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Industry Observations – December 31, 2018

Steel Industry

## Select Steel Public Company Industry Data As of December 31, 2018

(USD in millions, except per share data)

Company Name	Ticker	Market Data					LTM Operating Data			Forward Estimates	
		Price at 12/31/18	% of 52 Week High	Equity Value	Enterprise Value	Debt / Total Capital	Total Assets	LTM Revenue	LTM EBITDA	CY 2018 Revenue Estimate	CY 2018 EBITDA Estimate
Steel Industry											
Haynes International, Inc.	NasdaqGS:HAYN	\$ 26.40	58.5%	\$ 330.1	\$ 328.4	2.4%	\$ 582.5	\$ 452.7	\$ 26.2	\$497.04	\$55.39
Allegheny Technologies Incorporated	NYSE:ATI	\$ 21.77	72.0%	\$ 2,736.1	\$ 4,237.7	43.6%	\$ 5,501.8	\$ 4,046.6	\$ 484.6	\$4,233.95	\$571.96
Worthington Industries, Inc.	NYSE:WOR	\$ 34.84	69.8%	\$ 1,984.4	\$ 2,758.7	43.2%	\$ 2,562.4	\$ 3,808.5	\$ 288.6	\$3,856.57	\$316.32
Carpenter Technology Corporation	NYSE:CRS	\$ 35.61	57.9%	\$ 1,686.8	\$ 2,218.7	30.1%	\$ 3,161.8	\$ 2,319.1	\$ 319.8	\$2,347.25	\$389.47
Universal Stainless & Alloy Products, Inc.	NasdaqGS:USAP	\$ 16.21	52.0%	\$ 141.4	\$ 206.7	17.3%	\$ 353.3	\$ 255.9	\$ 34.7	\$269.24	\$38.51
Reliance Steel & Aluminum Co.	NYSE:RS	\$ 71.17	73.1%	\$ 5,012.6	\$ 7,005.5	29.2%	\$ 8,372.6	\$11,096.9	\$1,178.0	\$11,273.39	\$1,067.85
Olympic Steel, Inc.	NasdaqGS:ZEUS	\$ 14.27	55.2%	\$ 157.1	\$ 457.3	49.6%	\$ 760.7	\$ 1,715.1	\$ 74.2	\$1,651.00	\$55.05
TimkenSteel Corporation	NYSE:TMST	\$ 8.74	43.2%	\$ 389.7	\$ 580.7	27.5%	\$ 1,207.3	\$ 1,545.6	\$ 71.5	\$1,664.62	\$137.75
SunCoke Energy Partners, L.P.	NYSE:SXCP	\$ 10.64	48.5%	\$ 491.9	\$ 1,315.1	56.8%	\$ 1,619.1	\$ 892.1	\$ 209.6	\$952.30	\$224.75
Nucor Corporation	NYSE:NUE	\$ 51.81	73.5%	\$16,264.8	\$ 19,000.6	29.6%	\$ 17,920.6	\$25,067.3	\$4,154.3	\$24,683.06	\$3,454.19
Sims Metal Management Limited	ASX:SGM	\$ 7.08	55.6%	\$ 1,434.5	\$ 1,216.5	1.8%	\$ 2,368.2	\$ 4,778.1	\$ 219.0	\$5,993.94	\$362.40
AK Steel Holding Corporation	NYSE:AKS	\$ 2.25	33.1%	\$ 710.0	\$ 3,038.3	82.3%	\$ 4,515.7	\$ 6,818.2	\$ 635.8	\$6,946.05	\$520.43
SunCoke Energy, Inc.	NYSE:SXC	\$ 8.55	59.7%	\$ 553.6	\$ 1,446.8	55.1%	\$ 2,045.3	\$ 1,450.9	\$ 260.3	\$1,420.75	\$270.23
Steel Dynamics, Inc.	NasdaqGS:STLD	\$ 30.04	57.7%	\$ 6,895.7	\$ 8,215.50	37.9%	\$ 7,703.6	\$11,821.8	\$2,039.6	\$11,540.35	\$1,763.69
Commercial Metals Company	NYSE:CMC	\$ 16.02	60.0%	\$ 1,884.4	\$ 2,420.5	47.3%	\$ 3,708.7	\$ 4,844.5	\$ 338.8	\$6,144.09	\$559.69
Ryerson Holding Corporation	NYSE:RYI	\$ 6.34	49.0%	\$ 237.4	\$ 1,471.1	92.5%	\$ 2,296.8	\$ 4,059.0	\$ 189.1	\$4,947.71	\$247.01
Cleveland-Cliffs Inc.	NYSE:CLF	\$ 7.69	58.7%	\$ 2,291.8	\$ 3,710.5	83.1%	\$ 3,529.6	\$ 2,332.4	\$ 778.2	\$2,267.11	\$739.13
Schnitzer Steel Industries, Inc.	NasdaqGS:SCHN	\$ 21.55	55.5%	\$ 564.9	\$ 671.6	20.0%	\$ 1,109.2	\$ 2,445.5	\$ 194.3	\$2,276.19	\$139.50
United States Steel Corporation	NYSE:X	\$ 18.24	38.3%	\$ 3,233.4	\$ 4,392.4	36.2%	\$ 10,982.0	\$14,178.0	\$1,471.0	\$14,047.12	\$1,290.34
Corsa Coal Corp.	TSXV:CSO	\$ 0.53	31.7%	\$ 50.7	\$ 122.5	20.7%	\$ 286.9	\$ 293.6	\$ 64.7	\$339.20	\$43.90
Warrior Met Coal, Inc.	NYSE:HCC	\$ 24.11	71.5%	\$ 1,272.0	\$ 1,591.9	56.1%	\$ 1,100.1	\$ 1,255.7	\$ 517.1	\$1,224.68	\$461.52

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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## Select Steel Public Company Valuation Metrics As of December 31, 2018

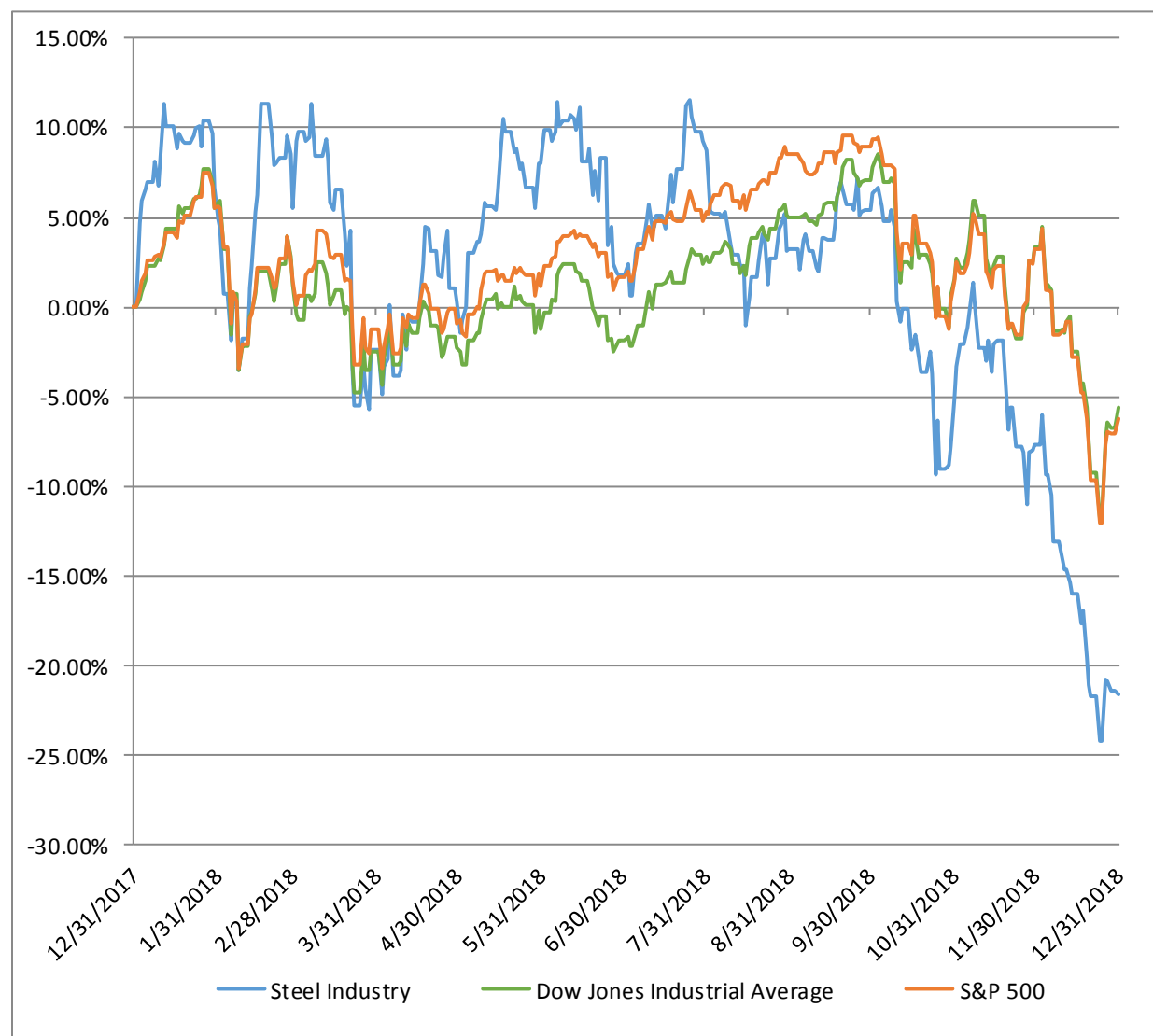
(USD in millions, except per share data)

		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 2018 Revenue	TEV/ LTM EBITDA	TEV/ CY 2018 EBITDA
Company Name	Ticker										
Steel Industry											
Haynes International, Inc.	NasdaqGS:HAYN	0.4%	-0.3%	0.8%	15.6%	1105.8%	5.8%	0.7x	0.7x	12.5x	5.9x
Allegheny Technologies Incorporated	NYSE:ATI	3.8%	12.3%	5.9%	14.8%	36.3%	12.0%	1.0x	1.0x	8.7x	7.4x
Worthington Industries, Inc.	NYSE:WOR	4.6%	20.3%	6.6%	16.5%	-2.9%	7.6%	0.7x	0.7x	9.6x	8.7x
Carpenter Technology Corporation	NYSE:CRS	4.2%	9.9%	6.3%	19.0%	15.0%	13.8%	1.0x	0.9x	6.9x	5.7x
Universal Stainless & Alloy Products, Inc.	NasdaqGS:USAP	3.0%	5.0%	3.6%	26.3%	67.8%	13.6%	0.8x	0.8x	5.9x	5.4x
Reliance Steel & Aluminum Co.	NYSE:RS	7.4%	18.1%	8.9%	18.0%	37.6%	10.6%	0.6x	0.6x	5.9x	6.6x
Olympic Steel, Inc.	NasdaqGS:ZEUS	5.2%	11.6%	6.6%	28.9%	78.9%	4.3%	0.3x	0.3x	6.2x	8.3x
TimkenSteel Corporation	NYSE:TMST	-0.1%	-4.5%	-0.2%	28.5%	26.8%	4.6%	0.4x	0.3x	8.1x	4.2x
SunCoke Energy Partners, L.P.	NYSE:XCPC	4.5%	9.7%	5.2%	5.5%	-6.7%	23.5%	1.5x	1.4x	6.3x	5.9x
Nucor Corporation	NYSE:NUE	12.3%	25.7%	15.1%	23.8%	57.3%	16.6%	0.8x	0.8x	4.6x	5.5x
	Mean	4.5%	10.8%	5.9%	19.7%	141.6%	11.2%	0.8x	0.7x	7.5x	6.4x
	Median	4.4%	10.8%	6.1%	18.5%	37.0%	11.3%	0.7x	0.7x	6.6x	5.9x

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 December 31, 2018



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

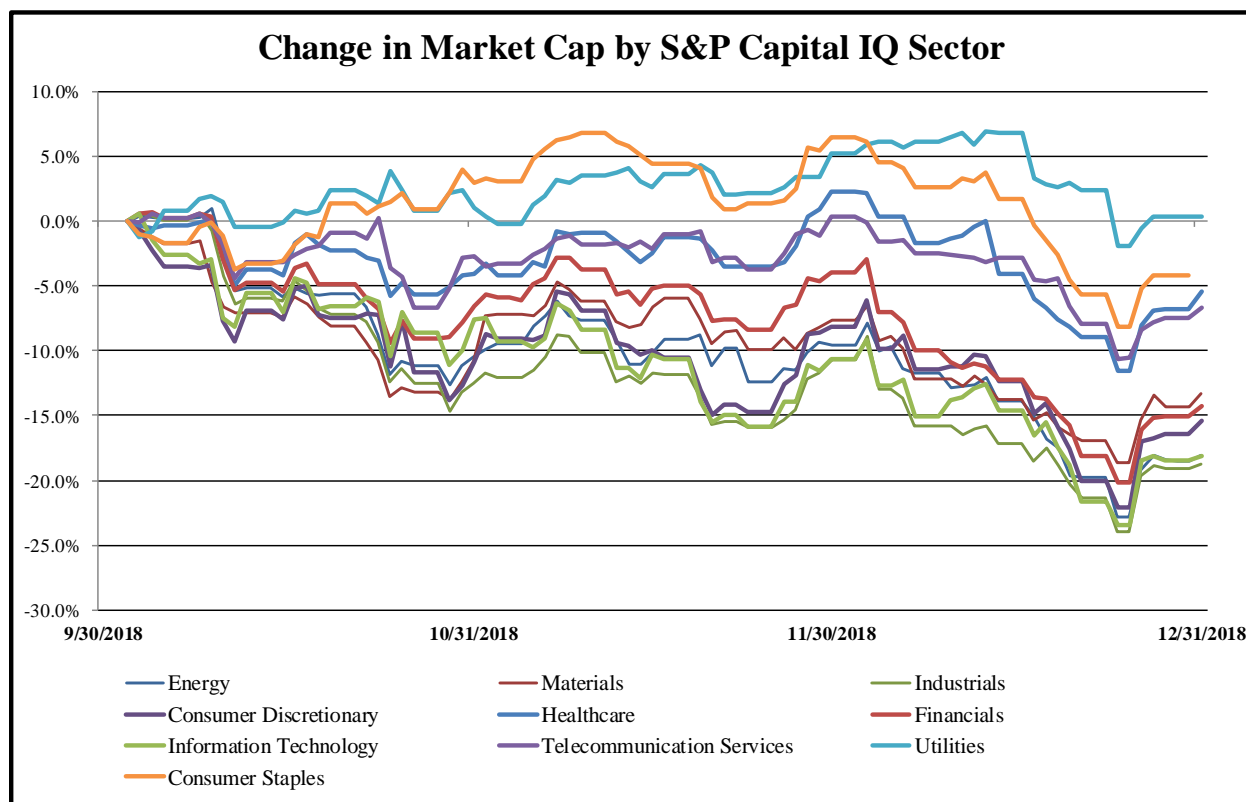
### December 31, 2017 to December 31, 2018

(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
3/30/2018	Wire Rod Mill & Two Downstream Facilities of Gerdau	Optimus Steel LLC	Steel	\$92.50
7/27/2018	Ameron Water Transmission Group, LLC	Northwest Pipe Company	Steel	\$38.30
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
7/2/2018	Galvanized Tube Operations in Munhall of Marcegaglia	Bristol Metals, LLC	Steel	\$10.00
9/18/2018	KES Holdings, LLC	Steel Dynamics, Inc.	Steel	\$5.00
10/24/2018	Moskowitz Bros Inc.	Cohen Holdings, Inc.	Steel	NA
10/5/2018	Assets of Pickling Operations in Dearborn, Michigan of	Maksteel, Inc.	Steel	NA
10/1/2018	The Spillman Company Inc.	New Hampton Metal Fabrication Corp.	Steel	NA
8/21/2018	Accu-Tube Corporation	Washington Equity Partners	Steel	NA

Source: Capital IQ

## S&P Capital IQ - Sector Last 3 Month Equity Performance As of December 31, 2018

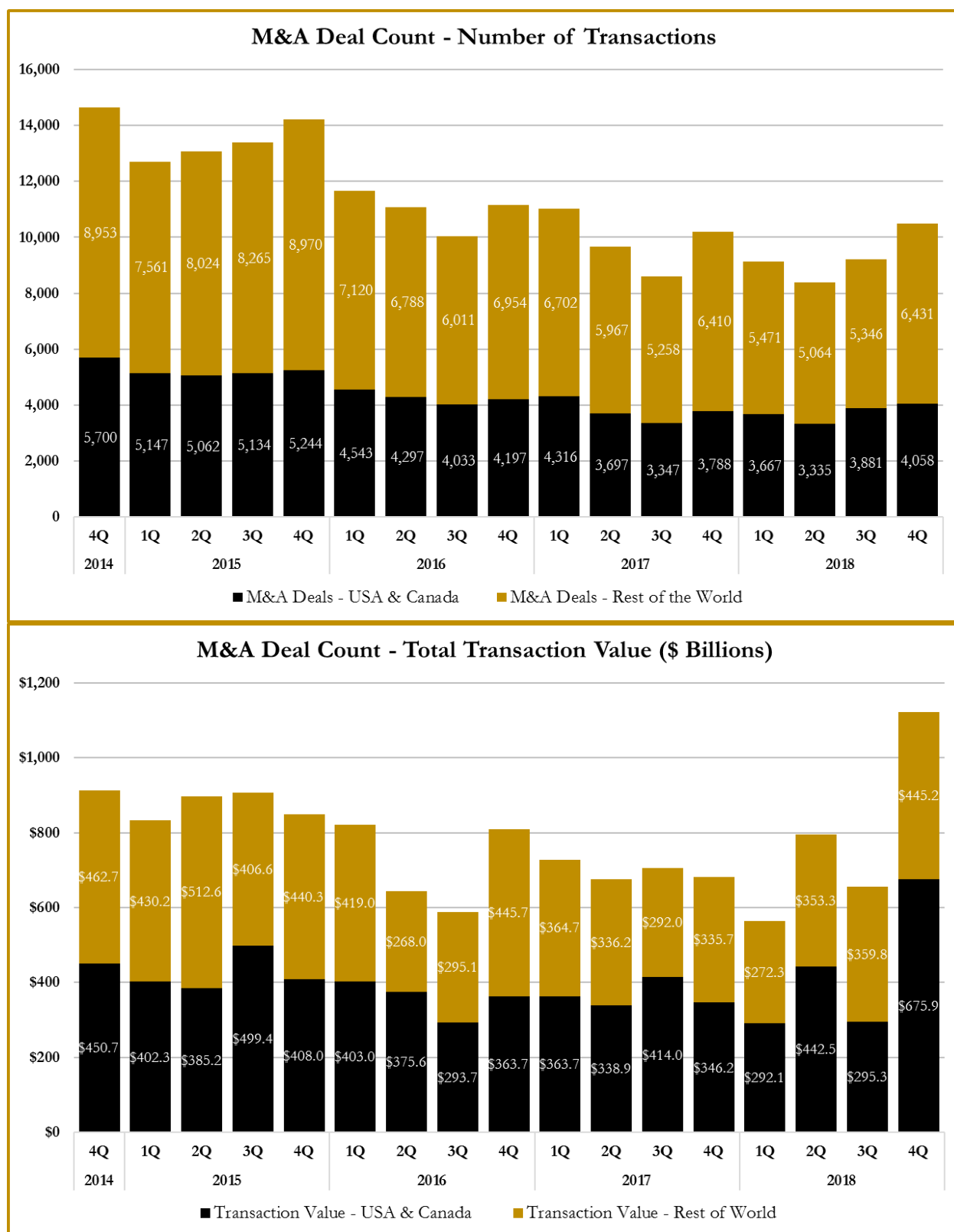


Note: The indices are derived from the equity performance of the S&P Capital IQ Sectors. Source: Capital IQ

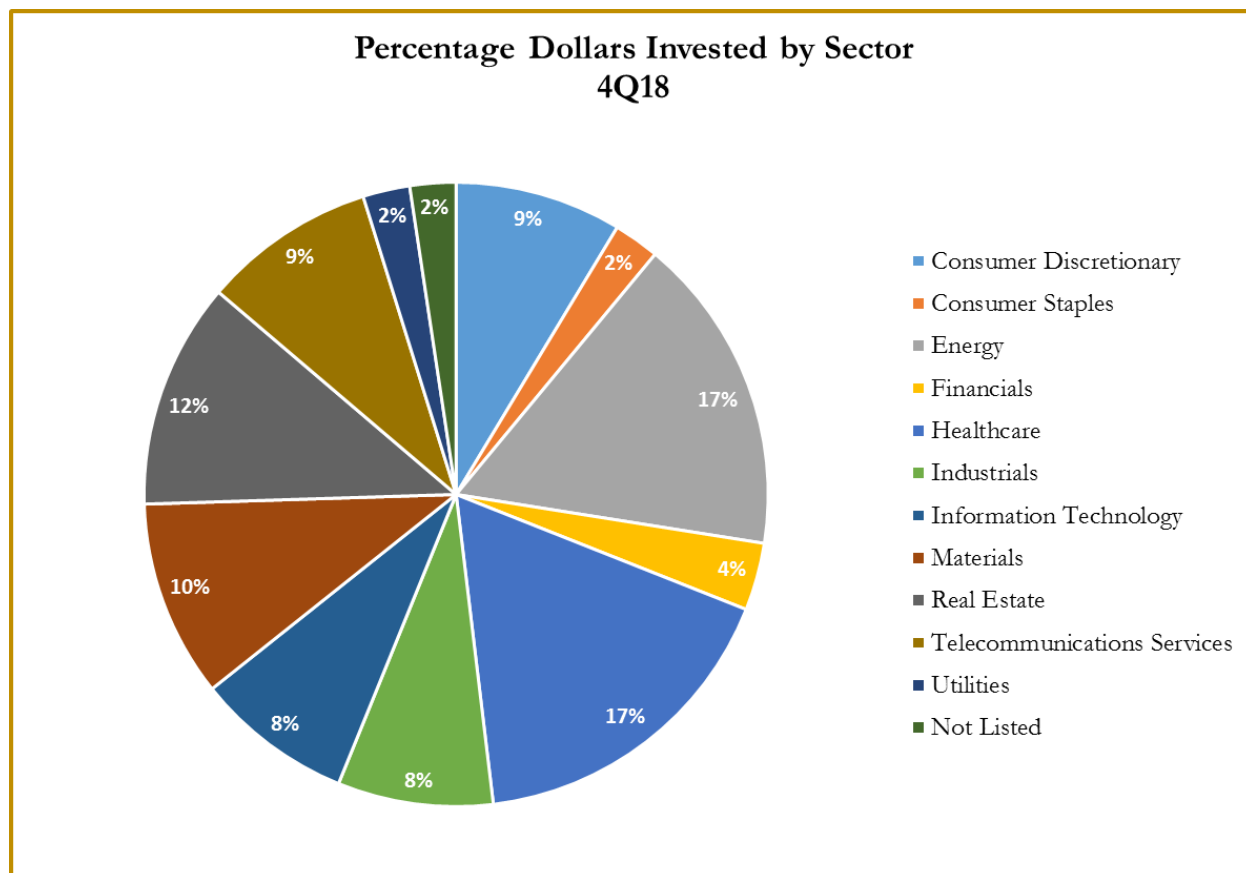


## M&A Deal Flow Statistics by S&P Capital IQ Sector

### As of December 31, 2018



## M&A Deal Flow Statistics by S&P Capital IQ Sector As of December 31, 2018







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