



Industry Update
Chemicals
Q2 2023

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Financial Performance

Size Profile, LTM Financials, Forward Estimates

(USD in millions, except per share data)

Company Name	Ticker	Size Profile			LTM Operating Data		Forward Estimates		
		Price at 06/30/23	% of 52 Week High	TEV	Total Assets	LTM Revenue	LTM EBITDA	2023 Est. Revenue	2023 Est. EBITDA
Specialty Chemicals									
The Sherwin-Williams Company	SHW	\$265.52	99.6%	\$82,867	\$23,166	\$22,961	\$4,038	\$22,838	\$4,069
Ecolab Inc.	ECL	\$186.69	99.4%	\$60,373	\$21,456	\$14,764	\$2,901	\$15,399	\$3,024
PPG Industries, Inc.	PPG	\$148.30	99.5%	\$39,258	\$22,216	\$17,905	\$2,603	\$18,182	\$2,913
DuPont de Nemours, Inc.	DD	\$71.44	91.1%	\$38,689	\$40,797	\$12,533	\$3,027	\$12,497	\$3,008
Celanese Corporation	CE	\$115.80	90.2%	\$26,975	\$25,649	\$10,297	\$1,637	\$11,194	\$2,492
Commodity Chemicals									
Dow Inc.	DOW	\$53.26	87.5%	\$50,811	\$58,294	\$49,245	\$6,055	\$44,475	\$5,543
LyondellBasell Industries N.V.	LYB	\$91.83	90.7%	\$42,163	\$36,683	\$43,009	\$4,548	\$40,873	\$5,239
Westlake Corporation	WLK	\$119.47	94.6%	\$20,009	\$20,981	\$13,862	\$2,815	\$12,964	\$2,784
Diversified Chemicals									
Eastman Chemical Company	EMN	\$83.72	81.9%	\$14,894	\$14,771	\$9,818	\$1,580	\$9,364	\$1,668
The Chemours Company	CC	\$36.89	96.2%	\$8,046	\$7,660	\$6,294	\$381	\$6,183	\$1,133
Huntsman Corporation	HUN	\$27.02	80.8%	\$6,482	\$7,553	\$6,863	\$569	\$6,376	\$567

Source: Capital IQ

Financial Performance (cont.)

Size Profile, LTM Financials, Forward Estimates

(USD in millions, except per share data)

Company Name	Ticker	Size Profile			LTM Operating Data		Forward Estimates		
		Price at 06/30/23	% of 52 Week High	TEV	Total Assets	LTM Revenue	LTM EBITDA	2023 Est. Revenue	2023 Est. EBITDA
Industrial Gases									
Linde plc	LIN	\$381.08	99.3%	\$199,826	\$78,718	\$33,093	\$11,450	\$33,434	\$12,046
Air Products and Chemicals, Inc.	APD	\$299.53	91.2%	\$72,605	\$30,930	\$12,979	\$3,985	\$12,919	\$4,845
Fertilizers & Agricultural Chemicals									
Nutrien Ltd.	NTR	\$59.05	57.5%	\$45,271	\$53,926	\$32,583	\$7,884	\$29,096	\$6,351
Corteva, Inc.	CTVA	\$57.30	83.7%	\$42,699	\$44,189	\$17,531	\$3,288	\$18,172	\$3,569
FMC Corporation	FMC	\$104.34	77.6%	\$15,326	\$11,952	\$5,358	\$1,242	\$5,269	\$1,328

Source: Capital IQ

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Valuation Metrics

Return Profile, Trading Multiples

Company Name	Ticker	Return Profile					Trading Multiples		
		Return on Assets	Return on Equity	Revenue Growth	EBITDA Margin	EBITDA Growth	5-yr Beta	TEV / LTM Revenue	TEV / LTM EBITDA
Specialty Chemicals									
The Sherwin-Williams Company	SHW	9.5%	80.0%	10.5%	17.6%	32.7%	1.1x	3.6x	20.5x
Ecolab Inc.	ECL	5.8%	16.3%	9.1%	19.7%	6.3%	1.0x	4.1x	20.8x
PPG Industries, Inc.	PPG	5.9%	19.2%	2.0%	14.5%	18.6%	1.2x	2.2x	15.1x
DuPont de Nemours, Inc.	DD	2.8%	3.8%	-3.9%	24.2%	-1.2%	1.2x	3.1x	12.8x
Celanese Corporation	CE	3.4%	22.6%	7.7%	15.9%	-35.3%	1.3x	2.6x	16.5x
	Mean	5.5%	28.4%	5.1%	18.4%	4.2%	1.2x	3.1x	17.1x
	Median	5.8%	19.2%	7.7%	17.6%	6.3%	1.2x	3.1x	16.5x
Commodity Chemicals									
Dow Inc.	DOW	3.6%	9.2%	-18.1%	12.3%	-47.6%	1.3x	1.0x	8.4x
LyondellBasell Industries N.V.	LYB	5.7%	16.6%	-19.6%	10.6%	-47.8%	1.2x	1.0x	9.3x
Westlake Corporation	WLK	5.5%	13.1%	-8.2%	20.3%	-42.7%	1.3x	1.4x	7.1x
	Mean	5.0%	13.0%	-15.3%	14.4%	-46.0%	1.3x	1.2x	8.3x
	Median	5.5%	13.1%	-18.1%	12.3%	-47.6%	1.3x	1.0x	8.4x
Diversified Chemicals									
Eastman Chemical Company	EMN	4.7%	13.2%	-10.0%	16.1%	-32.1%	1.5x	1.5x	9.4x
The Chemours Company	CC	0.6%	-8.5%	-9.2%	6.1%	-71.1%	2.0x	1.3x	21.1x
Huntsman Corporation	HUN	2.2%	3.3%	-19.9%	8.3%	-58.4%	1.2x	0.9x	11.4x
	Mean	2.5%	2.7%	-13.1%	10.1%	-53.9%	1.5x	1.2x	14.0x
	Median	2.2%	3.3%	-10.0%	8.3%	-58.4%	1.5x	1.3x	11.4x

Source: Capital IQ

Valuation Metrics (cont.)

Return Profile, Trading Metrics

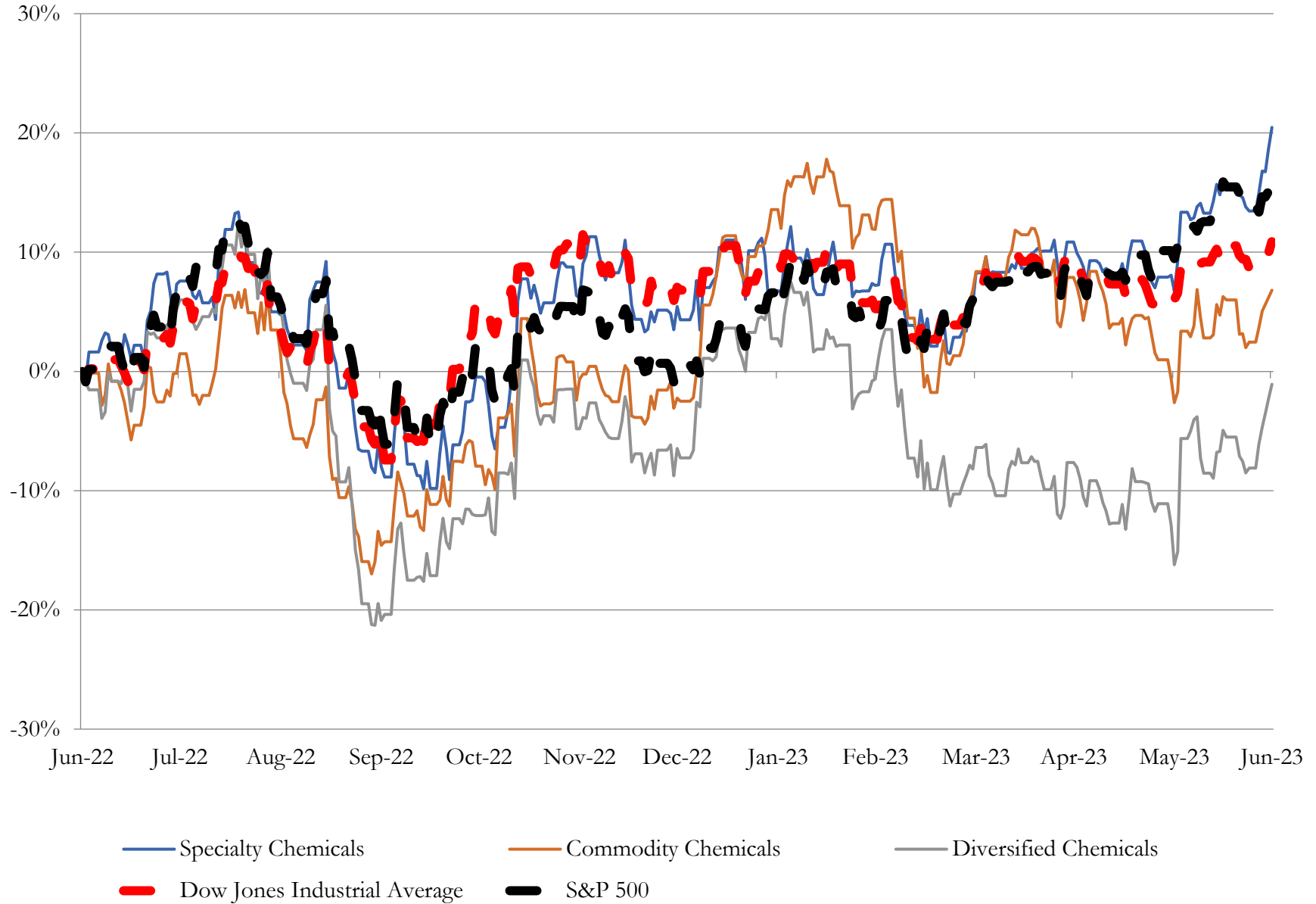
Company Name	Ticker	Return Profile					Trading Multiples		
		Return on Assets	Return on Equity	Revenue Growth	EBITDA Margin	EBITDA Growth	5-yr Beta	TEV / LTM Revenue	TEV / LTM EBITDA
Industrial Gases									
Linde plc	LIN	6.0%	14.2%	1.4%	34.6%	8.5%	0.9x	6.2x	17.9x
Air Products and Chemicals, Inc.	APD	5.7%	15.1%	15.4%	30.0%	6.9%	0.9x	5.7x	19.1x
	Mean	5.9%	14.6%	8.4%	32.3%	7.7%	0.9x	6.0x	18.5x
	Median	5.9%	14.6%	8.4%	32.3%	7.7%	0.9x	6.0x	18.5x
Fertilizers & Agricultural Chemicals									
Nutrien Ltd.	NTR	9.8%	27.6%	18.7%	29.2%	26.9%	0.0x	1.3x	4.6x
Corteva, Inc.	CTVA	3.1%	4.8%	10.3%	19.3%	-9.1%	0.8x	2.4x	12.6x
FMC Corporation	FMC	6.9%	24.9%	11.4%	24.4%	3.8%	0.8x	2.7x	11.1x
	Mean	6.6%	14.4%	18.9%	15.8%	30.1%	0.5x	2.2x	9.4x
	Median	6.9%	12.2%	19.0%	21.8%	15.4%	0.8x	2.4x	11.1x

Source: Capital IQ

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LTM Equity Performance

Major Indexes



Source: Capital IQ

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Recent M&A Activity

Last Twelve (12) Months as of June 30, 2023

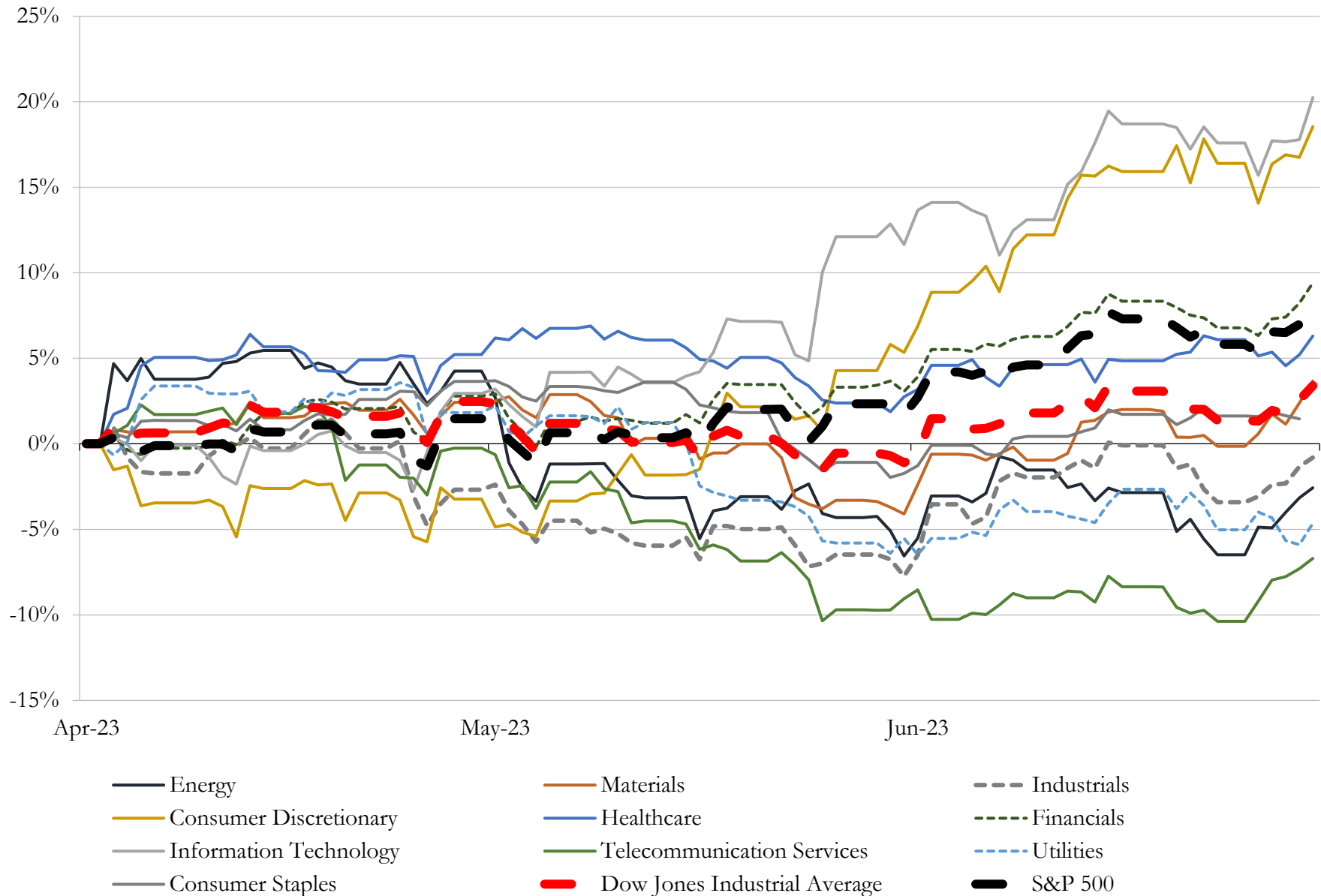
(USD in millions)

Close Date	Target	Acquirer	Implied TEV
Mar-23	Global Products Business of Valvoline Inc.	Aramco Overseas Company B.V.	\$2,650
Sep-22	GCP Applied Technologies Inc.	Compagnie de Saint-Gobain S.A.	\$2,307
Jul-22	Microbial Control Business Unit of International Flavors & Fragrances Inc.	LANXESS Aktiengesellschaft	\$1,300
Mar-23	The Stoller Group, Inc.	Corteva, Inc.	\$1,129
Oct-22	Quadion LLC	Trelleborg Sealing Solutions US, Inc.	\$950
Feb-23	Textile Effects Business of Huntsman International LLC	Archroma Germany GmbH; Archroma Operations S.À R.L.	\$718
Oct-22	Zymergen Inc.	Ginkgo Bioworks Holdings, Inc.	\$273
Jul-22	Marrone Bio Innovations, Inc.	Bioceres Crop Solutions Corp.	\$264
Feb-23	Laminates, Films and Coated Fabrics Businesses of Synthomer plc	SURTECO North America, Inc.	\$255
Sep-22	Nucera Solutions LLC	Chase Corporation	\$250
Mar-23	ICP Industrial, Inc.	Stahl Holdings B.V.	\$205
Jan-23	American Chrome & Chemicals Inc.	Yildirim Holding A.S.	\$170
Apr-23	Iron Oxide Business of Venator Materials PLC	Cathay Industries	\$140
Dec-22	McCann Plastics, Inc.	HEXPOL AB (publ)	\$120
Nov-22	Assets of Elite Polymer Solutions	Allied Tube and Conduit Corporation; Atkore HDPE, LLC	\$92
May-23	Fortress North America, LLC	Compass Minerals International, Inc.	\$75
Oct-22	Attapulgate business assets of BASF SE	Clariant International Ltd	\$60
Feb-23	Enduro Composites, Inc.	Creative Composites Group	\$35
Feb-23	CMT Materials, Inc.	ESCO Technologies Inc.	\$18
Sep-22	Surfactant Business and Associated Assets of PerformanX Specialty	Stepan Company	\$10
Oct-22	Gssi Sealants, Inc.	H.B. Fuller Company	\$7
Jul-22	Epicor Incorporated	Evoqua Water Technologies Corp.	\$4
May-23	NanoShield windshield strengthener and related automotive assets of C-Bond	N/A	\$4
Aug-22	Significant portion of assets of XG Sciences, Inc.	NanoXplore Inc.	\$3
May-23	Nankai Enviro-Tech Corp.	Tenma Corporation	\$2
Aug-22	CFOAM Corp.	CONSOL Energy Inc.	\$1
Jun-23	Comco Plastics, Inc.	Centric Machining Solutions LLC	NA
Jun-23	Two Plastics Manufacturing Facilities Of Paragon Medical	Clayens NP Group	NA
Jun-23	Assets of Design Molded Plastics	Big Shoulders Capital LLC	NA
Jun-23	Johnson Paint Company, Inc.	Ring's End, Inc.	NA

Source: Capital IQ

5 Change in Market Capitalization by Sector

Last Three (3) Months as of June 30, 2023

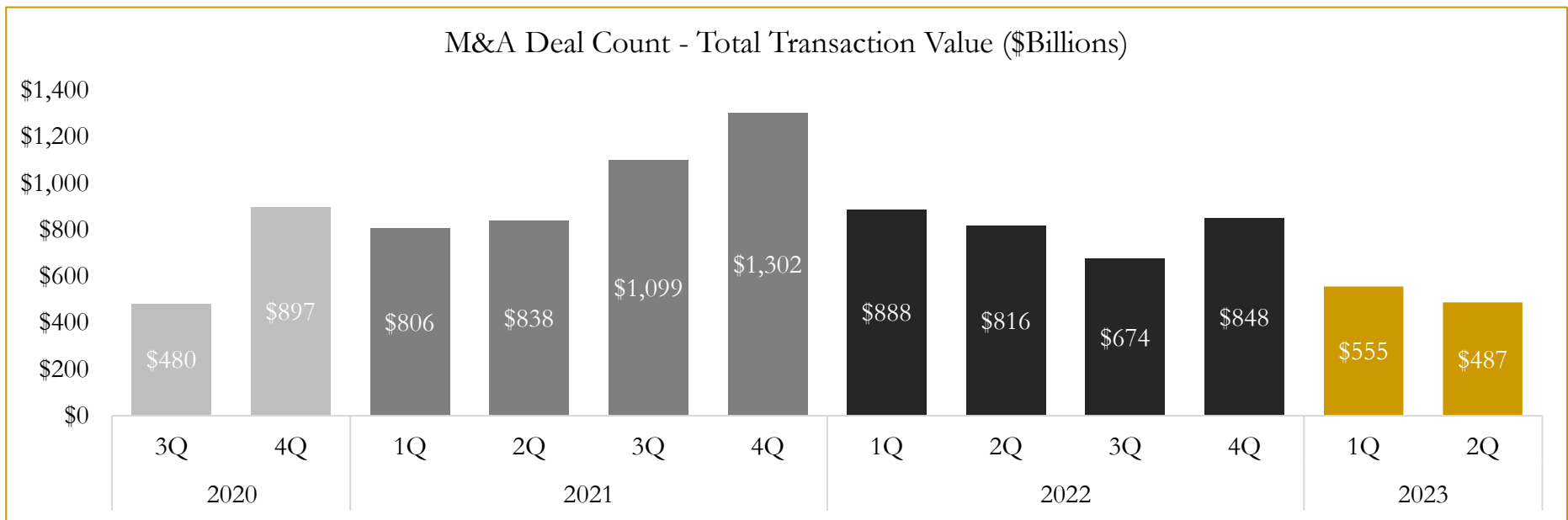
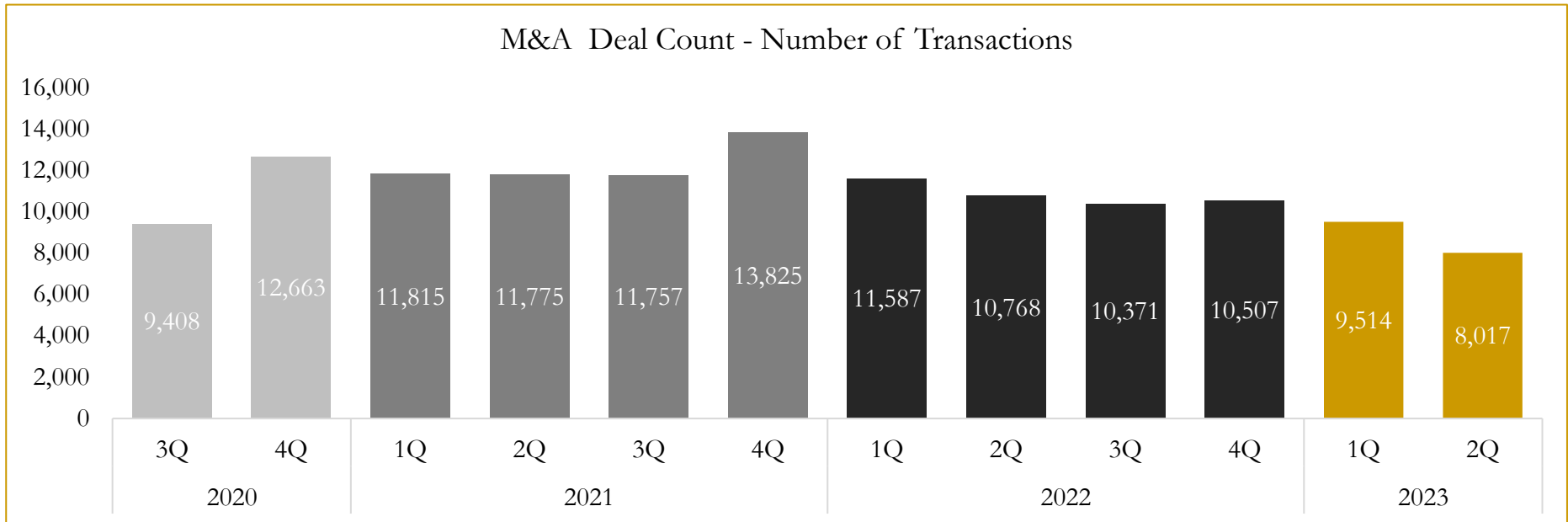


Source: Capital IQ

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M&A Deal Flow Statistics

Last Three (3) Years as of June 30, 2023



Source: Capital IQ

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 - Locked Token Valuations
- **Enterprise Valuations**
- **Fairness & Solvency Opinions**
 - SPAC Fairness
- **Estate & Gift Valuations**
- **Purchase Price Allocation (ASC 805)**
- **Goodwill Impairment Testing (ASC 350)**
- **Stock-based Compensation (ASC 718, IRC 409A)**

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For questions or inquiries regarding our services, please contact:

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