

Introduction

We are pleased to share our A&D Industry Multiples Valuation Update for Q2 2023.

At Seale & Associates, we are committed to providing process-driven solutions designed to optimize value and achieve our clients' strategic objectives in a range of transactions including Mergers, Acquisitions, Divestitures and Carve-Outs, Business Sales, Recapitalizations, and Joint Ventures, among other corporate finance and strategy consulting services.

Over the course of 25+ years, we have successfully served clients all over the world, and we are delighted to continue providing investment banking advisory services to our A&D Industry clients that are looking to grow through acquisitions or optimize their portfolios through strategic divestitures.

Seale has extensive experience advising leading multinational companies, private equity firms and family-owned businesses across a wide range of industries.



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Representative Aerospace & Defense Experience



























Acquisition Advisory Services











SEALE & ASSOCIATES' SECTOR RELEVANT EXPERIENCE

Case Studies & Seale Approach

- Advised Lockheed Martin Corporation, a global Aerospace and Defense company, on the sale of its commercial flight training business to Alteon, a full-service provider of airline training solutions and a subsidiary of The Boeing Company
 - Seale focused marketing materials on synergies with buyer's business and demonstrated premium pricing rationale through proforma financials
- Advised Triumph Group Inc. on the sale of its Triumph Air Repair business, a provider of APU
 maintenance and overhauls solutions, and Triumph Engines Tempe business, a vertically
 integrated provider of engine component repair and manufacturing services, to The Gores Group
 - The assignment included the sale of a niche provider of hot-section component manufacturing and repair services for original equipment manufacturers, aircraft operators, and repair and overhaul providers
- Advised Triumph Group Inc. on the sale of its Nashville operations to affiliates of TECT Aerospace
 - The Nashville operations offer vertically integrated, build-to-print manufacturing of long-andlarge structural parts to OEM customers
 - The assignment had a number of challenges and issues to resolve, including lack of stand-alone financial statements, accounting block / POC accounting, carve-out operations, declining volumes, restructured business and OEM assignments and approvals
- Advised RFE Investment Partners on the sale of PCX Texas from its PCX Aerosystems portfolio company. The Texas based operations offers large structural airframe parts and assemblies to premier aerospace OEMs and Tier I suppliers on a range of commercial and military platforms
 - Seale positioned the business on a go forward basis that included cost savings from recent restructuring efforts and presented a proforma illustration of performance under increased volumes









Aerospace & Defense Industry Overview, M&A Trends and Market Intelligence

Aerospace & Defense Industry Overview

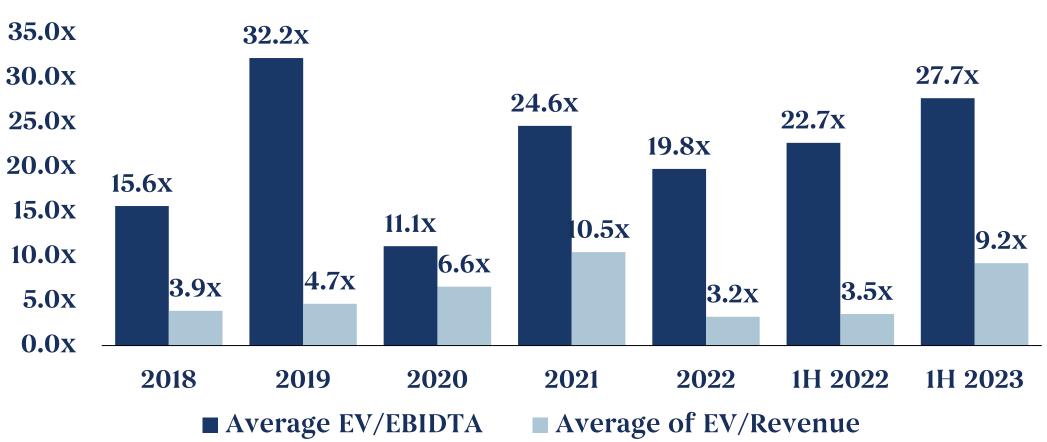
- The global A&D industry closed 2022 with a revenue of US\$795.9 billion. It is expected to grow to US\$855.6 billion by 2023, representing a CAGR of 7.5%
- The A&D market is expected to grow to US\$1,076.6 billion by 2027, representing a CAGR of 5.9%
- North America was the largest region in the A&D market in 2023. It is expected to be the fastest-growing region in the forecast period
- The industry is primarily focused on portfolio optimization, driving assets coming to market at low- to mid-range values as well as strategic and focused acquisitions to build out capabilities and programs (including unmanned and space)
- The aircraft manufacturing sector is beginning to recover after reporting some of the lowest volumes of aircrafts due to the COVID-19 pandemic
- The defense manufacturing sector has remained on an upward trend, the sectors more likely to emerge include intelligence, surveillance, and cybersecurity
- Economic recovery for the A&D industry gained momentum on the heels of rising demand for air travel

Source: Deloitte A&D Industry Outlook, Statista A&D Manufacturing Report, Capital IQ, GlobeNewswire A&D Global Market Report 2023

Aerospace & Defense Industry M&A Deal Size and Volume



Average EV/EBITDA and EV/Revenue multiples in the Aerospace & Defense Industry



Selected OEM's Global Comparable Public Companies

Company		Country	Market Cap.	Enterprise Value	Revenue	EBITDA	Annual Average EV/EBITDA		Second Quarter Jun. 30, 2023	
Company		Country	US\$M	US\$M	US\$M	Margin	2021	2022	EV/ EBITDA	EV/ Revenue
Airbus SE	<i>WAIRBUS</i>	NLD	\$114,018	\$109,498	\$63,588	11.6%	14.8x	11.3x	14.0x	1.7×
Bombardier Inc.	BOMBARDIER	CAN	\$4,701	\$10,043	\$7,120	9.2%	81.5x	26.1x	14.3x	1.4×
Dassault Aviation société anonyme	DASSAULT A V I A T I O N	FRA	\$16,474	\$6,220	\$7,553	10.4%	6.4x	6.9x	5.4x	0.8x
Embraer S.A.	← EMBRAER	BRA	\$2,825	\$4,544	\$4,759	-0.5%	79.8x	14.3x	NM	0.9x
General Dynamics Corporation	GENERAL DYNAMICS	USA	\$58,918	\$68,978	\$39,896	13.3%	11.8x	13.4x	12.1x	1.7×
Northrop Grumman Corporation	NORTHROP GRUMMAN	USA	\$69,218	\$83,030	\$37,106	20.2%	11.3x	9.5x	10.5x	2.2x
Rolls-Royce Holdings plc	ROLLS	GBR	\$16,040	\$20,479	\$16,290	9.5%	16.3x	9.9x	10.1x	1.2x
Saab AB (publ)	(i) SAAB	SWE	\$7,172	\$6,620	\$4,275	10.4%	13.3x	10.7x	15.0x	1.6x
The Boeing Company	Ø BOEING	USA	\$127,032	\$167,680	\$70,538	2.9%	NM	208.0x	68.0x	2.4x
Textron Inc.	TEXTRON	USA	\$13,640	\$15,854	\$12,892	11.6%	13.8x	11.0x	10.2x	1.2x
Excluded from mean and median NM - Not Measurable						Mean Median	12.5x 13.3x	10.9x 11.0x	11.5x 11.3x	1.5x 1.5x

Selected Structure and Manufacturers Global Comparable Public Companies

Company	Country	Market Cap.	Enterprise Value US\$M	Revenue	EBITDA	Annual Average EV/EBITDA		Second Quarter Jun. 30, 2023	
		US\$M		US\$M	Margin	2021	2022	EV/ EBITDA	EV/ Revenue
BAE Systems plc	BAE SYSTEMS GBR	\$35,837	\$40,955	\$25,614	11.9%	8.4x	10.8x	11.0x	1.5x
HEICO Corporation	HEICO USA	\$21,251	\$22,266	\$2,488	26.9%	39.3x	33.4x	32.1x	8.9x
Hexcel Corporation	HEXCEL USA	\$6,414	\$7,077	\$1,645	19.5%	32.2x	21.2x	20.6x	4.3x
Howmet Aerospace Inc.	HOWMET USA	\$20,483	\$24,101	\$5,942	22.1%	14.3x	14.9x	17.5x	4.1x
Leonardo S.p.a.	ELEONARDO ITA	\$6,529	\$11,199	\$16,016	9.4%	5.0x	5.7x	7.1x	0.7x
Lockheed Martin Corporation	LOCKHEED MARTIN → USA	\$116,592	\$129,752	\$66,146	13.1%	10.7x	14.3x	14.3x	2.0x
Raytheon Technologies Corporation	Raytheon Technologies USA	\$142,836	\$174,643	\$68,572	17.3%	17.1x	14.1x	14.1x	2.5x
Spirit AeroSystems Holdings, Inc.	SPIRIT USA	\$3,071	\$6,470	\$5,286	-1.5%	NM	64.4x	NM	1.2x
TransDigm Group Incorporated	TRANSDIGM USA	\$49,115	\$66,555	\$5,897	47.1%	26.4x	21.5x	23.8x	11.3x
Triumph Group, Inc.	TRIUMPH USA	\$810	\$2,293	\$1,379	14.1%	11.5x	12.2x	11.2x	1.7x
Excluded from mean and median NM - Not Measurable					Mean Median	13.3x 11.5x	14.3x 14.2x	15.0x 14.2x	2.2x 1.8x

Selected North American Airlines Global Comparable Public Companies

Company		Country	Market Cap.	Enterprise Value US\$M	Revenue	EBITDA	Annual Average EV/EBITDA		Second Quarter Jun. 30, 2023	
		oo amar y	US\$M		US\$M	Margin	2021	2022	EV/ EBITDA	EV/ Revenue
Air Canada	AIR CANADA	A CAN	\$6,765	\$12,464	\$13,947	7.3%	NM	15.2x	8.6x	0.9x
Alaska Air Group, Inc.	Alaska.	USA	\$6,802	\$8,104	\$10,161	8.7%	27.3x	8.0x	5.1x	0.8x
Allegiant Travel Company	allegiant	USA	\$2,273	\$3,481	\$2,451	14.7%	36.7x	12.2x	9.0x	1.4x
American Airlines Group Inc.	American Airlines	USA	\$11,712	\$42,325	\$52,261	12.3%	NM	16.9x	3.9x	0.8x
Controladora Vuela Compañía de Aviación, S.A.B. de C.V.	volaris +	MEX	\$1,630	\$4,100	\$3,011	4.8%	17.1x	5.4x	8.1x	1.3x
Delta Air Lines, Inc.	▲ DELTA	USA	\$30,555	\$54,604	\$55,746	12.6%	222.4x	21.0x	5.4x	1.0x
JetBlue Airways Corporation	jetBlue	USA	\$2,905	\$5,661	\$9,750	6.1%	NM	10.8x	4.4x	0.6x
SkyWest, Inc.	SKYWEST	USA	\$1,809	\$4,268	\$2,962	17.2%	17.2x	6.6x	6.9x	1.4x
Southwest Airlines Co.	Southwest	USA	\$21,548	\$19,250	\$24,826	8.6%	110.8x	14.6x	7.5x	0.8x
Spirit Airlines, Inc.	spirit	" USA	\$1,873	\$6,703	\$5,451	3.1%	100.0x	24.3x	9.2x	1.2x
United Airlines Holdings, Inc.	UNITED	USA	\$17,996	\$38,024	\$48,818	12.8%	NM	15.7x	3.9x	0.8x
Excluded from mean and medianNM - Not Measurable						Mean Median	24.5x 22.2x	13.7x 14.6x	6.5x 6.9x	1.0x 0.9x

Selected International Airlines Global Comparable Public Companies

Company		Country	Market Cap. US\$M	Enterprise Value US\$M	Revenue US\$M	EBITDA Margin	Annual Average EV/EBITDA		Second Quarter Jun. 30, 2023	
Company		Country					2021	2022	EV/ EBITDA	EV/ Revenue
Air France-KLM SA	AIRFRANCEKLI GROU	FRA	\$4,833	\$13,232	\$30,723	9.1%	NM	7.0x	3.2x	0.4x
ANA Holdings Inc.	ANA	JPN	\$11,075	\$14,064	\$12,845	15.8%	NM	31.4x	7.5x	1.2x
Cathay Pacific Airways Limited	CATHAY PACIFIC	HKG	\$6,580	\$17,940	\$6,545	20.2%	154.4x	51.9x	16.7x	2.8x
Deutsche Lufthansa AG	Lufthansa	DEU	\$12,241	\$19,622	\$37,830	9.7%	NM	15.2x	4.7x	0.5x
easyJet plc	easyJet	GBR	\$4,631	\$4,829	\$8,610	3.4%	NM	6.4x	7.0x	0.5x
International Consolidated Airlines Group S.A.	INTERNATIONAL AIRLINES GROUP	GBR	\$10,120	\$21,754	\$27,727	11.8%	NM	16.4x	4.7x	0.8x
Japan Airlines Co., Ltd.	JAPAN AIRLINES	JPN	\$9,430	\$11,614	\$10,348	14.9%	NM	28.8x	8.3x	1.2x
Korean Air Lines Co., Ltd.	K©REAN AIR	KOR	\$6,832	\$10,715	\$11,354	28.7%	10.0x	5.1x	3.3x	1.0x
LATAM Airlines Group S.A.	LATAM AIRLINES	CHL	\$5,708	\$10,945	\$10,217	9.5%	82.4x	53.8x	9.2x	1.1x
Ryanair Holdings plc	RYANAIR	RIRL	\$21,402	\$20,814	\$11,707	22.0%	56.0x	49.7x	8.1x	1.8x
Excluded from mean and medianNM - Not Measurable						Mean Median	33.0x 33.0x	35.3x 31.4x	6.2x 7.0x	1.1x 1.0x

Selected Avionics Providers Global Comparable Public Companies

Company		Country	Market Cap. ountry US\$M	Enterprise Value	Revenue	EBITDA Margin	Annual Average EV/EBITDA		Second Quarter Jun. 30, 2023	
Company		Country		US\$M	US\$M		2021	2022	EV/ EBITDA	EV/ Revenue
Aerospace Industrial Development Corporation	AIDC	TWN	\$1,813	\$2,379	\$1,128	9.3%	30.6x	22.2x	20.4x	2.2x
BAE Systems plc	BAE SYSTEMS	GBR	\$35,837	\$40,955	\$25,614	11.9%	8.4x	10.8x	11.0x	1.5x
DXC Technology Company	TECHNOLOGY	USA	\$5,630	\$9,460	\$14,430	3.9%	4.7x	3.6x	9.0x	0.7x
Honeywell International Inc.	Honeywell	USA	\$138,077	\$151,551	\$35,954	23.3%	19.5x	16.2x	17.4x	4.2x
L3Harris Technologies, Inc.	L3HARRIS FAST. FORWARD.	[™] USA	\$37,089	\$47,360	\$17,430	15.9%	13.1x	14.1x	16.1x	2.7x
Safran SA	SAFRAN AEROSPACE-DEFENCE-SECURI	FRA	\$65,788	\$66,599	\$21,026	19.0%	18.8x	16.4x	15.6x	3.1x
Thales S.A.	THALES	FRA	\$31,474	\$31,890	\$18,776	13.2%	9.1x	10.5x	10.8x	1.7x
Excluded from mean and median						Mean	12.3x	15.1x	14.3x	2.3x
						Median	11.1x	15.2x	15.6x	2.2x

Selected MRO Service Providers Global Comparable Public Companies

Company		Market Cap.		Enterprise	Revenue	EBITDA	Annual Average EV/EBITDA		Second Quarter Jun. 30, 2023	
Company		Country	US\$M	Value US\$M	US\$M	Margin	2021	2022	EV/ EBITDA	EV/ Revenue
AAR Corp.	AAR	USA	\$1,973	\$2,158	\$1,913	8.5%	18.2x	11.1×	10.9x	1.1x
Aerostar S.A.	AEROSTAR S.A. GRUP INDUSTRIAL AERONAUTIC-BACAU-ROMANIA	ROM	\$277	\$221	\$108	27.3%	10.1x	10.2x	7.5x	2.0x
Latécoère S.A.	LATÉCOÈRE	FRA	\$111	\$461	\$502	-5.0%	33.3x	NM	37.4x	0.9x
MTU Aero Engines AG	Aero Engines	DEU	\$13,949	\$14,626	\$5,696	12.4%	20.8x	15.5x	17.7x	2.5x
Singapore Technologies Engineering Ltd	ST Engineering	SGP	\$8,477	\$13,063	\$6,738	11.5%	14.4x	14.6x	15.3x	2.0x
Excluded from mean and median						Mean	19.4x	12.8x	12.8x	1.7×
NM - Not Measurable						Median	18.2x	12.9x	13.1x	2.0x

Sources: Capital IQ, Mergermarket, TTR

Seale & Associates

Precision Q2 Global Transactions

Date	Target	Country	Description	Buyer	Seller	% Acquired	Size US\$M	EV/ EBITDA	EV/ Revenue
Jun-23	Heads-up-display assets of Saab AB	SWE	Provides an advanced, light-weight integrated head up display, which improves safety during all phases of flight	Honeywell	SAAB	100.0%	-	-	-
Jun-23	ROPESSIONAL AVIATION SERVICES	USA	Provides aviation services	FIVUSA	-	100.0%	-	-	-
Jun-23	NADRANOS	USA	Manufactures solid rocket fuel, and rocket motors for national security, defense, and commercial spaceflight	⊗ ANDURIL	Elevate Ventures, Inc.; Explorer 1 Management Company LLC	100.0%	-	-	-
Jun-23	ALÉ. space	ESP	Develops, designs, operates, and manufactures nano-satellites	Sinnovating solutions	-	100.0%	-	-	-
Jun-23	Remaining Assets of Virgin Orbit	USA	Provides satellite development and launching services.	TIREFLY	ORBIT NATIONAL SYSTEMS	100.0%	\$3.8	-	-
Jun-23	GLOSAL	GRC	Offers aviation services	SEVENAIR Academy EST.1980	-	100.0%	-	-	-
Jun-23	Assets of Uniflight Global in Texas	USA	Provides maintenance, repair, overhaul, aircraft program management, and completions for helicopter and fixed wing operators	OPTIMA AERO	UNIFLIGHT	100.0%	-	-	-
Jun-23	SPACEFLIGHT	USA	Provides launch and in-space transportation services for satellites	FIREFLY AEROSPACE	-	100.0%	-	-	-
Jun-23	YINGLING	USA	Operates as a full-service maintenance, repair, overhaul (MRO) and FBO company	Industrial Partners	-	100.0%	-	-	-
Jun-23	MB AEROSPACE	GBR	Provides engineering solutions to the aerospace and defense industry	BARNES AEROSPACE	Blackstone	100.0%	\$740.0	11.4x	2.2x
Jun-23	PARK AIR	GBR	Provides communication, navigation, and surveillance solutions	ındra	NGC UK Ltd	100.0%	-	-	-
May-23	JBT AeroTech Business	USA	Manufactures and services airport equipment and products	OSHKOSH"	OJBT.	100.0%	\$800.0	9.0x	1.4x
May-23	Certain Long Beach California Aerospace Production and Manufacturing Assets	USA	Operates aerospace production and manufacturing assets	ROCKETLAB	ORBIT NATIONAL SYSTEMS	100.0%	\$16.1	-	-
May-23	Mojave Desert facility	USA	Provides a facility for the premises, including rocket engine test facilities and the aircraft hanger	LAUNCHER	ORBIT NATIONAL SYSTEMS	100.0%	\$2.7	-	-
May-23	Starlink facilities of SpaceX	USA	Offers web services transmitted via satellite	Unipol	SPACEX	100.0%	-	-	-

Sources: Capital IQ, Mergermarket, TTR

Seale & Associates

Precision Q2 Global Transactions

Date	Target	Country	Description	Buyer	Seller	% Acquired	Size US\$M	EV/ EBITDA	EV/ Revenue
May-23	Certain assets of Virgin Orbit Holdings, Inc.	USA	Designs and develops rocket technologies for conducting launch operations	STRATOLAUNCH	ORBIT NATIONAL SYSTEMS	100.0%	\$17.0	-	-
May-23	WENCOR GROUP	USA	Provides design, distribution, and repair solutions for airlines, repair stations, OEMs, personal aircraft, and militaries worldwide	HEICO	WarburgPincus	100.0%	\$2,050.0	12.9x	-
May-23	Intracom Defense S.A.	GRC	Designs, develops, and manufactures defense telecommunications and electronics systems for the defense and security		INTRACOM TELECOM	100.0%	-	-	-
May-23	Duotech	USA	Provides repair, engineering, and maintenance services for military electronic equipment	Bernhard Capital Partners	-	100.0%	-	-	-
May-23	Catering and Cargo Businesses	FRA	Provides cabin catering and cargo activities	HIVEST CAPITAL PARTNERS	SAFRAN AEROSPACE · DEFENCE · SECURITY	100.0%	-	-	-
May-23	Desser Aerospace's Propietary Solutions businesses	USA	Provides aircraft component and repair services intended for the domestic and international aerospace industry	LOARGROUP	AVIATION	100.0%	\$30.0	-	-
May-23	DESSER	USA	Distributes aviation tires, tubes, brakes, and batteries	AVIATION	-	100.0%	\$124.0	-	-
May-23	SALERIA CREATE-PROTECT-SECURE	USA	Develops and manufactures blast protection systems	Synthetik applied technologies	-	Merger	-	-	-
May-23	Federal and Defense Segment	USA	Provides aftermarket refurbishment and sustainment services to extend and maintain the life cycle of military vehicles, ships, and aircraft	Bernhard Capital Partners	AVIATION	100.0%	\$100.0	-	-
Apr-23	B N Britten-Norman	GBR	Designs and manufactures aircraft machinery	Cranfield Aerospace Solutions	-	100.0%	-	-	-
Apr-23	Aerosystems International Inc.	CAN	Provides and manufactures electric control system for the aerospace industry	Electrical Components International	-	100.0%	-	-	-
Apr-23	PINNACLE	USA	Provides simulation and training solutions to the Department of Defense, training system contractors, and weapon system original equipment manufacturers	AKIMA	-	100.0%	-	-	-
Apr-23	VERUS TECHNOLOGY GROUP	USA	Develops and manufactures counter-Unmanned Aerial Systems (c-UAS) products and security technology	BLUEHALO	-	100.0%	-	-	-
							Mean Median	11.1x 11.4x	

Sources: Capital IQ, Mergermarket, TTR

Private Equity Transactions

INDUSTRY CLASIFICATION	PERIOD	AVERAGE ENTERPRISE VALUE (IN USD)	REVENUE (IN USD)	TTM REVENUE GROWTH	ENTERPRISE VALUE / REVENUE	EBITDA MARGIN	ENTERPRISE VALUE /EBITDA	NUMBER OF TRANSACTIONS
	0-0-0-0	\$	\$	\$ \$ \equiv \text{\$}	\$	\$	\$	\$
Aerospace Product and Parts Manufacturing NAICS 3364 – Aerospace Product and Parts Manufacturing	2017-2022	\$41.1M	\$25.1M	7.0%	1.9x	27.8%	6.5x	10
Other Aircraft Parts and Auxiliary Equipment Manufacturing NAICS 336413- Other Aircraft Parts	2017-2021	\$56.9M	\$33.5M	3.2%	2.0x	28.8%	6.7x	5

and Auxiliary Equipment Manufacturing

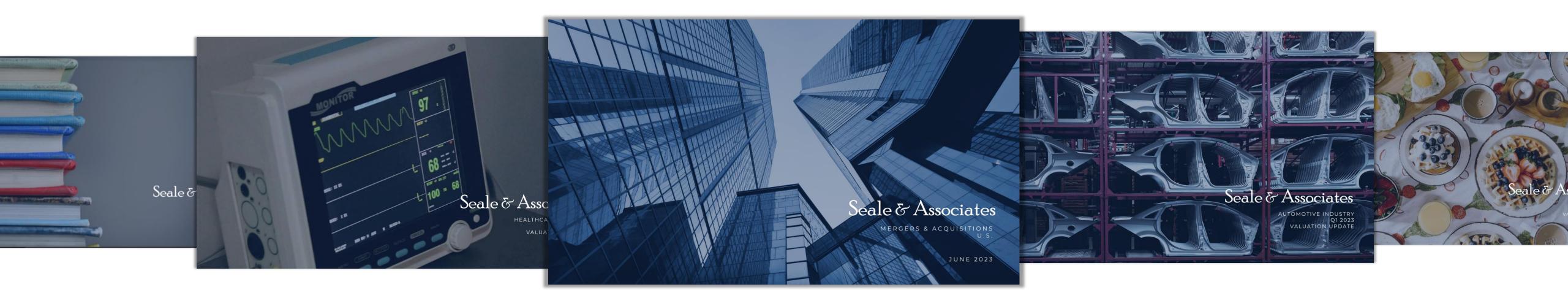
Source: GF Data

Notes

- Data obtained via GF Data, a subscription-based information platform, offering detailed information and metrics about the transactions of Private Equity funds in the U.S.
- The data is provided under a blind confidential format. Users of the data are unable to identify the exact company and transaction corresponding to the transaction details. Given this blind approach, the data submitted is less likely to be biased or manipulated.

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One of our core capabilities is to deliver sector-specific intelligence designed specifically for industry leaders, private equity firms, and their advisors. Our industry reports and featured articles deliver real-time access to key industry data, including:



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Representative Global Engagements







































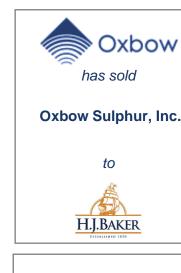


















































Advisor to Leading Companies Worldwide









































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Please contact us if you would like further information about M&A trends and/or specific transaction multiples for your industry

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Creative Solutions. Trusted Advice.

For over 25 years, Seale & Associates has served leading public and private companies from around the world and operating in a broad range of industries with a high level of quality, integrity and independence while presenting innovative ideas and trusted solutions to address their most complex dealings.

YEARS OF EXPERIENCE



SERVICES AND SOLUTIONS

Mergers & Acquisitions

Divestitures

Joint Ventures / Alliances

Recapitalizations

Due Diligence / Support

Expert Witness Testimony

Corporate Finance Advisory

Strategy Consulting

Trusted Advisor to Leading Companies Worldwide

We have worked repeatedly with many of the most well-known companies in the world...

















privately held companies.



...as well as with reputable funds, family-offices and





















































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