

CME
STEM Talks
BY THOUGHT LEADERS

2024.03.07 – What's Next in Chemicals M&A

Webinar

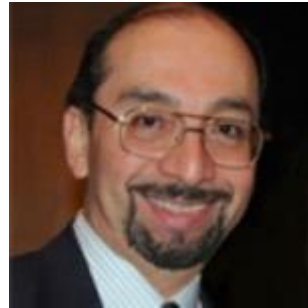
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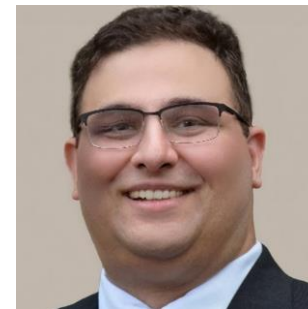
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The Future of Chemistry in the Automobile Market



Heather Rose-Glowacki
American Chemistry
Council



Patrick Manzi
National Automobile
Dealers Association
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Corporate Reinvention

Lori Ryerkerk
Celanese

CME: Accelerating STEM Leadership

For Sustainable Innovation



Agenda

01. Introduction

02. Presentation & Panel Discussion

03. Open Q&A session

03.07 Webinar: CME STEM Talk Arsenal Capital: What is Next in Chemicals M&A



Daniel Bruck
Arsenal Capital



Paul Greenfield
Moelis & Co.



Ranga Covindassamy
Evercore



What is Next in Chemicals M&A



Moelis

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March 7, 2024

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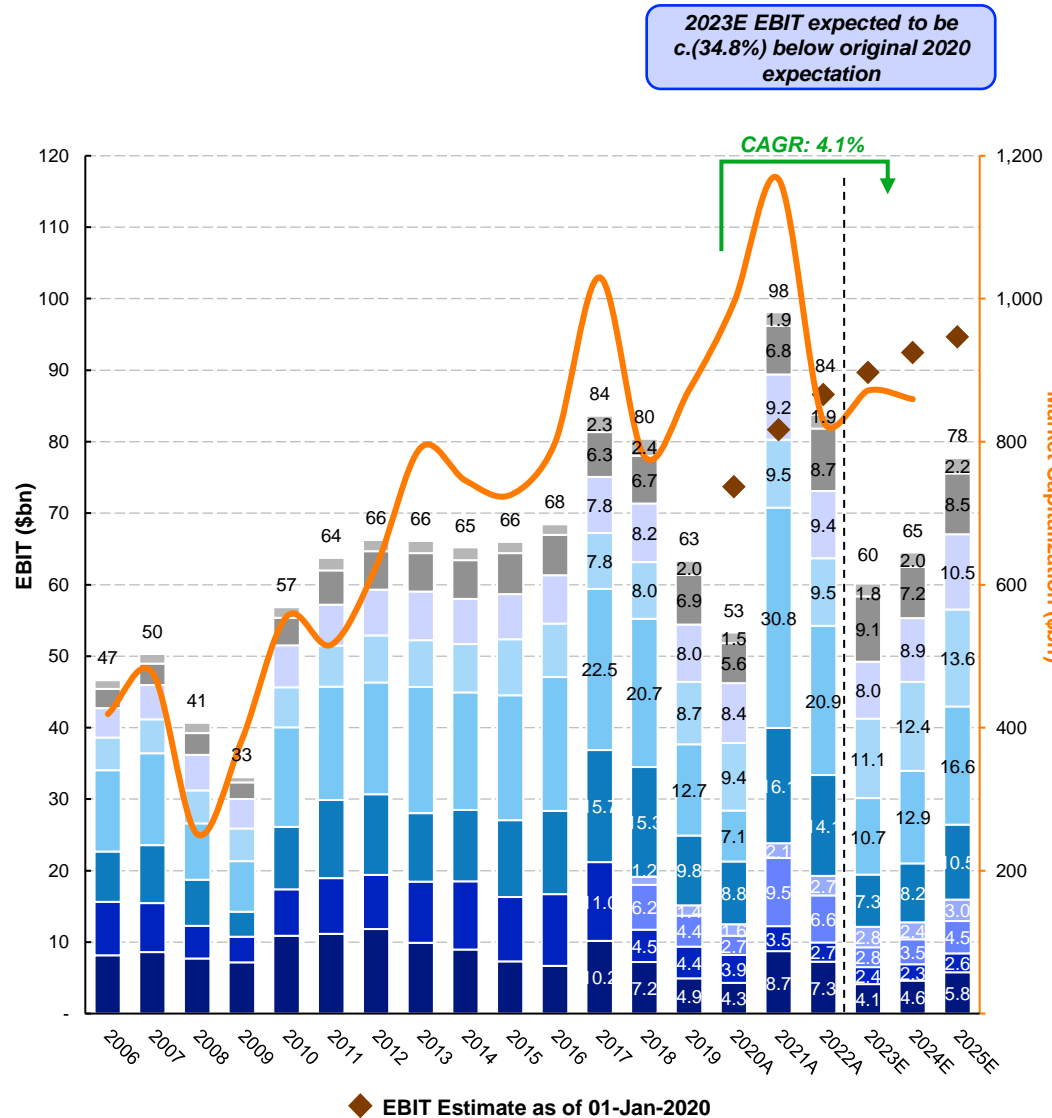
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Market Environment

- The chemicals sector reached all-time highs in 2021 in the post-pandemic environment; a confluence of factors has produced a more difficult phase for operating performance and chemical industry valuations
- The market/volumetric environment in 2023 was one of the more difficult since the 2008-2009 GFC, with continued earnings pressure in the specialty chemicals industry driven by oversupply, destocking, elevated energy prices, geo-political stress (Ukraine/Israel) and cost/labor issues
- Cautious earnings recovery expected in a multi-speed growth world (US vs rest of OECD) and Chinese economic malaise relative to past era of +5% GDP certainty
- Public valuations of premium sub-sectors have substantially de-rated from 2021 valuation highs (-6.5x for Consumer and -4.9x for Specialties on FY1 EBITDA basis), reverting to longer term averages
- Amidst a challenging market backdrop, balance sheets remain resilient with leverage at similar levels to 5 years ago (median today at 1.9x vs. 1.7x 5 years ago)
- M&A remains essential for current and aspiring leaders across sectors. Despite healthy balance sheets and a lower valuation environment, 2023 M&A volumes were 17% lower vs 2022 levels, reflecting 2023's recession-preparation mindset and boardrooms wanting to be more disciplined/cautious; bid-ask standoffs resolve themselves with time and higher certainty of economic trajectory
- Average M&A multiples for premium assets trended downwards (2022 average: 18.3x vs. 2023 / 2024 YTD average: 13.3x) but there is a wide range relative to public valuations; strong synergy profiles continue to drive higher multiples
- M&A remains central to maintaining and extending leadership position to meet ever tougher customer demands. Strategies vary, but most focus on extending sector leadership or dominating certain niches where strategic moats can be created

From COVID Whipsaw to Collateral Impacts From Chinese Malaise

EBIT and Market Capitalization Over Time



Materials & Minerals

Cabot, Imerys, Minerals Technologies, Morgan AM, Orion, RHI, U.S. Silica, Vesuvius

CAGR '18A - '20A	Growth '20A - '21A	Growth '21A - '22A	CAGR '22A - '24E
(20.5%)	24.5%	3.7%	3.1%

Specialties

Albemarle, Ecolab, Elementis, EMS, Entegris, Hexcel, Ingevity, Innospec, Johnson Matthey, NewMarket, Newpark Resources, Quaker, Umicore, Victrex

(8.7%)	22.2%	28.5%	(9.5%)
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Consumer Chems

Ashland, CHR Hansen, Corbion, Croda, Diversey, DSM, Givaudan, IFF, Kerry, Lonza, Novozymes, Sensient, Symrise, Tate&Lyle

1.4%	9.1%	2.5%	(2.6%)
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Coatings and Construction

AkzoNobel, Axalta, Dulux Group, GCP, HB Fuller, PPG, RPM, SHW, Sika

8.9%	0.7%	(0.4%)	14.6%
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Commodities

Braskem, Formosa Petrochem, Formosa Plastics, Formosa Chemicals, Iluka, LyondellBasell, Methanex, Orbia, Olin, Petronas, PTT, Sasol, Tronox, Westlake

(41.4%)	332.5%	(32.2%)	(21.2%)
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Diversified

Arkema, Celanese, Clariant, Covestro, Eastman, Evonik, Huntsman, Kemira, Lanxess, Solvay, Synthomer, Trinseo, Wacker Chemie

(24.3%)	83.6%	(12.6%)	(23.6%)
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Corteva

17.7%	29.1%	31.5%	(6.0%) I
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Dow

(34.0%)	251.1%	(30.9%)	(27.1%)
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DuPont

(7.8%)	(9.5%)	(22.4%)	(8.3%)
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BASF

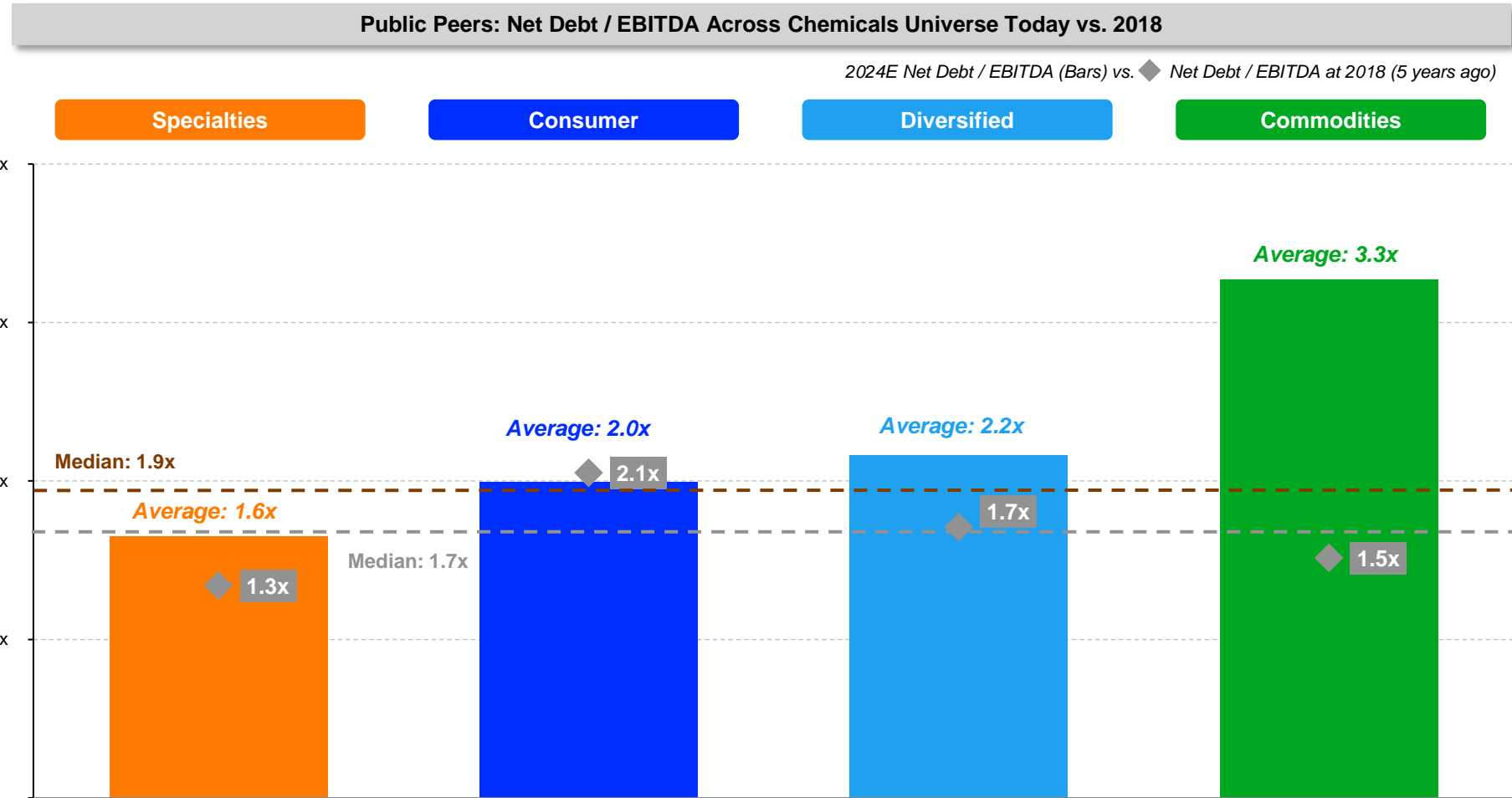
(22.6%)	102.2%	(17.0%)	(20.5%)
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Source: FactSet (02/23/24)

Note:

1. Dupont, Corteva and Dow CAGRs for 2018A - 2019A due to company reorganisation

Balance Sheets Resilient / Leverage at Similar Levels to 5 Years Ago



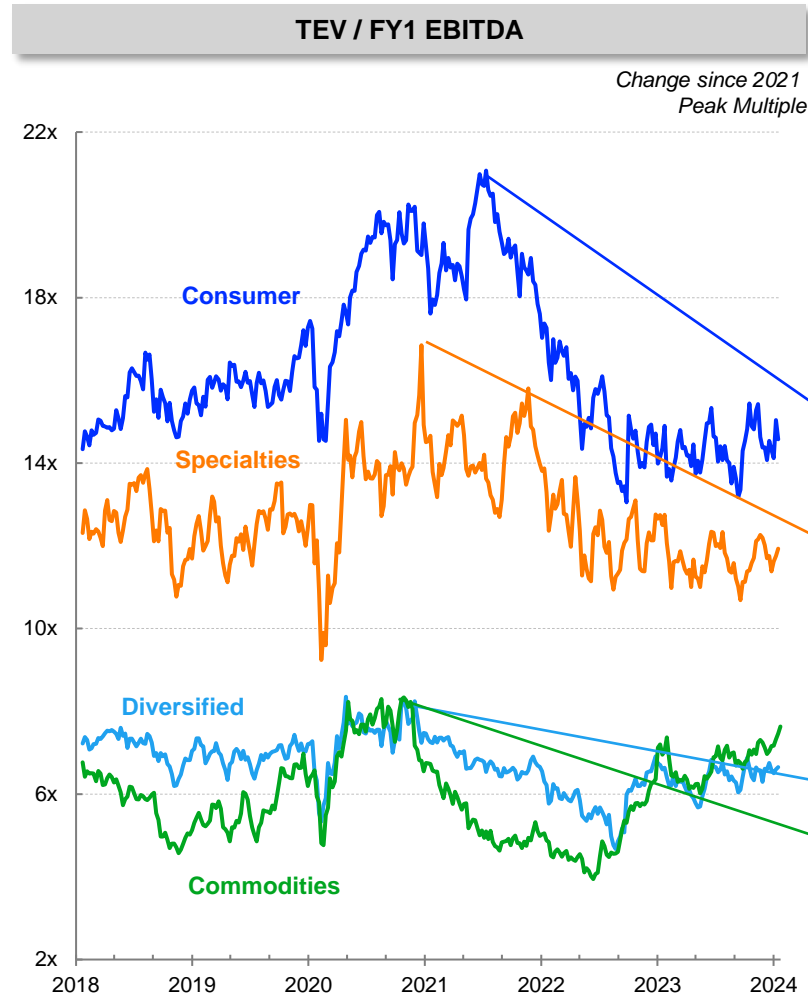
Specialty Chemicals: AkzoNobel, Albemarle, Corteva, DuPont, Ecolab, Elementis, EMS, Entegris, Hexcel, Ingevity, J. Matthey, PPG, RPM, Sherwin-Williams, Sika, Umicore, Victrex
Consumer Chemicals: Ashland, Chr. Hansen, Corbion, Croda, DSM-Firmenich, Givaudan, IFF, Kerry, Lonza, Novozymes, Sensient, Symrise
Diversified Chemicals: Arkema, BASF, Celanese, Clariant, Eastman, Ecovyst, Evonik, Huntsman, Kemira, Lanxess, Solvay, Synthomer, Wacker
Commodity Chemicals: Braskem, Covestro, Dow, Lyondell, Methanex, Orbia, Olin, PTT, Trinseo, Tronox, Westlake

Source: FactSet (02/23/24)

Note: Today's leverage based on Net Debt (excl. post-tax pensions) / 2024E EBITDA; 2018 based on 2018A Net Debt (excl. post-tax pensions) / 2018A EBITDA

1. Today refers to latest credit metrics published by credit research
2. Current leverage based on Net Debt / EBITDA

Premium Subsectors Reverted to Longer Term Averages

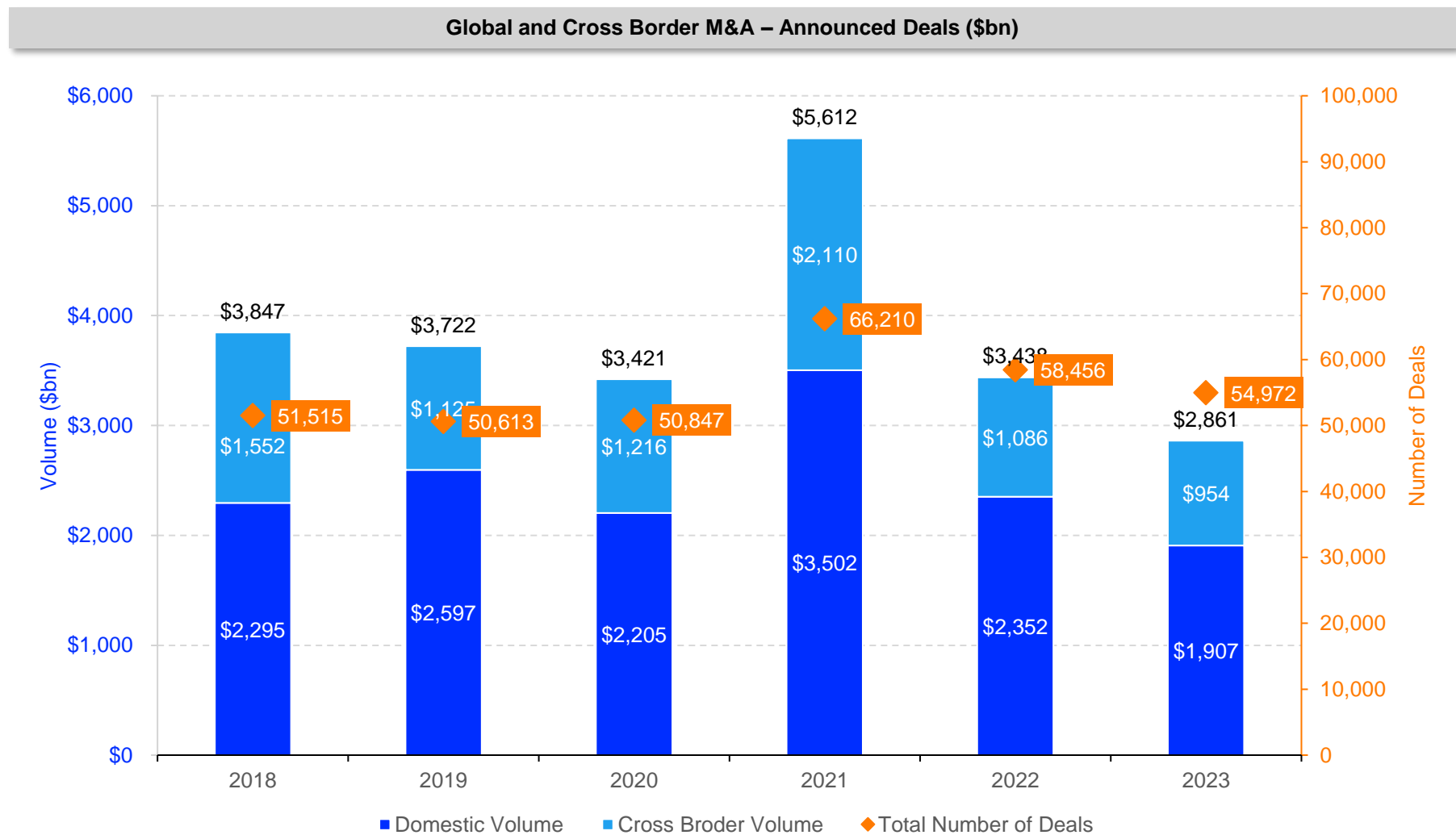


Consumer Chemicals: Ashland, Chr. Hansen, Corbion, Croda, DSM-Firmenich, Givaudan, IFF, Kerry, Lonza, Novozymes, Sensient, Symrise
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Source: FactSet (02/23/24)

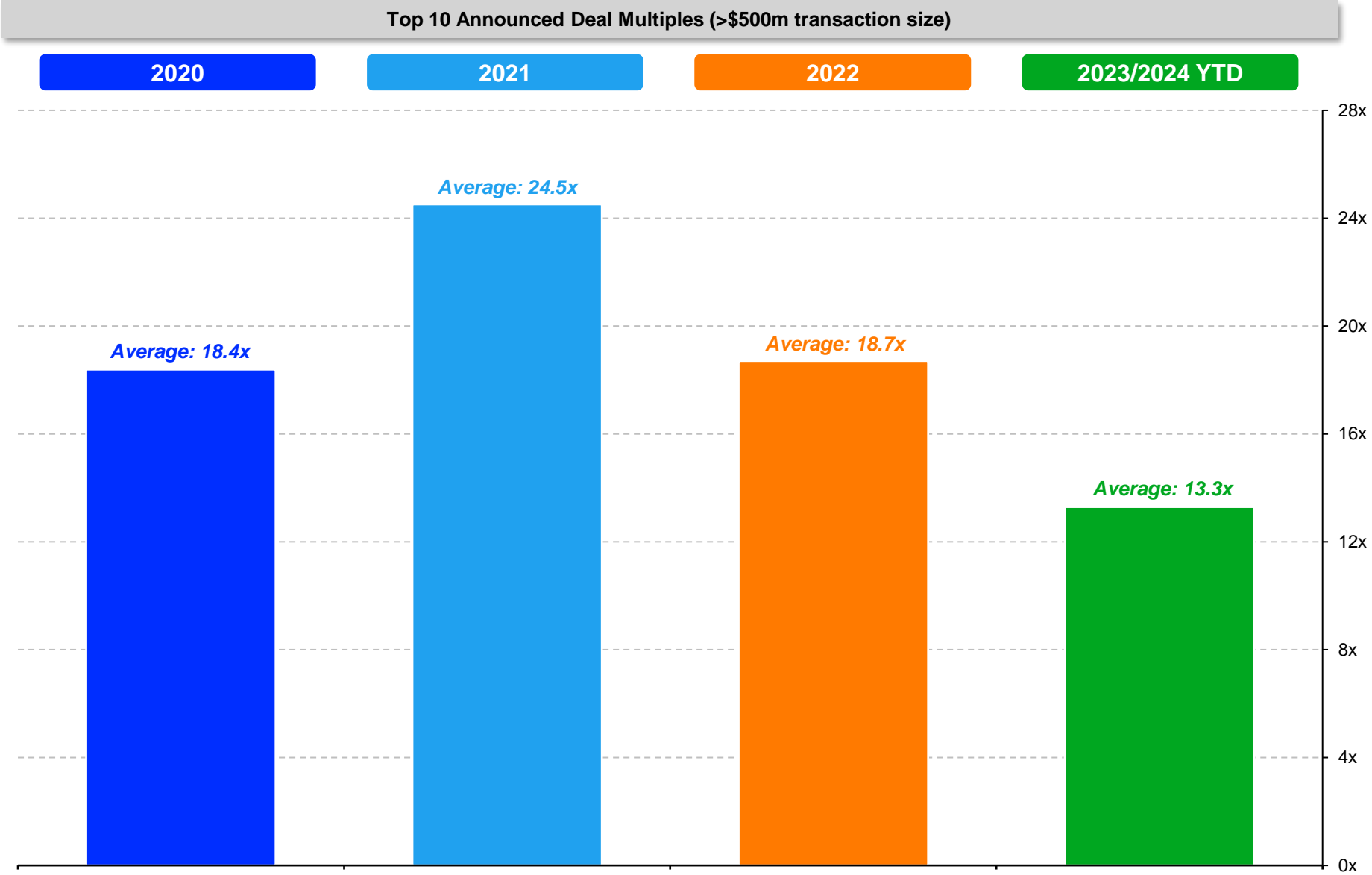
Lower M&A Reflects Boardroom Caution & Wide Bid-Ask Gaps

Global M&A Volume is down 17% compared to 2022 levels, while cross border M&A volume is down 12%



Source: Refinitiv Eikon (formerly Thomson Reuters)
 Note: Charts include all announced deals (12/31/23)

Premium Transaction Multiples Have Trended Lower



Source: Company Information, MergerMarket

Credit markets remain challenged with outlook improving

Recent economic data signals that interest rate cuts may not be as imminent as investors once believed

Credit market backdrop

- Since Jul-23, the Fed has held its benchmark federal-funds rate at a range between 5.25% and 5.5% as inflation has eased
 - In Jan-24, inflation came in above Wall Street's expectations, clouding the Fed's path to rate cuts
 - Initial expectations for a rate cut in Mar-24 likely to be pushed back until Jun-24
- Although lender posture has improved, debt remains expensive amidst higher for longer expectations – extending the prolonged period of cautious lending
 - The majority of loan volume has been used to support refinancings
- Bank financed activity continues to increase as banks competed with and beat out private credit for several large deals in late 2023, including Cetera Financial's (Genstar) \$1.2bn acquisition of Avantax and Roark's \$9.6bn acquisition of Subway
 - However, private credit will continue to remain the leading source of financing for sponsor transactions until interest rates level off and the pricing flex built into broadly syndicated debt narrows and stabilizes

“With market participants increasingly expecting the Federal Reserve to cut interest rates, traditional banks are starting to become more competitive in loan markets versus to direct lenders. Lower rates will enable banks to charge companies less in interest for risky loans than private credit participants, who typically charge more. And cheaper borrowing costs are likely to spur more economic activity and dealmaking in general, another factor that could spur activity for banks.”

REUTERS Jan. 24, 2024

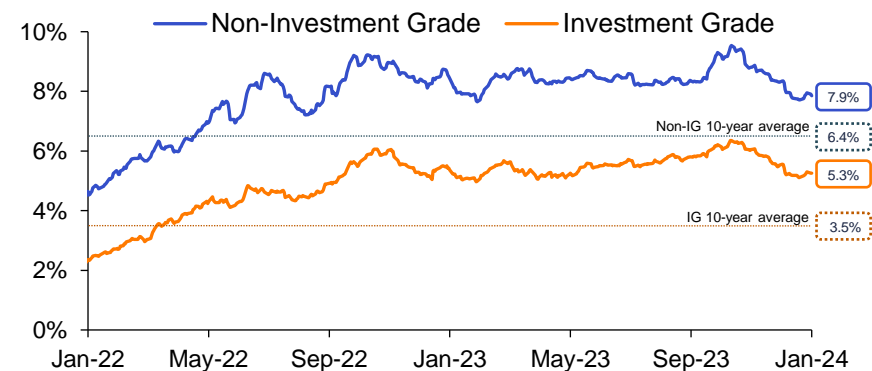
“As of Friday, interest-rate futures suggested that there was a greater-than-50% chance the Fed would start cutting rates by its June policy meeting. They also indicated that investors believe the central bank will likely cut rates by a quarter-percentage point at least three more times by the end of the year.”

THE WALL STREET JOURNAL Feb. 20, 2024

U.S. treasury yields



U.S. corporate bond yields



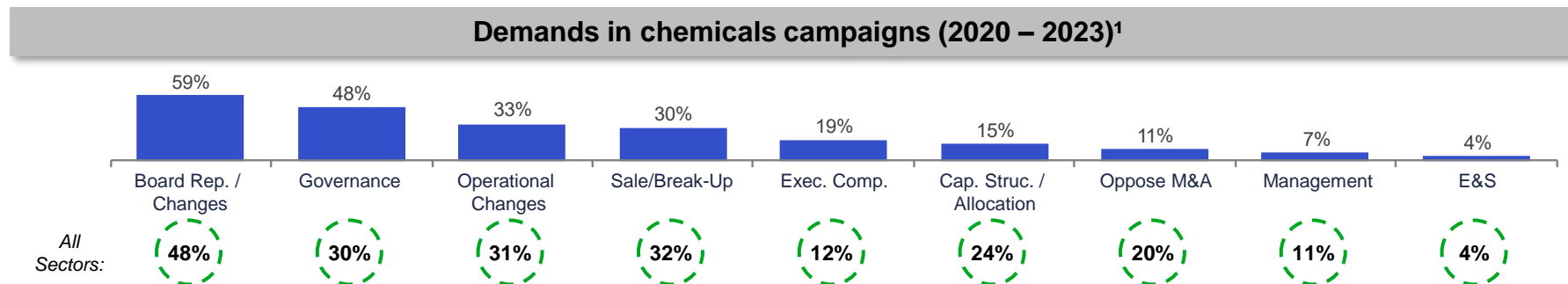
Source: LCD, MorningStar, S&P, Advantage Data, Refinitiv

Activist momentum expected to carry through 2024



Activists are busy in the chemical sector

Within chemicals, activists most often criticize operating performance and pair these critiques with demands for Board representation to effectuate their desired changes



Key recent chemical campaigns

Year	Target	Activist(s)	Demands / criticisms
2023	Corbion	INCLUSIVE CAPITAL PARTNERS	<ul style="list-style-type: none"> Share price underperformance and discount to SOTP valuation Growth spending on significant assets that have not delivered earnings growth Urged for a comprehensive strategic review for a take-private or sale to a strategic acquiror
2023	ELEMENTIS	FRANKLIN TEMPLETON	<ul style="list-style-type: none"> Share price underperformance and value destructive capital allocation Inability to improve operating performance and financial returns Urged company to initiate a formal sale process
2022 / 2023	VENATOR	J&T	<ul style="list-style-type: none"> Share price, financial underperformance, lack of strategic direction, and poor shareholder engagement Low gross and EBITDA margins vs. peers Board refresh, including two additional director nominees, which did not occur
2022 / 2023	BRENNTAG	PrimeStone Engine CAPITAL	<ul style="list-style-type: none"> Oppose company's proposed acquisition of Univar Separate business lines, conduct share repurchases, and change Board composition Company ended takeover talks with Univar but won proxy fight against PrimeStone
2022 / 2023	Univar Solutions	Engine CAPITAL	<ul style="list-style-type: none"> Share price underperformance Accelerate share repurchase program and initiate review of strategic alternatives Company acquired by Apollo
2022	ingevity	INCLUSIVE CAPITAL PARTNERS	<ul style="list-style-type: none"> Valuation discount to peers Improve communication of the company's ESG angle Partner of Inclusive Capital appointed to the Board
2021 / 2022	HUNTSMAN	STARBOARD VALUE	<ul style="list-style-type: none"> Share price underperformance Revenue growth and EBITDA margins trail peers Nominated four director nominees, all of whom lost in the proxy fight

Source: 13D Monitor, Activist Insight, Public filings, FactSet
 Note: All data only includes campaigns conducted by activists (hedge funds, investment advisers and mutual fund managers) against companies globally with market capitalization greater than \$500mm
 1. Total percentages for all activist demands exceed 100% as activists may push for multiple objectives in campaigns

Where do we go from here?

The bull case



Equity market meets consensus of 4-6 rate cuts starting in March



Surge of on hold M&A deals come to market in 1H 2024



Return and firming of the broadly syndicated loan market



Geopolitical tensions ease



“Soft landing” gains momentum and recession concerns subside



Private equity begins to deploy its \$2.0T in built-up dry powder

The bear case



Interest rate environment elevated for longer



IPO market slow to return, limiting exit optionality



Global geopolitical tensions drive volatility and uncertainty in markets



Further negative pressure on valuation levels due to higher interest rates and lower earnings



Private credit and bank financing remain expensive



Seller valuations do not adjust for cost of capital

Open Q&A

Use the Chat feature



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Heather Rose-Glowacki
American Chemistry
Council



Patrick Manzi
National Automobile
Dealers Association
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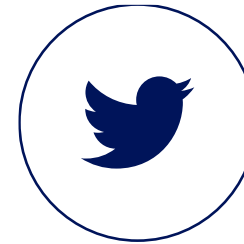
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