



Plastics Industry M&A Update – Q4 2023



Plastics Industry M&A Update

Q4 2023

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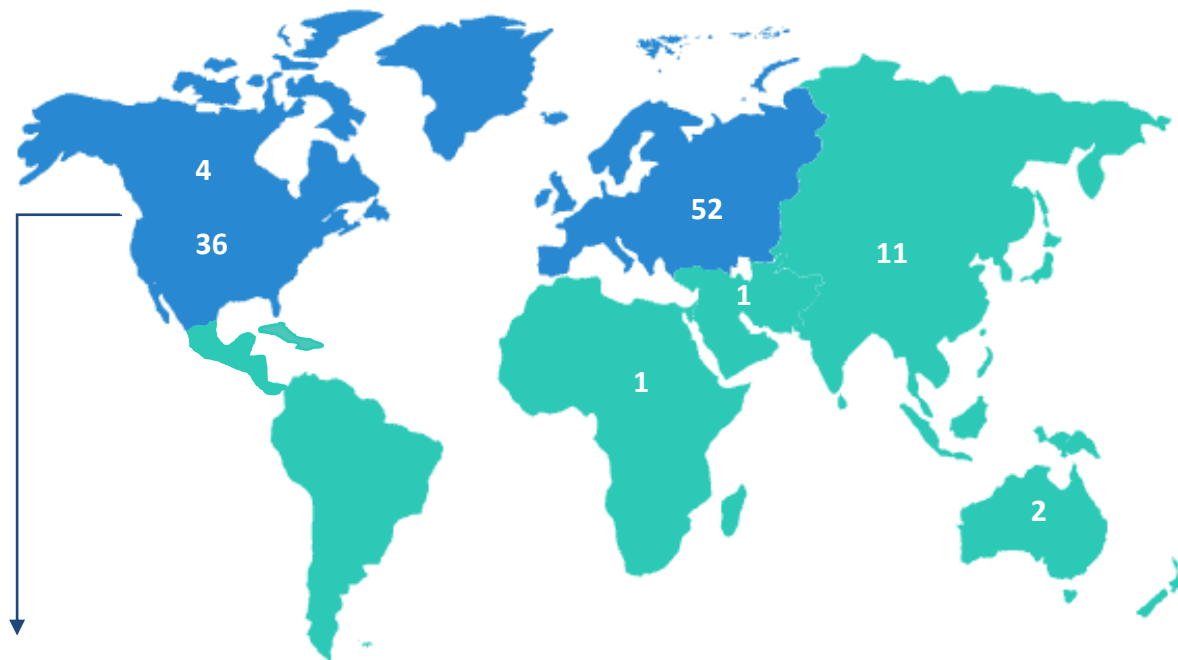
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REPORT HIGHLIGHTS

- Resin prices decreased 2.0% during Q4, continuing the downward trend since peaking in June 2022.
- The median EV/EBITDA multiple in the Plastics industry for reported strategic deals increased to 12.6x in 2023 from 7.8x in 2022. There were no reported private equity EV/EBITDA multiples in 2023.
- M&A deal volume in the Plastics sector increased 33.8% in Q4 to 107 deals from 80 deals in Q3, but decreased 4.5% from 112 deals in Q4 of the prior year.
- As a % of total capital invested in M&A transactions in 2023, private equity participation increased significantly to 49.0%, up from 19.8% in 2022.
- Europe was the most active region in Q4 with 52 deals. Most notably in Europe was MinervaHub's \$31.5 million buyout of Interlinea2 in December 2023.

Global Deal Analytics

Of the 107 deals in Q4, Europe was the most active market with 52. Another notable deal in the European market (aside from the Interlinea2 deal mentioned on the previous page) was an undisclosed investor's \$7.8 million PIPE investment in Velocity Composites (LON:VEL), a British provider of engineered composite material kits, in October 2023. North America was the second most active region with 40 deals. All other regions combined for a total of 15 completed transactions.



Canada: 4

United States Regions: 36

| | |
|----------------------|----------|
| Southeast: | 9 |
| West Coast: | 8 |
| Great Lakes: | 5 |
| New England: | 5 |
| Mid Atlantic: | 2 |
| Other: | 7 |

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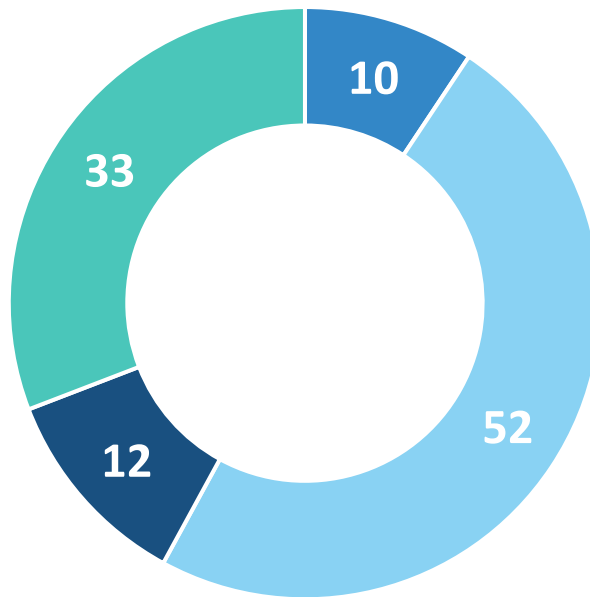
In the North American market, the Southeast region was the most active in Q4 with 9 deals followed by the West Coast with 8. Most notably in North America was INEOS Group's \$490.0 million acquisition of the Texas City Operations of Eastman Chemical, a producer of specialty chemicals, in December 2023. The Great Lakes and New England regions each had 5 transactions close. The Mid Atlantic saw 2 deals close and all other regions combined totaled 7 closed transactions.

Outside of the U.S. in the North American market, there were 4 reported transactions in Canada in Q4.

Global Deal Analytics

Of the 107 Plastics deals in Q4, 52 were in the Commercial Products subsector, making it the most active subsector in the industry from an M&A standpoint. Chemicals & Gases was the second most active with 12 deals followed by Plastic Containers & Packaging with 10. All other subsectors combined had a total of 33 closed transactions.

Deal by Subsector



Commercial Products

Plastic Containers & Packaging

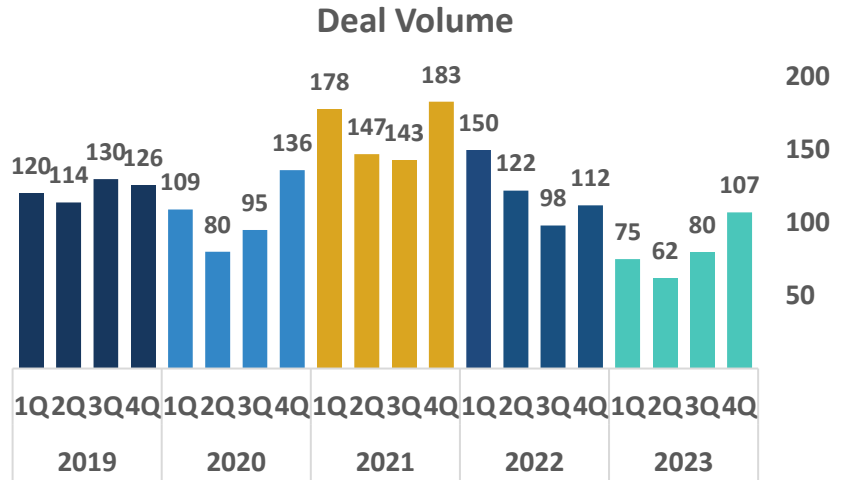
Chemicals & Gases

Other

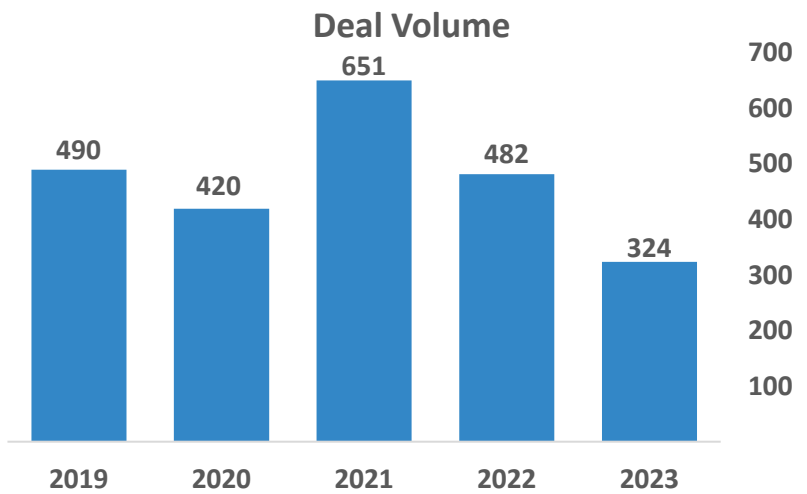


Global Deal Analytics

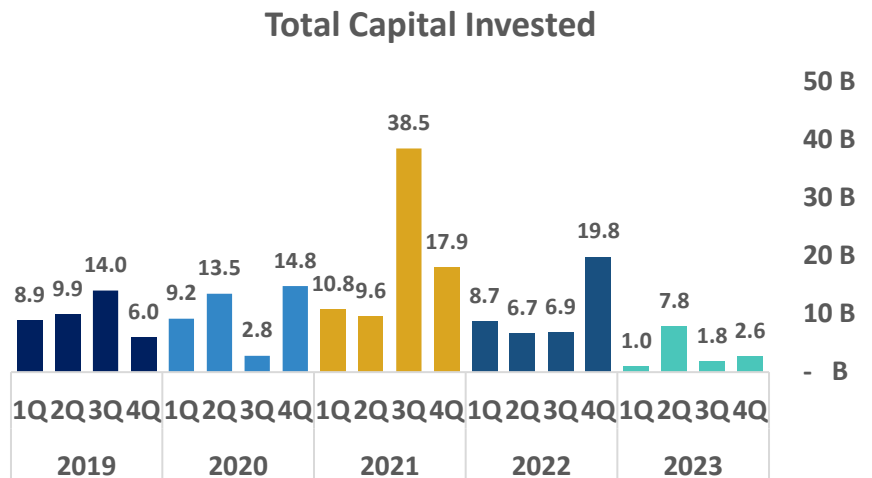
M&A deal volume in the Plastics sector increased 33.8% in Q4 2023 to 107 deals from 80 in Q3 2023, but decreased 4.5% from 112 deals in Q4 of the prior year.



Annual deal volume saw a 32.8% decline to 324 deals in 2023, down from 482 in 2022. We attribute this decline to more challenging market conditions from a dealmaking perspective, including elevated interest rates/cost of capital. These adverse conditions are expected to persist until the Fed begins quantitative easing in the form of interest rate cuts.



Following the trend in deal volume, total capital invested in M&A deals in the Plastics sector increased 44.4% in Q4 to \$2.6B from \$1.8B in Q3, but decreased 86.8% from \$19.8B in the same period of the prior year. This significant decline from Q4 2022 is primarily due to Celanese’s \$11.0B acquisition of DuPont’s Mobility and Materials Business in November 2022.



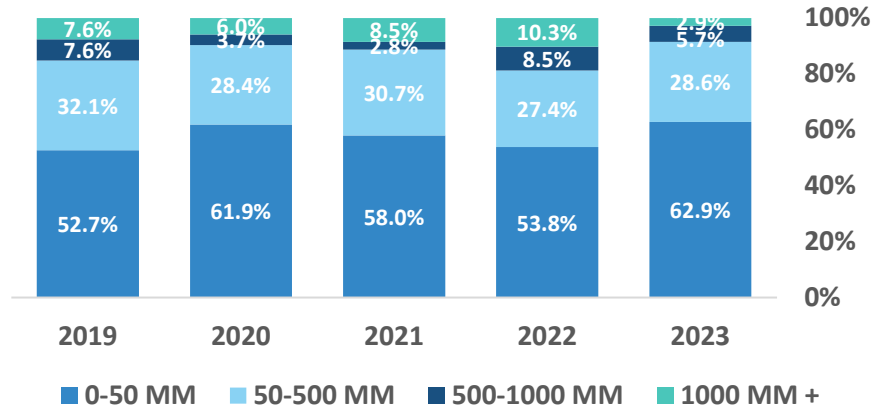
Global Deal Analytics

We saw a substantial shift in mix toward smaller deals in 2023 compared to the prior year. The lower middle market (\$0-\$50MM) and middle market (\$50-\$500MM) saw increases to 62.9% and 28.6% from 53.8% and 27.4%, respectively, in 2022. The large-cap (\$1000+MM) and upper-middle (\$500-\$1000MM) tranches each saw significant decreases to 2.9 and 5.7% from 10.3% and 8.5%, respectively, in 2022.

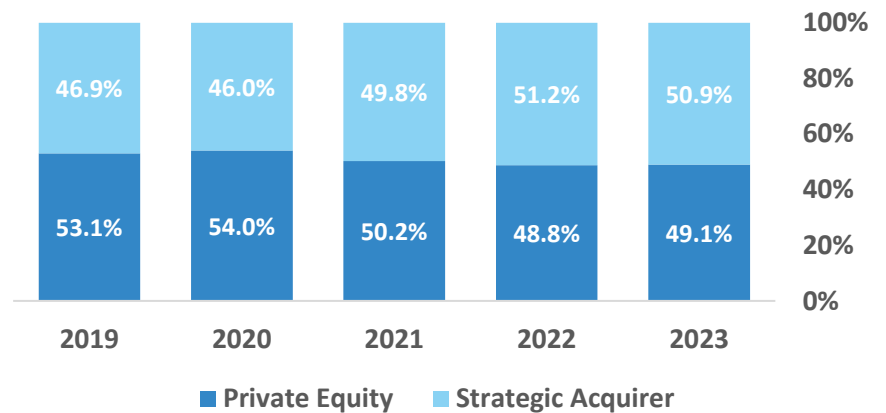
As a % of total deal volume, PE buyers trended slightly higher in 2023 relative to strategic buyers, representing 49.1% of deal volume in the sector. Despite this slight uptick, 2023 marks the second-lowest percentage of PE deal volume over the last 5 years. This lower level of PE activity is indicative of challenging market dynamics with increasing costs of capital and tightening liquidity from lenders.

The total capital invested by PE investors increased significantly in 2023 to 49.0% from 19.8% in 2022. Despite credit market challenges, PE investors were able to outcompete strategic buyers in a number of mid-sized deals in 2023 as compared to 2022.

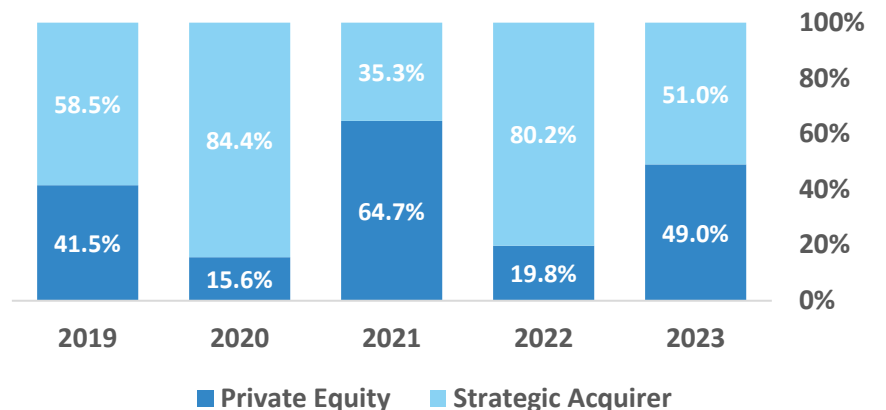
Deal Volume by Deal Size



Deal Volume by Acquirer

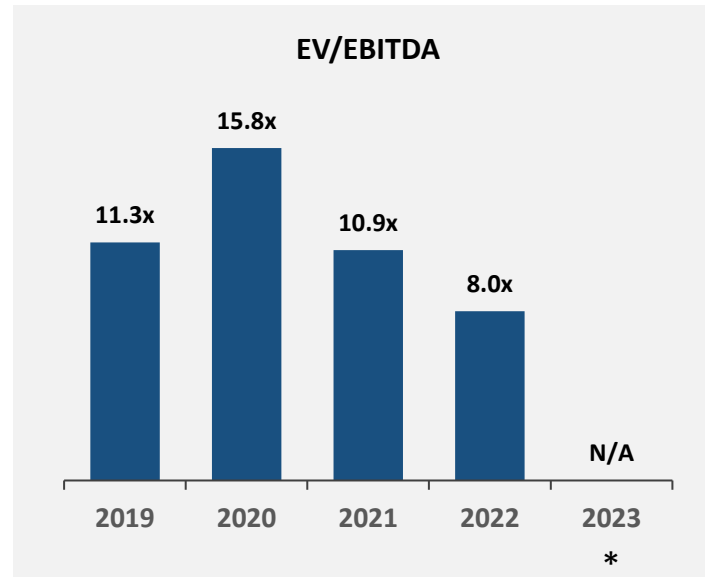
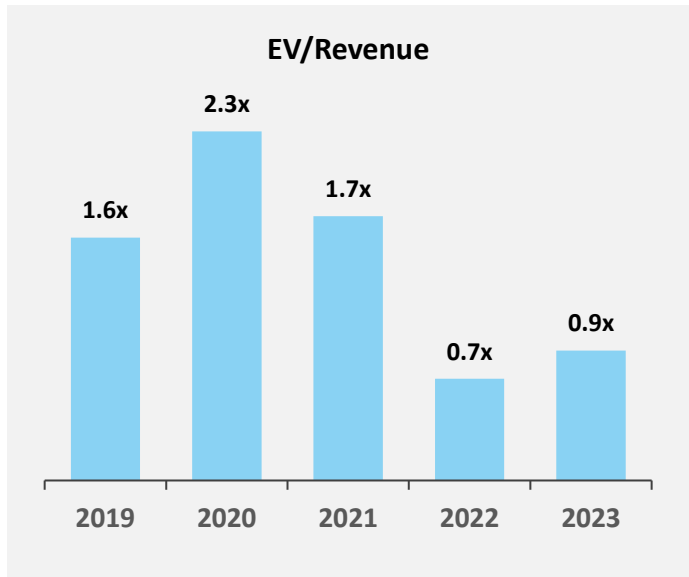


Total Capital Invested by Acquirer

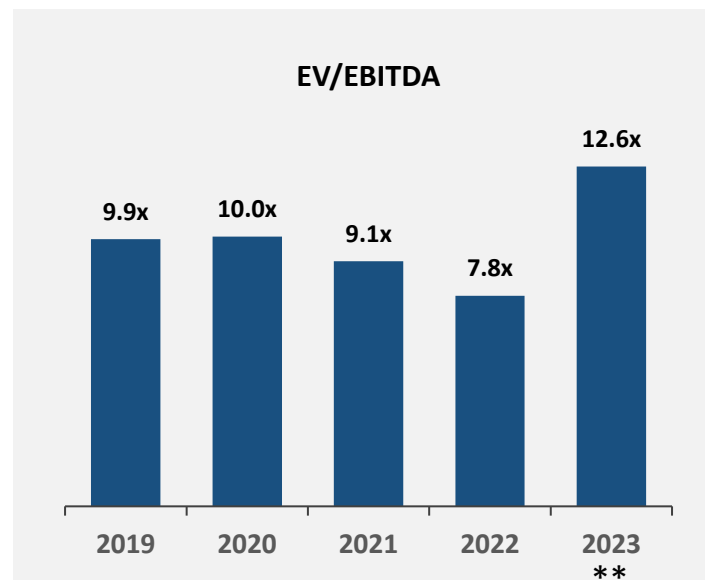
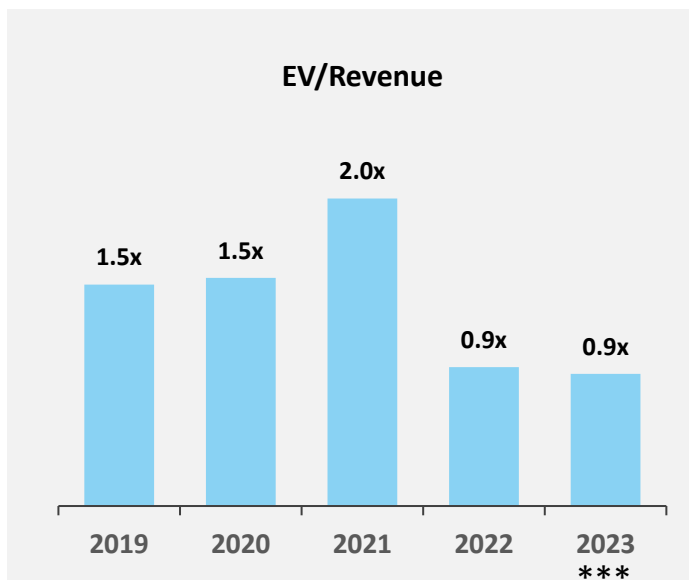


Valuation Multiples

Private Equity Multiples



Strategic Multiples



* No Private Equity valuation EV/EBITDA multiples were reported in 2023.

** EV/EBITDA multiple for strategic deals excludes outliers.

*** EV/Revenue multiple for strategic deals excludes outliers

Largest Deals (Completed)

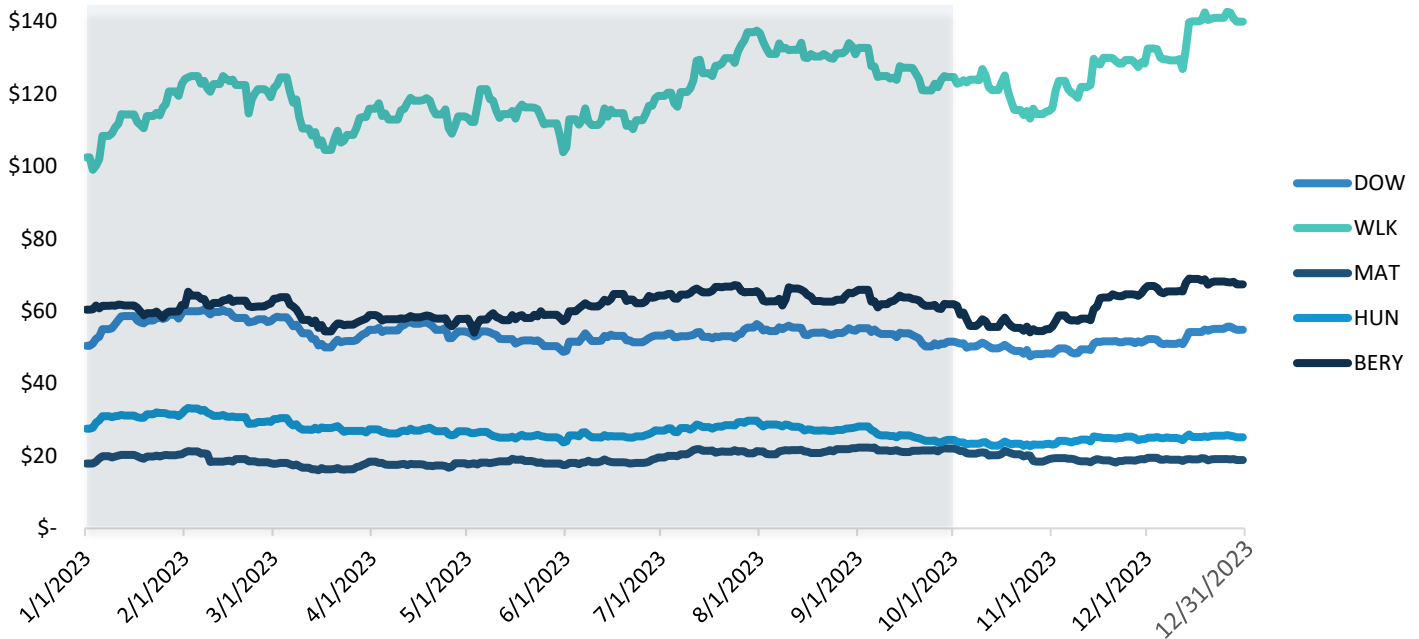
| Deal Date | Company Name | Investor | Deal Type | Deal Size (\$mm) | EV | | Target Business Description |
|-------------|--|---------------------------------------|---------------------|------------------|---------|--------|---|
| | | | | | Revenue | EBITDA | |
| 29-Dec-2023 | FAS Converting Machinery | CMD Corp. | Merger/Acquisition | \$ 3.7 | | | Manufacturer of machines for converting extruded polyethylene tubing to plastic. |
| 28-Dec-2023 | United Oil Projects | National Petroleum Services Company | Merger/Acquisition | 48.3 | | | Manufacturer of synthetic resins. |
| 19-Dec-2023 | AMufacture | Maven Capital Partners UK | PE Growth/Expansion | 0.9 | | | Manufacturer of 3D-printed prototypes. |
| 14-Dec-2023 | Schumag | Active Capital Company | PIPE | 5.8 | | | Producer of optical equipment and standard precision parts for injection molding and pressure die-casting. |
| 11-Dec-2023 | ACYC Magnetic Component | Shenzhen Microgate Technology Company | Merger/Acquisition | 25.9 | 2.29x | | Developer and manufacturer of iron silicon materials designed for magnetic devices. |
| 07-Dec-2023 | Interlinea2 | MinervaHub | Buyout/LBO | 31.5 | | | Manufacturer of plastic molding products intended for footwear, accessories, and fashion and sportswear. |
| 07-Dec-2023 | RUA Life Sciences | Undisclosed Investor | PIPE | 5.1 | | | Operator of a biomedical polymer technology, components, and medical device company. |
| 01-Dec-2023 | Eastman Chemical Company (Texas City Operations) | INEOS Group | Merger/Acquisition | 490.0 | | | Manufacturer of chemical products based in Texas City, Texas. |
| 01-Dec-2023 | PI Advanced Materials | Arkema | Merger/Acquisition | 425.4 | 4.64x | 30.08x | Producer of plastic films, primarily polyimide film. |
| 27-Nov-2023 | Advanced Infrastructure Technologies | C Change Group | Buyout/LBO | 15.0 | | | Supplier and provider of advanced composite materials and infrastructure intended to transform the bridge industry. |
| 17-Nov-2023 | United Fiberglass of America | Hill & Smith | Merger/Acquisition | 14.0 | 1.41x | | Manufacturer of industrial plastic products catering to construction and infrastructure industries. |
| 08-Nov-2023 | EB Packaging | Tomypak Holdings | Merger/Acquisition | 15.5 | | | Manufacturer of plastic packaging material catering to food, electronics, industrial packaging and building materials industries. |
| 01-Nov-2023 | Star Thermoplastic Alloys & Rubbers | HEXPOL | Merger/Acquisition | 26.5 | | | Manufacturer of thermoplastic elastomer to support the manufacturing companies. |
| 17-Oct-2023 | RenFuel | Comstock | Corporate | 3.0 | | | Manufacturer of lignin-based bioproducts and plastics intended to replace finite fossil fuels with sustainable biogasoline and biodiesel. |
| 11-Oct-2023 | Velocity Composites | Undisclosed Investor | PIPE | 7.8 | | | Velocity Composites PLC is a provider of engineered composite material kits to the aerospace industry. |
| 02-Oct-2023 | Barum & Dewar | Macfarlane Group | Merger/Acquisition | 4.3 | | | Provider of custom packaging solutions for diverse sectors. |
| 02-Oct-2023 | Bio-Works Technologies | Bonit Invest | PIPE | 3.3 | | | Supplier of activated resin, immobilized metal-ion affinity chromatography resin, ion exchange chromatography resin, and other resins. |
| Mean | | | | 66.2 | 2.78x | 30.08x | |
| Median | | | | 14.0 | 2.29x | 30.08x | |
| High | | | | 490.0 | 4.64x | 30.08x | |
| Low | | | | 0.9 | 1.41x | 30.08x | |

Leading M&A Deals (Completed)

| Deals | Deal Synopsis | Driver |
|---|--|---------------------------------------|
|  | <p>Eastman Chemical (“Eastman”) is a Tennessee-based producer of specialty chemicals. The Texas City Operations of Eastman were acquired by INEOS Group (“INEOS”) for \$490 million in December 2023. Through the acquisition, INEOS will gain access to competitively priced feedstocks in Texas City which will support the growth of its Acetyls business.</p> | <p>Merger/ Acquisition</p> |
|  | <p>PI Advanced Materials Co Ltd, a South Korea-based producer of plastic films, was acquired by Arkema for \$425.4 million in December 2023. The acquisition expands Arkema’s footprint in the advanced electronics and electric mobility markets, allowing the company to capitalize on increasing demand for 5G antennas, high-resolution OLED displays, flexible screens and electric vehicles.</p> | <p>Merger/ Acquisition</p> |
|  | <p>Star Thermoplastic Alloys & Rubbers, LLC, a Chicago-based manufacturer of thermoplastic elastomers, was acquired by HEXPOL for \$26.5 million in November 2023. The acquisition enables HEXPOL to expand its geographic footprint beyond Europe and Asia, gaining access to the expansive American TPE market.</p> | <p>Merger/ Acquisition</p> |
|  | <p>EB Packaging, a Malaysia-based manufacturer of plastic packaging material, was acquired by Tomypak Holdings (“Tomypak”) for \$15.48 million in November 2023. Through this acquisition, Tomypak aims to diversify its customer base beyond food and beverage manufacturers, expanding into industries such as electronics, industrial packaging, and building materials.</p> | <p>Merger/ Acquisition</p> |

Public Comps

Stock Price

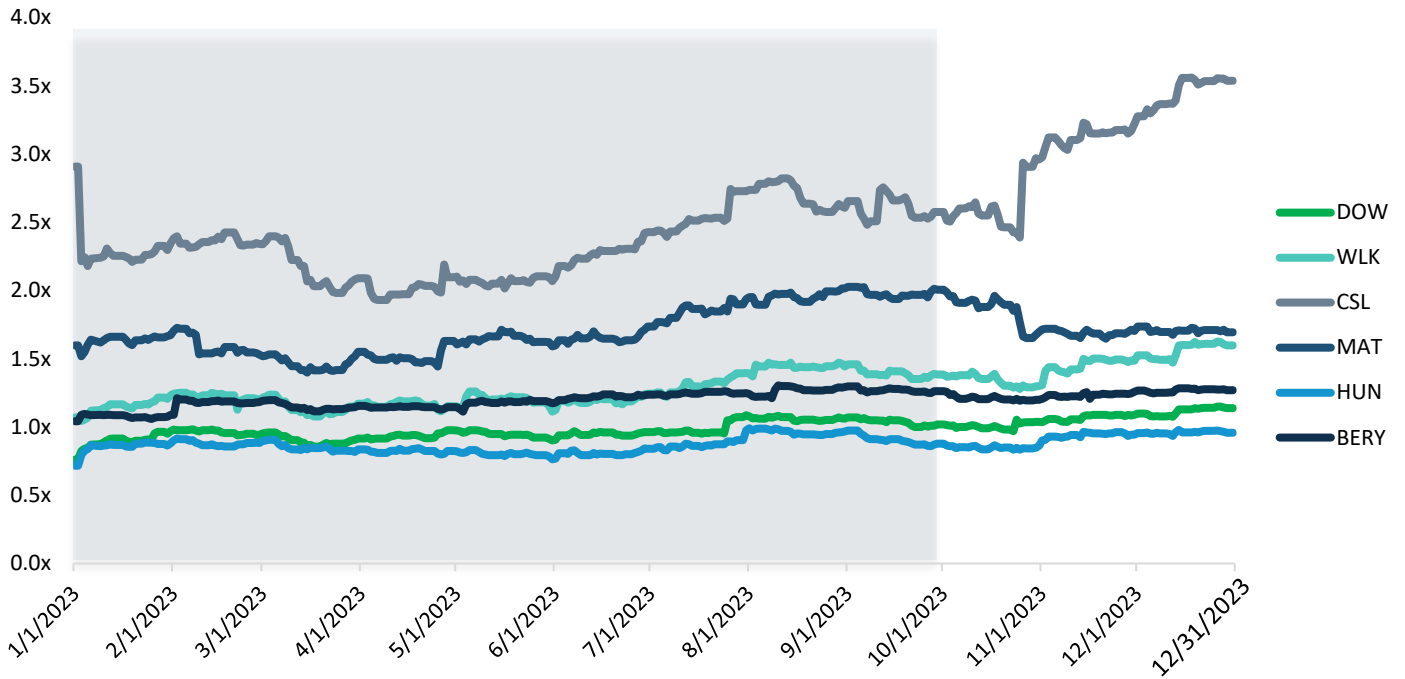


Financial & Valuation

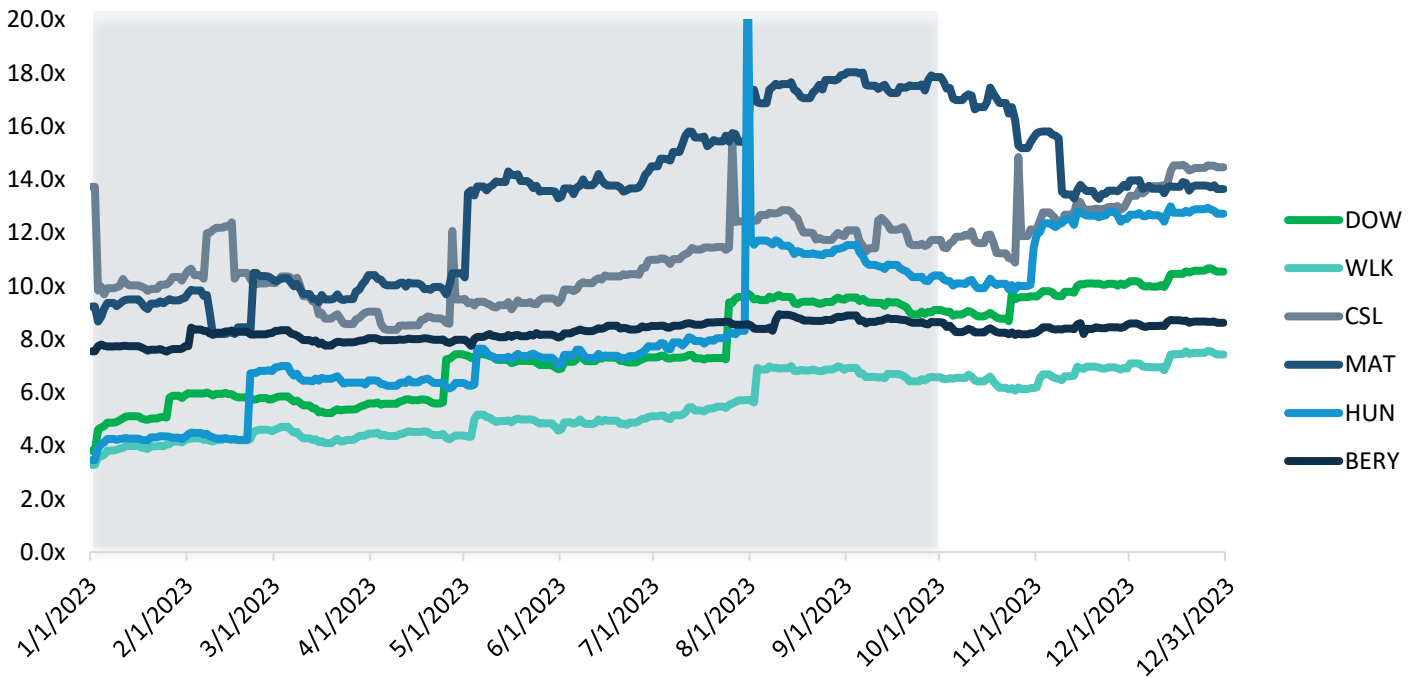
| \$MM Company | Ticker | Stock Price | Market Cap | Total Debt | EV/Revenue | | | EV/EBITDA | | |
|---------------------------|--------|-------------|------------|------------|-------------|-------------|-------------|--------------|-------------|--------------|
| | | | | | 21A | 22A | 23F | 21A | 22A | 23F |
| Dow | DOW | 55 | 38,738 | 16,270 | 1.1x | 0.8x | 0.9x | 4.9x | 4.6x | 6.8x |
| Nan Ya Plastics | 1303 | 2 | 17,210 | 5,874 | 1.9x | 1.5x | 1.7x | 6.5x | 6.7x | 15.2x |
| EMS-Chemie Holding | EMSN | 802 | 18,747 | 15 | 13.5x | 6.4x | 6.1x | 43.2x | 20.7x | 21.5x |
| Westlake | WLK | 141 | 18,051 | 5,415 | 1.5x | 1.1x | 1.2x | 5.1x | 3.7x | 5.5x |
| Formosa Chemicals & Fibre | 1326 | 2 | 11,897 | 4,557 | 1.4x | 1.1x | 1.2x | 6.5x | 10.3x | 21.9x |
| Carlisle Companies | CSL | 314 | 15,284 | 2,286 | 3.5x | 2.2x | 2.1x | 22.0x | 9.9x | 8.8x |
| Mattel | MAT | 19 | 6,757 | 2,640 | 2.0x | 1.5x | 1.5x | 12.4x | 8.6x | 7.5x |
| Huntsman | HUN | 25 | 4,430 | 1,981 | 1.2x | 0.8x | 0.9x | 6.7x | 3.9x | 7.1x |
| Berry Global | BERY | 68 | 7,867 | 9,505 | 1.4x | 1.1x | 1.1x | 9.0x | 7.7x | 7.5x |
| Mean | | | | | 3.0x | 1.8x | 1.9x | 12.9x | 8.4x | 11.3x |
| Median | | | | | 1.5x | 1.1x | 1.2x | 6.7x | 7.7x | 7.5x |

Public Comps

EV/Revenue



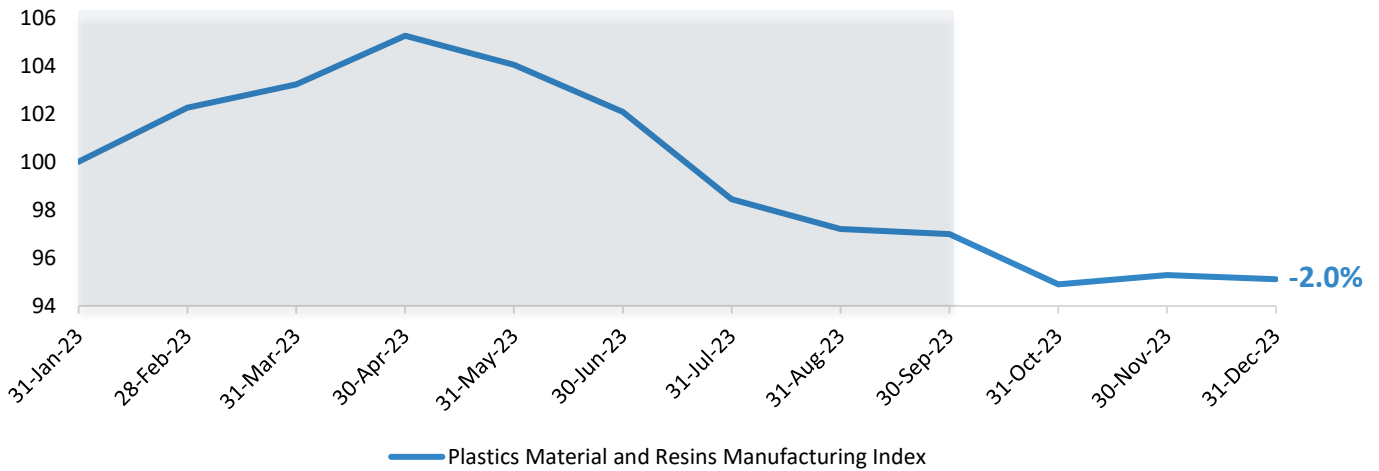
EV/EBITDA



Public Markets

Price of Plastic Materials and Resin

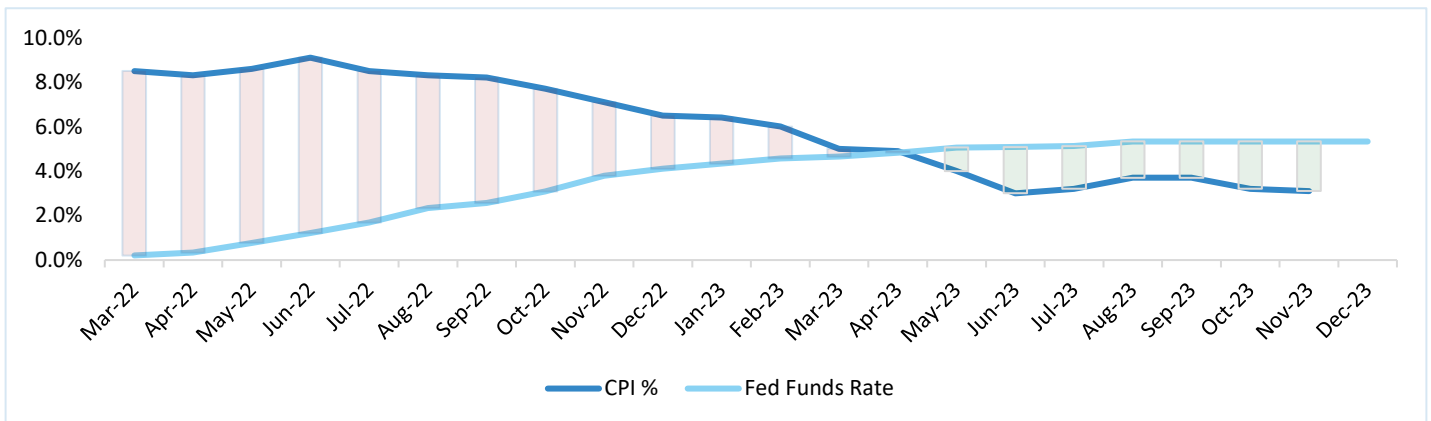
From October 1, 2023, to December 31, 2023, the price of plastic materials and resins decreased 2.0%. Resin prices have continued a downward trend since peaking in June 2022.



Key External Drivers

Decreases in the world price of crude oil over the last year have reduced costs for plastic manufacturers downstream, allowing them to achieve greater profit margins.

The Federal Reserve is anticipated to implement a series of rate cuts in 2024, with policymakers considering three cuts, reducing the fed funds rate from 5.25%-5.5% to 4.5%-4.75%. However, market expectations suggest the possibility of six quarter-point cuts, bringing the rate to 3.75%-4%. This projection has fueled a late 2023 stock market rally. Despite these anticipated cuts, the federal funds rate could still be restrictive in 2024. Additionally, the Federal Reserve plans to continue quantitative tightening by gradually reducing its holdings of Treasuries and mortgage-backed assets. Rate cuts are anticipated to increase M&A activity in the sector by lowering the cost of capital required to finance acquisitions.

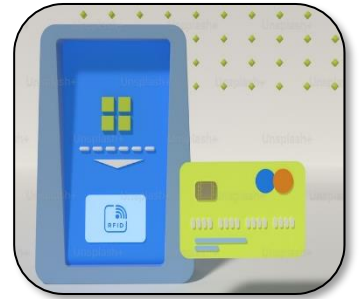


Industry Trends

RF Embedded Plastics

New Uses of Radio Frequency Embedded Plastics

RFID tech has long been used in theft prevention, ID badges, and hospital wristbands and is now being implemented in construction and commercial sectors to locate buried plastic materials like pipes for example. This new technology is also used in leak detection and rupture prevention by monitoring the strain and stress put on pipes.



Recycling

Advanced Recycling Technologies

Innovations in chemical and mechanical recycling processes are expanding the scope of materials that can be effectively repurposed, reducing the industry's reliance on virgin plastics and addressing sustainability concerns. Companies such as Loop Industries are pioneering chemical recycling processes that can break down a wide range of plastics into their original building blocks, allowing for the creation of high-quality recycled plastics.



Biodegradable Plastics

Biodegradable Plastics Replacing Single-Use Plastics

Biodegradable plastics made from natural plant materials are becoming popular for many uses including food containers and plastic bottles. The global market for these sustainable alternatives is projected to reach over \$12 billion by 2027.



Reinforced Plastics

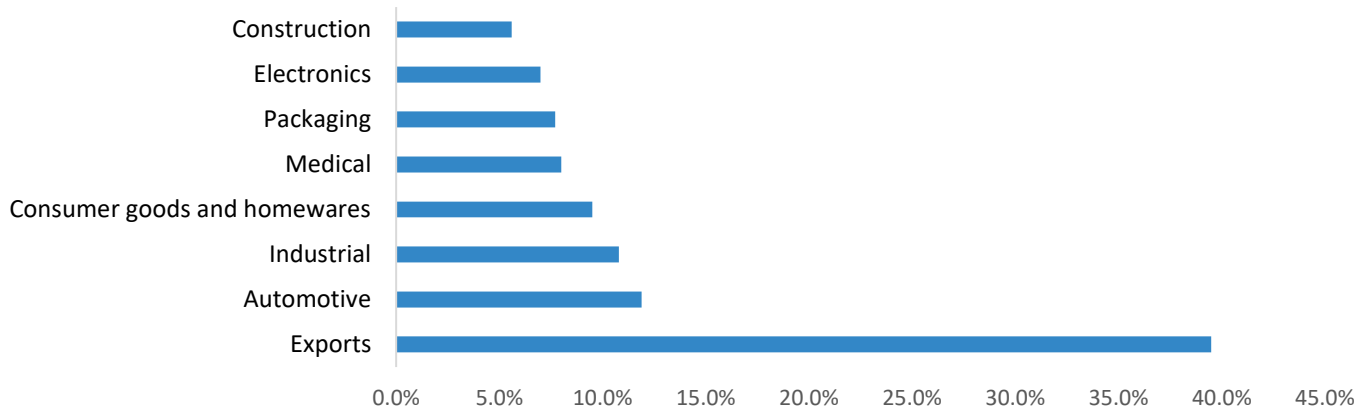
Reinforced Plastics Becoming Lightweight Alternatives

The use of carbon or polyamide fibers to reinforce materials has become increasingly popular due to their ability to enhance strength and heat resistance while remaining lightweight. As a result, these materials have found widespread applicability in numerous industries, including marine cordage, body armor, and automotive components.

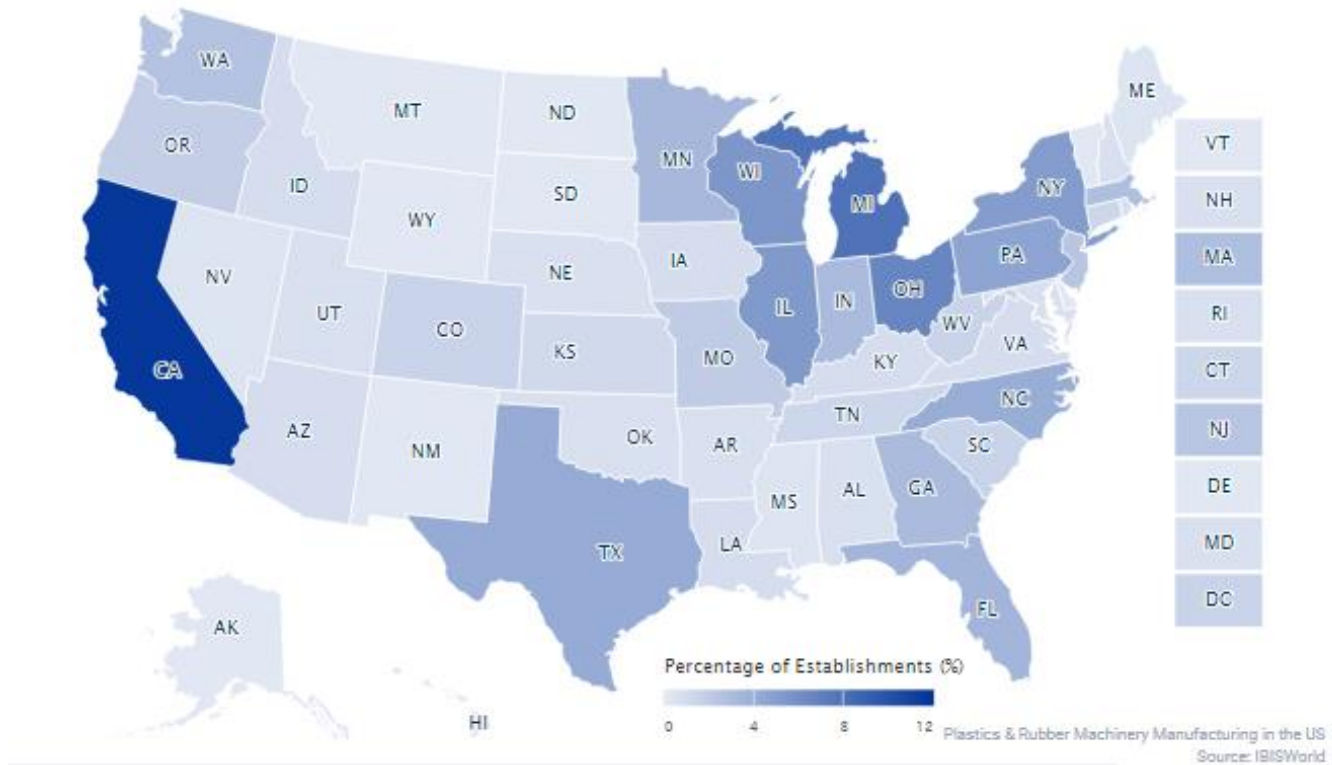


Industry Snapshot

Major End-Markets as a % of \$3.7bn Total Revenue



Business Locations



Our Service Offerings



Sell-Side Advisory: Sell your business

Sell your business for the highest price and for the best terms. At R.L. Hulett, communicating the value of your business to targeted buyers and finding the best fit for your team is our forte. We strive to maintain your company's culture and heritage even as you transition out of your business.



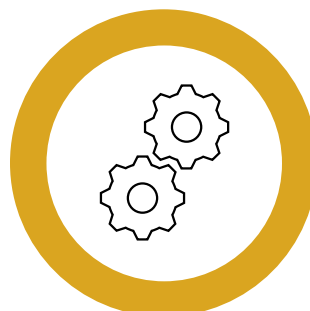
Buy-Side Advisory: Buy a business

Searching for acquisition targets can be a challenging and time-consuming task when trying to run your own business at the same time. Navigating the risks and pitfalls in negotiating valuation and deal structure can also be a daunting task for many business owners. Let our team help you minimize your risk and reduce time wasting efforts with our decades of experience in advising in both buy and sell-side M&A transactions. We utilize industry-leading M&A databases to scout for opportunities and pre-screen for "real" actionable targets so you can stay focused on what matters.



Capital Raise: Gain financial support

With nearly 40 years of experience in middle-market M&A advisory, we know how to package up your deal and put you in front of the right kind of investors who have the capital and the industry expertise you need to grow your business. Our team will develop a go-to-market strategy and advise on deal structure, valuation, due diligence and transition issues. Whether you are seeking capital for growth or trying to buy out other shareholders, we have the tools, expertise, and experience to execute a strategic process and find the optimal outcome to meet your objectives.



Restructuring: reorganization of your business

In today's uncertain economic times, more and more companies are finding themselves in unfamiliar, and unwanted, positions. Many business owners are hoping recovery is just around the corner; however, proactive measures are often required to maximize the remaining value of the business. Our team can aid banking institutions with workout situations by implementing internal controls over cash management and performing on-going cash flow modeling for their clients. We can also help business owners avoid having trouble making payments on their debts and avoid the cumbersome and low-value asset liquidation process.

Selected Transactions

Over the years, R.L. Hulett has completed hundreds of transactions in a wide variety of industries. Below are several relevant transactions in the Plastics sector. Please note that this list is not comprehensive.




have been acquired by



a portfolio company of






Has sold substantially all of its assets to







Has been acquired by





Has sold substantially all of its assets to


Has been acquired by





Has been acquired by




Our Team



R. Trevor Hulett, CPA
Managing Director
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Mr. Hulett has led M&A transactions in a variety of industries including manufacturing/industrial, software development/IT, business services and value-added distribution for over 15 years. Prior to joining the firm, he held senior level accounting and financial management positions in both public accounting and large corporations. Mr. Hulett began his career as a Certified Public Accountant with MPP&W, a St. Louis-based public accounting firm specializing in middle market companies. He then held various management positions in internal audit and corporate accounting with a Fortune 1000 industrial manufacturing company and also spent nine years with Enterprise Rent-A-Car Company as a department manager in the Corporate Accounting group. Mr. Hulett holds his Series 62, 63 and 79 securities registration. Mr. Hulett earned a Bachelor's Degree in Accounting from the University of Missouri, Columbia.



Robert L. Hulett
Chairman Emeritus
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Mr. Hulett founded the firm in 1981 and has negotiated and completed more than 200 transactions throughout his career. He began his career as a Certified Public Accountant and practiced with Peat, Marwick, Mitchell & Co. in St. Louis as an Audit Manager and in New York as the Director of Training for Private Business. Mr. Hulett has also served as Chief Executive & Board Member for various middle market companies. As an educator, he was an adjunct professor at New York University and a tenured faculty member at Lindenwood University in St. Louis. He conducted training sessions for middle market CPA firms throughout the country for more than ten years. Mr. Hulett earned his BS/BA Cum Laude in Accounting from the University of Missouri-Columbia, and an MBA from Lindenwood University.

Our Team



Ron Litton
Director
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Mr. Litton has been advising business owners in mergers and acquisitions since 2013. His primary industry focus areas have included industrials, paper and packaging, distribution, energy, promotional products and direct to consumer e-commerce. Prior to 2013, Mr. Litton held a variety of C-level roles with several companies in the paper and packaging industry including Unisource, Maverick Paper, Universal Graphics and Sabin Robbins. He has bought and sold a number of businesses, advised in the sale of family/founder owned businesses, and advised in start-ups and turnaround situations for banks, owners, and private equity firms. He enjoys working with owners that want to sell or transition out of their businesses. Ron covers the Kansas City and surrounding markets for the firm. He graduated from Central Missouri State University with a BS in Graphic Arts Technology and Management.



David T. Vass
Director
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Mr. Vass has over 30 years of business management experience including more than 10 years as President of a highly successful consumer products manufacturing company with revenues exceeding \$25 million. During this time, he not only reversed a declining sales and earnings trend, but increased both sales and operating income over 100%. In addition, he has spent over 20 years at the executive level of Vice President of Sales and Business Development. Mr. Vass also has experience in a number of other industry niches including consumer products, commercial furniture and fixtures and metal recycling. He holds a Bachelor's Degree in Economics from DePauw University and an MBA from the University of Michigan.

Our Team



Ryan Hartman
Senior Analyst
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Ryan provides analytical support for senior-level deal managers and, as a senior analyst, supervises the preparation of confidential memorandums, financial models and industry research reports. Ryan graduated with a Bachelor of Science degree in Finance from The Freeman School of Business, Tulane University. Prior to joining the firm, Ryan worked as an equity analyst for Burkenroad reports, an equity research program that produces widely circulated financial reports on small- to medium-sized companies. During his time at Tulane University, Ryan was elected as Vice President of Administration for Tulane's community government, took extensive courses in Investment Banking M&A transactions, and volunteered as a data analyst for American Red Cross.



Charlie Meier
Analyst
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Charlie provides transaction support for senior-level deal managers including financial modeling, valuations, industry research, offering memorandums and a variety of presentations. He graduated with a Bachelor of Science in Business Administration Degree with a major in finance and banking from the Trulaske College of Business, University of Missouri. Prior to joining the firm, Charlie worked as an investment analyst for the University of Missouri's Investment Fund Management Program. During his time at University of Missouri, Charlie was elected as Recruitment Chairman for the Phi Delta Theta Fraternity and took extensive courses in Banking.



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Lynda Hulett leads the firm's marketing, administrative and communication efforts. She maintains the firm's proprietary CRM database, manages outbound firm communications and provides administrative support to senior deal managers. Prior to joining R.L. Hulett, Lynda spent the previous ten years in various marketing and administrative functions. Most recently, she worked as a client liaison providing administrative support for a CPA firm. Prior to that, she was employed by Moneta Group, a financial services advisory firm, where she provided marketing and administrative support to the client managers. Lynda graduated from the University of Missouri – Columbia, receiving her business degree with an emphasis in Marketing.

About R.L. Hulett

R.L. Hulett is a middle-market investment bank based in St. Louis, Missouri, providing M&A and financial advisory services to middle-market companies. Since its founding in 1981, the firm has advised in over 275 transactions in a variety of industries including industrials, food & beverage, packaging, business services, transportation & logistics, healthcare and software/tech-enabled services. The firm has an experienced team of M&A advisors consisting of former business owners, seasoned corporate executives, professional service firm partners, CPAs and MBAs. Our ability to deliver customized solutions to meet or exceed our clients' expectations is what sets us apart from our competitors.

Industry Sectors Covered:



Flexible Packaging



Transportation & Logistics



Food & Beverage



Industrials



Tech-enabled Services



Healthcare

Disclaimer

The data in this document has been derived from PitchBook Data and has been compiled by R.L. Hulett. This document is strictly for illustrative purposes only. The data presented in this document is not comprehensive and should not be used for benchmarking, valuation, or for any other decision making. R.L. Hulett accepts no responsibility for loss or damage caused by dependence on the information in this document.



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