



The changing face of M&A in the chemical industry

In the chemical industry, mergers and acquisitions (M&A) are a familiar part of the landscape, with hundreds of transactions a year occurring in regions around the world. Cumulatively, approximately 20% of industry revenue has changed ownership over the course of a decade.

That finding is from the Accenture Chemical Industry M&A Study, a recent analysis of US\$1.1 trillion worth of M&A transactions by chemical companies that took place over the last 10 years.

The study reveals that traditional M&A drivers, such as consolidation and portfolio extension, are still important. At the same time, however, the nature of M&A is evolving, as chemical companies look for ways to contend with ongoing volatility and move to a more sustainable future.

In essence, the research shows that M&A is an important tool for change. Like products, applications and processes, it is a source of growth and innovation for chemical companies as they seek to optimize their portfolios and adopt new business models.

By understanding the M&A trends that have brought us to the present, chemical companies can gain insights into how they use M&A to reshape themselves—and the industry—to thrive in the coming years.

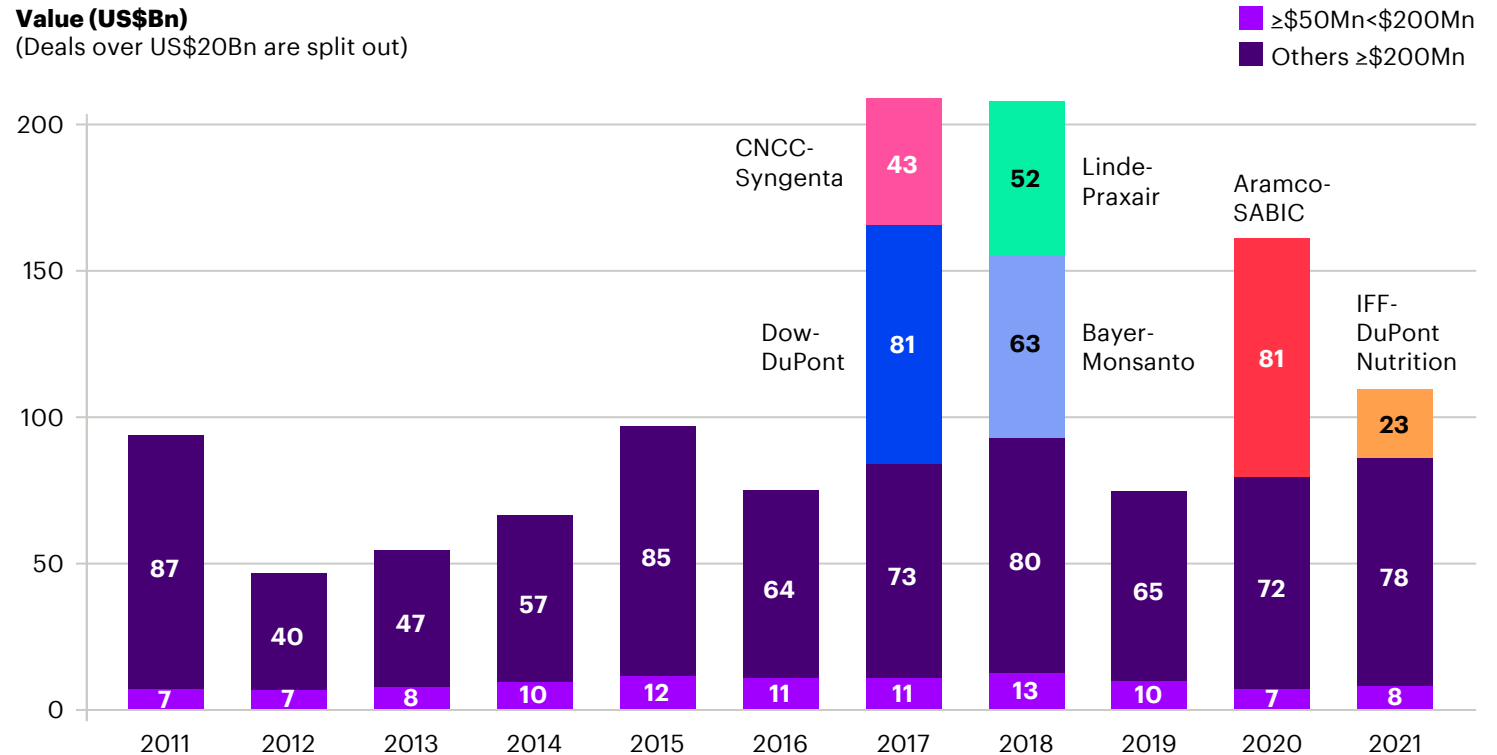


The where and why of industry M&A

Over the last decade, the chemical industry has seen several clear spikes in M&A activity due to a relative handful of exceptionally large transactions—such as Dow-DuPont, Aramco-SABIC and Bayer-Monsanto—and the resulting waves of consolidation that they triggered.

But beneath these high-profile deals, a significant level of more or less steady M&A activity has continued over the years, even through economic slowdowns. (See Figure 1)

Figure 1: Completed chemical industry M&A transactions, 2011–2021



Source: Accenture Chemical Industry M&A Study, see page 13; additional Accenture Research analysis of S&P Capital IQ Pro data on 1,037 chemical industry M&A transactions with values from US\$50 million to less than US\$200 million.

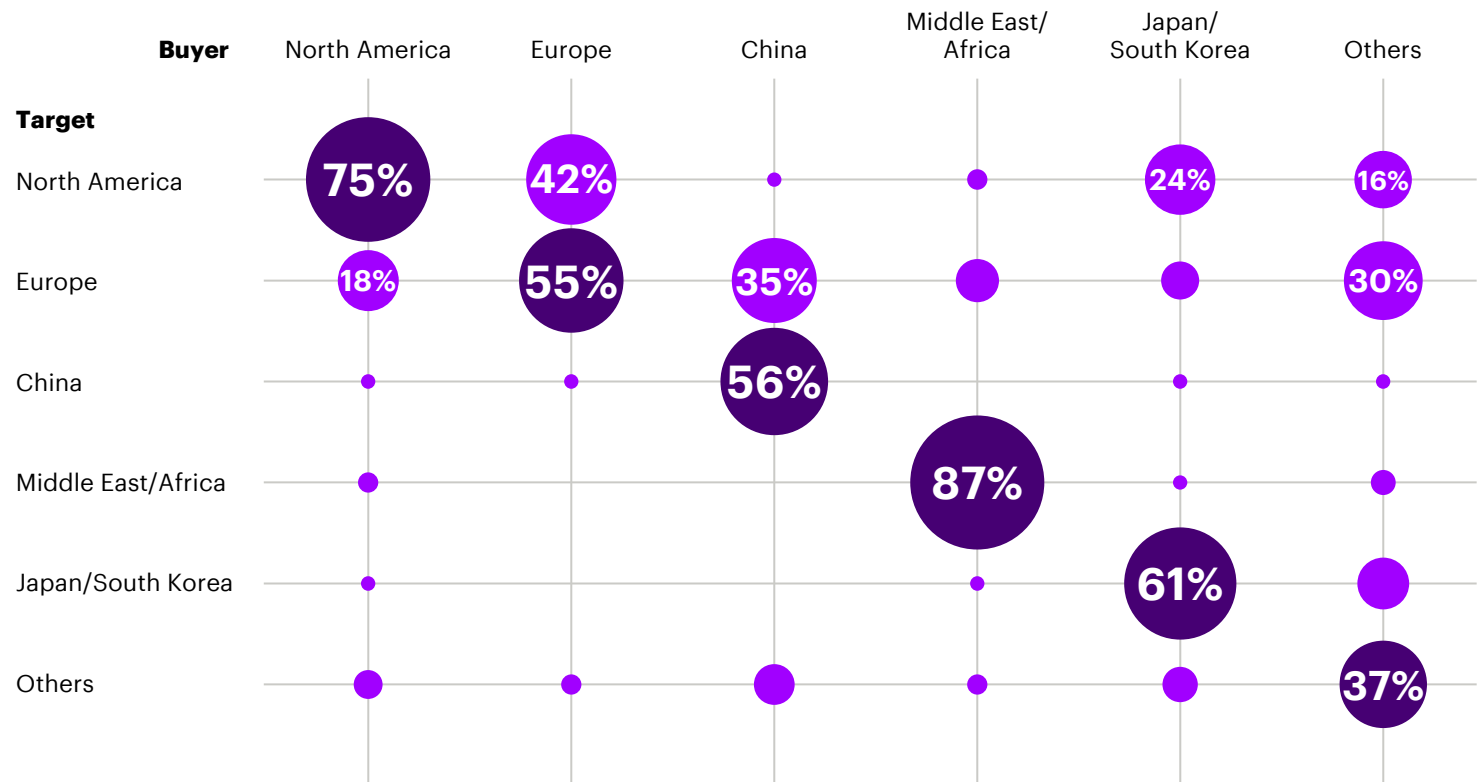
In terms of geography, most chemical industry M&A deals take place within companies' home regions—that is, deals where North American buyers have targeted North American companies account for 75% of the value of their transactions; deals with European companies targeting European companies account for 55% in Europe; and so on. (See Figure 2)

But there is some notable inter-regional activity, particularly involving Europe and Asia. A large percentage (42%) of deals involving European buyers have focused on North American companies, while roughly one-third (35%) of Chinese buyers have focused on European companies and about one-fourth (24%) of Japanese/South Korean buyers have targeted North America.

The research did not explore the motivations behind these cross-region transactions. However, it seems likely that companies in Japan and South Korea, which have mature chemical industries with a good technology base, are looking to North American targets to make further gains in their specialty positions.

Figure 2: Regional preferences in M&A

Bubble size = transaction value share of buyer region



Notes: North America = USA and Canada only; Others = Other Asian countries and Latin America.

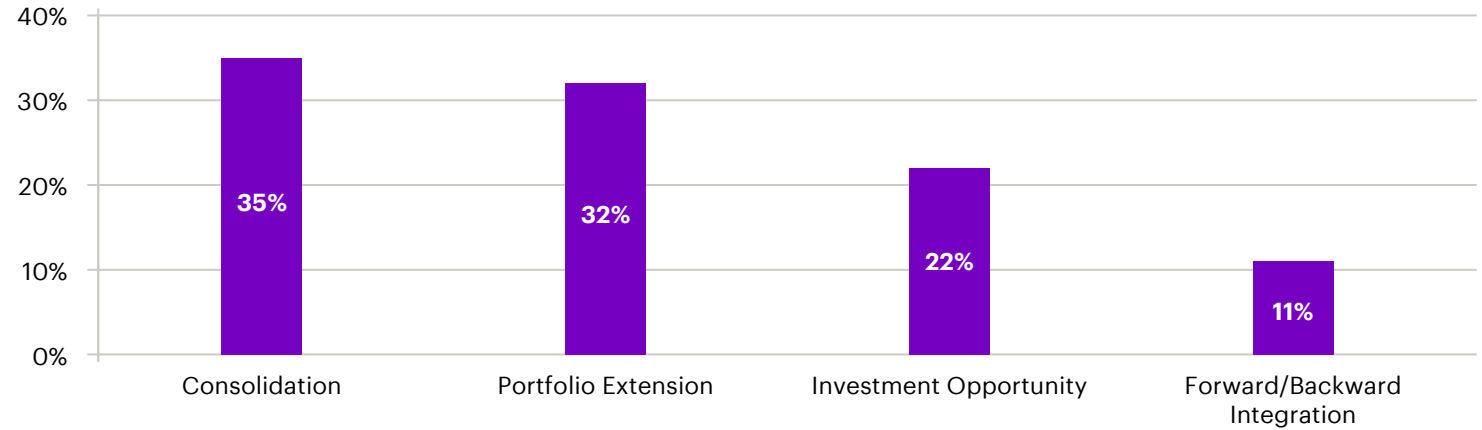
Source: Accenture Chemical Industry M&A Study, see page 13.

Chinese chemical companies, on the other hand, are often in need of more advanced technology, which is likely to drive their interest in European companies.

In terms of the rationales behind M&A actions in general, the research looked at both buyers and sellers. For buyers, consolidation and portfolio extension, respectively, were the top two drivers, as companies looked to purchase businesses and products that were most familiar to them. (See Figure 3)

These two drivers, which together were cited by 67% of buyers, indicate that chemical companies are fairly risk-averse in their approach to M&A, as they focus largely on what they already know rather than looking to diversify into entirely new areas. In addition, 11% cited forward/backward integration as the reason for buying; this could also be viewed as a way to expand an existing business without taking huge risks.

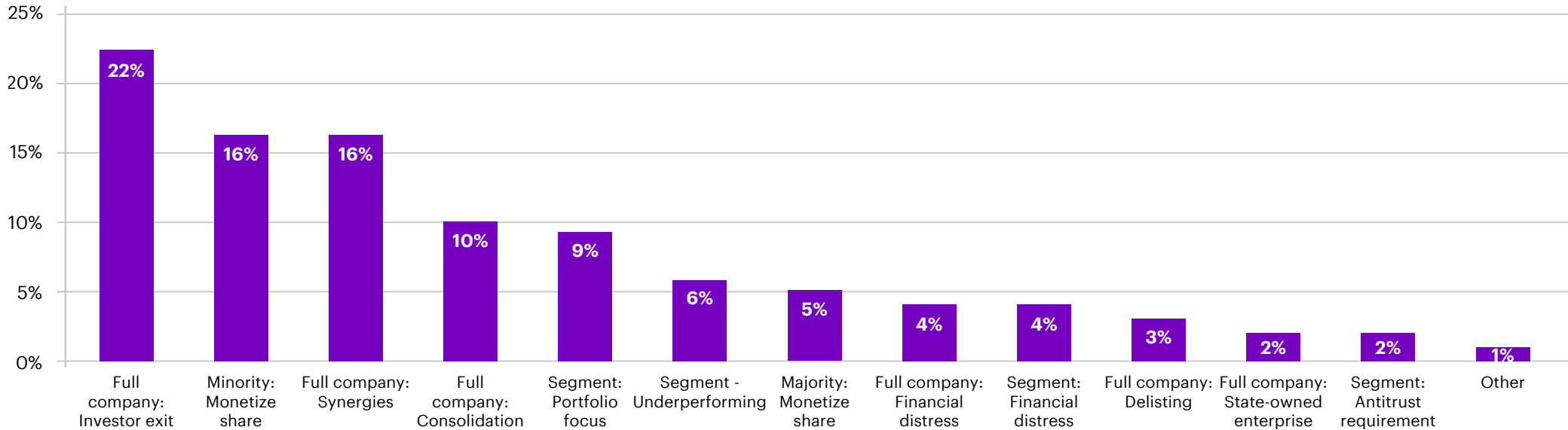
Figure 3: M&A buyer rationales (by percentage of transactions)



Source: Accenture Chemical Industry M&A Study, see page 13.



Figure 4: M&A seller rationales (by percentage of transactions)



Source: Accenture Chemical Industry M&A Study, see page 13.

Sellers cited a range of reasons for their actions. More than half the transactions involved the sale of a whole company, with “investor exits” and “synergies” being the most common reasons. About one-fifth of the transactions involved the sale of a segment of the business to refocus the portfolio, or because the segment was underperforming or encountering financial or antitrust issues. (See Figure 4)

For sellers, 43% of the transactions related to financial opportunity—typically, the monetization of share or investors exiting the business. In addition, 26% were driven by sellers seeing that buyers were prepared to pay a premium as they looked for synergy and consolidation opportunities. Financial distress and underperforming businesses were relatively minor factors, accounting for just 14% of total transactions.

While buyer rationales for M&A focused on consolidation and portfolio extension, sellers cited a range of reasons, the majority of which involved the sale of a whole company.

With consolidation playing such a prominent role in industry M&A, the research also explored the question of whether there is an early-mover advantage when a segment begins to consolidate. The data for several consolidation waves suggests that to some extent, that might be the case, as multiples for acquired businesses often do rise as a wave progresses. (See Figure 5) There is some logic to that finding, as a company in a fragmented competitive field could be perceived

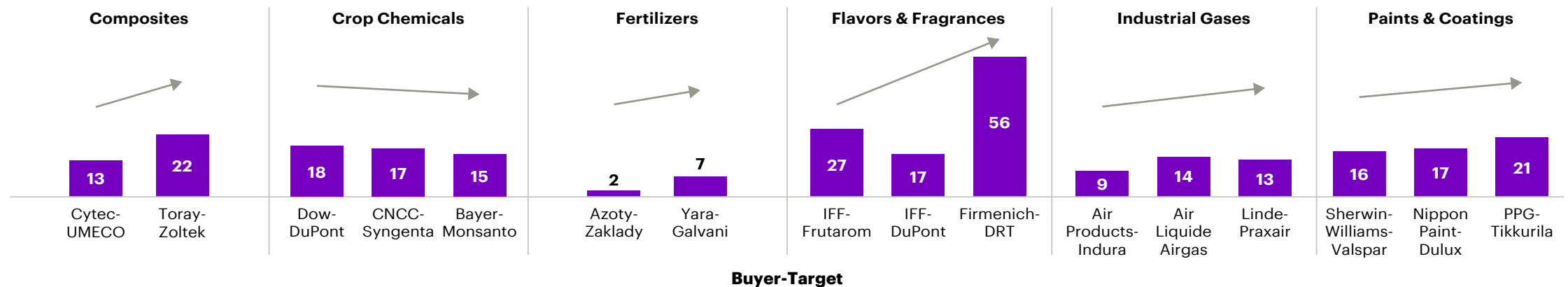
as less valuable than one in a field with only a few participants. That is, consolidation itself might drive up multiples. As one chemical company CEO explained, "If I buy a business with only two players in the market, it's worth more than if I buy a business where there are six players."

Nevertheless, the findings that point to a first-move advantage are far from definitive. There is the question of how certain one can be that

a transaction will lead to further consolidation. And the multiples paid for companies can depend on a wide range of variables, including the quality of the asset, legal and regulatory risks involved and the overall economic environment. However, if those other factors are all positive, the potential benefit of moving first and paying a lower multiple than those who step in later could be worth considering.

Figure 5: Transaction multiples in consolidation waves

Transaction multiple (Value/EBITDA)



Notes: Dow-DuPont multiple represents more than just crop chemicals; Includes only transactions over US\$300 million and where EBITDA and transaction values are available; Ordered by announced date.

Source: Accenture Chemical Industry M&A Study, see page 13.

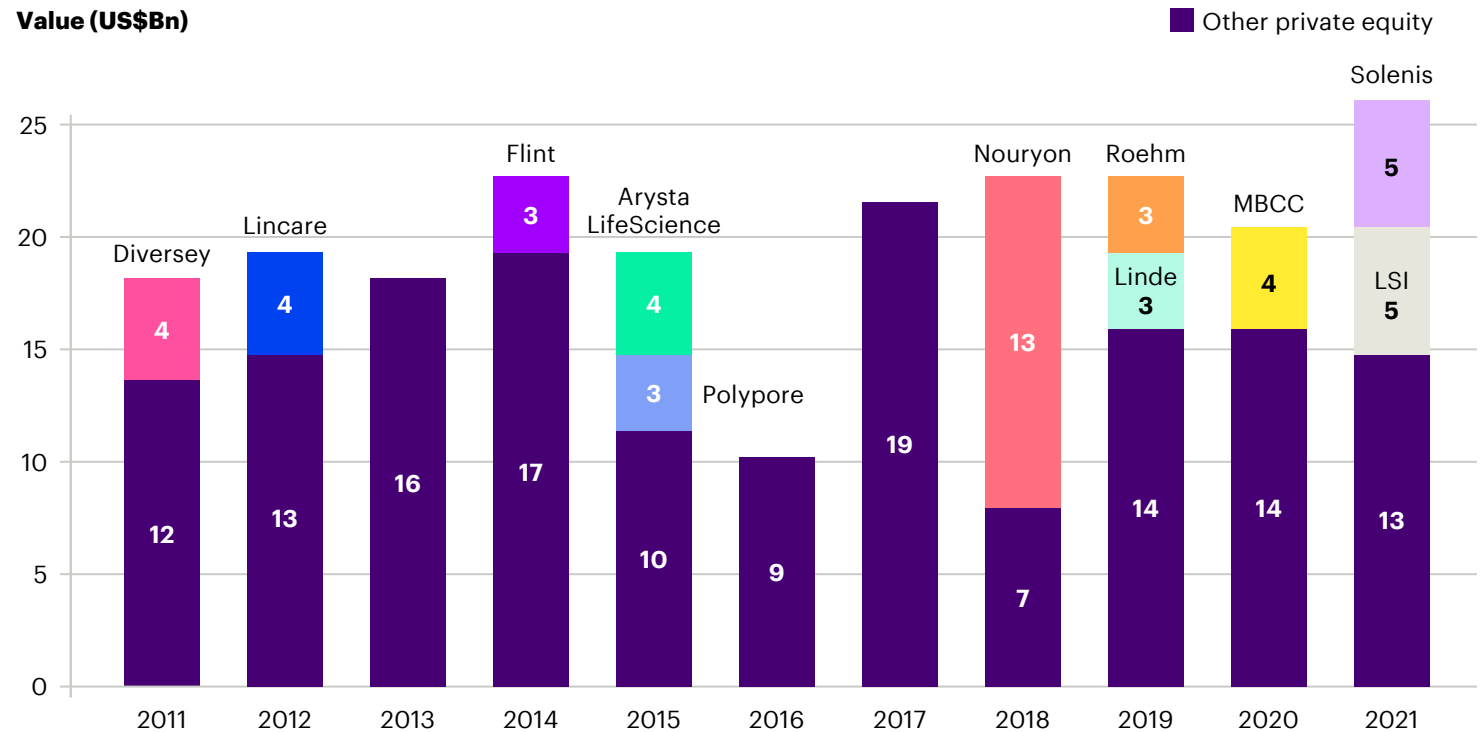
Emerging factors that are changing M&A

Private equity

Private equity has become important in many areas of business, and that includes the chemical industry where it is playing an active and prominent role in the M&A arena.

In the last 10 years, private equity has executed between US\$16 billion and US\$23 billion in transactions each year, accounting for 9% to 43% of total transaction value annually and 23% on average over the entire period. (See Figure 6) Some of these deals have involved relatively small companies, but many have been in the multibillion-dollar range, with a number of especially large deals in the last four years.

Figure 6: Private equity transactions in the chemical industry



Notes: Selected large transactions are shown separately; Roehm was formerly Evonik MMA & PMMA; MBCC is Master Builders Construction Chemicals; Lonza Specialty Ingredients (LSI) is now Arxada.

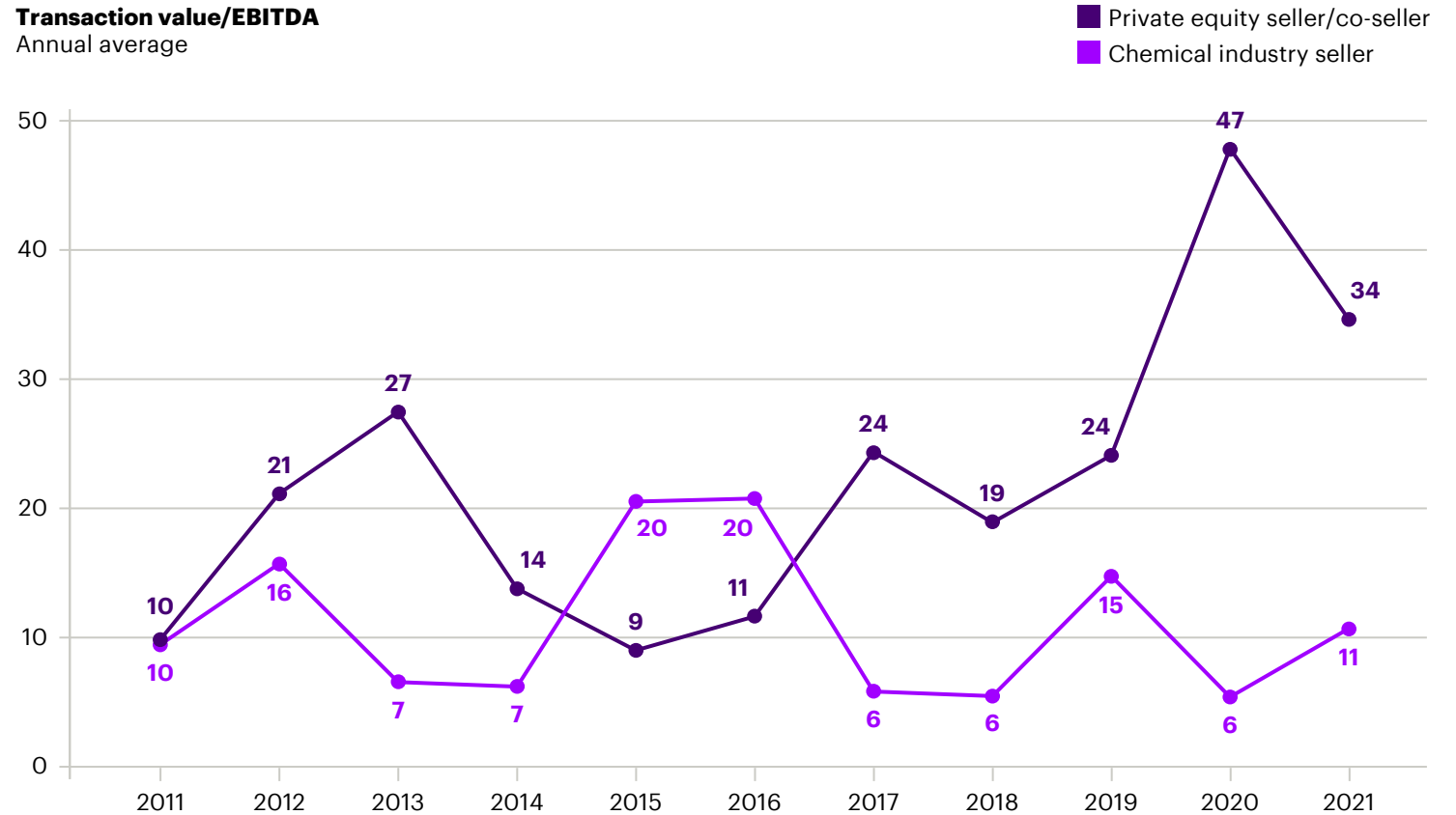
Source: Accenture Chemical Industry M&A Study, see page 13.

Just as important, private equity groups have proven to be highly effective players in chemical industry M&A. Frequently, these groups will buy assets from chemical companies, increase their value over the course of a few years, and sell them for substantially more. And quite often, they will sell at higher multiples compared to chemical company sellers. (See Figure 7)

These findings suggest that chemical companies are foregoing opportunities to restructure and optimize operations before selling a business.

Setting up lean organizational structures and implementing cost-effective business platforms, business services and operating models typically enables sellers to capture more value in a transaction—especially if the improvements are documented and evident in the company’s actual financial performance.

Figure 7: Private equity vs. chemical company multiples in M&A



Notes: Based on date of completed transactions.
Source: Accenture Chemical Industry M&A Study, see page 13.

What's more, it is striking to see how quickly such changes can be implemented by new owners after a merger or acquisition. This makes it clear that such value-creating changes are feasible and implementable.

However, they are often impaired by the seller's legacy mindsets and management attitudes. For chemical companies considering a sale, it is important to keep in mind that typically, each million dollars in cost savings and profit improvement has the potential to create millions more in value, based on the transaction multiple.

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Greenhouse gas emissions reductions

On another front, greenhouse gas (GHG) emissions reductions—a major issue in the industry—appear to be emerging as an important factor in M&A decisions.

It is clear that in order to meet net-zero goals, chemical companies will have to make significant capital investments in GHG emission-intensive businesses such as ammonia, ethylene and propylene production. In Europe alone, achieving the EU Green Deal's 2050 net-zero GHG emissions goal will cost the industry about €1 trillion in direct improvements, the relocation of plants to be near green energy sources, downtime incurred through the transition, and so on.¹

Figure 8: GHG emissions and EBITDA in M&A

	% of total GHG emissions		% of total EBITDA
Borealis: Fertilizer	50%	➤➤➤➤	5%
Mitsubishi Chemical: Petrochemicals	20%	➤➤	-1%
SABIC: Fertilizer	29%	➤➤	11%
Trinseo: Synthetic Rubber	25%	➤➤	9%
Solvay: EssentialCo	60%	➤➤	44%
Trinseo: Styrenics	46%	➤	38%
Evonik: MMA	15%	↔	13%
Arkema: PMMA	7%	↔	8%
DSM: Resins & Functional Materials	3%	◀	8%
DuPont: Mobility & Materials	12%	◀	17%

EBITDA Notes: EBITDA for closed deals based on last available financials. Trinseo-Synthetic Rubber EBITDA is for 2019; SABIC EBITDA is calculated as Operating Profit before Tax, Depreciation & Amortization; DSM EBITDA is for 2019; Mitsubishi Chemical negative operating profit published as -1% of company profit (estimated petrochemicals share).

GHG Emissions Notes: GHG is for 2020 unless otherwise noted. Solvay includes scope 1-3, but only for the soda ash portion of the divestiture; DuPont includes scope 1-2; Trinseo-Styrenics includes scope 1-2; SABIC includes scope 1-2; Evonik includes scope 1-3 (2018); Trinseo-Synthetic Rubber includes scope 1-2; Arkema includes scope 1-3; Mitsubishi Chemical includes estimated scope 1-2 based on 2021 base petrochemical capacity; DSM includes scope 1-2; Borealis includes scope 1-3.

Source: Accenture Chemical Industry M&A Study, see page 13.

Against that background, the research identified a pattern in which companies are selling businesses that produce both higher levels of GHG emissions and relatively lower financial returns. For example, one company recently divested a large fertilizer business that contributed 50% to its GHG emissions but only 5% to its EBITDA, while another divested a synthetic rubber business responsible for 25% of the company's emissions and just 9% of EBITDA.

For companies looking at the costs of reaching net zero, the question is whether to invest in reducing GHG emissions or to divest the GHG-intensive business to get it off the books. It appears that in some cases, they may be choosing the latter approach. Regardless, what is clear is that GHG considerations, while not the sole driver of M&A activity, appear to be having a growing influence on the decisions being made.



What it means for chemical companies

M&A will continue to be an important factor in the chemical industry. For many companies, understanding how to approach these deals will be key to successful and value-creating transactions.

And as they evaluate and execute M&A opportunities, chemical companies should:

- Treat M&A as a core capability with an end-to-end perspective that extends from well before transactions to well after.
- Deploy technology to help capture the value of M&A through data-driven insights, automation and future-ready platforms that streamline divestments and accelerate the integration of acquired businesses.
- Complete restructuring efforts and build leadership and partner networks prior to a sale in order to reduce the chance of leaving excessive amounts of value to the acquirer.

- Apply a fact-based approach to value GHG implications of M&A to avoid a “fire sale” of GHG-intensive businesses.
- Have a targeted, thoughtful approach to people and culture: In a transaction, the majority of employees, such as shift workers and plant operators, are not likely to be affected. It is the relatively few in leadership positions—perhaps 10% to 20%—that need to be brought along via effective change management.

By successfully pursuing their M&A strategies, chemical companies can both respond to change and drive it—and have an important tool at hand that will help them adapt in a constantly evolving industry.

About the research

The Accenture Chemical Industry M&A Study examined mergers, acquisitions and divestments from 2011–2021. Global in scope, the study encompassed transactions of US\$200 million or more. This totaled 760 deals with a collective value of US\$1.1 trillion, representing 91% of the total transaction value in the industry during this 10-year period. The study was based on an analysis of data from the S&P Capital IQ Pro market-intelligence platform and press announcements from Dow Jones Factiva.

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Special thanks to Ganesh Patro, Asako Sakuma, Gaurav Sharma, Ojas Wadivkar and Sven Wahle for their contributions to this research.

References

All data points in this report are from the Accenture Chemical Industry M&A Study except as indicated below.

- 1 “The chemical industry’s road to net zero: Costs and opportunities of the EU Green Deal,” April 22, 2022, Accenture and NexantECA, <https://www.accenture.com/us-en/insights/chemicals/eu-green-deal>.

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