

CHEMICALINSIGHTS



Corporate "Carve-Outs"A Key Tool to Value Creation - But You Have to Know What You're Getting Into

Among the larger chemical manufacturers, one of the persistent themes in M&A since the end of the Great Recession in 2009 has been "portfolio realignment," which in practice has meant a culling of non-core assets and investing in the company's primary products, technologies, and markets. M&A is an important tool in portfolio realignment, the whole point of which is to enhance growth and margins. But it's not simply a case of getting bigger. While getting big is still important, there is a growing recognition that getting bigger while simultaneously becoming more concentrated and focused is even better.

From a buy-side perspective, this has meant acquisitions that augment core competencies. Acquisition targets have had to offer solid, identifiable synergies, not just low-hanging fruit like SG&A savings, but something more substantial like complementary technologies, product line extensions, market consolidation, or broader geographic distribution. We're not suggesting this is an original insight: identifying and quantifying synergies should be the foundation of all strategic acquisitions.

For a more concrete manifestation of what portfolio realignment really means in our current slow growth economy, you have to examine what assets corporations are choosing to sell. Surprisingly, you can make the argument that the goal for an asset sale is nearly the same as for making a synergistic acquisition. But instead of attempting to achieve faster growth through the magic of synergies, essentially making 1+1=3, in an asset sale you are attempting to trim the fat but keep the muscle. The rationale is that a leaner and more focused competitor will have sustainable competitive advantages in its selected markets and better opportunities for organic growth. Indeed, a recent survey by RR Donnelly found that improving operational efficiencies was cited by 56% of the respondents as a main driver of corporate asset sales, and 40% cited focusing on core competencies. This isn't to say that an asset or business being sold is necessarily a poor performer - sometimes it's just the opposite - just that it doesn't fit with the parent's overall strategic direction.



Traditionally, corporations have three options to choose from when shedding assets: divestitures, spin-offs, and carve-outs. We are using the term "divestiture" here in a narrow sense, to mean simply a standard run-of-the-mill sale of a free-standing business to a third-party buyer. Another option is a spin-off, which involves a parent company effectively "divesting" one of its own businesses to its existing shareholders – no buyer required. In a spin-off, the parent creates a new, independent company by issuing and distributing shares of a soon-to-be former subsidiary or division to its shareholders. What both divestitures and spin-offs have in common is the separation of a relatively free-standing business from the parent. Presumably, the business being sold or spun-out is fully independent, with its own P&L, separate personnel and facilities.

The third option, a carve-out, is less well-defined, since it doesn't involve the sale of a complete business. The term "carve-out" is actually quite descriptive, as it denotes the "carving out" of a piece of a business - not an entire business, but a fragment. It can be a sale of a product line, a technology, intellectual property, one or more manufacturing facilities, or some combination of these along with some working capital.

Carve-outs represent good opportunities for both buyers and sellers. In a carve-out, the seller often can pick and choose which assets to sell and which to retain. Of course it's not always that simple; some assets are not easily separable (e.g., a plant that manufactures both carve-out products and other products for retained lines of business), and the seller will need to make the "package" as attractive as possible in order to attract buyers and realize a full value. Carve-outs are also a way to unlock the value of assets that may be undervalued in the context of an entire enterprise, since one company's non-core asset just might just be another's ideal strategic acquisition.

If you are a buyer, a carve-out often comes with built-in cost savings, such that there is a greater marginal contribution to profitability than if a "complete" business were being acquired. This allows some buyers to bid high for assets that have a strong strategic fit, and it's usually one of these buyers that will prevail. The successful buyer typically isn't overly burdened with unwanted or duplicative parts of the business, and can

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occasionally negotiate to purchase only those assets that it really wants or needs. The downside is that the buyer will have to fill in various "holes" - critical functions or services not transferring in the sale - but in an ideal situation, you can leverage existing resources at minimal incremental cost. Additionally, by its very nature, a carve-out will be structured as a sale of assets, which unlike a stock sale, allows the buyer to step up the value of the acquired assets at closing to their fair market values. The buyer gets a higher tax basis in the assets, and can generate tax benefits from higher depreciation expenses. Also unlike a stock sale, goodwill acquired in an asset sale can be amortized over 17 years, and is tax deductible.

For a seller, there are three important steps in executing a successful carve-out. You generally start by identifying what ideally you would like to sell. Then, you identify what a buyer will need to "complete" the business. The third step is critical, and involves determining which potential buyers can provide the missing elements on the most cost effective basis.

Why is this last step so important? Usually because in most carve-outs, the pool of potential buyers is relatively small. When a carve-out is marketed through a traditional broad-based auction, there is a high potential for things to not go well. Because carve-outs are difficult to value and are more complicated than the sale of a free-standing business (more on this below), the seller can expect to receive a wildly varying range of bid values in the process. There is also a higher probability of "false positives" – seemingly strong bids by buyers that haven't really done their homework. Simply put, false positives can be disastrous in an auction, setting up the seller for a price cut later in the process after having gone exclusive with a buyer, or even worse, a "busted" auction where the carve-out business is taken off the market.

Because of these potential pitfalls, a limited auction process is often the best way to go, with clearly identified buyers that are almost certain to have a strong strategic interest in the carve-out business. In many cases, the seller may already know who the best potential buyers are - typically strategic competitors or companies that have previously approached the seller about purchasing the business. In particularly complex carve-outs, there may be only a few realistic buyers.

A successful carve-out requires much more up front work than a traditional sale of a stand-alone asset. In addition to a carefully delimited buyer pool, it's important for the seller and their advisors to determine early in the process the "scope" of the transaction - that is, exactly which assets and liabilities are included or excluded from the potential deal, and how to handle those circumstances where a "clean" transfer is problematic. As an example of how important this is, consider a situation in which the seller has a unique equipment set that is required to manufacture the carve-out products, but which is also necessary to manufacture the seller's other products. Or perhaps how to transfer the customer service function when



the seller's integrated sales support organization is not transferring with the business. Issues like these are inevitable in carve-outs, but they are rarely intractable. A little creative thinking at the outset will go a long way toward preventing some tense negotiations later on.

Valuation and financial statements are another issue that makes a carve-out more complicated than the sale of a standalone business. A carve-out may not have historical P&Ls or balance sheets. Sometimes, a seller will engage an accounting firm or use internal staff to produce "carve-out financials" that attempt to describe how the business would have performed on a pro forma basis had it been a stand-alone operation. "Pro forma" is the operative word here, and everyone with experience in M&A understands that "pro forma" means that the financials are highly dependent on the accuracy of the assumptions underlying them. A buyer should understand that "EBITDA" will be a somewhat fluid concept in the context of a carve-out, and that the best course probably is to value the business based on the incremental EBITDA the acquisition could potentially generate when integrated into the buyer's own operations. That in itself is not an easy exercise, and it's common for different buyers to value assets in very divergent ways.

Selecting an advisor for a carve-out is an important decision. A typical high-profile "matchmaker" is generally the wrong choice, especially since the best buyers may already be known. Also, as we have noted, a process-centric auction house think generalist investment banks with a high percentage of private equity buyers - may also be a poor choice. Banks that specialize in broad auction processes will usually drive work to mid-level bankers and put pressure on buyers to figure it out on their own with minimal help. Grace Matthews' approach is different: we specialize in chemical transactions and understand that carve-outs are the epitome of a "roll up your sleeves" kind of deal. Our senior bankers identify issues early and develop solutions so buyers have a clear understanding of what they are getting into, saving our clients disproportionate heartache later in the process. Our large corporate clients value this, as predictability is important to them. Based on our industry experience and firsthand knowledge of potential acquirers, Grace Matthews believes that a thoughtful, well-planned sale process will result in an outcome that best balances value and the likelihood of success.

Case Study: 3M's Pressurized Polyurethane Foam Adhesives Business

3M's pressurized polyurethane foam adhesives business provides polyurethane foam adhesive formulations and systems to the residential and commercial roofing, and insulation and industrial foam markets. The business' product offerings include a two-component roof tile adhesive used by professional contractors to install ceramic or concrete roof tiles. The business also manufactures and sells polyurethane foam adhesives used for adhering fleece-backed roofing membrane and insulation board in low-slope roofing applications.

The business was a part of 3M's Industrial Adhesives and Tapes Division, whose management determined after a strategic portfolio to exit the business and focus on the Division's core adhesive applications. 3M engaged Grace Matthews to execute a "carve-out" sale process to a strategic buyer, with the result that the business was sold to Innovative Chemical Products Group ("ICP Group") in Q1 2016. The acquisition of the business aligned with ICP Group's growth strategy in specialty coatings and adhesives, providing it with unique formulation and application technology in polyurethanes focused on the industrial and construction markets.



ICP Group will maintain the business' operations in Texas and Florida as a stand-alone business unit within its specialty chemicals platform.



Select Corporate Mergers, Divestitures, and Carve-Out Transactions: 2015 - 2016

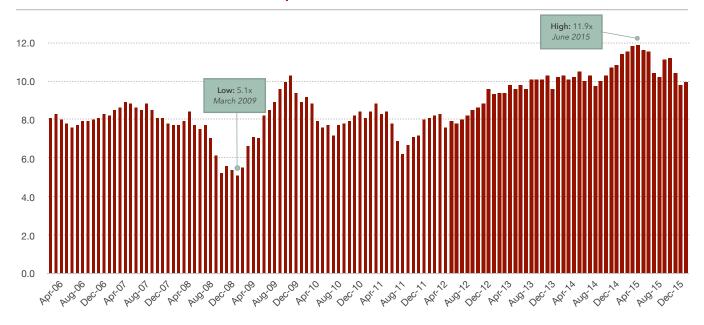
Transaction values in \$US millions								
Announced	Acquirer / Target	Target Description	Transaction Value	TEV / Sales*	TEV / EBITDA*			
Mar-16	Sherwin-Williams / Valspar	Paints and coatings	\$11,278.8	2.6x	16.2x			
Mar-16	Ferro / Synthomer's South African dispersions business	Polymer dispersions	\$18.9	0.6x	7.7x			
Mar-16	WL Ross Holdings / Nexeo Solutions	Chemicals and plastics distribution	\$1,669.0	NA	8.4x			
Mar-16	Synthomer / Hexion's performance adhesives and coatings	Dispersions, additives, powder coatings and speciality monomers	\$226.0	0.6x	7.5x			
Mar-16	RPM / Seal-Krete	Concrete care coatings and sealants	NA	NA	NA			
Feb-16	AkzoNobel / BASF's industrial coatings business	Coil and general industry coatings	\$531.0	1.6x	NA			
Feb-16	ICP / 3M's pressurized polyurethane foam adhesives business	Foam adhesive formulations and systems	NA	NA	NA			
Jan-16	Italmatch / Solvay's water additives business	Desalination and phosphonates and phosphonic acid-based water additives	NA	NA	NA			
Dec-15	Gabriel Performance Products / InChem Phenoxy resins products	Adhesives raw materials	NA	NA	NA			
Dec-15	Gabriel Performance Products / BASF Versamid polyamide curing agents business	Adhesives raw materials	NA	NA	NA			
Dec-15	Huber Engineered Materials / Albemarle's mineral flame retardants and specialty chemicals business	Specialty chemicals	NA	NA	NA			
Dec-15	Dow Chemical / DuPont Merger	Diversified chemicals	\$142,400.0	1.7x	10.1x			
Nov-15	Huntsman Family Investments / American Pacific Corporation specialty chemicals business	Rocket-grade ammonium perchlorate and specialty chemicals	NA	NA	NA			
Oct-15	Lotte Chemical Corp / Samsung's chemicals business	Fine chemicals and lithium ion battery and renewable energy technologies	\$2,262.0	NA	NA			
Oct-15	Honeywell / Sigma-Aldrich research chemicals business	Solvents, biochemical research chemicals, pharmaceutical chemicals, titration reagents	\$119.0	NA	NA			
Oct-15	Ineos/ Axiall aromatics business	Phenol, acetone, alphamethylstyrene products	\$62.9	NA	NA			
Aug-15	GAF / Quest Construction Products	Construction coatings and protective roofing systems	NA	NA	NA			
Jul-15	Solvay / Cytec	Specialty chemicals and materials	\$6,226.0	3.1x	14.7x			
Jul-15	Canada Colors & Chemicals / APCO Industries industrial solvents and chemicals business	Industrial solvents and chemicals	NA	NA	NA			
Jul-15	IGM Resins / Lamberti photoinitiators business	Photoinitiators for UV curing applications	NA	NA	NA			
Jun-15	Thermo Fischer Scientific / Johnson Mattheys Alfa Aesar research chemicals business	Small volume research chemicals	\$402.8	3.3x	NA			
Jun-15	Emerald Kalama Chemicals / Innospec Widnes Limited	High purity aroma chemicals	NA	NA	NA			
Jun-15	Platform Specialty Products / OM Group electronic chemicals and photomasks	Electronic chemicals	\$365.0	NA	NA			
Jun-15	Valspar Corporation / Quest Specialty Chemicals automotive products and industrial products businesses	Automotive refinish and industrial coatings	NA	NA	NA			
May-15	Troy Corporation / Ashland's biocides assets	Industrial biocides	NA	NA	NA			
May-15	BASF / Lanxess's polyisobutene business	Polyisobutene	NA	NA	NA			
May-15	Boulevard Acquisition (Avenue Capital) / Dow Chemical AgroFresh business	Agricultural chemicals	\$879.0	NA	8.7x			
Apr-15	Highlander Partners / Ashland's Valvoline car care assets	Automotive reconditioning and maintenance products	NA	NA	NA			
Mar-15	Olin Corp. / Dow Chemical chlor-alkali business	Chlor-alkai's and downstream derivatives	NA	NA	NA			
Mar-15	The Blackstone Group / Orica Limited chemicals business	Chlor-alkali and ingredients for food, pharmaceuticals, cosmetics and personal	\$647.1	0.7x	7.7x			



Transaction values in \$US millions								
Announced	Acquirer / Target	Target Description	Transaction Value	TEV / Sales*	TEV / EBITDA*			
Feb-15	Tronox / FMC soda ash business	Alkali chemicals	\$1,640.0	2.2x	NA			
Jan-15	Chase Corporation / Henkel's microspheres and polyurethane dispersions business	Microspheres and polyurethane dispersions intermediates	\$33.3	NA	NA			
Jan-15	Vertellus Specialties / Dow Chemical sodium borohydride business	Sodium borohydride	NA	NA	NA			
Jan-15	Daikin / Solvay's German refrigerants and pharma propellants business	Refrigerant and propellant chemicals	NA	NA	NA			
Jan-15	SRF / DuPont's Dymel pharma propellant business	Hydrofluorocarbon pharmaceutical propellant gases	\$20.0	NA	NA			

^{*}TEV = Total Enterprise Value (equity value, plus funded debt, minority interests and preferred shares; less cash and cash equivalents)

Grace Matthews Chemical Index: Enterprise Value / EBITDA



Source: Grace Matthews & Capital IQ

The Grace Matthews Chemicals Index tracks the Enterprise Value / EBITDA ratios ("EV/EBITDA multiples" or just "EBITDA multiples") of 48 publicly-traded chemical companies that span multiple markets and geographies. The index aggregates the latest reported financial data and stock prices, and tracks valuation trends and operating metrics across different industry sectors. The Index averages are equally weighted, as opposed to weighting by market capitalization, in order to avoid having the valuations and financial performance of the largest companies determine index values.

Grace Matthews Chemical Index Current Values

	Total Enterprise Value / Revenues	Total Enterprise Value / EBITDA	Gross Margin % Sales	EBITDA % Sales	Trailing Twelve Months Revenue Growth %	Trailing Twelve Months EBITDA Growth %
Mean	1.8x	10.1x	31.0%	16.0%	(1.8%)	5.8%
Median	1.6x	10.4x	31.0%	15.0%	(3.4%)	3.7%
High	3.8x	16.4x	56.0%	33.0%	82.8%	114.1%
Low	0.6x	4.6x	12.0%	7.0%	(31.0%)	(53.9%)

¹ "Enterprise Value" or "EV" is the sum of all invested capital in a company, including both the value of equity (market capitalization) and funded debt less cash and cash equivalents.



Grace Matthews: Select Chemicals and Materials Transactions















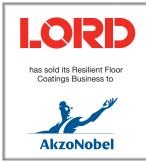




























Grace Matthews Overview

Grace Matthews is recognized globally as a leader in transaction advisory services for manufacturers and distributors throughout the chemical value chain. Grace Matthews' clients include privately held businesses, private equity funds, and large, multinational corporations.

Grace Matthews' practice is global in scope, and focuses on several areas: sell-side transactions for private companies, private equity holdings, and divestitures for multi-national corporations; buy-side work, typically for large, public companies or major multi-nationals and sponsor-backed chemical platforms; leveraged transactions involving raising debt and/or equity capital, strategic advisory analysis, and transaction fairness opinions. Areas of expertise include:

- Paints, Industrial Coatings, Inks
- Adhesives, Sealants, Tapes
- Plastics, Polymers, Resins
- Colorants, Additives
- Construction Materials
- Contract Packaging
- Biomaterials

- Agricultural Chemicals
- Inorganics, Ceramics, Catalysts
- Personal Care, Soaps, Cleaners
- Fine Chemicals
- Water Treatment Chemicals
- Oil & Gas Process Chemicals
- Industrial Minerals

Grace Matthews is a privately held investment bank with successful chemical industry transactions dating back to the early 1990s. Grace Matthews principals have completed over 100 transactions involving global corporations such as AkzoNobel, 3M, Lubrizol, BASF, DuPont, Sherwin-Williams, PPG Industries, Ashland, Ceradyne, DSM, ICI, Borregaard, Air Products, Landec Corporation, The Home Depot, Hexion Specialty Chemicals, ITW, PolyOne, Weatherford, and Evonik, to name a few.

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Grace Matthews, Inc. (www.gracematthews.com) is an investment banking group providing merger, acquisition, and corporate finance advisory services for chemical companies both in the U.S. and internationally. Grace Matthews is global in scope and well known for its strong track record of success dating back to the early 1990s.

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