



2020 was a very strange year. The impact of the COVID-19 pandemic was a major factor for the Chemical Industry, but the locked down economy with fewer plane and car journeys highlighted the long-term consequences of environmental issues whilst the preparations for Brexit and a new trading relationship between the UK and European Union were hampered by the lack of clarity of the deal.

With over 2 million deaths around the world, COVID-19 has inflicted personal tragedy on many communities and families, as well as being largely responsible for a major shock to the world economy. In the first half of 2020, demand collapsed as the world came to terms with the new deadly virus and 'lockdowns'. As people learned how to operate at a social distance and to work from home, business activity began to recover. Consequently, the final outturn for the industry was not as poor as had been feared. Despite changing consumer behaviours, disrupted supply chains and travel restrictions, the Chemical Industry's inherent resilience has meant that many companies have come through the downturn, stronger and ready to face the challenges of 2021.

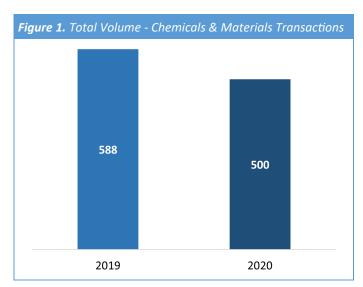
The level of mergers and acquisitions within the chemicals sector has been affected by the shocks of 2020, but deals have continued to be signed, even during the various 'lockdowns'. Some potential deals were derailed by the new economic conditions, but others were able to continue. Natrium Capital was delighted to announce it has recently advised Solvay on the sale of its North American and European amphoteric surfactant business to OpenGate Capital, and that nearly all of the sale process was undertaken in this era of homeworking, social distancing and minimal travel.

In March 2020, the US Department of Homeland Security identified the Chemical Industry and its workers as Essential Critical Infrastructure, an industry sector critical to public health and safety, economic and national security, noted the American Chemistry Council (ACC). This acted as a strong reminder that the Chemical Industry is a vital supplier to manufacturing industries for everyday life but also has a key role to play in the COVID-19 pandemic, both in its prevention and the recovery. Demand surged for plastics for PPE and hygiene products especially hand sanitizers and soaps.

After a year of uncertainty and change, we are looking back on the impact that the pandemic has had on this critical industry in 2020.

<u>Chemicals Mergers and Acquisitions in 2020</u>

Mergers and Acquisitions ("M&A") activity in the Chemicals sector was severely impacted by the COVID-19 pandemic, although there was a considerable



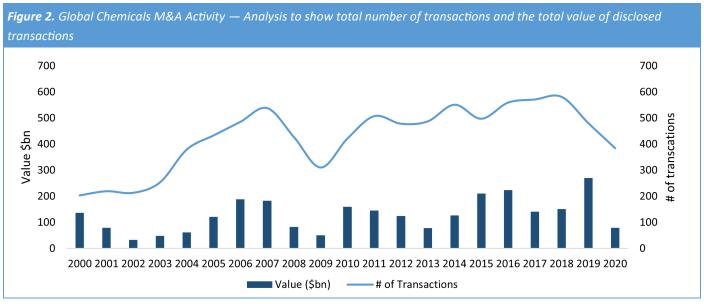
Source: Mergermarket, Global Chemicals and Materials Deals

rebound towards the end of the year. Following national lockdowns around the world, many Chemicals transactions were put on hold while workers adjusted to the new environment of working from home and



COVID-19 restrictions, such as video conference meetings and social distancing in the workplace. As these became the norm, activity recovered and resulted in a total of 500 Chemicals deals reported during the year, (see Figure 1), down 15% from a high base of 588 in 2019 which included big deals such as International Flavors & Fragrances acquisition of DuPont's Nutrition & Biosciences business for \$26.2bn and Saudi Aramco acquiring a 70% stake in SABIC for \$70.4bn. By comparison Global M&A activity across all industry sectors fell by only 13%. Overall, as a percentage of the total global M&A deal volume, the chemical industry represented a mere 3% of the total.

During 2020, many companies conducted strategic reviews to analyse their businesses in the new circumstances. These often led to a renewed focus on the core businesses. In addition, some chemical companies reduced leverage by divesting non-core assets. These led to an increased appetite to complete M&A deals with several deals being announced toward the latter part of the year.



Source: Mergermarket, by announcement date, ex. China. Value only includes transactions with disclosed financials

Despite the record levels of available cash to financial sponsors, strategic chemical companies were still able to compete in the largest transactions, such as INEOS acquiring BP's Petrochemical business for \$5bn. In sub-sectors of the chemical industry which had seen a marked increase in demand for their products during the pandemic, such as surfactants, disinfectants and detergents, there was strong appetite for investment in these areas.

That there were several transactions successfully completed in 2020 proves that deals can be done in a virtual environment, relying heavily on video conferencing to fill the void left by travel restrictions and limited face-to-face interactions. However, we note that crucial steps such as meeting key management and site visits remain an important part of transactions within Chemical Industry and need to be managed effectively.

Select Global Chemicals M&A in 2020

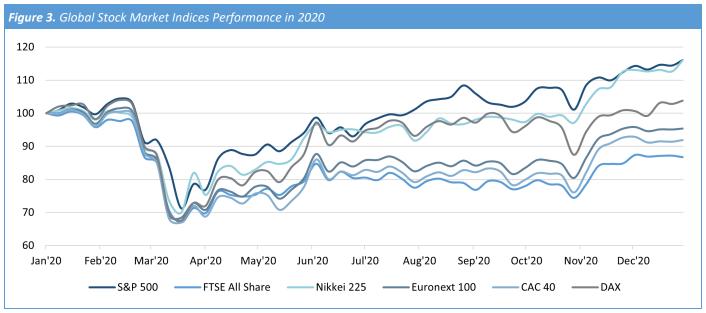
Date	Target	Buyer	Seller	EV (\$m)	EV / Sales	EV / EBITDA
21-Jan	Lummus Technology, Inc	Rhone Capital LLC; The Chatterjee Group		2,725	-	-
06-Mar	Les Derives Resiniques Et Terpeniques SA	Firmenich SA	Ardian; Tikehau Capital Partners	1,920	3.1x	-
12-Mar	Borealis AG (39% Stake)	OMV AG	Mubadala Investment Company PJSC	13,730	1.5x	11.9x
07-Apr	Schuelke & Mayr GmbH	EQT Partners AB	Air Liquide SA	1,005	2.8x	12.3x
01-Jun	Coty Inc. (professional and retail hair beauty business) (60% Stake)	Kohlberg Kravis Roberts & Co. L.P.	Coty, Inc.	4,300	2.4x	16.7x
29-Jun	BP Plc (global petrochemicals business)	INEOS Group AG	BP Plc	5,000	-	-
17-Jul	Rovensa Group	Partners Group Holding AG	Bridgepoint Advisers Limited	1,140	2.8x	-



Date	Target	Buyer	Seller	EV (\$m)	EV / Sales	EV / EBITDA
20-Jul	Noble Energy, Inc.	Chevron Corporation		1,260	2.8x	14.3x
30-Sep	Royal DSM N.V. (Resins & Functional Materials business)	Covestro AG	Royal DSM N.V.	1,900	1.6x	12.0x
05-Oct	K+S Aktiengesellschaft (Americas salt business)	Stone Canyon Industries Holdings Inc. Mark Demetree (Private investor)	′K+S Aktiengesellschaft	3,200	-	12.5x
13-Oct	Angus Chemical Company (50% Stake)	Ardian	Golden Gate Capital	2,250	-	-
18-Nov	Iberchem S.A.	Croda International Plc	Eurazeo SA	970	4.7x	24.1x
30-Nov	Ennis-Flint, Inc.	PPG Industries, Inc.	Olympus Partners	1,150	-	-
14-Dec	Altuglas International	Trinseo S.A.	Arkema Group SA	1,380	1.8x	6.6x
Average					2.6x	13.8x
Median					2.8x	12.4x

Chemicals M&A Valuations

Public markets were severely impacted by COVID-19. Initial uncertainty around the impact of the virus and subsequent availability of credit facilities, as seen in the last global recession, sent equities tumbling. Equities quickly regained some ground with announcements on expanding credit facilities, huge government support packages and negotiated new credit terms. Growing belief in the effectiveness of vaccines to combat COVID-19 supported improved sentiment. Most notably the S&P 500 and Nikkei 225 indexes finished the year higher than the start of the year. This may be due in part to record low interest rates and growing sentiment and outlook for the coming years as well as substantial retail investors playing the market online, especially in the US.

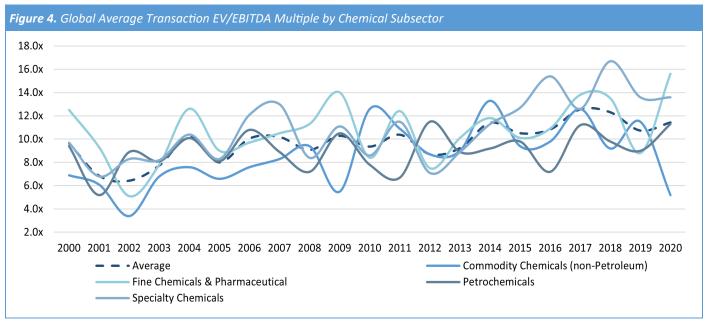


Source: Bloomberg, rebased to 100 as of 02 January 2020

Transaction multiples have not been impacted by the pandemic with EV/EBITDA multiples holding strong in 2020. Despite the turbulent year for equities, investors have still been willing to pay premium prices for quality assets. Acquirers have been able to overlook the short-term impact of the pandemic and acknowledge the underlying profitability of businesses and have had access to relatively cheap financing.

Within the Chemical Industry, sectors that have the most 'value add' have been the most resilient to the pandemic in terms of transaction valuations and we would also expect to see resilient earnings within these subsectors. Fine Chemicals & Pharmaceuticals have noticeably had the largest increase from historic figures (see figure 4).





Source: Mergermarket; EV/EBITDA Multiples by announcement date, excluding China. Average by subsector of disclosed transactions

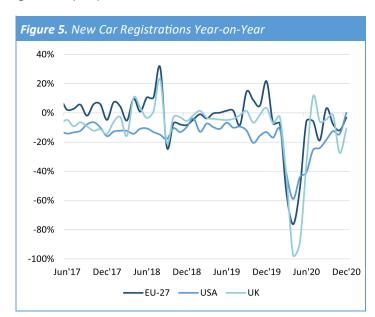
Chemical Industry Impact

The longer-term impact of the pandemic is still to being realised as we enter into earnings season for full-year results. Different areas of the chemical industry have been hit in different ways depending on the end market exposure.

Some sectors and businesses have seen significant growth as a result of the impact on behaviours during the COVID-19 pandemic. Chemical companies with predominant exposure to 'essential' items, such as food packaging and hygiene products, have seen significant sales boosts. The constant washing of hands and 'cleanliness' drive has led to disinfectants, detergents and surfactants having a bumper year. Also, working from home has enabled individuals to get on with DIY projects that may have been put off leading to strong sales to the consumer of decorative coatings and DIY adhesives & sealants. These enhanced sales are likely to be long-lasting as many across the industry see a longer-term change to consumer's behavioural habits. Companies servicing the oil and gas industries in particular had an enormous challenge of adapting to the much lower price of crude oil, whilst those with exposure to the automotive parts & equipment markets were also significantly impacted.

Many chemical companies suffered plant closures. Those dependent on China for raw materials, intermediates and fine chemicals faced significant supply chain uncertainty as the lockdown of the city Wuhan spread round the world with subsequent national lockdowns that hit most major chemical manufacturers. As for the general population, manufacturing plants were not immune to COVID-19 outbreaks. Steps were put in place across the globe to limit exposure and reduce risks on site, such as reducing numbers of staff and changing shift patterns.

Several chemical companies closed manufacturing facilities unexpectedly during the year. In some cases, this was a direct result of workers becoming infected with the virus, whilst others closed as a response to national 'lockdown' or to preserve cash. Also, in March, major automotive companies halted production across Europe and North America. Automotive registrations remain lower than prepandemic levels.



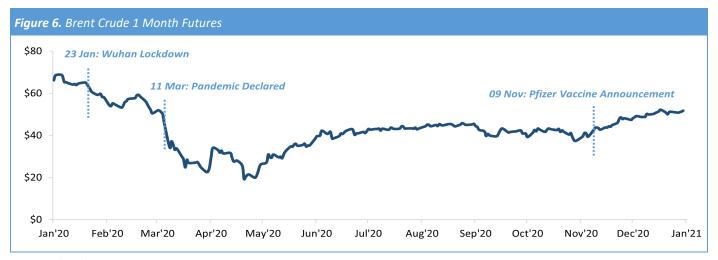
Source: Bloomberg (UK New Car Registration YoY, USA Sales Retail Trade Passenger Car Registrations YoY, EU 27 New Passenger Car Registrations YoY)



Some chemical companies turned their focus in-house with the aim of preserving cash. Unlike during the Global Financial Crisis in 2008, companies were able to increase credit facilities and temporarily extend covenants to ensure sufficient liquidity for the foreseeable future. Initial uncertainty placed some M&A processes on hold, whilst some capital expenditure budgets were slashed to meet the new economic circumstances and further preserve cash. The longer-term impact of these measures and budget cuts are yet to be realised. Many will see this as an opportunity to refocus new capital expenditure, including investment into sustainable developments and manufacturing processes to meet Environmental, Sustainability and Governances promoted by investors.

Oil Prices

Oil prices faced severe headwinds in 2020 due to ongoing price wars and the pandemic. Global oil demand plummeted upon the news of national lockdowns and international travel restrictions, putting pressure onto oil supply chains and downstream chemicals. China was a significant driver of this, as the first nation to face national lockdown and the World Largest oil importer, accounting for approximately 20% of global oil imports. Crude pricing has continued to gain momentum over the second half of 2020, with optimism for economic recovery growing.



Source: Bloomberg

Summary

In 2020, the Chemical Industry reminded everyone just how critical it is in supporting day-to-day lives, and keeping us safe. After a year that saw many companies focus inwardly, preserving cash, reviewing strategy and being faced with numerous challenges, we expect 2021 to be a year of action for many in the Chemicals Industry, with more corporate spin-outs as a result of strategy reviews and a 'back to core' mentality. Whilst some companies will have reached the conclusion that a sale is needed earlier than expected, others will be looking to fill newly exposed gaps in their portfolio or targeting growth in others. With the light at the end of the tunnel that's been provided by vaccines, many are hopeful that we can get back to "business as usual".

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About Natrium Capital Limited

Natrium Capital is a corporate finance boutique specialising in the chemical, material, biotechnology, and clean technology industries. Natrium Capital offers high level strategic and M&A (Mergers and Acquisitions) execution advice and has a wealth of experience in investment banking and corporate finance. Natrium Capital advises clients in Europe, North America, Latin America, and Asia, especially India. Natrium Capital was set up by Alasdair Nisbet in 2012.

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