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Learning from the leaders: Value creating strategies in the chemical sector

Chemical company performance drivers

In recent years, the gap between top- and bottom-tier performers in the chemical sector has remained wide, both in terms of total shareholder return (TSR) and the companies' value multiples (EV/EBITDA). Concurrently, the chemical sector is experiencing significant change, such as the growing emphasis on sustainability and ESG more broadly, the shifting growth dynamics and attractiveness of many end markets (e.g., automotive, oil, and gas), dislocations in the global supply chain, as well as a range of broad impacts brought by COVID-19. As change continues to accelerate, we expect the performance gap between the stronger and weaker performers to remain wide and perhaps even widen.

Our analysis of, and experience advising, companies in the chemical sector reveals a common set of six characteristics that drive leading performance. These characteristics that distinguish leaders have remained relatively consistent over time. As senior management looks to recalibrate or "refresh" current strategies due to fundamental changes in the business environment, a gap analysis against these leader characteristics offers a valuable starting point to help focus strategy efforts.

In this article, we review the characteristics of the performance leaders in the chemical sector, offer a perspective on how these lessons can be applied to recalibrate strategy, and provide some thoughts on two of the often difficult trade-offs management faces in striving for leading performance: getting the balance right between raising margins and driving growth and making the most difficult choice of whether to shrink the company in order to generate sustained profitable growth.

Chemical company performance drivers

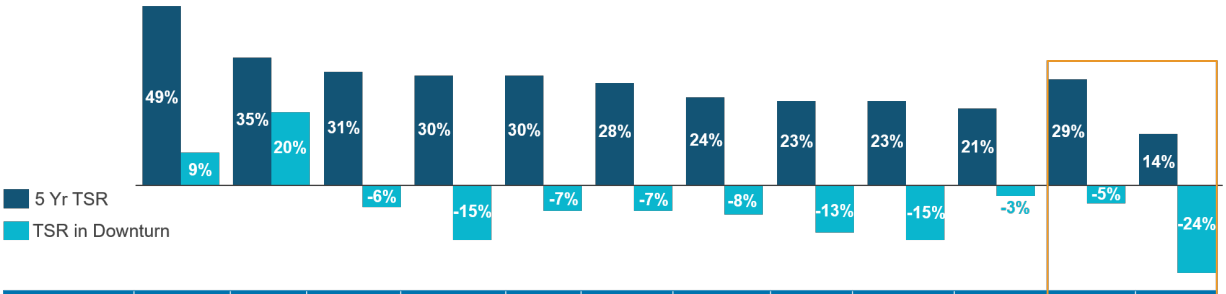
We analyzed over 70 publicly traded chemical companies over the last five years (2015–2020), a period of generally solid economic growth followed by a precipitous economic decline in the first half of 2020 driven by COVID-19, and then a rapid rebound in the second half of 2020 and into 2021 (particularly in the US).

Performance leaders among these 70+ chemical companies are generally relatively large market cap (>$10B), with significant exposure to high-growth end markets and/or an effective growth model (organic + inorganic), with a clear portfolio focus that drives distinctiveness and competitive advantage. Leaders not only significantly outperformed their peers in terms of TSR over the past five years, they also better weathered the market downturn of early 2020. These same leaders also typically enjoy sizable multiple premiums.

- A five-year annual TSR of ~29%, double the industry's average of ~14% per year
- A limited 5% decline in TSR during the market downturn of early 2020 vs. -24% for the average of the over 70 companies in the sector
- An EBITDA multiple average of 19X, ~7 points higher than the industry average of 12X

These levels of outperformance have held steady through the continued strong economic rebound experienced over the first six months of 2021. Figure 1 shows the large performance gap between the top tier and average performance.

Figure 1: Top 10 TSR Performers in the Overall Chemical Industry



	Entegris	Lonza	DSM	CMC Materials	FMC	Quaker	Sherwin Williams	Linde	Albemarle	Air Products	Top 10 Avg	Group Avg[1]
Market Cap ($B, Dec'20)	$13	$48	$29	$4	$15	$5	$60	$138	$16	$60	$39	$16
TEV/EBITDA Multiples (as of Dec'20)	23x	25x	15x	14x	13x	20x	18x	16x	23x	16x	18x	13x
Portfolio Mix[2]	F/SP	F/SP	D/SP	F/SP	F/SP	F/SP	F/Mix[3]	F/SP	D/SP	F/SP		

Notes:

1. Group average of ~70 chemical companies in the analysis
2. Portfolio Mix key: F = Focused; D = Diversified // SP = Largely Specialty; Mix = Commodity / Specialty / Branded Mix
3. Note: Sherwin Williams portfolio is a mix of specialty and branded coatings
4. Note: 5 year TSR is from Jan 1, 2016 to December 31 2020
5. Note: TSR in downturn is from Jan 1, 2020 to end April 2020

Characteristics of Leading Performers

In examining the portfolios and positioning of the leading performers, we identify six common characteristics summarized in Figure 2.

Figure 2: Six Common Characteristics of Leading Performers in Chemical Sector

1. Portfolio coherence/focus	Focused or actively shifting toward few businesses with common business models and strong linkages that can be monetized (e.g., market, technology, manufacturing footprint) or a single segment of the chemical industry (e.g., industrial gases, coatings, etc.)
2. Distinct leadership positions	Advantaged leadership businesses represent a sizable share of the portfolio
3. Attractive market structures	Participation in markets/industry segments that offer, on average, high and relatively stable margins and returns (e.g., industrial gases)
4. Strong technology/innovation contribution	A track record of value contribution from technology/innovation, supporting superior margins and advantaged business positions and growth
5. Strong growth dynamics	Products and end-market positioning that offer higher underlying growth (e.g. electronics/semiconductors) and a portfolio that offers significant growth optionality
6. Relative cycle resiliency	Relatively stable performance through a cycle in terms of volumes and margin performance

While we believe these six factors will remain critical to performance, structural changes in the economy and in investor perceptions could place greater emphasis on certain characteristics or introduce new ones. For example, we believe two characteristics are likely to be of greater importance looking forward:

1. Positioning in markets that are favored by changing economic conditions and shifting consumer preferences (e.g., semiconductors, renewable energy, life sciences, etc.), and
2. Having a well-defined ESG strategy that is positively viewed by direct customers, final consumers, as well as investors

Chemical companies are actively reexamining their end-market mix to define portfolio strategies that will better position them for the future and are rethinking how to create value from a proactive, rather than a compliance-driven, ESG strategy.

Strategy Gap Analysis

Testing your company's position against the characteristics of leaders provides a way to objectively assess strategy against the requirements for top-tier performance. Such an assessment can help management focus on how to build upon its strengths, identify its critical gaps that need to be addressed to support superior performance, define priorities for improvement, and guide strategic decision making.

In Figure 3 we illustrate how an indicative specialty chemical company fared against leader characteristics. It highlights both the areas of strength and critical gaps that represent material challenges to be addressed.

Figure 3: Illustrative Strategy Gap Analysis

Leader Characteristics	Evaluation	Assessment
1. Portfolio coherence		Two core divisions, based on different chemistries/technologies – limited market linkages or shared model
2. Distinct leadership positions		Leadership position in one core business (which is the primary driver of margins and growth)
3. Technology & innovation		Track record of new products and applications from disciplined R&D program – some success in breakthrough technologies
4. Positioned in businesses with attractive market structures		One business is in a sector with attractive structure while other is in a fragmented segment of the industry – limited opportunity for advantage or leadership
5. Strong growth dynamics • Underlying market growth • Growth optionality		• Several segments facing long-term headwinds (e.g., ICE and Oil & Gas) • Selected smaller market segments poised for growth • Limited growth optionality in primary business
6. Cycle resiliency		Exposure to certain cyclical end markets, but overall, only modest volume and margin declines during downturns

Well positioned Mixed position Significant gap

In this example, the company's key issues are lack of portfolio coherence and disproportionate exposure to low-growth markets. Its highly productive investment in technology innovation has delivered value but is seen as insufficient to offset the growth headwinds. The company is also too reliant on a single core business to drive its performance, with its other businesses being sub-scale, and low margin, contributing to corporate complexity that results in relatively high overall SG&A.

The strategy gap analysis suggests the company needs to directly address two critical issues. First, portfolio reshaping is necessary to establish greater portfolio coherence involving both selected business divestitures and making a commitment to building an attractive second platform. The second priority is to enhance the company's growth trajectory to better position it against more favorable major macro and industry-specific market trends.

Managing trade-offs

In this example, as is often the case, company leadership faces tough choices involving stark trade-offs. Let's briefly examine two important, and common, trade-offs associated with this example:

1. Is a "shrink to grow" plan to create greater portfolio focus and raise its medium-term growth likely to be value creating or are the risks too large?
2. How to strike the right balance between margin enhancement and growth?

"Shrink to grow" is a particularly tough decision for management. On the one hand, there is a natural reluctance to sell a business or businesses before a company has a clear and executable growth program. While this is understandable, once a company has aligned around a view of where it is headed, businesses that are no longer part of the future should, in our view, be dealt with as soon as possible. Waiting for the best timing to sell is a common management response but too often can backfire, a victim of unforeseen events. The premium for creating the necessary corporate focus as soon as possible is, in our experience, most often the best choice.

Management also wrestles with the question of how tightly to focus on raising margins even if it means sacrificing growth or conversely, as in more often the case, whether it should be willing to sacrifice margins to deliver above average growth. Making the right choice comes down to the company's starting point. Our analysis shows that:

- For companies with above average margins (i.e., in top tier of the chemical sector) achieved higher performance (measured by TSR) when prioritizing growth. Driving margins yet higher delivered much more limited value.
- In contrast, for companies starting from a position of below average margins, the main driver of performance enhancement was margin improvement. In this case, raising margins was the precondition for profitable growth.

Conclusion

Leading companies in the chemical sector share common characteristics that shape their performance through strong periods and market downturns. By objectively assessing your company's current position versus the characteristics of leaders, management can better focus their improvement priorities, define more robust strategies, and make the often difficult trade-offs to achieve leading shareholder returns.

About Charles River Associates

Charles River Associates (CRA) is a leading global consulting firm that offers strategic, economic, and financial expertise to major corporations, private equity firms, law firms, and governments. Our experts bring a unique combination of cutting-edge analytics, proven experience, and industry insight to bear on our clients' most complex challenges.

CRA's chemical industry team has decades of experience consulting to the industry on the highest value and rapidly changing issues and challenges facing sector management.

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