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Industry Observations – March 31, 2019

Steel Industry

Select Steel Public Company Industry Data As of March 31, 2019

(USD in millions, except per share data)

Company Name	Ticker	Market Data					LTM Operating Data			Forward Estimates	
		Price at 03/31/19	% of 52 Week High	Equity Value	Enterprise Value	Debt / Total Capital	Total Assets	LTM Revenue	LTM EBITDA	CY 2019 Revenue Estimate	CY 2019 EBITDA Estimate
Steel Industry											
Haynes International, Inc.	NasdaqGS:HAYN	\$ 32.83	74.4%	\$ 408.7	\$ 405.0	2.4%	\$ 582.5	\$ 452.7	\$ 26.2	\$498.26	\$51.44
Allegheny Technologies Incorporated	NYSE:ATI	\$ 25.57	84.7%	\$ 3,224.6	\$ 4,491.1	43.6%	\$ 5,501.8	\$ 4,046.6	\$ 484.6	\$4,222.63	\$537.02
Worthington Industries, Inc.	NYSE:WOR	\$ 37.32	75.2%	\$ 2,096.7	\$ 2,853.4	43.4%	\$ 2,567.3	\$ 3,841.2	\$ 258.9	\$3,742.57	\$300.51
Carpenter Technology Corporation	NYSE:CRS	\$ 45.85	74.6%	\$ 2,172.4	\$ 2,793.5	30.1%	\$ 3,161.8	\$ 2,319.1	\$ 319.8	\$2,336.23	\$393.86
Universal Stainless & Alloy Products, Inc.	NasdaqGS:USAP	\$ 16.57	53.6%	\$ 145.3	\$ 188.3	16.5%	\$ 353.3	\$ 255.9	\$ 32.4	\$272.72	\$38.00
Reliance Steel & Aluminum Co.	NYSE:RS	\$ 90.26	92.7%	\$ 6,054.5	\$ 8,137.9	32.0%	\$ 8,044.9	\$11,534.5	\$1,190.1	\$11,502.42	\$1,080.44
Olympic Steel, Inc.	NasdaqGS:ZEUS	\$ 15.87	65.4%	\$ 174.7	\$ 467.9	49.6%	\$ 760.7	\$ 1,715.1	\$ 74.7	\$1,651.00	\$55.05
TimkenSteel Corporation	NYSE:TMST	\$ 10.86	56.0%	\$ 486.1	\$ 653.6	26.1%	\$ 1,197.6	\$ 1,610.6	\$ 63.1	\$1,616.82	\$120.71
SunCoke Energy Partners, L.P.	NYSE:SXCP	\$ 12.45	66.9%	\$ 575.5	\$ 1,420.0	56.8%	\$ 1,619.1	\$ 892.1	\$ 212.1	\$952.30	\$223.71
Nucor Corporation	NYSE:NUE	\$ 58.35	84.8%	\$17,784.0	\$ 21,176.0	30.0%	\$ 17,920.6	\$25,067.3	\$4,133.8	\$24,604.82	\$3,404.57
Sims Metal Management Limited	ASX:SGM	\$ 7.60	59.7%	\$ 1,541.4	\$ 1,421.8	2.7%	\$ 2,205.2	\$ 4,805.0	\$ 201.2	\$6,571.56	\$377.70
AK Steel Holding Corporation	NYSE:AKS	\$ 2.75	50.9%	\$ 869.8	\$ 3,144.5	82.3%	\$ 4,515.7	\$ 6,818.2	\$ 635.8	\$6,995.65	\$512.36
SunCoke Energy, Inc.	NYSE:SXC	\$ 8.49	59.3%	\$ 552.7	\$ 1,465.0	55.1%	\$ 2,045.3	\$ 1,450.9	\$ 262.9	\$1,420.75	\$269.07
Steel Dynamics, Inc.	NasdaqGS:STLD	\$ 35.27	67.7%	\$ 7,904.2	\$ 9,176.07	37.9%	\$ 7,857.2	\$12,035.4	\$2,012.1	\$11,535.66	\$1,401.21
Commercial Metals Company	NYSE:CMC	\$ 17.08	68.5%	\$ 2,014.1	\$ 3,346.6	48.3%	\$ 3,728.7	\$ 5,193.0	\$ 376.8	\$6,179.98	\$552.34
Ryerson Holding Corporation	NYSE:RYI	\$ 8.56	66.1%	\$ 320.5	\$ 1,453.3	93.8%	\$ 2,086.3	\$ 4,408.4	\$ 204.9	\$4,865.31	\$250.52
Cleveland-Cliffs Inc.	NYSE:CLF	\$ 9.99	76.3%	\$ 2,902.8	\$ 4,172.5	83.1%	\$ 3,529.6	\$ 2,332.4	\$ 778.2	\$2,280.46	\$708.82
Schnitzer Steel Industries, Inc.	NasdaqGS:SCHN	\$ 24.00	63.2%	\$ 629.1	\$ 790.5	19.3%	\$ 1,087.3	\$ 2,359.6	\$ 181.4	\$2,114.88	\$142.77
United States Steel Corporation	NYSE:X	\$ 19.49	49.7%	\$ 3,378.5	\$ 4,760.5	36.2%	\$ 10,982.0	\$14,178.0	\$1,471.0	\$13,991.93	\$1,198.74
Corsa Coal Corp.	TSXV:CSO	\$ 0.64	48.0%	\$ 60.3	\$ 137.0	19.0%	\$ 283.3	\$ 265.9	\$ 33.4	\$324.00	\$44.00
Warrior Met Coal, Inc.	NYSE:HCC	\$ 30.40	96.1%	\$ 1,567.3	\$ 1,813.2	39.7%	\$ 1,395.0	\$ 1,379.8	\$ 619.2	\$1,221.33	\$496.33

Notes: LTM (latest twelve months); Enterprise Value (market capitalization less total cash and short-term investments plus short-term borrowings and total long-term debt); EBITDA (earnings before interest, taxes, depreciation and amortization)

Source: Capital IQ

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Publicly available information utilized in this publication has been obtained from sources deemed to be reliable. Houlihan does not guarantee the accuracy or completeness of the information provided within this publication. The material presented reflects information known to the authors at the time this publication was written and this information is subject to change.

Select Steel Public Company Valuation Metrics As of March 31, 2019

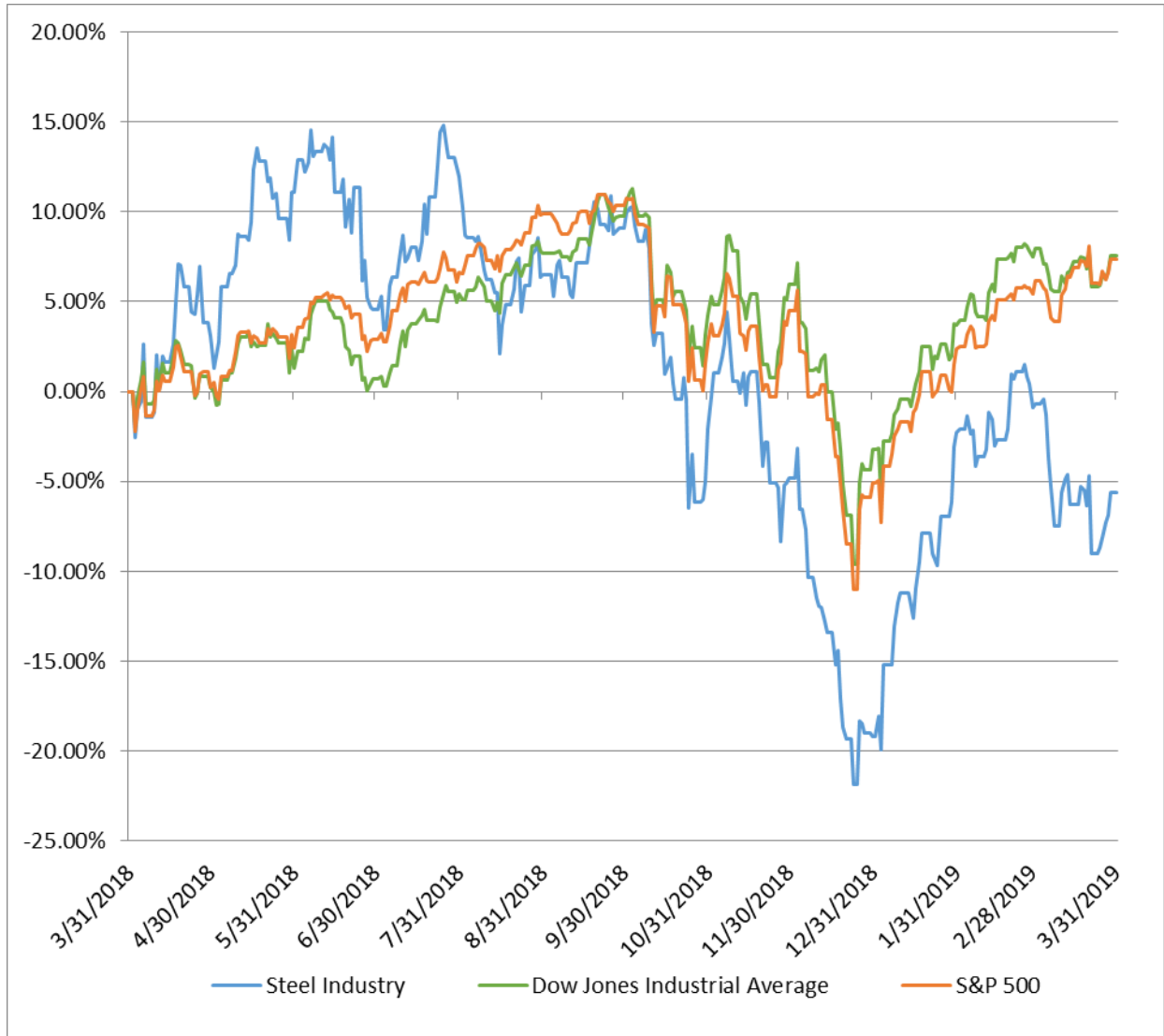
(USD in millions, except per share data)

Company Name	Ticker	LTM Operating Statistics						Trading Multiples			
		Return On Assets	Return On Equity	Return On Capital	Revenue Growth	EBITDA Growth	EBITDA Margin	TEV/ LTM Revenue	TEV/ CY 2019 Revenue	TEV/ LTM EBITDA	TEV/ CY 2019 EBITDA
Steel Industry											
Haynes International, Inc.	NasdaqGS:HAYN	0.4%	-0.3%	0.8%	15.6%	1105.8%	5.8%	0.9x	0.8x	15.5x	7.9x
Allegheny Technologies Incorporated	NYSE:ATI	3.8%	12.3%	5.9%	14.8%	36.3%	12.0%	1.1x	1.1x	9.3x	8.4x
Worthington Industries, Inc.	NYSE:WOR	3.9%	15.3%	5.6%	12.8%	-15.9%	6.7%	0.7x	0.8x	11.0x	9.5x
Carpenter Technology Corporation	NYSE:CRS	4.2%	9.9%	6.3%	19.0%	15.0%	13.8%	1.2x	1.2x	8.7x	7.1x
Universal Stainless & Alloy Products, Inc.	NasdaqGS:USAP	3.0%	5.0%	3.6%	26.3%	56.6%	12.7%	0.7x	0.7x	5.8x	5.0x
Reliance Steel & Aluminum Co.	NYSE:RS	7.7%	13.7%	9.0%	18.7%	35.5%	10.3%	0.7x	0.7x	6.8x	7.5x
Olympic Steel, Inc.	NasdaqGS:ZEUS	5.2%	11.6%	6.6%	28.9%	80.1%	4.4%	0.3x	0.3x	6.3x	8.5x
TimkenSteel Corporation	NYSE:TMST	-0.5%	-5.8%	-0.9%	21.2%	31.7%	3.9%	0.4x	0.4x	10.4x	5.4x
SunCoke Energy Partners, L.P.	NYSE:XCPC	4.6%	9.7%	5.3%	5.5%	-5.6%	23.8%	1.6x	1.5x	6.7x	6.3x
Nucor Corporation	NYSE:NUE	12.2%	25.7%	15.0%	23.8%	56.5%	16.5%	0.8x	0.9x	5.1x	6.2x
	Mean	4.5%	9.7%	5.7%	18.6%	139.6%	11.0%	0.9x	0.8x	8.6x	7.2x
	Median	4.1%	10.8%	5.8%	18.8%	35.9%	11.1%	0.8x	0.8x	7.8x	7.3x

Notes: LTM (latest twelve months); NTM (next twelve months); EBITDA (earnings before interest, taxes, depreciation and amortization); TEV (total enterprise value)

Source: Capital IQ

Steel Industry Public Company LTM Equity Performance
As of March 31, 2019



Note: The indices are derived from the equity performance of the previously listed companies. Source: Capital IQ

Recent M&A Activity in the Steel Industry

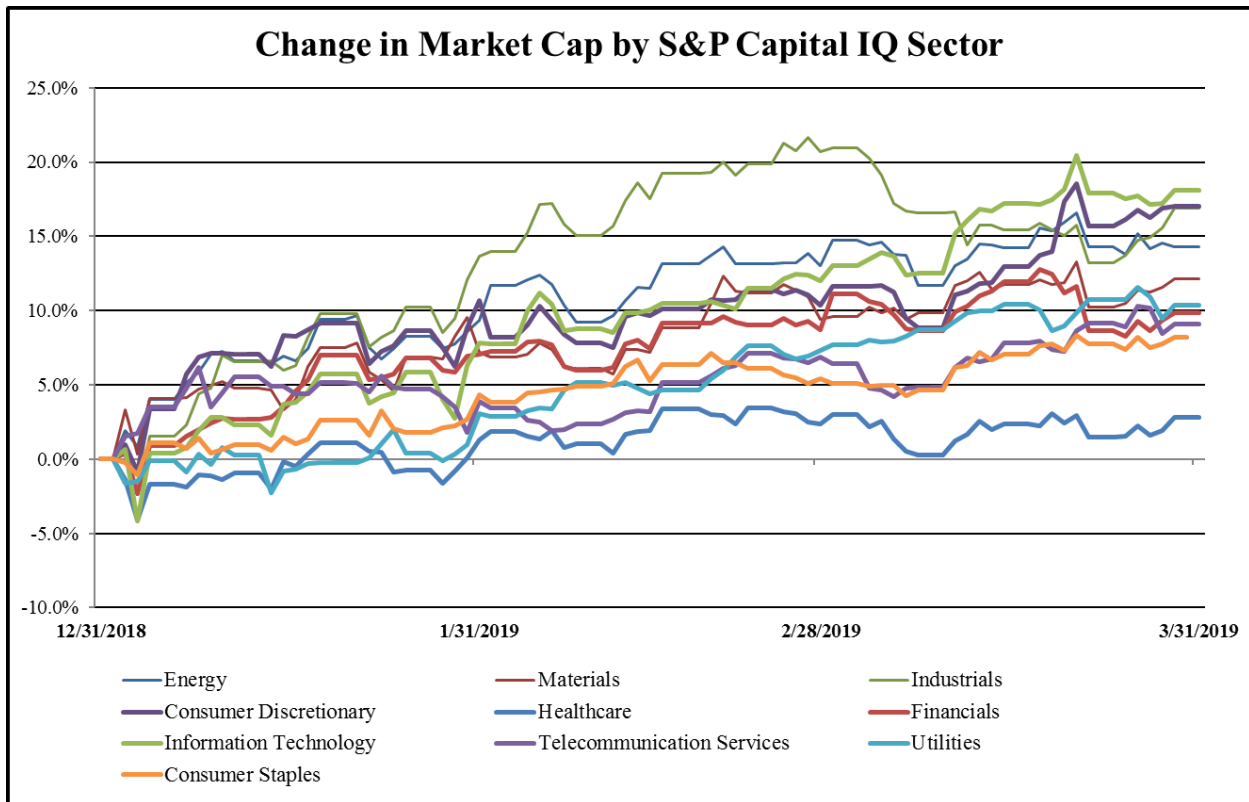
March 31, 2018 to March 31, 2019

(USD in millions)

Close Date	Target	Acquirer	Target Company Primary Industry	Implied Enterprise Value
11/5/2018	TAMCO Steel, Inc. and Gerdau Reinforcing Steel West and	CMC Steel Fabricators, Inc.; CMC Steel US, LLC	Steel	\$701.20
6/29/2018	Heartland Steel Processing, LLC	Steel Dynamics, Inc.	Steel	\$400.00
8/30/2018	Seah Steel California, LLC	SeAH Steel International Co., Ltd.	Steel	\$283.75
6/15/2018	ACERO Junction, Inc. (nka: JSW Steel USA Ohio, Inc)	JSW Steel Limited	Steel	\$182.41
7/27/2018	Ameron Water Transmission Group, LLC	Northwest Pipe Company	Steel	\$38.30
1/1/2019	Substantially All of the Assets of American Stainless	Synalloy Corporation	Steel	\$28.00
9/28/2018	Certain Properties and Manufacturing Facilities of Union	Store Capital Acquisitions, LLC	Steel	\$19.00
7/28/2018	Substantially All Assets of Sivyer Steel Corporation	Crestwood Capital Management, Inc.	Steel	\$12.19
7/1/2018	Galvanized Tube Operations in Munhall of Marcegaglia	Bristol Metals, LLC	Steel	\$10.38
9/18/2018	KES Holdings, LLC	Steel Dynamics, Inc.	Steel	\$5.00
3/31/2019	TSK Partners, Inc.	Ellwood Group, Inc.	Steel	NA
3/29/2019	3D Material Technologies, LLC	Aerojet Rocketdyne Holdings, Inc.	Steel	NA
3/1/2019	Eagle Steel Products, Inc. (nka:Eagle Steel & Metal	Kestrel Co. Inc.	Steel	NA

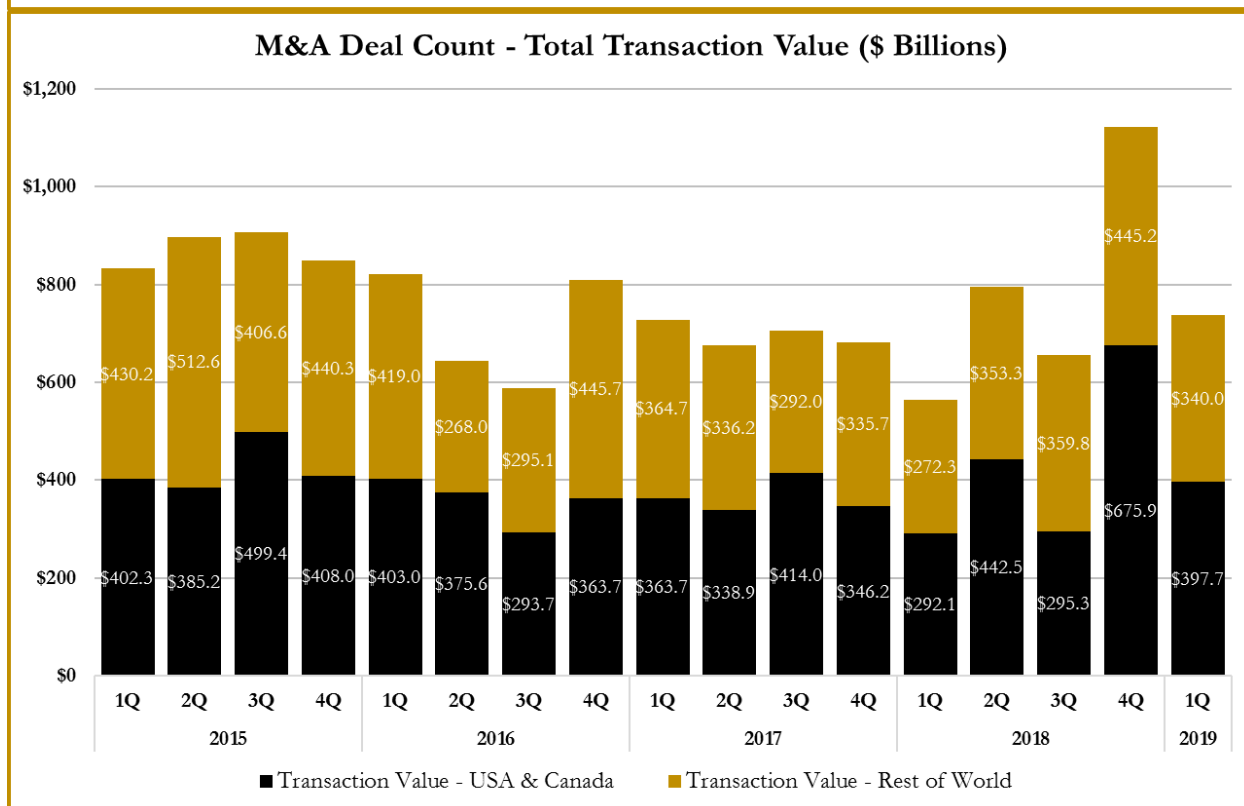
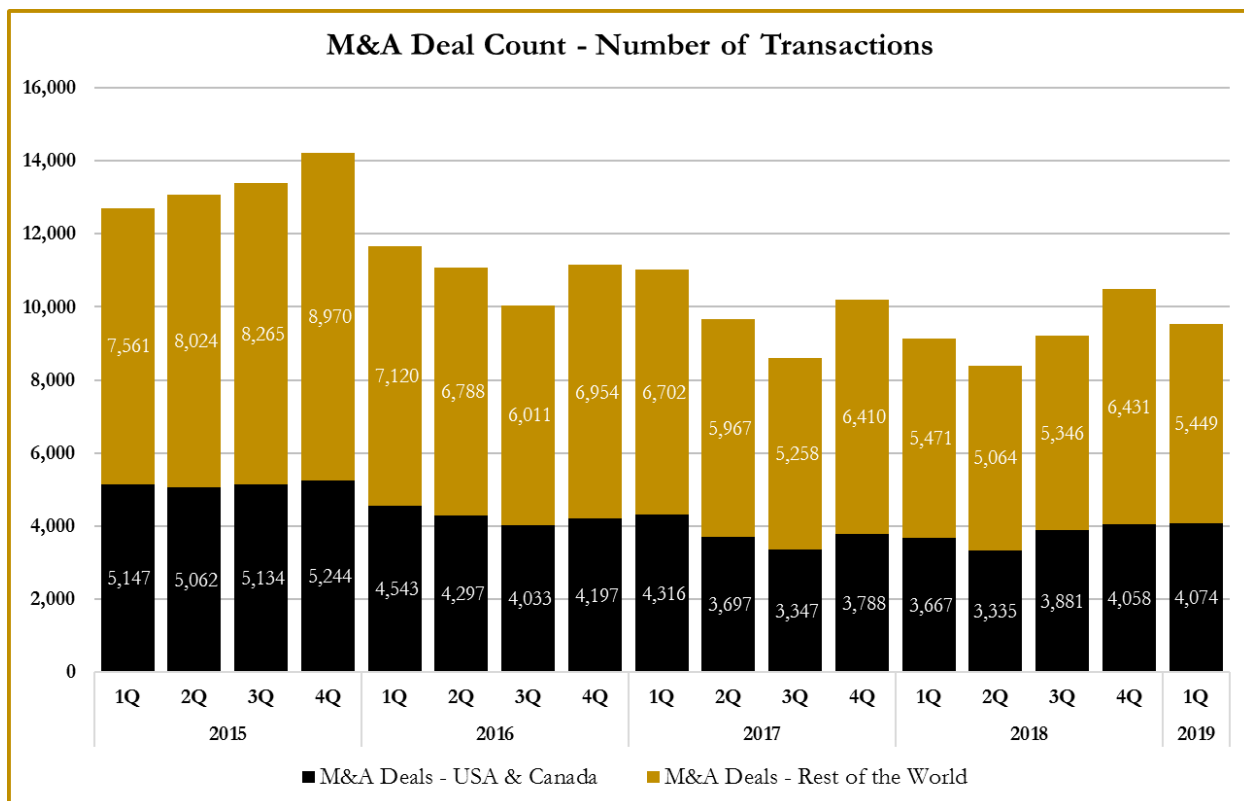
Source: Capital IQ

S&P Capital IQ - Sector Last 3 Month Equity Performance
As of March 31, 2019

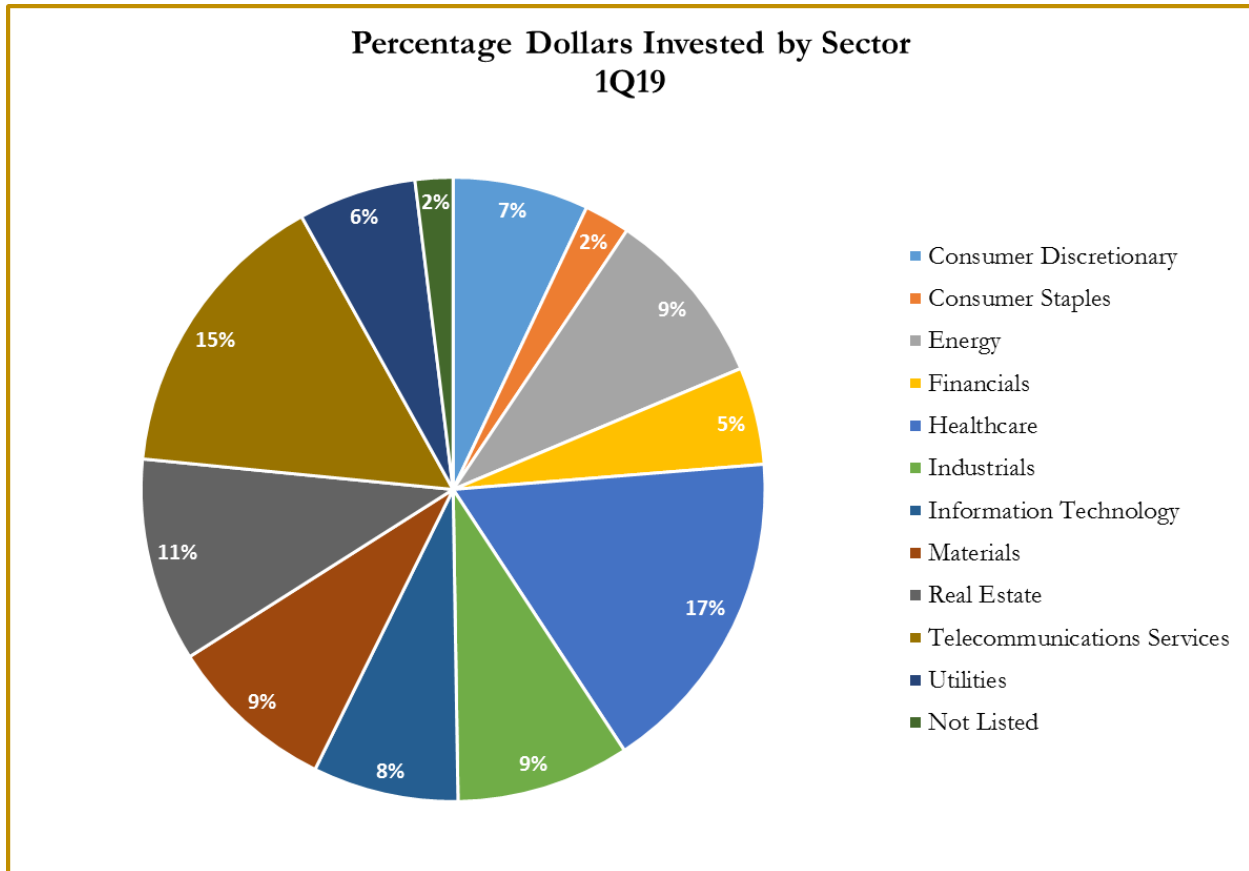


Note: The indices are derived from the equity performance of the S&P Capital IQ Sectors. Source: Capital IQ

M&A Deal Flow Statistics by S&P Capital IQ Sector As of March 31, 2019



M&A Deal Flow Statistics by S&P Capital IQ Sector
As of March 31, 2019





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