



Industry Update  
**Chemicals**  
Q4 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 12/31/23	% of 52 Week High	TEV	Total Assets	LTM Revenue	LTM EBITDA	2023 Est. Revenue	2023 Est. EBITDA
<b>Specialty Chemicals</b>									
The Sherwin-Williams Company	SHW	\$311.90	99.3%	\$88,796	\$22,954	\$23,052	\$4,250	\$23,715	\$4,501
Ecolab Inc.	ECL	\$198.35	98.4%	\$64,773	\$21,858	\$15,053	\$2,994	\$16,104	\$3,406
PPG Industries, Inc.	PPG	\$149.55	97.8%	\$39,594	\$0	\$18,246	\$2,832	\$18,696	\$3,182
DuPont de Nemours, Inc.	DD	\$76.93	97.7%	\$35,726	\$39,133	\$12,274	\$2,898	\$12,081	\$2,857
Celanese Corporation	CE	\$155.37	97.7%	\$29,130	\$25,538	\$10,719	\$1,710	\$11,281	\$2,809
<b>Commodity Chemicals</b>									
Dow Inc.	DOW	\$54.84	90.1%	\$51,927	\$57,967	\$44,622	\$4,711	\$45,603	\$6,238
LyondellBasell Industries N.V.	LYB	\$95.08	93.2%	\$40,942	\$36,875	\$41,384	\$4,858	\$40,626	\$5,549
Westlake Corporation	WLK	\$139.96	97.5%	\$20,981	\$21,396	\$13,021	\$2,635	\$12,407	\$2,605
<b>Diversified Chemicals</b>									
Eastman Chemical Company	EMN	\$89.82	97.4%	\$14,987	\$14,594	\$9,376	\$1,519	\$9,512	\$1,811
The Chemours Company	CC	\$31.54	80.8%	\$8,024	\$7,948	\$6,004	\$214	\$6,205	\$1,181
Huntsman Corporation	HUN	\$25.13	75.1%	\$6,020	\$7,369	\$6,358	\$439	\$6,207	\$539

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 12/31/23	% of 52 Week High	TEV	Total Assets	LTM Revenue	LTM EBITDA	2023 Est. Revenue	2023 Est. EBITDA
<b>Industrial Gases</b>									
Linde plc	LIN	\$410.71	94.6%	\$211,364	\$77,827	\$32,451	\$11,794	\$34,351	\$12,824
Air Products and Chemicals, Inc.	APD	\$273.80	85.3%	\$68,705	\$32,003	\$12,600	\$4,011	\$13,374	\$5,480
<b>Fertilizers &amp; Agricultural Chemicals</b>									
Nutrien Ltd.	NTR	\$56.33	66.1%	\$39,685	\$52,229	\$29,967	\$6,548	\$27,502	\$5,990
Corteva, Inc.	CTVA	\$47.92	73.5%	\$36,097	\$43,110	\$17,344	\$3,246	\$17,608	\$3,564
FMC Corporation	FMC	\$63.05	47.3%	\$11,243	\$10,956	\$4,963	\$1,155	\$4,677	\$1,074

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
<b>Specialty Chemicals</b>									
The Sherwin-Williams Company	SHW	9.9%	70.1%	4.1%	18.4%	18.8%	1.1x	3.9x	20.9x
Ecolab Inc.	ECL	6.0%	16.8%	8.4%	19.9%	9.4%	1.1x	4.3x	21.6x
DuPont de Nemours, Inc.	DD	2.7%	3.7%	-6.7%	23.6%	-9.4%	1.2x	2.2x	14.0x
PPG Industries, Inc.	PPG	0.0%	17.9%	3.4%	15.5%	24.4%	1.3x	N/A	N/A
Celanese Corporation	CE	2.8%	33.3%	11.7%	16.0%	-26.8%	1.3x	2.7x	17.0x
	Mean	4.3%	28.3%	4.2%	18.7%	3.3%	1.2x	3.3x	18.4x
	Median	2.8%	17.9%	4.1%	18.4%	9.4%	1.2x	3.3x	19.0x
<b>Commodity Chemicals</b>									
Dow Inc.	DOW	2.2%	3.3%	-21.6%	10.6%	-46.1%	1.3x	1.2x	11.0x
LyondellBasell Industries N.V.	LYB	6.1%	17.8%	-22.0%	11.7%	-32.6%	1.2x	1.0x	8.4x
Westlake Corporation	WLK	4.9%	11.7%	-18.6%	20.2%	-43.3%	1.3x	1.6x	8.0x
	Mean	4.4%	10.9%	-20.7%	14.2%	-40.7%	1.3x	1.3x	9.1x
	Median	4.9%	11.7%	-21.6%	11.7%	-43.3%	1.3x	1.2x	8.4x
<b>Diversified Chemicals</b>									
Eastman Chemical Company	EMN	4.4%	10.8%	-14.0%	16.2%	-31.5%	1.5x	1.6x	9.9x
The Chemours Company	CC	-0.7%	-30.2%	-14.6%	3.6%	-83.4%	2.1x	1.3x	37.5x
Huntsman Corporation	HUN	1.3%	0.9%	-25.1%	6.9%	-67.4%	1.2x	0.9x	13.7x
	Mean	1.7%	-6.1%	-17.9%	8.9%	-60.8%	1.6x	1.3x	20.4x
	Median	1.3%	0.9%	-14.6%	6.9%	-67.4%	1.5x	1.3x	13.7x

Source: Capital IQ

## Valuation Metrics (cont.)

### Return Profile, Trading Metrics

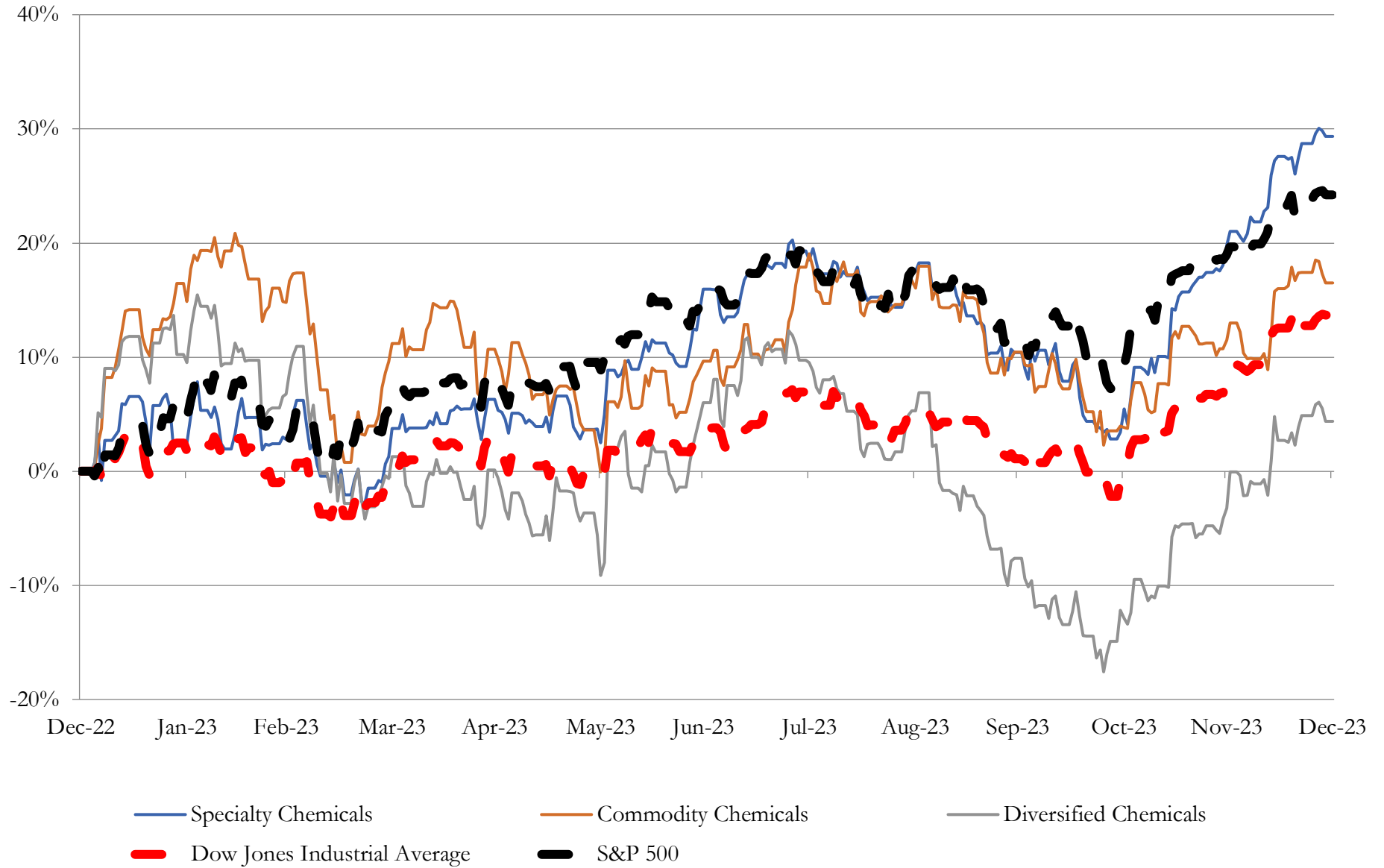
Company Name	Ticker	Return Profile						Trading Multiples	
		Return on Assets	Return on Equity	Revenue Growth	EBITDA Margin	EBITDA Growth	5-yr Beta	TEV / LTM Revenue	TEV / LTM EBITDA
<b>Industrial Gases</b>									
Linde plc	LIN	6.5%	15.5%	-3.9%	36.3%	9.9%	0.9x	6.5x	17.9x
Air Products and Chemicals, Inc.	APD	5.6%	15.9%	-0.8%	31.8%	5.6%	0.8x	5.5x	17.1x
	Mean	6.1%	15.7%	-2.3%	34.1%	7.8%	0.9x	6.0x	17.5x
	Median	6.1%	15.7%	-2.3%	34.1%	7.8%	0.9x	6.0x	17.5x
<b>Fertilizers &amp; Agricultural Chemicals</b>									
Nutrien Ltd.	NTR	5.6%	8.7%	-18.6%	21.9%	-44.4%	0.0x	1.3x	6.1x
Corteva, Inc.	CTVA	3.0%	4.5%	1.4%	18.7%	-9.2%	0.7x	2.1x	11.1x
FMC Corporation	FMC	5.6%	18.5%	-11.3%	23.3%	-14.1%	0.9x	2.3x	9.7x
	Mean	4.8%	8.6%	5.9%	-0.6%	15.7%	0.5x	1.9x	9.0x
	Median	5.6%	7.9%	10.0%	4.8%	-4.6%	0.7x	2.1x	9.7x

Source: Capital IQ

# 3

## LTM Equity Performance

### Major Indexes



Source: Capital IQ

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## Recent M&amp;A Activity

*Last Twelve (12) Months as of December 31, 2023*

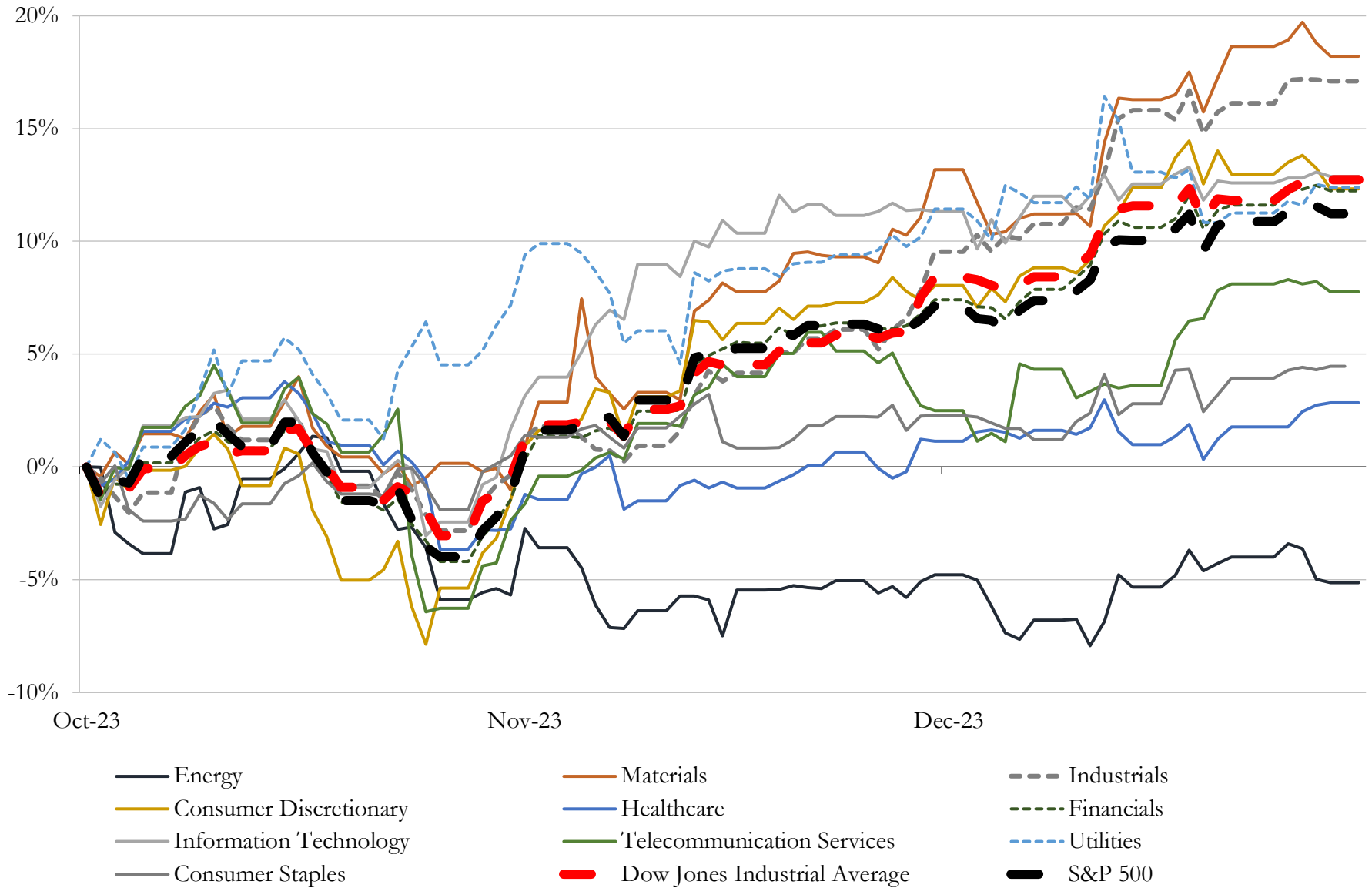
(USD in millions)

Close Date	Target	Acquirer	Implied TEV
Jul-23	Diversey Holdings, Ltd.	Solenis LLC	\$4,516
Mar-23	Global Products Business of Valvoline Inc.	Aramco Overseas Company B.V.	\$2,650
Mar-23	The Stoller Group, Inc.	Corteva, Inc.	\$1,452
Nov-23	Chase Corporation	KKR & Co. Inc.; North America XIII Fund	\$1,330
Feb-23	Textile Effects Business of Huntsman International LLC	Archroma Germany GmbH; Archroma Operations S.À R.L.	\$718
Oct-23	KMG Chemicals, Inc. (nka:FUJIFILM Electronic Materials Process	FUJIFILM Holdings America Corporation	\$700
Mar-23	AgroFresh Solutions, Inc.	Paine Schwartz Partners, LLC; PSP AGFS Holdings, L.P	\$573
Dec-23	Texas City Operations of Eastman Chemical Company	INEOS Acetyls Americas Limited	\$452
Feb-23	Laminates, Films and Coated Fabrics Businesses of Synthomer plc	SURTECO North America, Inc.	\$255
Dec-23	Verdant Specialty Solutions LLC	Samyang Specialty Solutions LLC	\$250
Mar-23	ICP Industrial, Inc.	Stahl Holdings B.V.	\$205
Jan-23	American Chrome & Chemicals Inc.	Yildirim Holding A.S.	\$170
Nov-23	Vycom Plastics, Inc.	Plaskolite, LLC	\$140
Apr-23	Iron Oxide Business of Venator Materials PLC	Cathay Industries	\$140
Aug-23	Glycolic Acid business of The Chemours Company	PureTech Scientific Inc.	\$138
May-23	Fortress North America, LLC	Compass Minerals International, Inc.	\$68
Feb-23	Enduro Composites, Inc.	Creative Composites Group	\$35
Jul-23	Natech Plastics, Inc.	Stratec SE	\$30
Nov-23	Star Thermoplastic Alloys & Rubbers, Inc.	HEXPOL AB (publ)	\$27
Feb-23	CMT Materials, Inc.	ESCO Technologies Inc.	\$18
Oct-23	Substantially all the assets of The Miami Products & Chemical Company	Hawkins, Inc.	\$16
Dec-23	Toppen Health Inc.	Aion Therapeutic Inc.	\$5
May-23	NanoShield windshield strengthener and related automotive assets of C-Bond	Apex Protect GPS, LLC	\$4
Jul-23	EcoTech Enterprises, Inc.	Hawkins, Inc.	\$3
May-23	Nankai Enviro-Tech Corp.	Tenma Corporation	\$2
Dec-23	MoldPro, Inc.	Plastifab Industries Inc.	NA
Dec-23	R&F Industries, Inc.	Candler Industries, Inc.	NA
Dec-23	Cilajet, LLC	VSS Group	NA
Dec-23	Newsom Seed, Inc.	SiteOne Landscape Supply, Inc.	NA
Dec-23	Certain Industrial and Logistics Assets from Odom Industries Inc.	Sipcam Agro USA, Inc.	NA

Source: Capital IQ

# 5 Change in Market Capitalization by Sector

Last Three (3) Months as of December 31, 2023



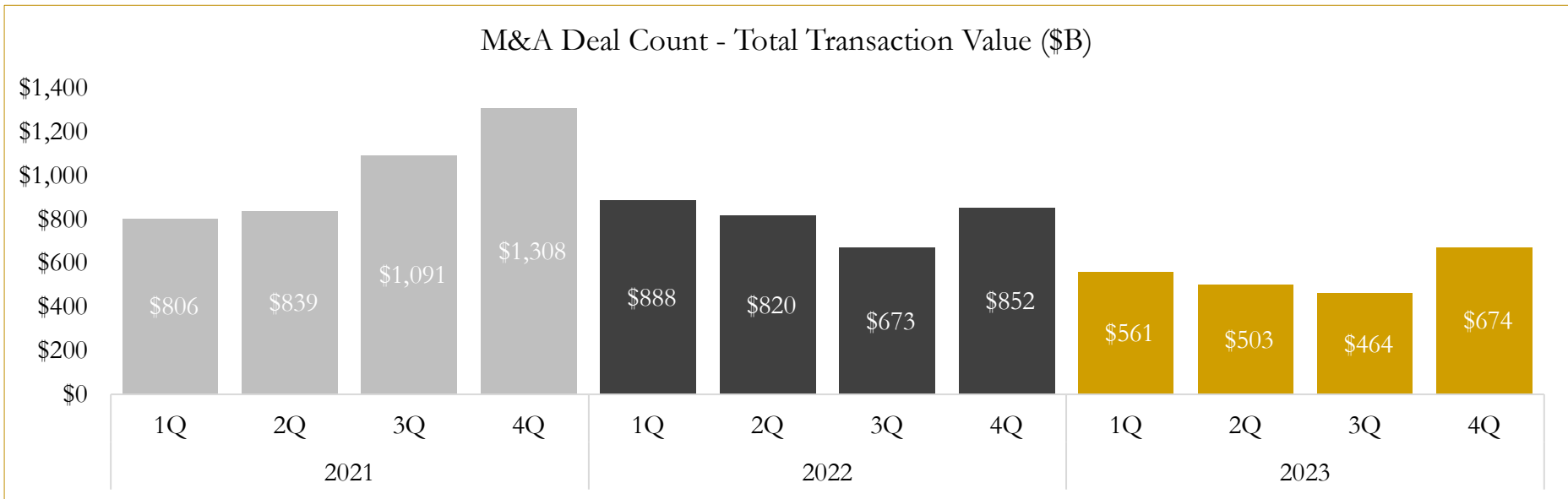
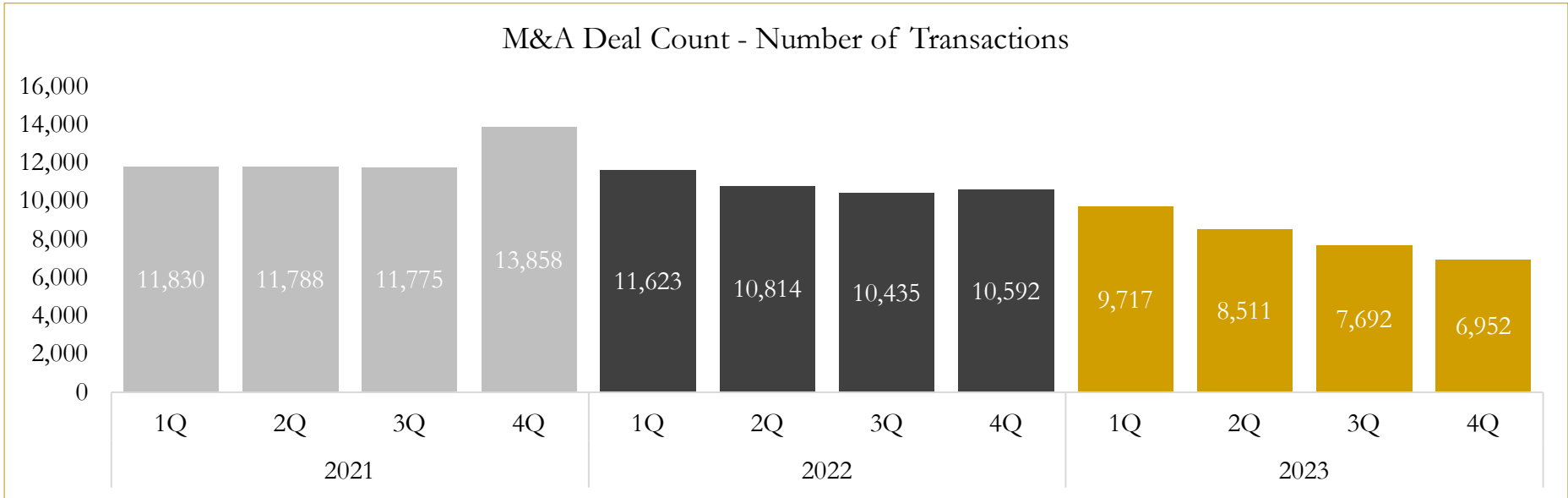
Source: Capital IQ



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## M&A Deal Flow Statistics

Last Three (3) Years as of December 31, 2023



Source: Capital IQ

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### Valuation & Financial Advisory

- **Portfolio Valuation (ASC 820)**
- **Complex & Illiquid Securities (Level 3)**
- **Cryptoasset /Blockchain Valuations**
  - 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)**

### Investment Banking

- **Mergers & Acquisitions**
  - Sell-Side Advisory
  - Sale of Minority Ownership Positions
  - Leveraged Buyouts
  - Majority Recapitalizations
  - Corporate Divestitures
- **Corporate Financial Services**
  - Financial Modeling
  - Investor Presentation
  - Valuation Analysis
  - Strategic Advisory

**For questions or inquiries regarding our services, please contact:**

**[info@houlihancapital.com](mailto:info@houlihancapital.com)**