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2021 Global chemical industry mergers and acquisitions outlook

From recovery to growth

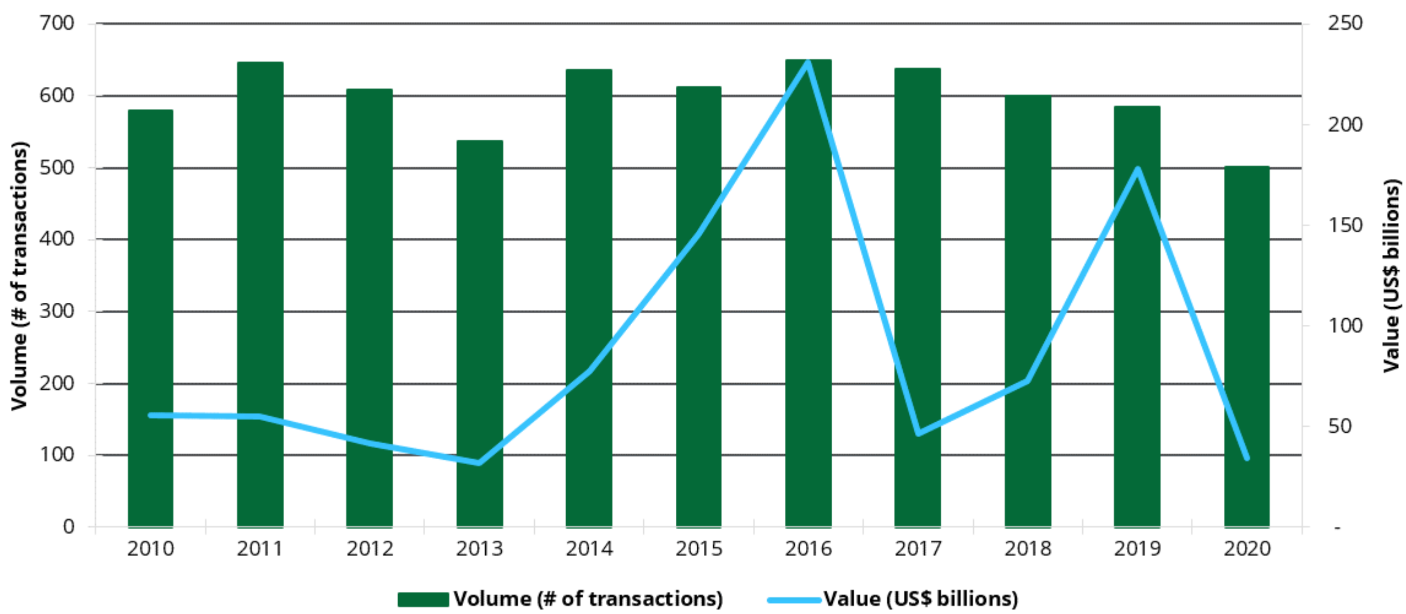
Contents

Introduction

"Clearing the hurdles"—that's what we titled our *2020 Global chemical industry mergers and acquisitions outlook* (2020 Outlook). But going into 2020, no one could have predicted just how high those hurdles would be. In our 2020 Outlook, we highlighted several potential mergers and acquisitions (M&A) challenges, including trade and geopolitical risks, a potential cyclical downturn, and certain supply/demand challenges. However, dealing with a global pandemic was not on anyone's radar.

As you can see in Figure 1, global chemical M&A activity in 2020 was not immune to COVID-19 (pun intended), with overall global volumes down 14.4 percent compared to 2019. However, this decrease is likely less significant than many might have feared at the start of the pandemic. 2020 marks the fourth year of global M&A volume declines. While the chemicals industry is used to navigating headwinds, the global pandemic brought with it some unique challenges that caused chemicals companies to rightfully focus inward, putting M&A transactions on pause. Despite that, 2020 still finished with solid M&A activity in the industry, with over 500 transactions, eight of which had a value of over $1 billion (see Figure 2).

Figure 1: Global chemical mergers and acquisitions activity (2010 to 2020)



Total activity (2010 to 2020)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Volume (# of transactions)	579	646	609	537	635	612	650	637	600	585	501
Value (US$ billions)	55.6	55.1	41.8	31.8	77.8	145.8	231.1	46.4	72.4	178.3	34.6

Source: Deloitte Development LLC analysis of data from S&P Capital IQ. Data is from January 1, 2010, to December 31, 2020.

Figure 2: Activity over US$1 billion (2010 to 2020)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Volume (# of transactions)	10	11	11	8	13	16	12	13	16	14	8
Value (US$ billions)	39.2	36.7	23.8	13.6	52.6	126.3	205.7	29.2	58.8	158.5	21.7

Source: Deloitte Development LLC analysis of data from S&P Capital IQ. Data is from January 1, 2010, to December 31, 2020.

Given the tumultuous 2020 and the uncertainty heading into 2021, we thought it would be an opportune time to take the pulse of chemical executives, assessing their sentiments regarding the M&A market and learning about their priorities for their respective companies. We are pleased to present the results of our inaugural Chemical M&A Survey in this report.

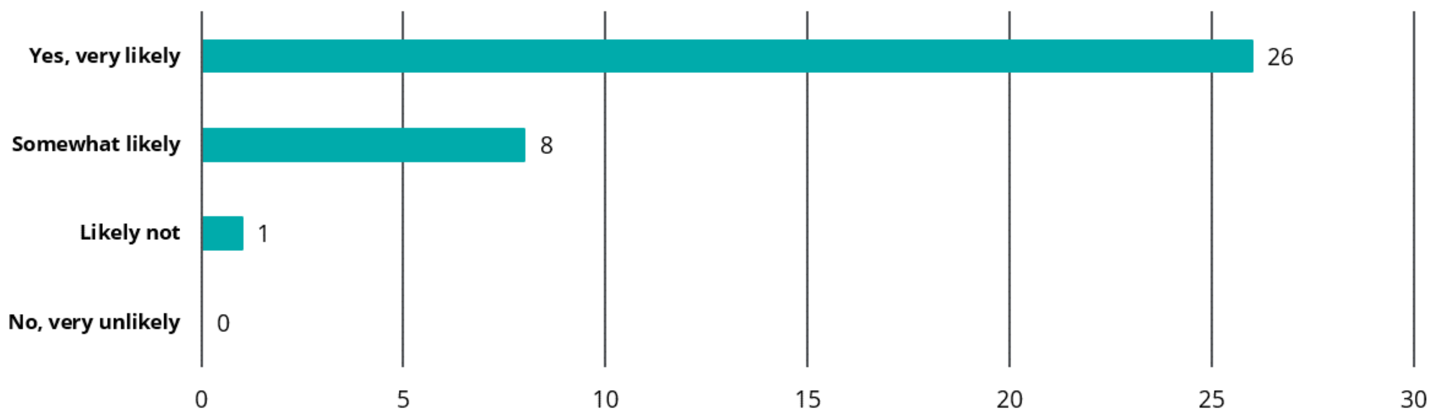
After four straight years of M&A volume declines, will 2021 finally buck the trend or will M&A declines continue? How did COVID-19 impact 2020 global chemical M&A activity? Will the industry's move toward sustainability take a back seat as companies tackle the challenges presented by COVID-19, or will they continue to look to M&A to help drive their sustainability agenda? What insights can be gained from our survey as it relates to the M&A appetite among chemical executives as 2021 continues? What sectors and geographies look to be the most active for 2021?

We will explore these and other questions in the *2021 Global chemical industry mergers and acquisitions outlook*.

Chemical M&A Survey—Things are looking up

Our survey polled 35 executives at chemical companies across sectors and geographies between September 10 and November 3, 2020, to assess current and future M&A plans. Chemical executives were nearly unanimous in their positive M&A outlook looking forward to 2021, sending a clear signal that activity will be an important lever as their companies recover and look for growth this year. Here, we look at the results of the survey, and at key insights from survey respondents.

Question: Do you anticipate that your company will undertake any mergers or acquisitions over the next 12 months?

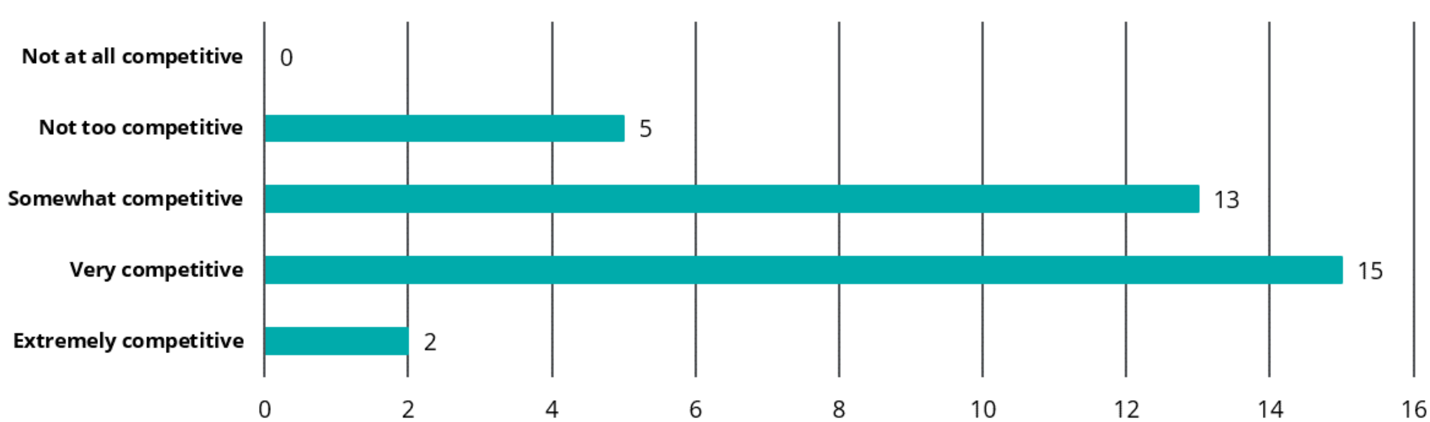


When executives were asked what was driving their company's acquisition strategy, *portfolio/technical capability* and *geographic expansion* were the two most-cited drivers, followed by diversification of the end-markets that they serve.

The most attractive end-market for our survey respondents appears to be *Advanced resins/plastics,* with eight respondents ranking it as their most attractive end-market and eight ranking it second. This was followed by *Automotive (including electrification)*, with six respondents ranking it as their most attractive end-market and four respondents ranking it second. *Healthcare/beauty/life sciences* came in third, with four respondents ranking it their top-priority and five respondents ranking it their second.

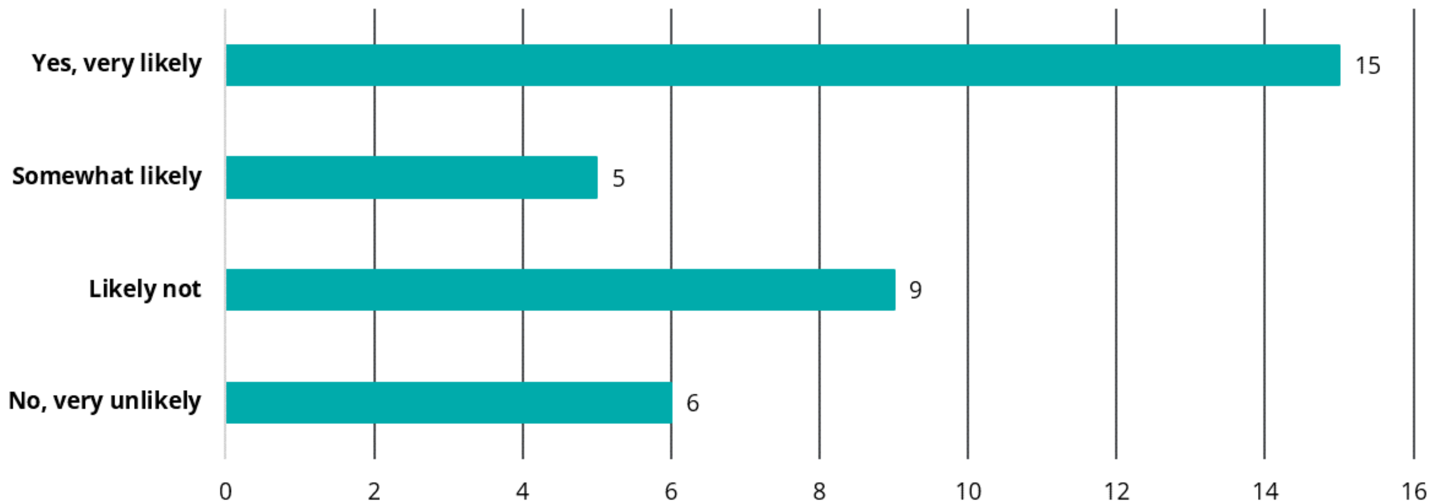
When asked what they saw as the biggest impediment to their company's ability to execute an M&A transaction in a COVID-19/post-COVID-19 environment, executives ranked *lack of reliability or uncertainty in forecasted revenue/earnings, seller's high valuation expectations, and assessing COVID-19 impact on the target's performance* as the top three.

Question: How competitive do you believe the current acquisition climate is?



Despite the impacts of COVID-19, nearly half of survey respondents thought the current acquisition climate was either very competitive or extremely competitive.

Question: Do you anticipate your company undertaking any divestitures (including spin-offs) over the next 12 months?

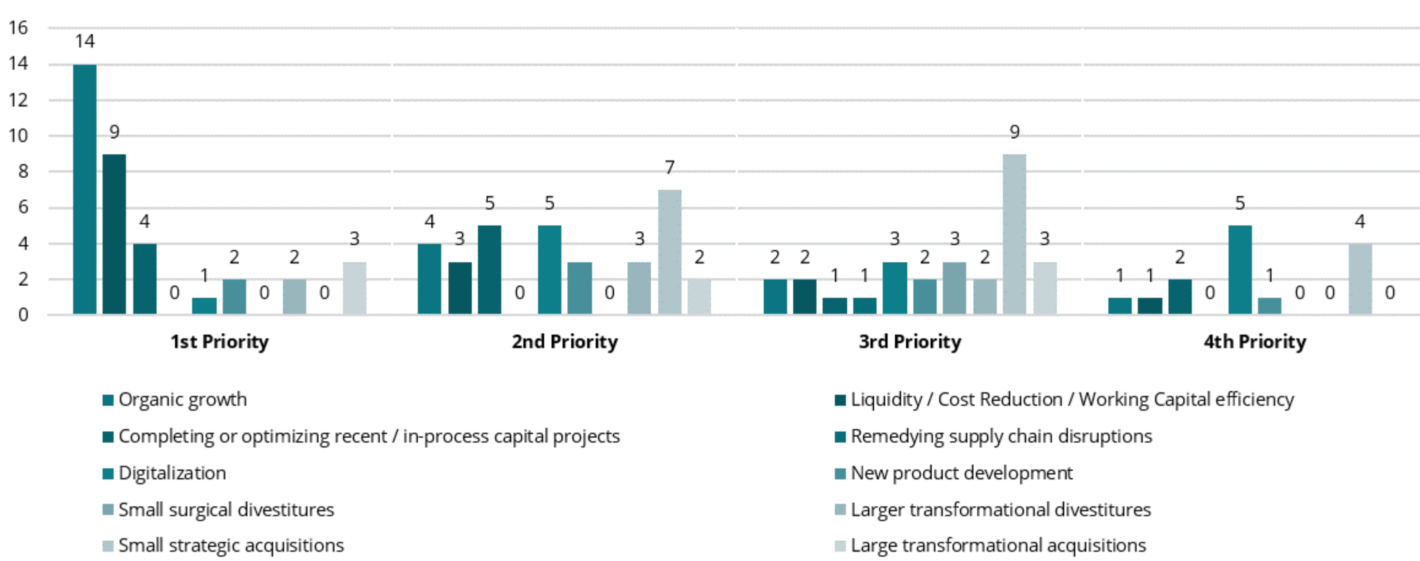


While chemical executives in our survey were not as bullish on divestitures as they were on a merger or acquisition, still more than half of the respondents said that their companies were somewhat likely or very likely to undertake a divestiture in the next 12 months.

Despite the economic fallout from the global pandemic, only three survey respondents cited *liquidity needs/debt covenants* as a driver of their current divestiture strategy. Nearly all of the 20 survey respondents who said their companies were somewhat likely or very likely to undertake a divestiture in the next 12 months cited *non-core portfolio pruning* as a driver of their divestiture strategy.

Similar to the top impediments for executing a merger or acquisition transaction, *valuation expectations* were cited as the biggest impediment to a chemical-company divestiture in a COVID/post-COVID environment.

Question: What are your company's top priorities over the next 12 months?



Organic growth was selected most often, with 14 respondents ranking it as their top priority and 21 respondents ranking it among their top four priorities for 2021. This was closely followed by *focus on liquidity/cost reduction/working capital efficiency,* which 9 respondents put as their first priority and 15 respondents ranked among their top four—clearly signaling that despite forecasts of brighter days ahead, chemical executives continue to focus on driving efficiencies in their businesses.

While *large transformational acquisitions* and *small strategic acquisitions* together were only ranked by three respondents as their top priority, they were listed in the top four priorities by 20 and 8 chemical executives respectively, sending a clear signal that acquisitions will definitely be a focus in 2021. Similarly, while only noted by one chemical executive as their number-one priority, *digitalization* was one of the areas noted most as high priority, with 14 survey respondents ranking it among their top four. For additional insight, please see our recently released perspective on the future of digitalization in the chemicals industry.

Additional green shoots in sustainable investment expected in 2021

In our 2020 Outlook, we anticipated a trend in sustainability becoming a bigger part of the chemical industry's focus, through in-house initiatives, sourcing, recycling, and investment decisions. Sustainability-driven transactions continued to grow throughout 2020, both in terms of traditional M&A transactions and nontraditional transactions such as partnerships, alliances, and new ecosystems.

Many countries and some US states have started phasing out single-use plastics as a commitment to sustainability and combating climate change is increasingly becoming a prevalent issue for the chemical industry. Companies are going public with their decarbonization goals, perhaps as a means to communicate with the market, as much as to hold themselves publicly accountable. Key industry organizations, including the American Chemistry Council (ACC) and the European Chemical Industry Council (CEFIC), are also heavily focused on sustainability as a key element of the industry's future success through various initiatives and programs designed to build pathways to decarbonization and create a more sustainable chemical industry. Importantly, we have also observed an investing sentiment toward more sustainable companies. For example, in global investment manager BlackRock Inc.'s 2020 Global Client Sustainable Investing Survey of more than 425 investors in 27 countries, including corporate and public pension plans, asset managers, endowments, foundations, and global wealth managers with nearly US$25 trillion in assets under management, survey respondents said they plan to double their Environmental, Social and Governance (ESG) assets under management by 2025.[1]

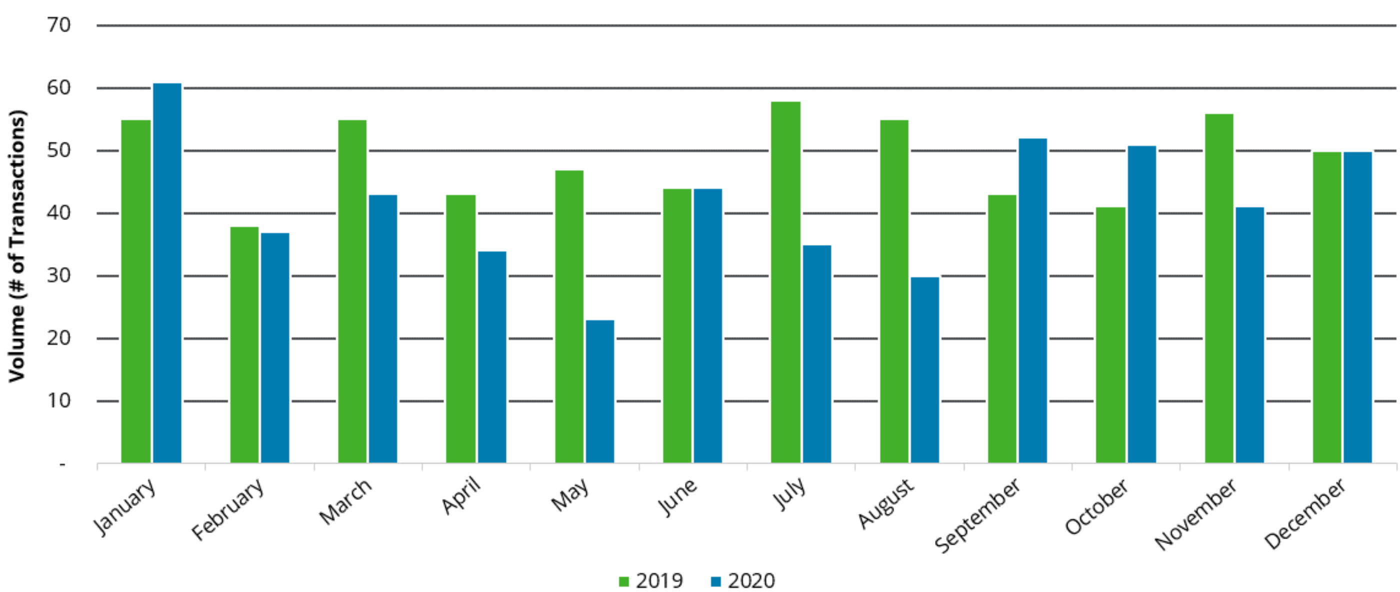
This has led many chemical companies to focus on M&A transactions, alliances, and initiatives that support a more sustainable world and enhance the investor appeal of the industry, recognizing the ESG sentiment of investors. These actions have led to efforts such as alliances with recyclers that use traditional mechanical practices to grind plastic particles for re-melting into new products, and investing in new chemical technologies that break down plastics into molecules or oils, thus creating virgin feedstock materials for future plastics production. And this commitment is being recognized. The Wall Street Journal's list of top sustainable companies lists four chemical companies—Arkema, Umicore, Stepan, and Air Products & Chemicals—among the top 50.[2]

While there are still few major traditional acquisitions being driven by sustainability, new alliances and adjacencies have been created, especially in the electric car battery space. For example, LG Chemical and General Motors partnered to create Ultium Cells LLC,[3] and Total entered into a joint venture with Groupe PSA called Automotive Cells Co., both of which will manufacture electric batteries.[4] A notable potential transaction is with Bolder Industries, a company that uses end-of-life tires to develop a sustainable alternative to carbon black, which has signed a letter of intent to merge with special purpose acquisition company (SPAC) GigCapital2 Inc in a deal that would take Bolder Industries public and value it at close to US$900 million, including debt.[5]

Investments in sustainability will likely continue to gain momentum in 2021 and future years as this megatrend becomes more important to the chemical industry and the investment community. Moreover, we expect there will be additional due diligence in M&A transactions focused on the carbon footprint and sustainability practices of the potential transaction partner. Acquirors may want to understand if the target company's practices are aligned, and companies with more remediation needs may become less-desirable partners. In any event, the movement toward sustainability will surely continue in 2021 and both traditional and nontraditional M&A will likely be employed by many chemical companies to help drive this initiative.

COVID-19—What were the impacts on M&A and how long will they last?

Figure 3: Monthly Chemical M&A Activity (2019 to 2020)



Source: Deloitte Development LLC analysis of data from S&P Capital IQ. Data is from January 1, 2019, to December 31, 2020.

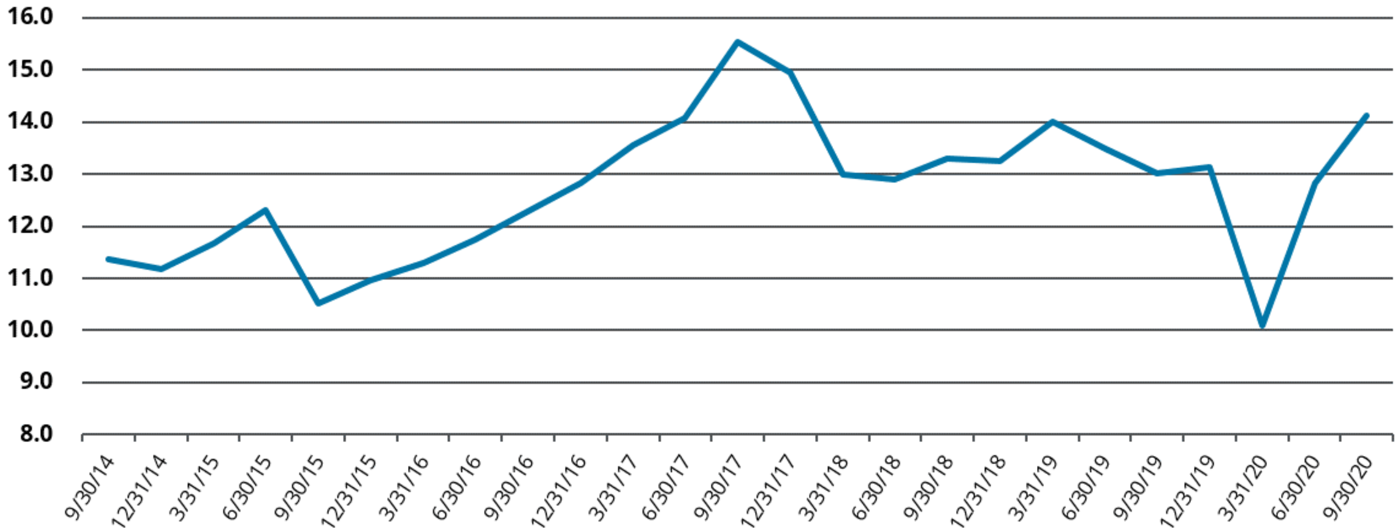
A critical factor impacting deal volumes in 2020 was undoubtedly the outbreak of the COVID-19 pandemic. Its impacts were felt across the globe. However, as discussed on the following pages, some countries and regions had a more pronounced impact than others as related to deal activity. As shown in Figure 3, a strong start to 2020 quickly turned weaker beginning in March, as the pandemic raced around the world. Deals that had sufficient momentum and work done by buyers and sellers ahead of lockdowns and travel bans may have made it across the finish line. Deals that were earlier in the process, however, were either delayed or shelved entirely. Several key factors contributed to a slowdown in deal-making, including: (i) price dislocation between buyers and sellers given substantial uncertainty in forecasts, (ii) impacts to global supply chains due to plant shutdowns, (iii) liquidity concerns of buyers, (iv) uncertain financing sources, and (v) simple logistics of customary in-person site visits and meetings with management teams.

While the outlook for how COVID-19 will continue to impact the broader global economic environment remains uncertain, there are signs for optimism in deal-making.

First, as seen in Figure 3, the total volume of transactions in the last four months of 2020 exceeded that from 2019. While some of this was the restart of delayed processes from earlier in the year, many new assets were brought to the market during Q3 and Q4 which resulted in announced M&A deals during 2020.

Second, private equity and other financial investors remain a factor in this industry, and these buyers appear to have been less put off by some of the factors discussed above. Those with existing platforms or committed financing sources were able to execute deals despite forecasting uncertainty and put some of their substantial "dry powder" to use in the chemical industry. The pandemic may also have provided for opportunistic buying in an industry that has had a long period of rich EV/EBITDA multiples. Refer to Figure 4 for a view of EV/TTM EBITDA multiples of the S&P 500 Chemical index over the last six years, including the significant drop from historical levels in Q1 and Q2 of 2020.

Figure 4: EV/TTM EBITDA



Source: Deloitte Development LLC analysis of data from S&P Capital IQ. Data is from September 30, 2014, to September 30, 2020.

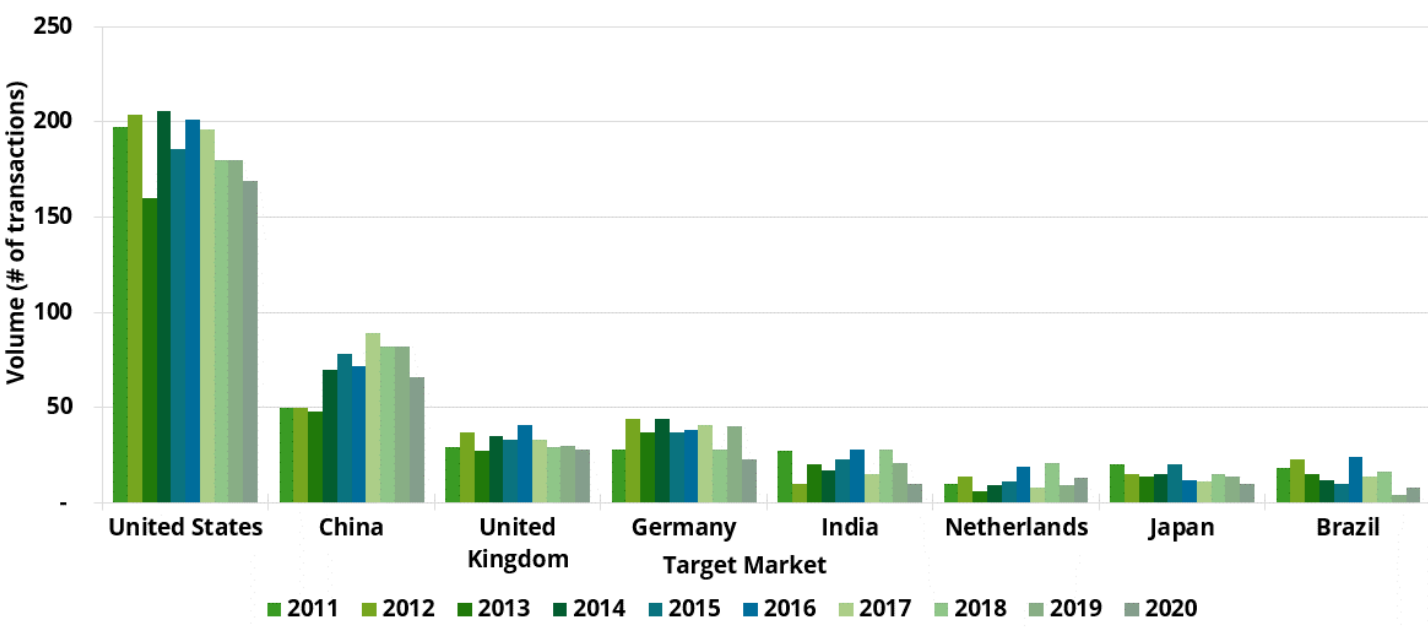
Finally, it appears that some of the factors inhibiting deal-making earlier in the year are starting to be resolved. Many chemical companies have a better understanding of how a prolonged COVID-19 environment could impact their forecast based on how end-markets have or have not rebounded. While there were disruptions in certain geographies, these have largely abated as many governments have deemed companies in the chemical industry to be critical and allowed them to remain open. Many buyers have taken steps to shore up their own liquidity, which has been aided by recovering demand. Finally, buyers have either resumed in-person travel or used technology aids such as drones or video conference calls to replace some on-site visits.

Combined with the rollout of several promising vaccines, which may allow for safer operations and the gradual re-opening of large parts of key end-markets and economies, it is possible that the chemical M&A market will return to pre-2020 levels in 2021.

Mergers and acquisitions activity by chemical sector

Deal activity across all chemical sectors followed a similar trend of a sharp drop at the onset of the pandemic and then an uptick starting in August. Overall deal volume has continued to decrease year-over-year for the last four years, with significant declines in 2020 in commodity chemicals, specialty chemicals, and fertilizer and agricultural chemicals. Beyond trade tensions, which we highlighted as a potential key driver in the 2020 Outlook, the COVID-19 pandemic and low oil prices have been major drivers of M&A declines. In this section, we analyze M&A activity in each chemical sector and highlight recent trends and transactions.

Figure 5: Global chemical mergers and acquisitions by target country (2010 to 2020)



Global chemical mergers and acquisitions by target sector (2011 to 2020)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Commodity chemicals	376	350	340	383	372	382	387	348	359	305
Specialty chemicals	174	171	132	159	147	185	172	157	148	130
Fertilizers and agricultural chemicals	69	66	43	67	72	61	65	77	61	51
Industrial gases	12	14	16	15	14	13	10	9	11	8
Diversified chemicals	15	8	6	11	7	9	3	9	6	7
Total	**646**	**609**	**537**	**635**	**612**	**650**	**637**	**600**	**585**	**501**

Source: Deloitte Development LLC analysis of data from S&P Capital IQ. Data is from January 1, 2011, to December 31, 2020.

Commodity chemicals: Reshaping portfolios while restructuring in a pandemic and low-price environment will continue to fuel transaction activity

Deal volume related to commodity chemicals was down 15% compared to 2019; such a sharp decrease has not been seen over the last decade. But despite the significant decrease in deal volumes, two of the largest transactions announced were in this sector: OMV's acquisition of another 39% stake in Borealis for $4.7B,[6] and BP's sale of its petrochemical business to INEOS for ~$5B[7].

The impact of COVID-19 has been profound on commodity chemical companies, some of which were already dealing with oversupply and a lower price environment in key petrochemicals. The pandemic also created stress on balance sheets for a subset of industry participants who turned to divestitures to address liquidity, raise cash and drive transformation to reposition their organizations. For example, Sasol entered into a joint venture with LyondellBassell for certain base chemical assets at its Lake Charles chemical complex for $2 billion in consideration.[8] Additionally, some oil majors had already announced a reshaping of their portfolios and continued engaging in sale transactions of their non-core assets. This trend of portfolio reshaping and restructuring will likely continue in 2021 as demand from key end-markets for base chemicals will continue with a level of uncertainty depending upon how the pandemic plays out. Our M&A Survey further reinforces this belief, as 80 percent of petrochemical company survey respondents said that they were very likely to undertake a divestiture in the next 12 months, compared to only 28 percent of all other chemical-company survey respondents. Companies will likely stay away from larger growth-driven acquisitions and focus on creating a resilient portfolio through restructuring and further divestments.

Specialty chemicals: Coatings and F&F deals continue strong M&A momentum driven by strong end-market demand

Like other sectors, deal activity in specialty chemicals was affected by the pandemic, with overall deal volume dropping to just 130 transactions in 2020, representing more than a 10 percent decline in M&A volumes from 2019. However, there was a significant uptick in deal volume in the second half of 2020, showing signs of a recovering M&A market heading into 2021.

Coatings, adhesives, sealants, and elastomers (CASE) continued to be a very active subsector in 2020, as key end-markets such as construction/infrastructure and consumer markets showed a strong rebound in demand as the pandemic began to ease. Examples include PPG's $1.15-billion acquisition of Ennis-Flint,[9] AkzoNobel's acquisition of Titan Paints[10] and Henkel's acquisition of the consumer sealants business of Momentive Performance Materials.[11] It looks as though coatings deals will continue their strong momentum in 2021 with PPG pursuing the acquisition of Tikkurila.[12]

Flavors, fragrances, and ingredients is another subsector with continued strong end-market demand that has continued its strong M&A momentum from 2019. Examples include Croda's €820-million acquisition of Iberchem[13] and Cargill's acquisition of Floratech.[14]

Despite the overall M&A slowdown in the sector in 2020, we expect deal volumes in specialty chemicals to rebound in 2021, driven by attractive growth rates in many of the end-markets.

Fertilizers and agriculture chemicals: Business recovery and resilience to continue to be a higher priority than deal-making

It was a fairly quiet year in terms of M&A in the fertilizer and agricultural chemicals sector, especially when compared to some of the megadeals in the past. This softness in M&A activity was largely driven by the significant impact the pandemic had on agricultural commodity prices and agricultural supply chains,[15] ultimately raising questions early in the year about the demand and pricing for fertilizers and agricultural chemicals.

Despite these early headwinds, there were still some significant transactions in the sector, including Partners Group's $1.1-billion acquisition of Rovensa,[16] and Anglo American's acquisition of the Woodsmith potash mine.[17] The strong rebound in agricultural commodity prices in late 2020 and early 2021 may drive grower demand for fertilizers and agricultural chemicals to help drive yields[18]—potentially good news for M&A in the sector in 2021.

Industrial gases: More of the same to continue with lower deal volumes in an already consolidated sector

With a continued trend of lower deal volumes and the last group of sizable transactions being almost two years ago, business drivers for deals in industrial gases remain unchanged and deal volume dipped into single digits. The majority of transactions were asset sales, including Air Liquide's acquisition of air separation units from Sasol,[19] signaling a continued low likelihood of larger-scale consolidation in industrial gases, and industry observers expect 2021 activity to be largely in line with 2020's. It's worth noting that the pandemic had limited impact on the industry due to longer-term fixed-volume contracts that companies in this sector have with their industrial customers despite the decline in production activities in some end-markets. This trend suggests a very similar M&A environment for 2021.

Diversified chemicals: Level of economic recovery to drive M&A

The diversified chemicals sector saw a very similar trend to the past year with low deal volumes. Where in the past large global diversified chemical companies made sizable acquisitions, this year such companies made significantly smaller bolt-on acquisitions to strengthen their current portfolios. As many chemical companies continue to focus on their core businesses, acquisitions of diversified businesses will likely continue to be out of vogue. As such, we would continue to expect the same level of M&A activity in the sector for 2021.

Mergers and acquisitions activity by geography

Figure 6: Global chemical merger and acquisitions by target market (2011 to 2020)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
United States	197	204	160	206	186	201	196	180	180	169
China	50	50	48	70	78	72	89	82	82	66
United Kingdom	29	37	27	35	33	41	33	29	30	28
Germany	28	44	37	44	37	38	41	28	40	23
India	27	10	20	17	23	28	15	28	21	10
Netherlands	10	14	6	9	11	19	8	21	9	13
Japan	20	15	14	15	20	12	11	15	14	10
Brazil	18	23	15	12	10	24	14	16	4	8
Other	267	212	210	227	214	215	230	201	205	174
Total	**646**	**609**	**537**	**635**	**612**	**650**	**637**	**600**	**585**	**501**

Source: Deloitte Development LLC analysis of data from S&P Capital IQ. Data is from January 1, 2010, to December 31, 2020.

United States: A historically low-volume M&A market showed signs of building momentum in the second half of 2020 that should continue in 2021

COVID-19 clearly had an impact on economic activity during the past year, and M&A activity was not spared. US deal volumes in 2020 were at their lowest level since 2013, across all chemical sectors. US deal values were also at a decade-low, attributable to there being no megadeals in combination with low deal volumes. There were only two deals in 2020 in the US over $1 billion.

That said, when examining the monthly M&A trends, we saw a bit of a rebound going into the back half of the year as deal-related activity began to pick up. April and May saw almost no transactions, with only seven in April and two in May. Since then, deals gradually increased month-over-month and levels in the last quarter of the year returned almost to normal levels.

Deal activity in the US appeared to be a balance of companies executing against long-term strategic plans with deals like PPG's acquisition of Ennis-Flint,[20] and companies opportunistically strengthening their current offerings with deals like LyondellBasell's joint venture with Sasol.[21]

What we did not see was significant downstream acquisition activity from major oil and gas companies in their chemical portfolios. While there was some activity in the upstream and mid-stream sectors in 2020, we may see moves within downstream businesses in 2021. These companies are well capitalized and are all considering their strategic options. Chemicals may become more and more attractive as market forces drive consumer moves away from traditional oil and gas demand.

Ultimately as we look to 2021, given continuing economic uncertainty driven by the COVID-19 pandemic, we anticipate that deal ebbs and flows will continue with some volitivity until the pandemic is more under control. Until then, companies with strong balance sheets will likely continue to take advantage of opportunities in the market, and companies with clear and defined strategies will continue to execute against their plans.

China: COVID-19 impacts 2020 deal activity but foreign investment continues

Continuing the theme, both deal volumes and deal values in China were significantly impacted by COVID-19. Compared to 2019, volume was down nearly 20 percent in 2020 and value down by 40 percent. Transactions in the commodity chemical segment decreased by 45 percent in value but still accounted for more than 80 percent of total deal value in the chemical sector. Restructuring of large state-owned companies continues to be a key driver for deals larger than US$1 billion.

Despite the ongoing pandemic, foreign investment in China has remained robust. ExxonMobil broke ground in 2020 on the construction of a US$10 billion petrochemical plant,[22] and Shell and CNOOC signed a strategic cooperation framework agreement to invest US$5.6 billion on their Huizhou phase III ethylene project.[23]

In China's published guidelines of its 14th five-year-plan for the chemical industry, the reduction of overcapacities is once again a priority. The demand for further standardization of chemical industrial parks and stricter regulations for hazardous chemicals is anticipated to further drive consolidation in traditional chemical segments. This plan also kicks off China's 2060 carbon-neutrality targets. As a result, ESG will likely have a key impact on M&A strategies. There is a push for new technologies, and many leading Chinese companies are planning to set up funds to invest in growing companies. The lingering impact of the US/China trade dispute and ongoing capital controls in China will likely keep overseas acquisitions by Chinese buyers at low levels; however, 2021 might see an increasing number of cross-border investments or joint ventures in the "encouraged segments," such as electronic chemicals and new materials.

UK: 2020 activity impacted by COVID-19, although PE appetite remains strong

Notwithstanding a relative uptick of activity in Q4, overall M&A activity in 2020 involving UK-based chemical targets declined compared to the prior year, although only modestly when compared to the impact to some other geographies. Despite this, one "mega-deal" was announced in the year: BP's sale of its petrochemicals business for US$5 billion.[24] Although volumes were down, international interest in UK companies continued, with investors from the US particularly active. As in 2019, the specialty chemicals space proved the most active, especially companies serving the cleaning chemicals subsector, where increased demand from COVID-19 buoyed valuations.

As in 2019, corporations made up the majority of acquirers of UK chemical companies, despite an active global private equity market supported by continued record levels of dry powder.[25] There were limited PE exits of UK companies, with COVID-19 and Brexit both creating some ongoing uncertainty.

Outbound M&A from UK corporations was also lower compared to 2019, as many companies paused M&A to focus on securing their internal position. By contrast, UK PE companies acquired more chemical companies than in recent years.

With the industry continuing to experience a period of uncertainty, continued caution toward M&A may be expected in the UK chemicals market. However, the ongoing uptick in carve-outs is anticipated to continue as big players look to improve balance sheets and become increasingly focused. Furthermore, with a post-Brexit trade deal now announced and the rollout of COVID-19 vaccines underway, the backdrop of relatively cheap debt and private equity with cash to deploy may create the conditions for an uptick in M&A as 2021 progresses.

Germany: Chemical industry showing recovery in back half of 2020 with a continued focus on growth in core businesses and end-markets

The German chemical industry has overcome the pandemic with some setbacks in business, but compared with other industries, seems to be well-poised. Many major chemical companies are repositioning themselves for further growth.

The chemical industry typically serves as a good early indicator of the general economic situation. After the initial economic downturn, the chemical industry picked up in the third quarter of 2020—demand from manufacturers of active pharmaceutical ingredients as well as chemicals for the construction and electronics end-markets recovered especially well. This improvement resulted in a broad-based recovery in the last two quarters.

In the first half of 2020, the volume of M&A transactions in the German chemical industry decreased significantly due to uncertainties leading to a decade-low M&A volume in 2020. However, the pandemic led companies to intensify the internal review of their existing business portfolios. Despite the continued uncertainty, many chemical companies are now pushing ahead with internal reorganizations. Further corporate spin-offs are expected, and some German chemical companies are already looking into strategic acquisitions. The continued trend is to further focus on a selected number of core businesses with solid growth expectations, and then expand those in scale. The pressure from capital markets on companies with a diversified portfolio is expected to lead companies to focus on only a selected number of core businesses. This trend to identify and focus only on core businesses is likely to continue in 2021.

In Germany, potential M&A transactions in specialty and fine chemicals are already on the horizon in the first quarter of 2021. This trend is likely to intensify into the latter half of 2021—provided that the recovery of the economy continues.

India: Chemical industry M&A activities poised for growth on sustained performance, favorable investment climate and shifting consumption preferences

The chemical industry in India is expected to grow rapidly to US$300 billion by 2025, from US$165 billion in 2019–20.[26] This growth will be primarily driven by rising disposable income, the relatively low median age of the population, urbanization, growing penetration and demand from rural markets, and shifting consumer preferences toward healthier lifestyles and environmentally friendly products.[27] This will create a huge opportunity for investors and for consolidation of the domestic industry, giving rise to multinational Indian conglomerates. An important macroeconomic indicator of inflows, the foreign exchange reserves of India increased by a significant 27 percent from US$457 billion in December 2019[28] to US$580 billion in December 2020.[29]

The chemical industry in India is well balanced with expected growth across all sectors. Expected growth will be fastest in specialty chemicals, growing at 12 percent CAGR from FY19 to FY22, followed by petrochemicals growing by a 7.5 percent CAGR from FY19 to FY23, and agricultural chemicals growing by 8 percent through FY25.[30]

In addition to the "Make in India" initiative, in May 2020 Prime Minister Modi launched the "Atmanirbhar Bharat Abhiyan" ("Self-Reliant India") campaign, outlining five pillars of focus—economy, infrastructure, system, vibrant demography, and demand.[31] The campaign expects to enhance manufacturing capabilities for import substitution and give a boost to exports. Cabinet has approved a Performance Linked Incentive (PLI) scheme for ten key sectors, including advance chemistry cell (ACC) batteries.[32]

Based on the positive outlook, coupled with strong industry performance in 2020 despite the COVID-19 pandemic, the favorable investment climate and investor-friendly reforms, and shifting consumption preferences, we expect that the chemical industry could see a rebound in M&A activity in terms of volume as well as value in 2021.

Netherlands: Strong M&A momentum in 2020 despite COVID-19, appears poised to continue into 2021

Despite the challenging macroeconomic environment due to COVID-19, chemicals M&A activity in the Netherlands remained fairly active in 2020. The number of deals increased to 13 with most of the transactions either plastics- or paints-and-coatings-related. The largest transaction of 2020, and one of the largest globally, was Covestro's acquisition of DSM's Resins & Functional Materials business for almost US$2 billion.[33]

The rollout of the vaccine, an expected ease of global trade tensions, and continued low interest rates provide confidence and are expected to support continued M&A activity in the Netherlands. During 2020, more resilient companies were already active in seizing the opportunity but it is expected that a broader group of chemical companies will seize the momentum, restructure their non-core assets and revisit deals put on pause, and private equity firms will sell businesses they have owned for more than four or five years.

As discussed, ESG factors are impacting the M&A agenda more and more often, and it's no different for Netherlands-based companies. A recent example is LyondellBasell and Suez's announcement of their joint acquisition of Belgium-based mechanical plastics recycling company Tivaco.[34] It is expected that this trend will accelerate even further in the future.

Taking all of this into consideration, an active chemical M&A market is expected in the year to come.

Japan: Business and economic outlook concerns continue to drive a tepid M&A appetite, but back-half of 2020 shows promising momentum

The tale of two halves might not be any more evident than it was in Japan, with only two announced chemical deals in the first half of 2020. Outbound M&A activity by chemical companies in Japan showed a remarkable slowdown in 2020 compared with 2019. Activity in 2019 was driven by the business-critical need to rapidly expand overseas to offset a declining domestic market. Many chemical M&A players observed that the M&A appetite never disappeared from a strategic point of view, but the business and economic environment was too uncertain in 2020 due to COVID-19, putting a pause on most M&A. Mobility limitations made outbound deals difficult to close, and it caused significant concerns regarding post-merger integration with foreign companies, so any ongoing transactions were suddenly suspended or canceled. On the other hand, inbound and domestic M&A activity did not experience a significant change in volume as companies have a continuing need to transform their portfolios. It seems that companies were focused on "defensive M&A" such as divestitures/reorganizations rather than acquisitions in 2020.

One scenario for 2021 is that "defensive M&A" will be accelerated under the continued uncertain business environment, with companies remaining hesitant to carry out larger or transformational outbound acquisitions, although they have a strong appetite to resume as soon as the outlook becomes more stable.

Brazil: Despite a rebound from decade-low activity in 2019, headwinds exist heading into 2021

2020 started off well for M&A activity in Brazil, but in March the market took a sudden turn due to rising uncertainties related to the COVID-19 pandemic. Nonetheless, the M&A market regained pace in Q3, resulting in overall growth in chemical M&A transactions compared to 2019, but it was still well off its highs experienced in the past. Chemical products and fertilizers did especially well in 2020 comparatively, ranked among the top five segments with greatest relative growth in volume of transactions.[35]

Even though chemical M&A activity in Brazil has fallen behind early-decade figures, there has been an upward trend since 2019. Transactions related to fertilizers and agricultural chemicals are steadily growing with the rise in agricultural commodity prices, and companies continued to focus on sustainability, such as biomass and biodegradable chemicals. Also, private equity buyers have been keen on acquiring stakes in Brazilian chemical companies.

As COVID-19 uncertainties begin to dissipate, the market points to an optimistic scenario for chemical M&A activity in Brazil in 2021. While the Brazilian GDP is estimated to have decreased by 4.4 percent in 2020, there are positive projections for the coming years: a rise of 3.2 percent in 2021 and 2.5 percent in 2022.[36] In the meantime, macroeconomic challenges, including volatile inflation and exchange rate fluctuations, may result in more careful M&A participants, and also lesser foreign interest and greater speculation in M&A activity in 2021.[37]

Summary outlook for 2021 mergers and acquisitions activity

As we put 2020 behind us and look forward to 2021, there are certainly still economic and business uncertainties coming out of the COVID-19 pandemic. However, there appears to be a favorable environment for strong M&A activity in 2021—continued portfolio realignment by corporations, abundant dry powder from private equity funds, a favorable interest-rate environment, an improving economic backdrop, and corporations now looking for growth. This assessment is further supported in our M&A survey, which showed a strong sentiment among chemical executives heading into 2021.

This doesn't mean that in 2021 M&A will be easy, though. With a mismatch between the supply of high-quality of assets and demand from PEI and chemical companies searching for growth, we anticipate high valuations and competition for high-quality assets.

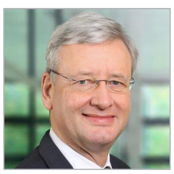
Based on this more favorable backdrop, we are optimistic that 2021 will not be the fifth year of global M&A volume declines in the industry, but rather we expect to see a rebound in chemical M&A volumes and values.

Contacts

Global

Dan Schweller
Deloitte Financial Advisory Global Energy, Resources & Industrials Industry Leader
Deloitte & Touche LLP
dschweller@deloitte.com
+1 312 486 2783

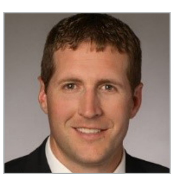
Rajeev Chopra
Deloitte Global Energy, Resources & Industrials Industry Leader
Global Oil, Gas & Chemicals Sector Leader
rchopra@deloitte.co.uk
+44 20 7007 2933



Dr. Wolfgang Falter
Deloitte Global Chemicals & Specialty Materials Sector Leader
Deloitte Touche Tohmatsu Limited
wfalter@deloitte.de
+49 211 8772 4912

Walid Bazzi
Deloitte Global Consulting Oil, Gas & Chemicals Sector Leader
Deloitte Consulting LLP
wbazzi@deloitte.com
+1 703 251 3629

US



Philip Hueber
Partner
Deloitte & Touche LLP
phueber@deloitte.com
+1 312 486 5791

Joel Flottum
Senior Manager
Deloitte & Touche LLP
jflottum@deloitte.com
+1 312 486 4758

US (cont.)

Joel Schlachtenhaufen
Principal
Deloitte Consulting LLP
jschlachtenhaufen@deloitte.com
+1 612 659 2924

Saadat Khan
Senior Manager
Deloitte Consulting LLP
saadakhan@deloitte.com
+1 612 659 2609

Amy Chronis
Vice Chairman, US Oil, Gas & Chemicals Sector Leader
Deloitte LLP
achronis@deloitte.com
+1 713 982 4315

Brazil

Ubirata Bertelli Costa
Partner
Deloitte Brazil
ucosta@deloitte.com
+55 21 3981 0491

Venus Kennedy
Partner
Deloitte Brazil
vkennedy@deloitte.com
+55 11 5186 6329

China

Jill Wang
Partner
Deloitte China
jillwang@deloitte.com.cn
+86 10 8520 7766

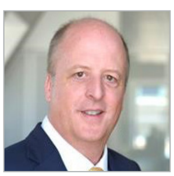
Germany

Joerg Niemeyer
Partner
Deloitte Germany
jniemeyer@deloitte.de
+49 211 8772 3668

Malte Stoever
Director
Deloitte Germany
mstoever@deloitte.de
+49 211 8772 2895

Marc Schmitz
Director
Deloitte Germany
marcschmitz@deloitte.de
+49 697 5695 6200

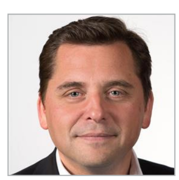
Switzerland



Konstantin von Radowitz
Partner
Deloitte Switzerland
kvonradowitz@deloitte.ch
+41 58 279 6457

Netherlands

Don van Neuren
Partner
Deloitte Netherlands
dvanneuren@deloitte.nl
+31 882886166



Justin Hamers
Partner
Deloitte Netherlands
jhamers@deloitte.nl
+31 882881951

Japan

Dai Yamamoto
Partner
Deloitte Japan
dia.yamamoto@tohmatsu.co.jp
+81 7031914171

Tetsuya Matsumoto
Partner
Deloitte Japan
tetsuya.matsumoto@tohmatsu.co.jp
+81 8044351491

India

Savan Godiawala
Partner, Corporate Finance
Deloitte India
sgodiawala@deloitte.com
+91 7966827340

UK

Mark J. Adams
Partner, Corporate Finance
Deloitte United Kingdom
mjadams@deloitte.co.uk
+44 20 7007 3624

Middle East

Lawrence Hunt
ER&I M&A Leader
Deloitte Middle East
lhunt@deloitte.com
+971 2 408 2424

Bart Cornelissen
ER&I Leader
Deloitte Middle East
bpcornelissen@deloitte.com
+971 4 376 8888

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