



INDUSTRY UPDATE

METALS & MINING
Q1 2022



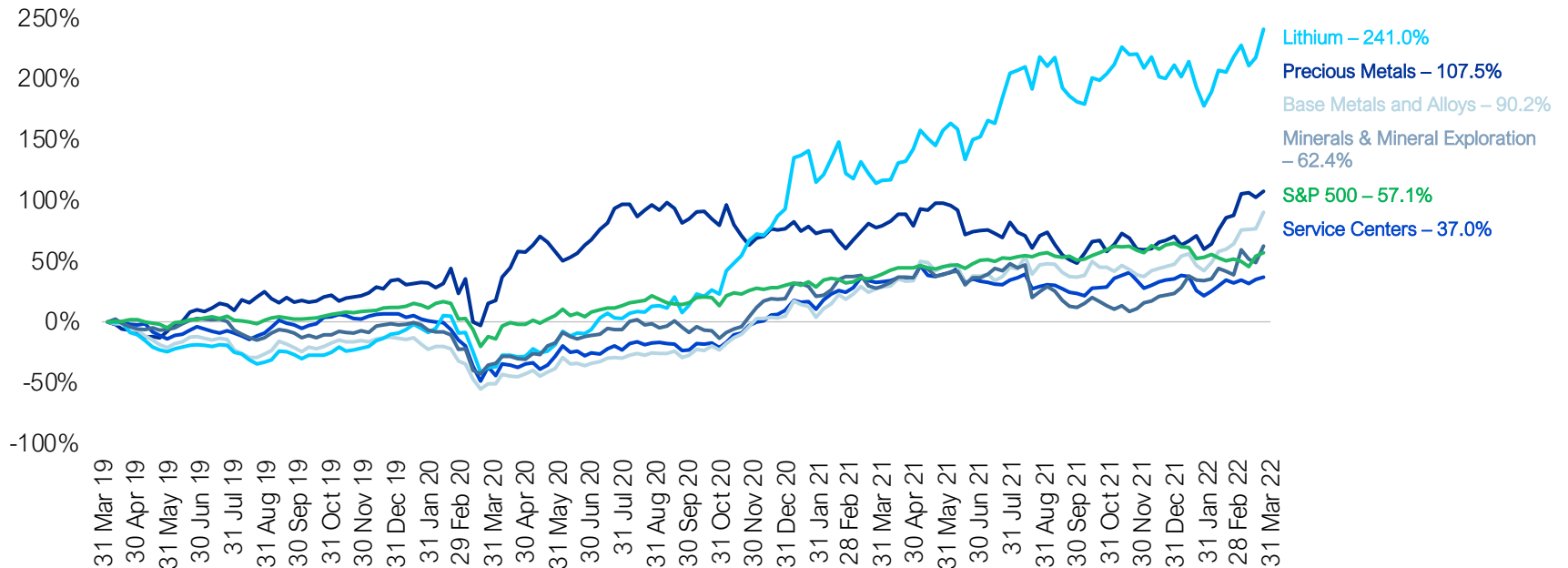
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Public Market Performance

Public equities across most segments of the Metals & Mining industry continued to increase in Q1 2022 after the sector came out of a slump in Q4 2021. The Metals & Mining industry stabilized after several quarters of volatility and uncertainty, and the majority of the industry outperformed the S&P 500. During times of economic uncertainty, many consumers look to precious metals as safe investments which could be what is leading to increases in this sector, however, there is cause for concern. The unexpected war in Ukraine and global supply chain issues have caused a worldwide constraint on commodities such as precious and base metals. Paired with the Federal Reserve raising interest rates to combat inflation, the growth expectation for precious metals seems bleak for the remainder of the year. Mining companies experienced growth, but it was tempered by spikes in COVID cases in January and February of 2022. The overall outlook of the industry is positive, but gains may come slow as companies navigate the everchanging global landscape. On a 3-year period ending in March 2022, the Lithium, Precious Metals, Base Metals and Alloys, and Minerals & Mineral exploration sectors (241.0%, 107.5%, 90.2%, and 62.4%, respectively) outpaced the S&P 500, which had a 57.1% return.

Metals & Mining Market Performance

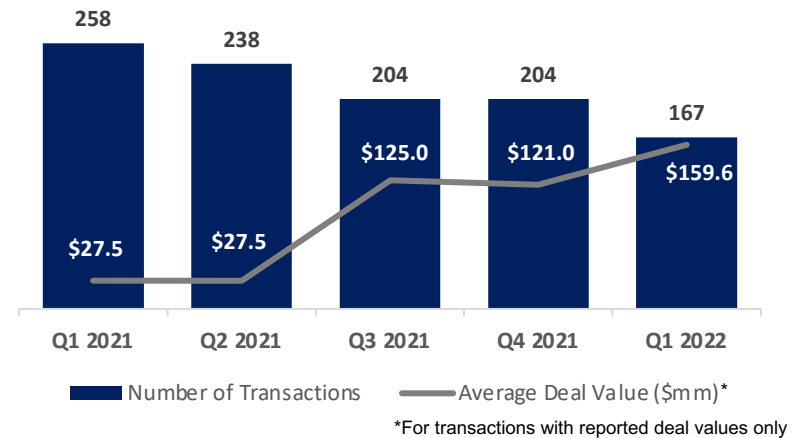


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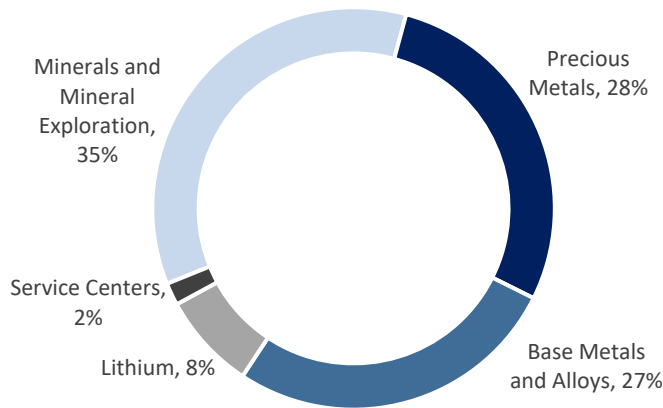
M&A Activity

The volume of M&A activity in the Metals & Mining industry decreased to 167 deals closed in Q1 2022 after stable quarters of 204 deals closed during the prior two quarters. The average deal value (based on transactions with reported values only) interestingly increased by 32% after a slight decrease in Q4 2021. This seemingly indicates that the market is being more selective and targeting higher-end companies rather than investing in a high quantity of mid-range metals & mining companies. Strategic buyers continue to represent the majority of the transactions in the sector as they seek continued growth through acquisition. Private equity sponsors increased their activity in the sector this quarter albeit by a small margin. The Minerals and Mineral Exploration category led activity, accounting for 35% of total Metals & Mining transaction volume. The Precious Metals sector jumped Base Metals and Alloys as the second most attractive sector in the industry with 28% of deal flow.

Metals & Mining M&A Activity

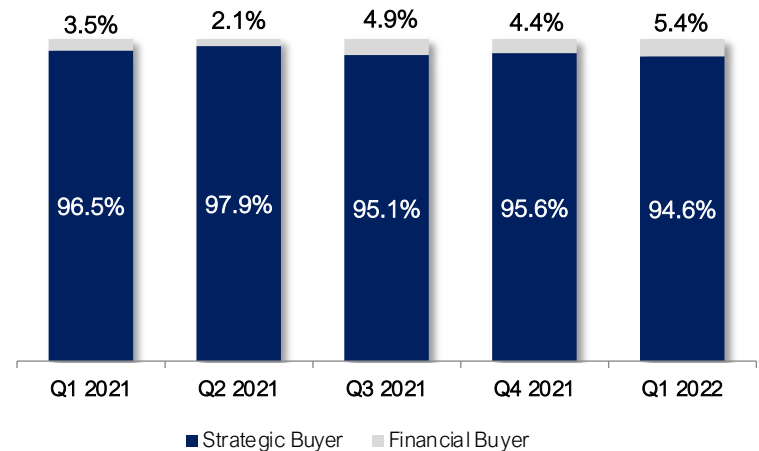


Q1 2022 M&A Activity by Sector



Source: S&P Capital IQ
 Note: All values based on publicly available data as of 3/31/2022

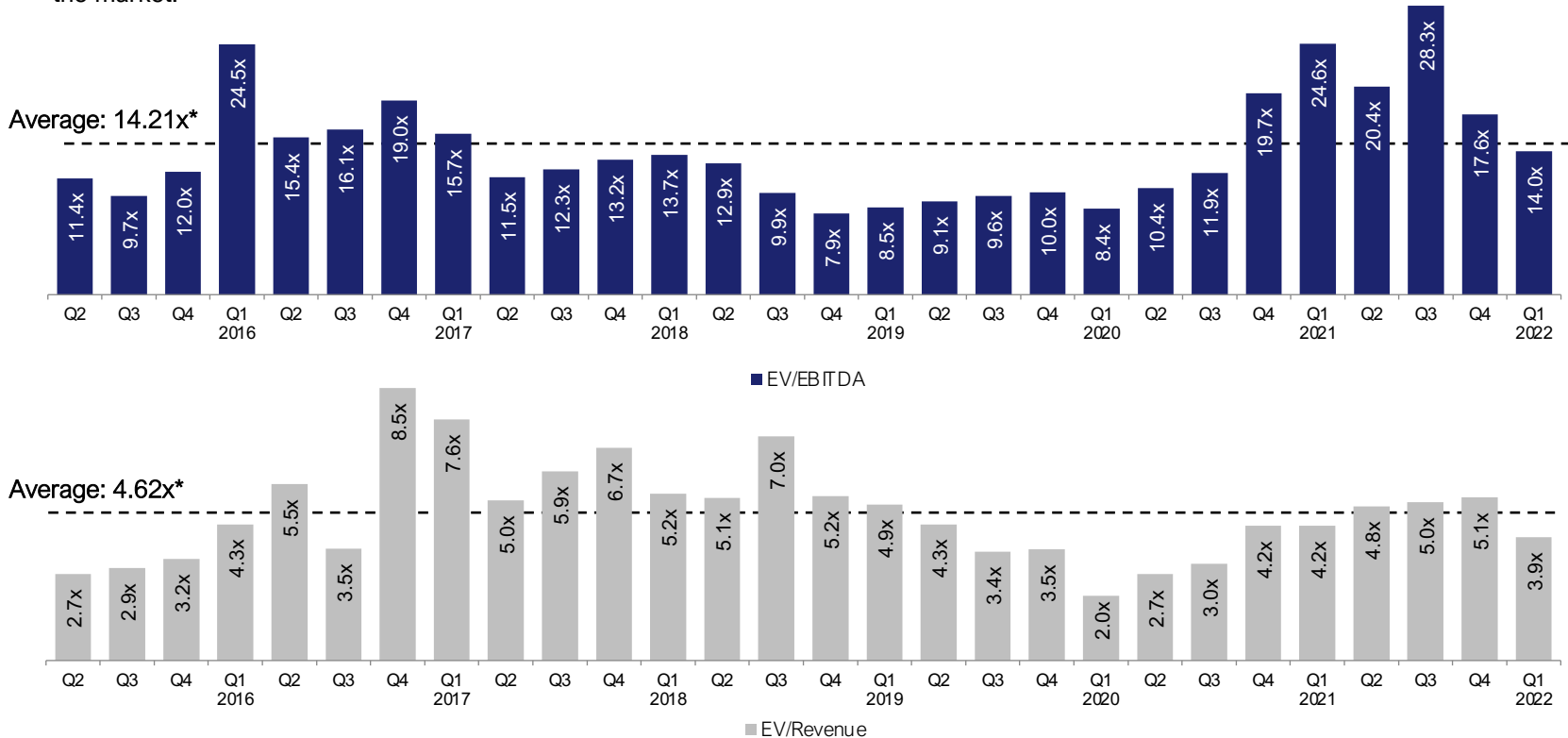
M&A Activity by Buyer Type



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Public Company Trading Multiples

Select publicly traded companies representing the key sectors across the Metals & Mining industry traded at an average multiple of 14.21x EBITDA and 4.62x Revenue. Trading multiples varied significantly across and within the five categories with the strongest multiples observed in the Precious Metals sector. Both global and domestic precious metals producers and explorers had strong quarters with companies such as Golden Minerals, Barrick Gold, Newmont, and Anglo American realizing gains of 43.4%, 29.2%, 28.1% and 20.5% in their share price, respectively, as precious metals continue to be consumers' choice for insurance during uncertainty and volatility across the market.



Source: S&P Capital IQ
 Note: All values based on publicly available data as of 3/31/2022

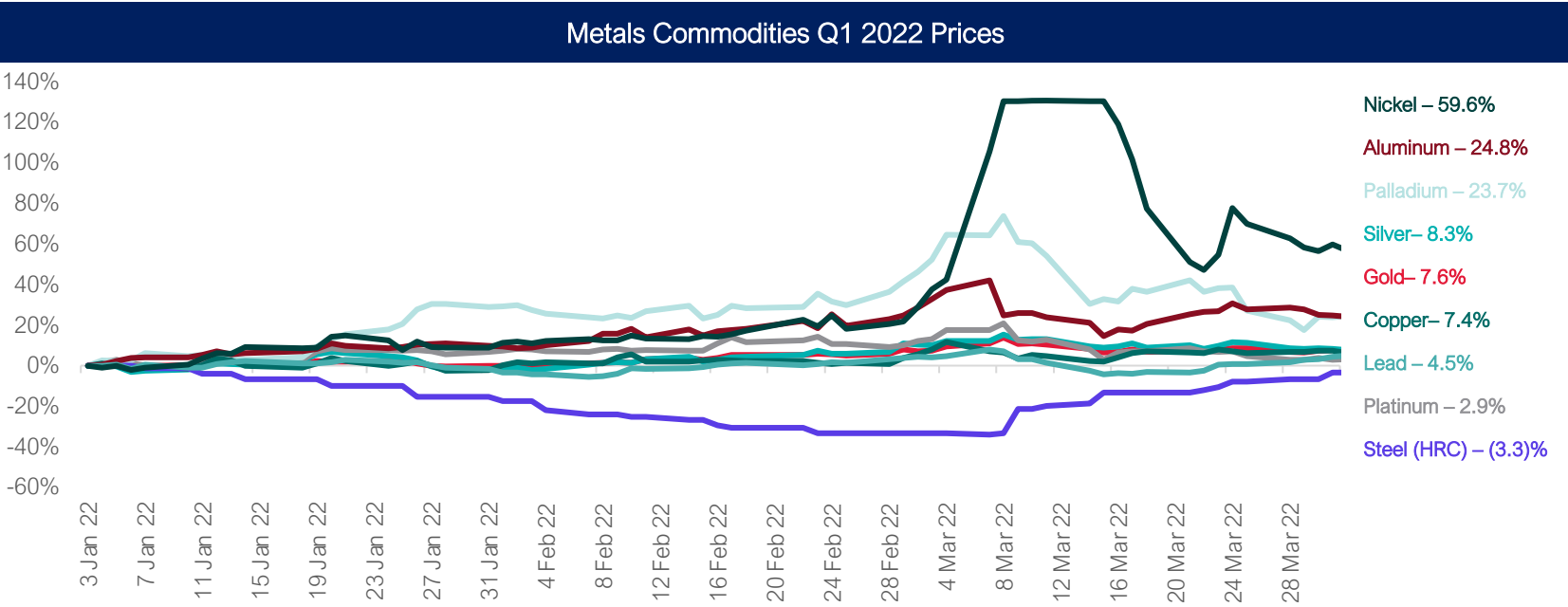
*Limited sample size does not support a meaningful conclusion



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Commodity Prices for Key Metals

Prices for metals commodities have increased in Q1 2022 for numerous macroeconomic reasons. A key driver of this price increase has been the Russia-Ukraine war that began in the middle of the first quarter. Much of the world relies on Russia to supply nickel and aluminum (10% and 6% of the world's supply, respectively), and ongoing sanctions against Russia have caused prices for both commodities to skyrocket as the global supply has been diminished. Gold prices also increased this quarter from Russia-Ukraine supply chain worries, surging inflation, and the resumed production of high-grade gold mining. Gold took a hit in the latter part of the quarter when the Federal Reserve increased interest rates, which investors view as a reason to move away from the haven asset. Palladium and silver (23.7% and 8.3% gains, respectively) rounded off the strong quarter for precious metals. The increase in metals prices has had an impact on margin compressions for metals companies around the globe, but domestic players are outperforming foreign competitors as the United States has emphasized its efforts to rely on American mining operations to supply the country with steel, copper and other materials necessary for growth. Additionally, the metals reclamation industry has grown due to the increase in construction, the high demand for automobiles, and green energy initiatives all requiring metals while the global supply of mined metals is constricted.



Source: S&P Capital IQ
Note: All values based on publicly available data as of 3/31/2022

*Limited sample size does not support a meaningful conclusion



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Select M&A Transaction Activity

Announcement Date	Target Name	Buyer Name	Sector	Value (\$mm)	TEV/Rev	TEV/EBITDA
3/31/2022	Keystone Royalty Corp.	Topaz Energy Corp.	Minerals and Mineral Exploration	85.2	-	-
3/30/2022	Arsham Aluminum Alloys, LLC	Panamera Holdings Corporation	Base Metals and Alloys	-	-	-
3/30/2022	QuestEx Gold & Copper Ltd.	Skeena Resources Limited	Precious Metals	45.8	-	-
3/24/2022	Skeena Resources Limited	-	Precious Metals	990.4	-	-
3/23/2022	Pacific Arc Resources Ltd.	RocketFrac Services Ltd.	Minerals and Mineral Exploration	-	-	-
3/21/2022	Tiffin Metal Products Co.	Steele Solutions Inc.	Base Metals and Alloys	-	-	-
3/11/2022	Gatling Exploration Inc.	MAG Silver Corp.	Precious Metals	18.4	-	-
3/7/2022	Precoat Metals Corp.	AZZ Inc.	Base Metals and Alloys	1,283.0	1.83x	9.36x
3/1/2022	Daam Galvanizing Ltd.	AZZ Inc.	Base Metals and Alloys	36.2	-	-
2/28/2022	Orca Gold Inc.	Perseus Mining Limited	Precious Metals	210.8	-	-
2/10/2022	VAR Resources Corp.	Grounded Lithium Corp	Minerals and Mineral Exploration	-	-	-
2/7/2022	R & B Grinding Co., Inc.	Willis & Smith Capital, LLC	Base Metals and Alloys	-	-	-
1/11/2022	Mi-Tech Tungsten Metals, LLC	Global Tungsten & Powders Corp.	Base Metals and Alloys	-	-	-
1/7/2022	Pima Zinc Corp.	Cybeats Technologies Inc.	Base Metals and Alloys	-	-	-
1/7/2022	Penz Products, Inc.	Tramec Sloan, LLC	Base Metals and Alloys	-	-	-
1/6/2022	LaSalle Exploration Corp.	Harfang Exploration Inc.	Minerals and Mineral Exploration	6.6	-	-
1/5/2022	Busby Metals, Inc.	Wieland-Werke Aktiengesellschaft	Service Centers	-	-	-
1/4/2022	Oregon Metal Services, Inc.	ISSC, Inc.	Base Metals and Alloys	-	-	-

Source: S&P Capital IQ

Note: All values based on publicly available data as of 3/31/2022



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Public Comparable Companies

Company Name	Enterprise	Revenue	Price Change		LTM Margins		TEV / LTM:		
	Value (\$mils)	(\$mils)	3 month	12 month	Gross	EBITDA	Revenue	EBITDA	
Precious Metals									
Anglo American Platinum Limited	\$ 32,894	\$ 13,444	21.6%	(5.7%)	49.0%	50.4%	2.2x	4.4x	
Golden Minerals Company	\$ 70	\$ 31	43.1%	(27.9%)	47.5%	11.5%	2.7x	67.6x	
Agnico Eagle Mines Limited	\$ 30,308	\$ 4,200	19.1%	6.0%	55.7%	47.4%	7.9x	17.0x	
Wheaton Precious Metals Corp.	\$ 21,833	\$ 1,185	14.0%	22.7%	76.4%	70.7%	18.0x	25.2x	
Eldorado Gold Corporation	\$ 2,168	\$ 911	23.0%	1.8%	48.3%	39.9%	2.3x	5.2x	
Pan American Silver Corp.	\$ 5,656	\$ 1,705	12.7%	(10.2%)	36.5%	33.2%	3.4x	9.4x	
Fresnillo plc	\$ 7,399	\$ 2,703	(19.4%)	(21.3%)	34.8%	43.8%	2.8x	6.5x	
Newmont Corporation	\$ 66,367	\$ 12,373	33.5%	33.9%	39.8%	36.0%	5.4x	14.2x	
Barrick Gold Corporation	\$ 53,152	\$ 11,882	31.3%	22.7%	40.2%	52.4%	4.4x	7.6x	
Coeur Mining, Inc.	\$ 1,762	\$ 819	(7.5%)	(50.3%)	29.4%	21.2%	2.1x	7.5x	
Mean	\$ 22,161	\$ 4,925	17.1%	(2.8%)	45.8%	40.7%	5.1x	16.5x	
Median	\$ 14,616	\$ 2,204	20.3%	(1.9%)	43.8%	41.9%	3.1x	8.5x	

Source: S&P Capital IQ

Note: All values based on publicly available data as of 3/31/2022



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Public Comparable Companies (Cont'd)

Company Name	Enterprise	Revenue	Price Change		LTM Margins		TEV / LTM:		
	Value (\$mils)	(\$mils)	3 month	12 month	Gross	EBITDA	Revenue	EBITDA	
Service Centers									
Russel Metals Inc.	\$ 1,846	\$ 3,734	(2.9%)	27.3%	26.4%	14.2%	0.5x	3.5x	
DXP Enterprises, Inc.	\$ 844	\$ 1,188	7.2%	(9.7%)	29.6%	6.9%	0.8x	9.4x	
Reliance Steel & Aluminum Co.	\$ 12,976	\$ 15,741	13.9%	18.7%	31.4%	16.2%	0.9x	5.7x	
Ryerson Holding Corporation	\$ 2,169	\$ 6,277	33.4%	107.5%	21.7%	11.2%	0.4x	4.1x	
Schnitzer Steel Industries, Inc.	\$ 1,819	\$ 3,248	(0.1%)	21.3%	14.5%	8.6%	0.6x	5.5x	
Worthington Industries, Inc.	\$ 3,541	\$ 4,700	(6.6%)	(25.6%)	16.5%	10.0%	0.8x	5.2x	
thyssenkrupp AG	\$ 2,944	\$ 41,922	(21.6%)	(35.7%)	14.5%	6.0%	0.1x	1.8x	
Klöckner & Co SE	\$ 2,225	\$ 9,281	12.6%	7.9%	23.8%	10.2%	0.3x	2.4x	
Toyota Tsusho Corporation	\$ 25,029	\$ 66,110	(10.5%)	(1.7%)	9.5%	5.1%	0.4x	7.2x	
Olympic Steel, Inc.	\$ 757	\$ 2,545	55.6%	19.8%	21.3%	8.4%	0.3x	3.7x	
Mean	\$ 5,415	\$ 15,475	8.1%	13.0%	20.9%	9.7%	0.5x	4.8x	
Median	\$ 2,197	\$ 5,489	3.6%	13.3%	21.5%	9.3%	0.5x	4.6x	

Source: S&P Capital IQ

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Public Comparable Companies (Cont'd)

Company Name	Enterprise	Revenue	Price Change		LTM Margins		TEV / LTM:		
	Value (\$mils)	(\$mils)	3 month	12 month	Gross	EBITDA	Revenue	EBITDA	
Base Metals and Alloys									
United States Steel Corporation	\$ 11,512	\$ 21,845	58.9%	51.3%	30.4%	28.5%	0.6x	2.1x	
Nucor Corporation	\$ 44,011	\$ 36,484	30.8%	86.9%	30.3%	27.9%	1.2x	4.3x	
Commercial Metals Company	\$ 5,791	\$ 7,866	14.4%	34.7%	18.4%	13.9%	0.7x	5.0x	
Allegheny Technologies Incorporated	\$ 4,729	\$ 2,941	69.5%	22.7%	14.2%	11.3%	1.7x	16.0x	
Carpenter Technology Corporation	\$ 2,747	\$ 1,694	48.5%	4.8%	6.5%	4.6%	1.8x	65.3x	
Haynes International, Inc.	\$ 605	\$ 400	21.0%	63.8%	17.9%	10.8%	1.7x	20.8x	
Materion Corporation	\$ 2,308	\$ 1,605	(4.9%)	29.2%	18.2%	8.8%	1.5x	15.5x	
Hyundai Steel Company	\$ 13,247	\$ 19,183	(3.0%)	(18.6%)	15.4%	17.7%	0.7x	4.0x	
Voestalpine AG	\$ 9,899	\$ 16,139	(18.2%)	(29.3%)	21.2%	13.3%	0.6x	4.6x	
Glencore plc	\$ 114,446	\$ 203,751	31.0%	68.4%	6.1%	7.9%	0.6x	6.1x	
HBIS Group Co., Ltd.	\$ -	\$ 67,167	-	-	10.6%	8.2%	0.0x	0.0x	
POSCO Holdings Inc.	\$ 25,018	\$ 64,082	2.4%	(16.3%)	15.5%	16.8%	0.4x	2.3x	
Ternium S.A.	\$ 10,141	\$ 17,146	8.5%	20.9%	37.3%	34.7%	0.6x	1.6x	
Southern Copper Corporation	\$ 64,466	\$ 11,165	26.7%	12.6%	65.1%	62.6%	5.9x	9.2x	
Steel Dynamics, Inc.	\$ 18,085	\$ 20,434	36.9%	66.7%	31.0%	27.2%	1.0x	3.8x	
Mueller Industries, Inc.	\$ 3,137	\$ 3,961	(6.9%)	30.5%	23.9%	19.2%	0.8x	4.7x	
Cleveland-Cliffs Inc.	\$ 23,005	\$ 22,350	48.6%	66.6%	24.9%	28.1%	1.1x	4.3x	
Universal Stainless & Alloy Products, Inc.	\$ 148	\$ 166	10.7%	(11.3%)	11.0%	9.4%	1.0x	13.2x	
Alcoa Corporation	\$ 18,411	\$ 12,575	52.1%	181.2%	28.5%	26.1%	1.5x	6.3x	
Synalloy Corporation	\$ 269	\$ 381	(1.1%)	75.7%	19.6%	14.0%	0.8x	6.0x	
Mean	\$ 18,599	\$ 26,567	22.4%	39.0%	22.3%	19.5%	1.2x	9.8x	
Median	\$ 10,020	\$ 14,357	21.0%	30.5%	19.0%	15.4%	0.9x	4.9x	

Source: S&P Capital IQ

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Public Comparable Companies (Cont'd)

Company Name	Enterprise Value (\$mils)	Revenue (\$mils)	Price Change		LTM Margins		TEV / LTM:		
			3 month	12 month	Gross	EBITDA	Revenue	EBITDA	
Lithium									
Albemarle Corporation	\$ 28,598	\$ 3,626	(3.8%)	49.2%	32.9%	28.1%	8.6x	28.4x	
Sociedad Química y Minera de Chile S.A.	\$ 25,658	\$ 2,862	76.0%	63.5%	38.1%	41.1%	9.0x	21.4x	
Ganfeng Lithium Co., Ltd.	\$ 27,962	\$ 2,353	(10.2%)	39.3%	50.4%	43.9%	15.9x	46.2x	
Tianqi Lithium Corporation	\$ 22,930	\$ 1,895	(23.1%)	123.7%	73.2%	71.3%	31.1x	69.4x	
Pilbara Minerals Limited	\$ 7,668	\$ 297	10.5%	211.6%	43.4%	37.0%	25.1x	60.6x	
Livent Corporation	\$ 4,574	\$ 472	12.6%	46.0%	29.7%	23.6%	10.9x	72.8x	
Allkem Limited	\$ 5,913	\$ 241	22.9%	147.9%	64.4%	44.4%	23.8x	53.4x	
Savannah Resources Plc	\$ 90	\$ -	2.8%	(10.6%)	-	NA	0.0x	NM	
Piedmont Lithium Inc.	\$ 1,279	\$ -	40.2%	7.7%	-	NA	0.0x	NM	
Lithium Americas Corp.	\$ 4,991	\$ -	34.1%	146.0%	-	NA	0.0x	NM	
Mineral Resources Limited	\$ 8,166	\$ 2,586	0.5%	39.2%	88.8%	33.9%	3.1x	8.6x	
Mean	\$ 12,530	\$ 1,303	14.8%	78.5%	38.3%	40.4%	11.6x	45.1x	
Median	\$ 7,668	\$ 472	10.5%	49.2%	38.1%	39.1%	9.0x	49.8x	

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Public Comparable Companies (Cont'd)

Company Name	Enterprise	Revenue	Price Change		LTM Margins		TEV / LTM:		
	Value (\$mils)	(\$mils)	3 month	12 month	Gross	EBITDA	Revenue	EBITDA	
Minerals and Mineral Exploration									
CONSOL Energy Inc.	\$ 1,874	\$ 1,475	70.7%	306.0%	39.5%	16.4%	1.5x	6.1x	
Arch Resources, Inc.	\$ 2,425	\$ 2,684	54.4%	232.9%	35.0%	31.0%	1.1x	4.3x	
Peabody Energy Corporation	\$ 3,884	\$ 3,358	158.4%	764.5%	20.5%	17.8%	1.2x	4.9x	
Alliance Resource Partners, L.P.	\$ 2,299	\$ 1,712	21.9%	162.1%	35.6%	31.1%	1.5x	4.8x	
Warrior Met Coal, Inc.	\$ 1,945	\$ 1,237	47.5%	124.9%	54.5%	47.3%	1.8x	4.7x	
Beijing Haohua Energy Resource Co., Ltd.	\$ 3,307	\$ 1,379	46.0%	181.9%	64.6%	53.7%	3.1x	6.8x	
Whitehaven Coal Limited	\$ 3,438	\$ 1,678	64.7%	139.7%	51.4%	49.2%	2.0x	3.7x	
Hallador Energy Company	\$ 217	\$ 248	40.2%	75.1%	19.7%	14.9%	0.9x	5.8x	
BHP Group Limited	\$ 210,476	\$ 67,879	30.1%	13.1%	85.2%	59.3%	3.0x	5.1x	
Mean	\$ 25,540	\$ 9,072	59.3%	222.2%	45.1%	35.6%	1.8x	5.1x	
Median	\$ 2,425	\$ 1,678	47.5%	162.1%	39.5%	31.1%	1.5x	4.9x	
Metals & Mining Mean	\$ 16,924	\$ 13,855	23.3%	62.8%	32.3%	27.0%	2.0x	9.3x	
Metals & Mining Median	\$ 4,860	\$ 2,902	21.0%	29.2%	29.6%	23.6%	1.1x	5.2x	

Source: S&P Capital IQ

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Metals & Mining Expertise

GCG's Metals & Mining team has vast industry background and expertise formed by working with clients across nearly all aspects of the sector. Our professionals bring direct experience in senior operating roles within the industry to augment our investment banking and consulting services. With experience serving private and publicly traded Metals & Mining companies, GCG has a deep understanding of the trends and dynamics affecting this increasingly global industry.

More about Greenwich Capital Group

Greenwich Capital Group ("GCG") is a middle market focused advisory firm offering a range of investment banking and consulting services to private companies, public companies and private equity investors. For additional perspective or to discuss M&A related opportunities in the metals & mining sector, please reach out to GCG's metals & mining practice leader, Chris Lewis. For more information, please visit www.greenwichgp.com.



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Data Sources: We have based our findings on data provided by industry recognized sources. Data and information for this publication was collated from the S&P Capital IQ database. For more information on this or anything else related to our research, please email info@greenwichgp.com.

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