive company valuations. In addition, companies intend to recapture lost market shares and margins. Others may be forced to merge.

Questions for chemicals M&A in these times are:

- How will falling valuations impact M&A activities in 2020?
- How will the slump in oil prices affect M&A in chemicals?
- What will be the effect of the prevailing uncertainty?
- Which key rationales for M&A will we see after the COVID-19 pandemic?
- Which sectors will experience the next consolidation wave?
- What makes a chemical company a likely acquisition target?
- What role does private equity play?

We invite you to discover our thoughts on these questions.

Executive summary

Holistic view

Value of M&A in chemicals in 2019 among the highest of all time with US$182b

Mainly driven by Saudi Aramco/SABIC, IFF/N&B business of DuPont and Showa Denko/Hitachi megadeals

Megadeals and cross-border M&A in sharp decline in 2020

But carve-out intensity to increase driven by portfolio adjustments in the second half of the year

Sector perspective

Higher M&A activity in fertilizers and plastics processing expected

Driven by financial challenges

The COVID-19 pandemic to increase consolidation pressure in paints and coatings

Due to additional demand shock in transportation equipment, especially automotive

Oil price collapse, driving upstream M&A activity

As the oil majors shift their strategies toward future-proof business models

Investor perspective

Well-funded investors, especially private equity, could benefit from a slump in chemicals valuations

Given they find willing sellers

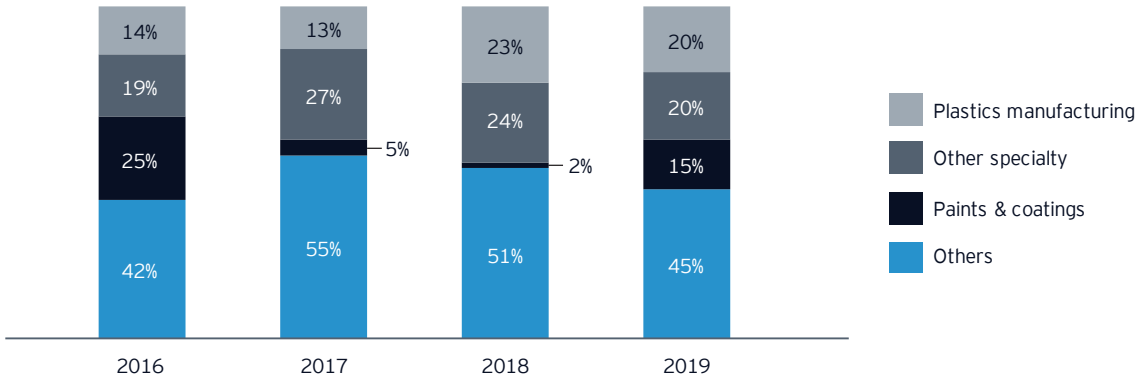
Holistic view

Value of M&A in chemicals in 2019 among the highest of all times

With US$182b, the value of all time M&A activity in chemicals rose to the second highest level of all times in 2019. The increase was driven mainly by three megadeals: Saudi Aramco/SABIC, IFF/N&B business of DuPont and Showa Denko/Hitachi. The average deal size was close to the highest value of the last 20 years.[1] Private equity (PE) investments played a strong role, with 8 of the 30 largest deals (representing close to 30% of deal value) mainly related to carve-outs, such as Lone Star/BASF's Construction Chemicals business and IMM/Linde's Korea business.

Excluding the aforementioned megadeals, intense M&A activity took place in the plastics manufacturing, other specialty, and paints and coatings subsectors (Figure 1).

Figure 1: Share of individual subsectors on total M&A value in chemicals (excluding the top three transactions)



Source: EY-Parthenon analysis

Megadeals and cross-border M&A with sharp decline in 2020

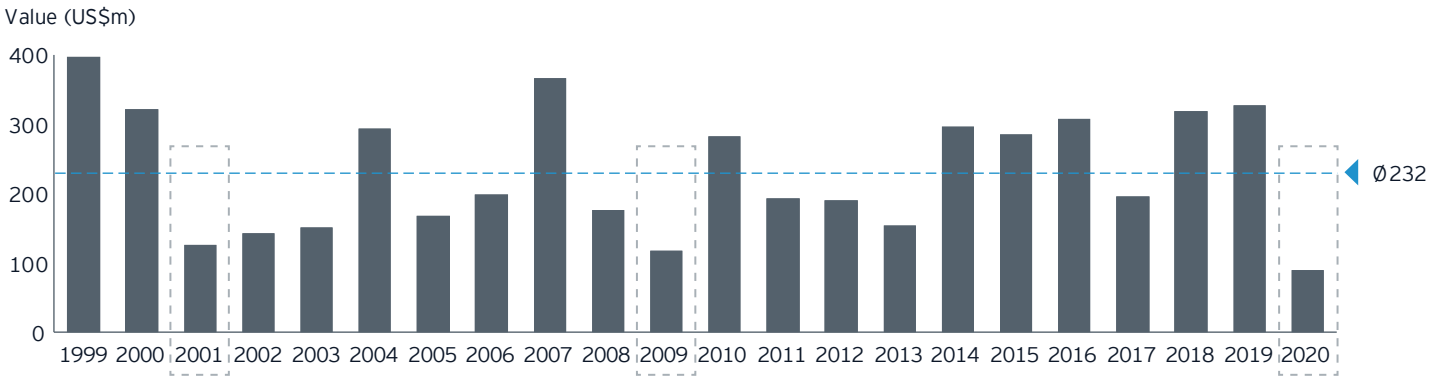
After a strong 2019, we expect a significant decline in megadeals and cross-border-related M&A transactions due to the COVID-19 pandemic in 2020. Some deals have been postponed, pricing might be complex due to high volatility and, contrary to previous crises, site visits have been limited by global travel ban policies. However, the intensity of carve-outs might be expected to increase due to portfolio adjustments and business model reorientation induced by the crisis in the second half of 2020. Also, more certainty may improve deal financing options.

We expect the average transaction value to be the key driver of any decline as evidenced by very low transaction values, especially in time of crises. The 2009-related transaction value was the lowest ever. A similar situation can be observed in the 2020 deals to date. This perspective is based on several key drivers (among others):

- Higher risk for large strategic moves in times of high uncertainty
- Big players that are not willing to sell at low valuations during downturn times
- Reduced sales price expectations of distressed targets dealing with liquidity pressure due to the COVID-19 pandemic
- Temporary lack of debt financing possibilities for PE

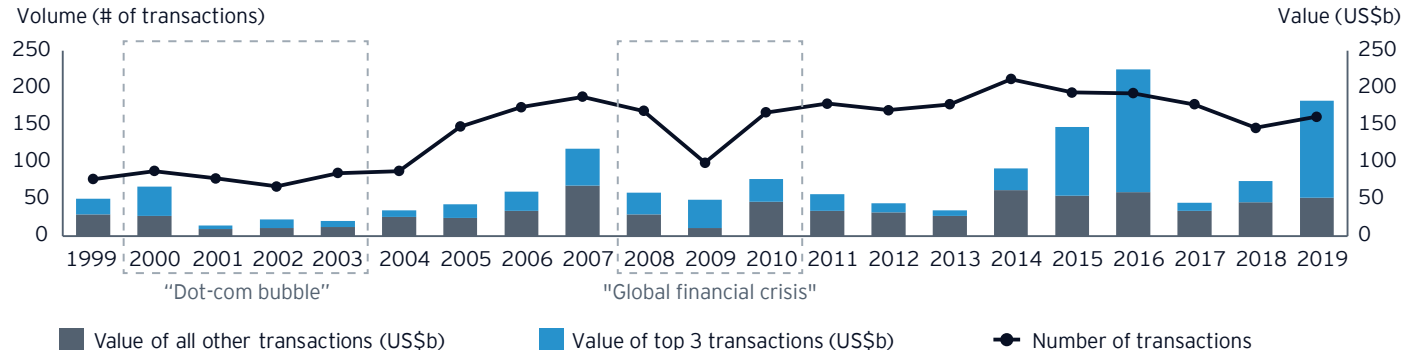
[1] The analysis includes M&A deals with the status closed or announced. The time of a transaction refers to the date of the announcement.

Figure 2: Average M&A deal value (excluding the top three transactions) in chemicals between 1999–2020; 2020 transactions are as of 26 June 2020



Source: EY-Parthenon analysis

Figure 3: M&A activity in chemicals between 1999–2019



Source: EY-Parthenon analysis

The travel bans may imply a rather short-term to midterm-related impact. In the long run, cross-border M&A activity might be affected by increased protectionism as an additional result of the pandemic crisis.

Earlier downturn times illustrate the effect of uncertainty on chemicals-related M&A activity (Figure 3). The impact of a global crisis can be potentially significant, as shown by the decreased number and value of transactions after the global financial crisis in 2009 or as part of the dot-com bubble. We expect a similar structure post-COVID-19 pandemic.

However, other than 2001 and 2008–09, we see a tendency to slow down or potentially reverse the globalization trend. This, in turn, may change the scope for consolidation logic in M&A deals.

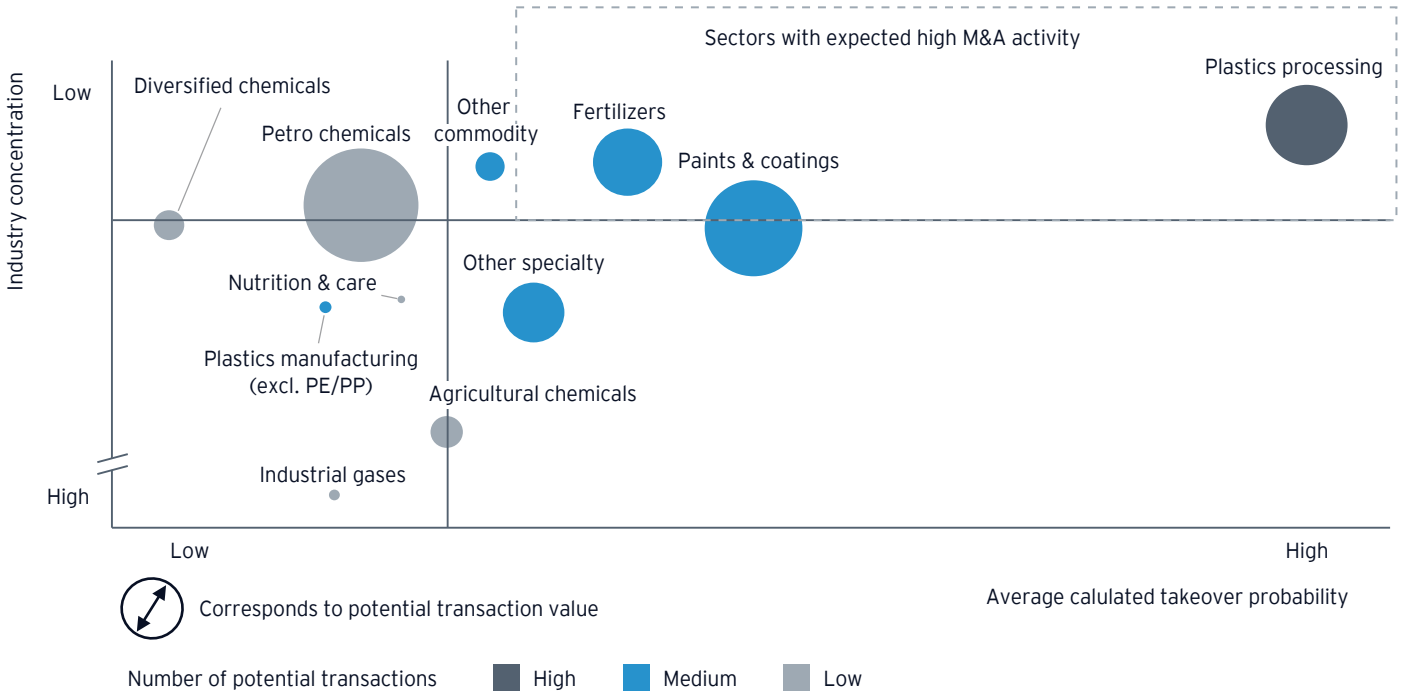
Sector perspective

Higher M&A activity in fertilizers and plastics processing expected

From a sector perspective, we expect high levels of M&A activity in fertilizers, plastics processing, and paints and coatings. This forecast is based on a calculated takeover probability combined with the degree of consolidation per sector (Figure 4).[2] According to our research, the following factors determine takeover probability:[3]

- High price volatility (highest correlation)
- Being headquartered in countries with strong investor protection
- Small firm size
- Low valuation
- Low profitability
- High leverage
- Low liquidity (lowest correlation

Figure 4: Average calculated takeover probability for 2020 and degree of industry concentration of all chemical companies with sales exceeding US$100m by subsector[4]



Source: EY-Parthenon analysis

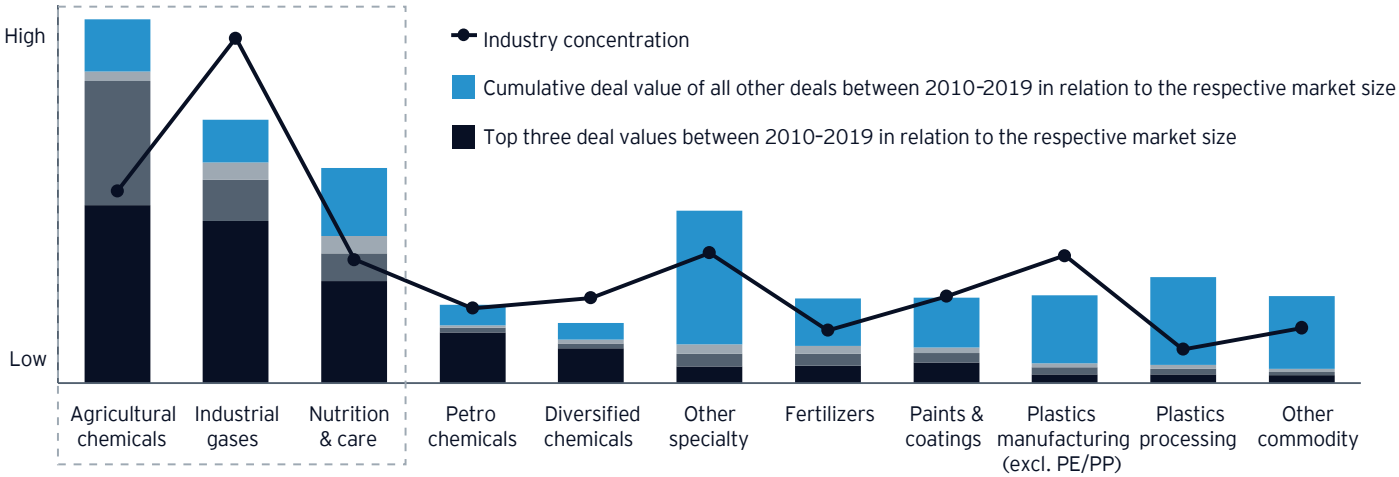
In addition, we consider low industry concentration as a major driver for M&A activity. The main reasons lie in lower antitrust regulations and higher competitive pressure. A review of past transactions (Figure 5) shows that the low industrial concentration in different subsectors can be explained by a limited amount of realized transformational transactions.

[2] We have identified the factors that influence the probability of a chemical company to be acquired. The results are based on regression analysis on transaction data from 1999 to 2019. We calculated the influence of these factors on the takeover probability for every chemical company.

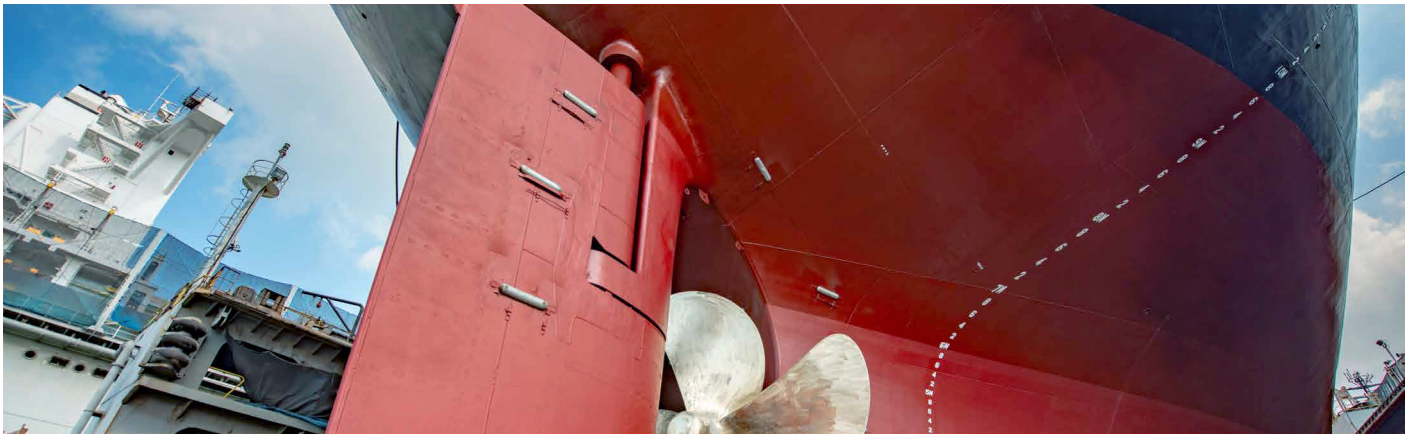
[3] Factors are at significance levels of 10% or better.

[4] The calculation of industry concentration was based on the HHI (Herfindahl-Hirschman Index) of all companies clustered by sectors with sales of more than US$50m. For the subsectors plastics manufacturing, other specialty and other commodity, the HHI was calculated as an average of the four largest areas. These are plastics manufacturing (PUR, PVC, PC and PA), other specialty (catalysts, adhesives and sealants, fluid and lubricant additives, and electronic chemicals) and other commodity (soda ash, caustic soda, carbon black and calcium carbide).

Figure 5: M&A activity in relation to the respective market size and industry concentration by subsector, 2010-2019



Source: EY-Parthenon analysis

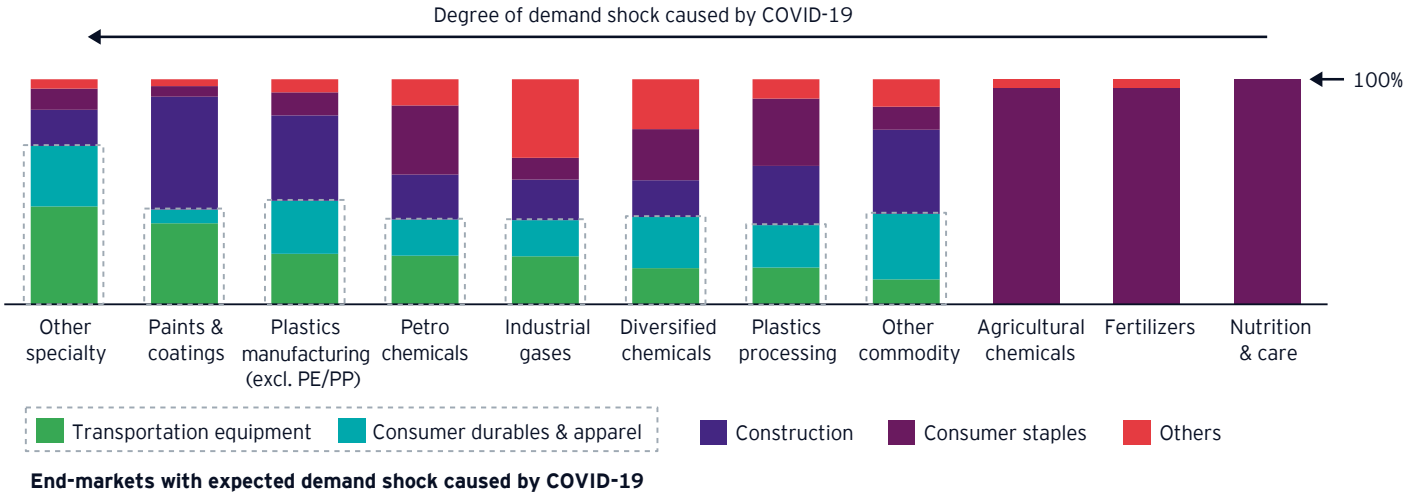


COVID-19 pandemic to increase consolidation pressure in paints and coatings

Considering the impact of the COVID-19 pandemic, we expect an acceleration of the ongoing consolidation in paints and coatings due to a demand shock in transportation equipment as one of its major end markets. Consequently, in paints and coatings, the declining profitability and liquidity, as well as the increase in debt, is expected to extend and accelerate. As mentioned above, these characteristics increase the takeover probability; so, in this respect, the COVID-19 pandemic may act as a catalyst for consolidation. For the fertilizers and plastics processing subsectors, we still predict high M&A activity but with a more moderate impact due to the COVID-19 pandemic.

The COVID-19 pandemic may affect the other specialty subsector as well (Figure 6), explicitly the catalysts subsegment with a high dependence on automotive.

Figure 6: Sales of chemicals subsectors by end-user industry, 2019



Source: Company data, Mordor Intelligence and EY-Parthenon analysis

The strong demand shock in transportation equipment and consumer durables and apparel is driven by the fact that cash-intense investments are being postponed by both private and industrial customers. Demand in transportation equipment and consumer durables and apparel is expected to decline by more than 10% and 5%, respectively, in 2020.

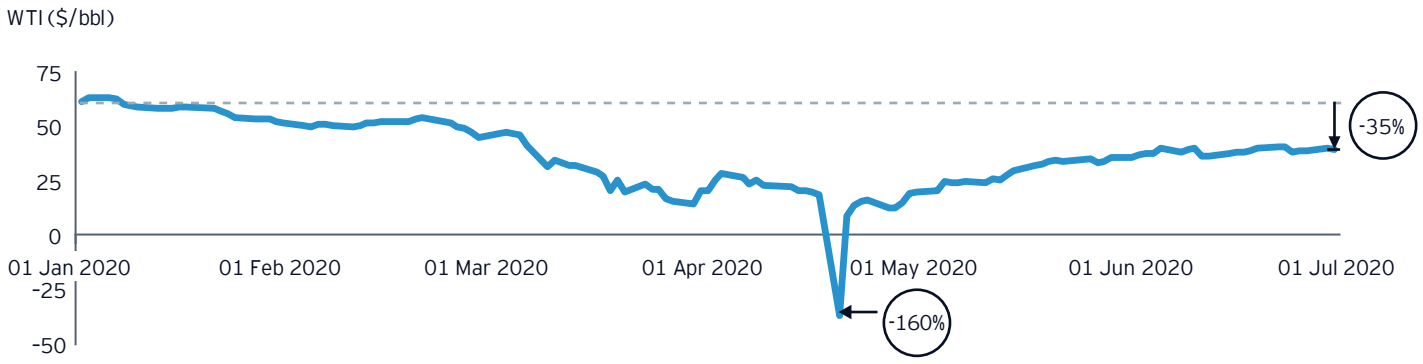
Oil price collapse, driving upstream M&A activity

Since the beginning of 2020, oil prices currently have plummeted by approximately 35%, driven by the COVID-19 pandemic demand shock. Even more unprecedented, the WTI price went negative in spring 2020 in the middle of Russia-Saudi Arabia oil disputes (Figure 7). The COVID-19 pandemic is expected to impact the point in time in which the oil demand will peak, with, for example, BP's CEO claiming, "We might have already seen it."[5]

This will reinforce the ongoing trend of oil companies shifting away from hydrocarbon dependency toward future-proof business models, as the old business model of crude oil exploration, production and distribution appears to be coming to an end. One option could be moving downstream. The possible success of which is indicated by pure-play petrochemicals, which have been less severely hit by the crisis, than the oil majors with integrated petrochemical subsidiaries (share prices: BP and Shell at –40% and –45% year to date, respectively, vs. –18% at pure-play petrochemicals, as shown in Figure 9).

The movement away from hydrocarbon dependency could take different shapes and may trigger M&A. BP disposed from its petrochemical units in a major divestment and focuses on its low-carbon ventures. Another example of a major M&A-driven downstream integration is the Saudi Aramco/SABIC merger last year.

Figure 7: Crude oil price in US$ per bbl



Source: U.S. Energy Information Administration

[5] Financial Times website, https://www.ft.com/content/21affff2-1e57-4000-a439-62cfef6344fb, accessed on 12 May 2020.

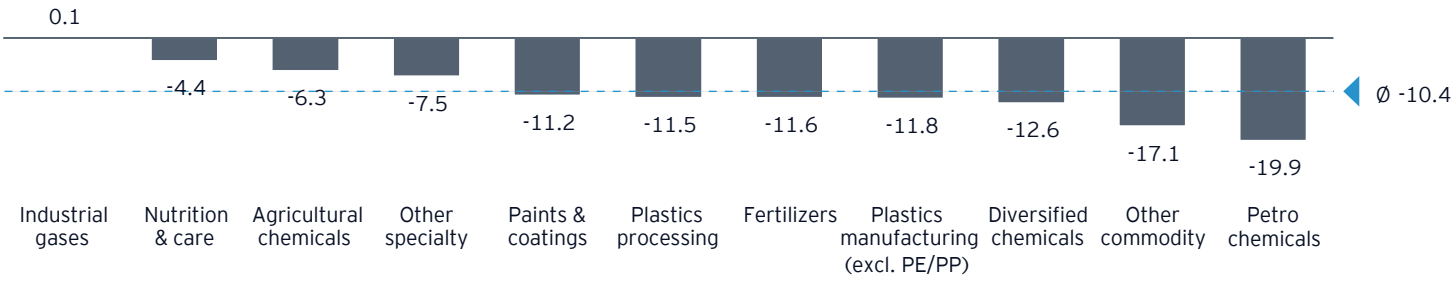
89%
53.00
50.00
47.00
44.00
41.00
38.00
2019-06-09
1.31
0.65
0.00
-0.65

Investor perspective

Well-funded investors, especially private equity, could benefit from a slump in chemicals valuations

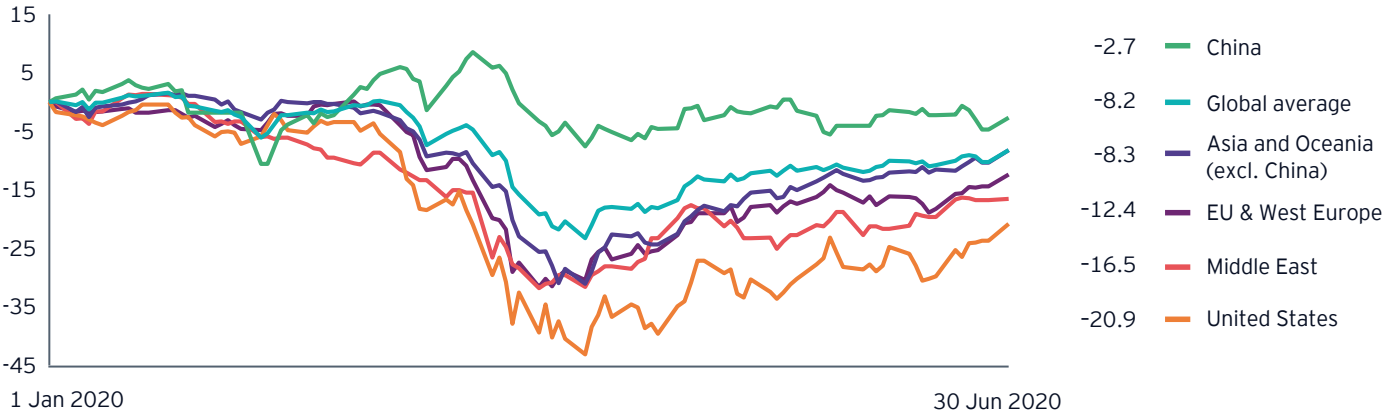
A further consequence of the COVID-19 pandemic is the significant decrease in valuations. We therefore assume that well-funded investors, ranging from strategic buyers, PE (as soon as debt financing returns to quasi-normal) and hedge funds, to state-owned enterprises, could benefit from the sharp decrease in chemicals valuations that hit particular commodities (product-wise, Figure 8) and US companies (geographically, Figure 9).

Figure 8: Market capitalization between 2 January 2020 and 28 June 2020, as a percentage average of the largest 700 public chemical companies (by subsector)



Source: EY-Parthenon analysis

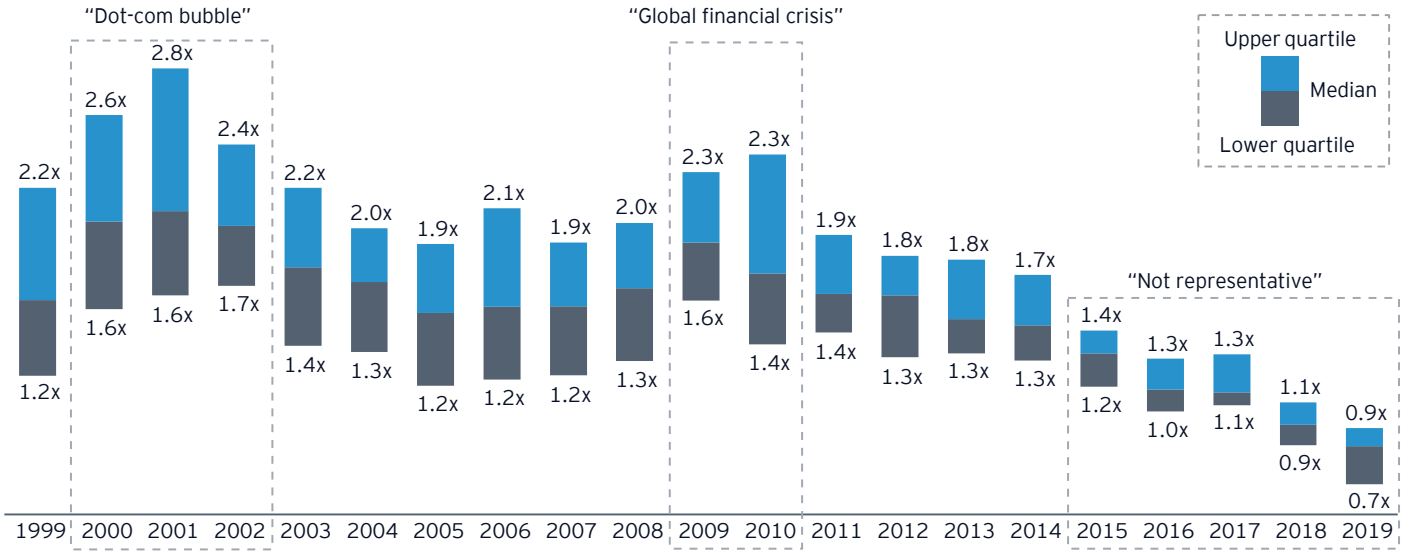
Figure 9: Development of market capitalization as an average of the 700 largest public chemical companies per region, change in percentage compared to 2 January 2020



Source: EY-Parthenon analysis

However, we see the current market more as a sellers' market (compared to other sectors), as chemicals has not been hit as hard as, for example, consumer services or aviation. Opportunities still exist, with chemical majors streamlining their portfolios, in the small- to mid-sized markets because here we find companies that were under financial pressure before the crisis, with the COVID-19 pandemic intensifying this distress. On the buyer side, there are many interested investors, as a study among PE managers conducted by the FINANCE Private Equity Panel has shown: the value indicating their tactical positioning (1 equals seller, 10 equals buyer) rises to 6.8 points, the highest value since mid-2010.[6] As the past shows, years during a crisis are often the best time to buy; thus, buyout funds reached, in 2000–02 and 2009–10, the highest net money multiples of the last 20 years (Figure 10).

Figure 10: Net money multiples of buyout funds (global, all industries)[7]



Source: EY-Parthenon analysis

[6] Source: FINANCE Private Equity Panel – Spring 2020.
[7] Multiples are as of Q3 2019. Vintage year is determined by date of the fund's first cash flow.

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EYG No. 006774-20Gbl
EY-000123097.indd (UK) 10/20.
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