



HOULIHAN
CAPITAL

Value. Added.



Industry Observations – September 30, 2018

Steel Industry

Select Steel Public Company Industry Data As of September 30, 2018

(USD in millions, except per share data)

Company Name	Ticker	Market Data					LTM Operating Data			Forward Estimates	
		Price at 09/30/18	% 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	\$ 35.50	78.6%	\$ 444.1	\$ 437.5	2.5%	\$ 597.5	\$ 413.8	\$ 13.4	\$444.83	\$30.86
Allegheny Technologies Incorporated	NYSE:ATI	\$ 29.55	97.7%	\$ 3,714.0	\$ 5,260.3	42.7%	\$ 5,389.0	\$ 3,918.6	\$ 487.8	\$4,012.70	\$517.43
Worthington Industries, Inc.	NYSE:WOR	\$ 43.36	86.8%	\$ 2,576.0	\$ 3,347.1	42.0%	\$ 2,610.2	\$ 3,721.5	\$ 305.7	\$3,832.99	\$310.87
Carpenter Technology Corporation	NYSE:CRS	\$ 58.95	95.9%	\$ 2,789.3	\$ 3,281.6	26.9%	\$ 3,007.7	\$ 2,250.3	\$ 302.9	\$2,337.63	\$319.70
Universal Stainless & Alloy Products, Inc.	NasdaqGS:USAP	\$ 25.51	81.8%	\$ 221.7	\$ 281.4	21.7%	\$ 351.3	\$ 249.1	\$ 33.1	\$262.25	\$39.51
Reliance Steel & Aluminum Co.	NYSE:RS	\$ 85.29	87.6%	\$ 6,170.8	\$ 8,118.2	29.2%	\$ 8,372.6	\$11,096.9	\$1,178.0	\$11,510.61	\$1,227.19
Olympic Steel, Inc.	NasdaqGS:ZEUS	\$ 20.87	80.8%	\$ 229.7	\$ 521.9	49.7%	\$ 789.3	\$ 1,593.7	\$ 70.8	\$1,700.00	\$85.00
TimkenSteel Corporation	NYSE:TMST	\$ 14.87	73.5%	\$ 663.0	\$ 846.0	27.5%	\$ 1,207.3	\$ 1,545.6	\$ 71.5	\$1,603.34	\$93.00
SunCoke Energy Partners, L.P.	NYSE:SXCP	\$ 15.25	69.5%	\$ 705.0	\$ 1,565.5	56.8%	\$ 1,654.1	\$ 902.9	\$ 228.4	\$887.22	\$211.87
Nucor Corporation	NYSE:NUE	\$ 63.45	90.0%	\$20,072.0	\$ 23,239.0	29.6%	\$ 17,962.9	\$23,863.7	\$3,598.3	\$25,100.71	\$4,123.16
Sims Metal Management Limited	ASX:SGM	\$ 9.16	70.1%	\$ 1,870.6	\$ 1,646.7	1.8%	\$ 2,368.2	\$ 4,778.1	\$ 219.0	\$6,812.95	\$401.02
AK Steel Holding Corporation	NYSE:AKS	\$ 4.90	72.1%	\$ 1,546.0	\$ 3,878.8	82.3%	\$ 4,487.9	\$ 6,636.7	\$ 470.7	\$6,841.92	\$573.17
SunCoke Energy, Inc.	NYSE:SXC	\$ 11.62	81.1%	\$ 752.1	\$ 1,697.4	55.1%	\$ 2,098.2	\$ 1,441.6	\$ 268.7	\$1,421.45	\$254.40
Steel Dynamics, Inc.	NasdaqGS:STLD	\$ 45.19	86.7%	\$10,610.0	\$ 12,122.69	37.3%	\$ 7,798.4	\$11,254.4	\$1,864.4	\$11,888.72	\$2,131.90
Commercial Metals Company	NYSE:CMC	\$ 20.52	76.8%	\$ 2,401.1	\$ 2,959.8	43.7%	\$ 3,328.3	\$ 4,643.7	\$ 352.4	\$4,805.48	\$398.41
Ryerson Holding Corporation	NYSE:RYI	\$ 11.30	87.3%	\$ 421.4	\$ 1,449.1	92.5%	\$ 2,296.8	\$ 4,059.0	\$ 189.1	\$4,393.22	\$225.67
Cleveland-Cliffs Inc.	NYSE:CLF	\$ 12.66	96.6%	\$ 3,772.1	\$ 5,275.4	103.9%	\$ 3,125.0	\$ 2,612.1	\$ 749.0	\$2,452.73	\$816.71
Schnitzer Steel Industries, Inc.	NasdaqGS:SCHN	\$ 27.05	69.6%	\$ 706.5	\$ 873.7	13.8%	\$ 1,104.8	\$ 2,364.7	\$ 195.0	\$2,429.05	\$198.11
United States Steel Corporation	NYSE:X	\$ 30.48	64.0%	\$ 5,401.8	\$ 6,716.8	38.8%	\$ 10,569.0	\$13,620.0	\$1,359.0	\$14,288.69	\$1,812.19
Corsa Coal Corp.	TSXV:CSO	\$ 1.08	60.9%	\$ 102.6	\$ 178.8	20.7%	\$ 286.9	\$ 276.2	\$ 64.3	\$277.70	\$35.80
Warrior Met Coal, Inc.	NYSE:HCC	\$ 27.04	80.2%	\$ 1,427.4	\$ 1,823.0	56.1%	\$ 1,100.1	\$ 1,255.7	\$ 517.1	\$1,331.27	\$569.15

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

The material contained in this publication is meant to provide general information regarding valuation topics. This publication does not constitute investment advice with respect to the securities of any company discussed herein, is not intended to provide information upon which to base an investment decision, and should not be construed as such. Professional advice should be obtained before taking any action based on the information contained herein.

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 September 30, 2018

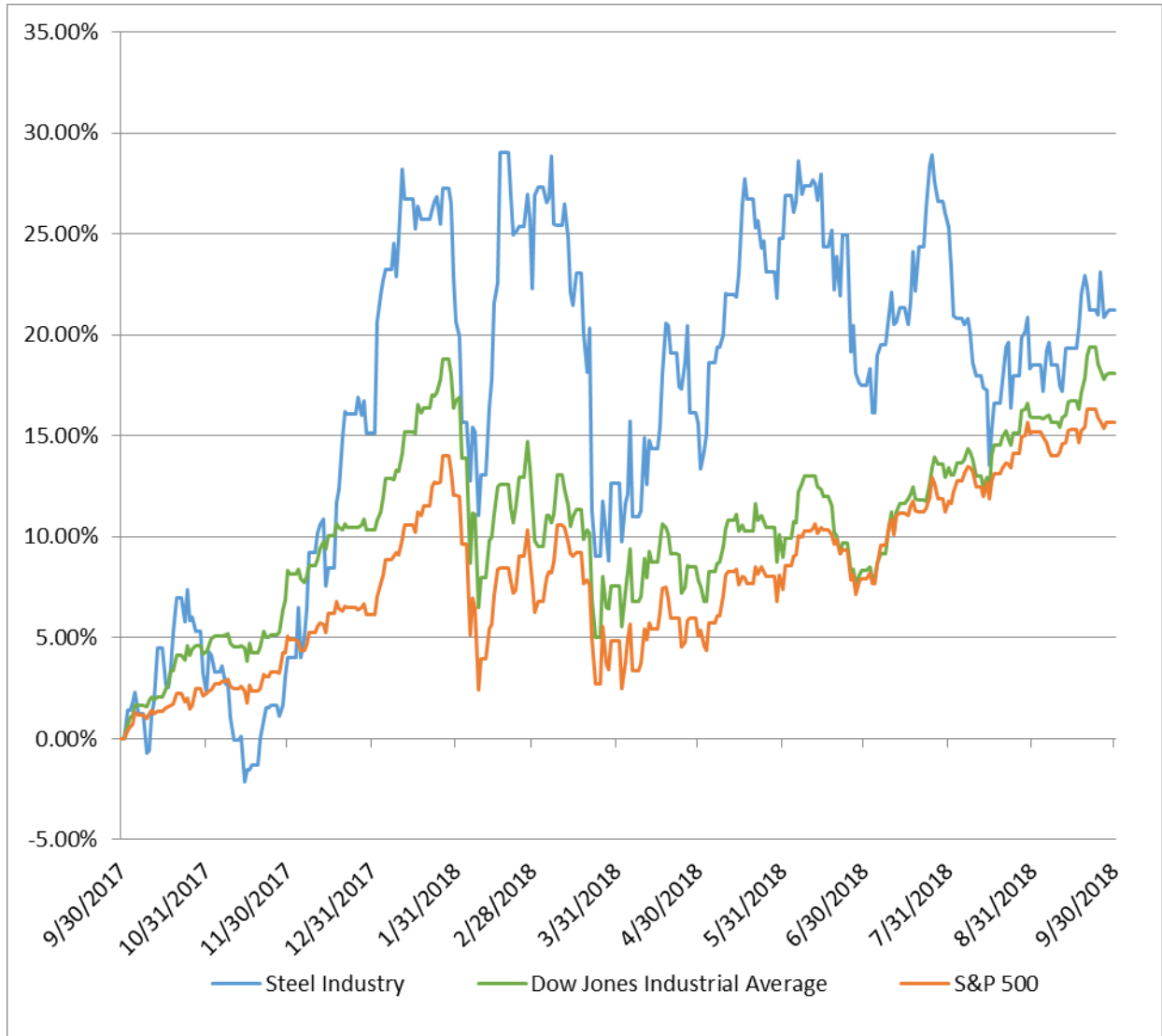
(USD in millions, except per share data)

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 2018 Revenue	TEV/ LTM EBITDA	TEV/ CY 2018 EBITDA
Steel Industry											
Haynes International, Inc.	NasdaqGS:HAYN	-1.0%	-9.0%	-2.0%	2.9%	3.0%	3.2%	1.1x	1.0x	32.6x	14.2x
Allegheny Technologies Incorporated	NYSE:ATI	3.9%	11.2%	5.9%	14.9%	53.0%	12.4%	1.3x	1.3x	10.8x	10.2x
Worthington Industries, Inc.	NYSE:WOR	4.8%	19.8%	7.0%	19.1%	6.1%	8.2%	0.9x	0.9x	10.9x	10.8x
Carpenter Technology Corporation	NYSE:CRS	4.0%	14.4%	6.1%	19.2%	19.7%	13.5%	1.5x	1.4x	10.8x	10.3x
Universal Stainless & Alloy Products, Inc.	NasdaqGS:USAP	3.1%	8.6%	3.6%	33.6%	77.9%	13.3%	1.1x	1.1x	8.5x	7.1x
Reliance Steel & Aluminum Co.	NYSE:RS	7.4%	18.1%	8.9%	18.0%	37.6%	10.6%	0.7x	0.7x	6.9x	6.6x
Olympic Steel, Inc.	NasdaqGS:ZEUS	4.7%	13.6%	6.0%	24.8%	72.4%	4.4%	0.3x	0.3x	7.4x	6.1x
TimkenSteel Corporation	NYSE:TMT	-0.1%	-4.5%	-0.2%	28.5%	26.8%	4.6%	0.5x	0.5x	11.8x	9.1x
SunCoke Energy Partners, L.P.	NYSE:SCP	5.4%	26.4%	6.5%	9.0%	-1.6%	25.3%	1.7x	1.8x	6.9x	7.4x
Nucor Corporation	NYSE:NU	10.0%	23.1%	12.5%	24.8%	38.9%	15.1%	1.0x	0.9x	6.5x	5.6x
	Mean	4.2%	12.2%	5.4%	19.5%	33.4%	11.1%	1.0x	1.0x	11.3x	8.7x
	Median	4.4%	14.0%	6.1%	19.1%	32.2%	11.5%	1.0x	1.0x	9.6x	8.2x

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 September 30, 2018



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

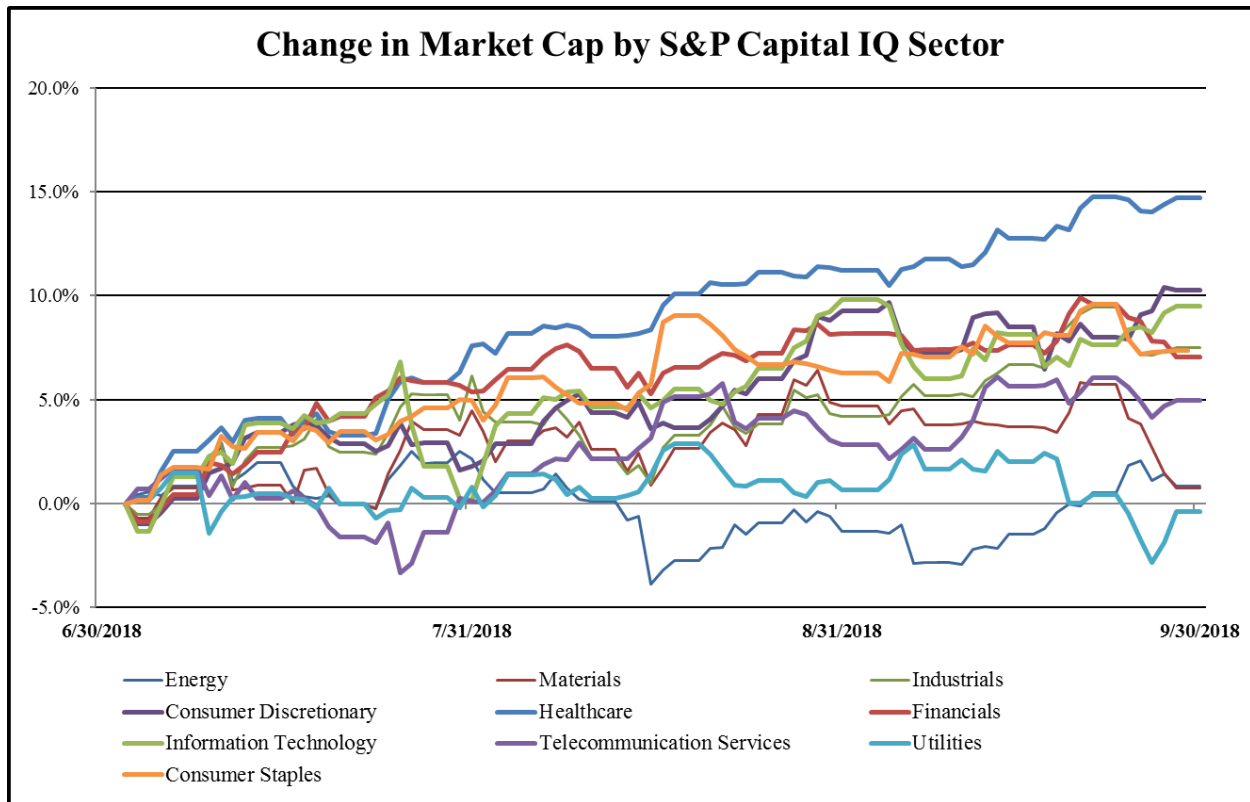
Recent M&A Activity in the Steel Industry September 30, 2017 to September 30, 2018

(USD in millions)

Close Date	Target	Acquirer	Target Company	
			Primary Industry	Implied Enterprise Value
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
12/26/2017	Manufacturing Facility Located at 8154 Industrial Park	Almacenadora Afirme, S.A. de C.V., Organización Auxiliar	Steel	\$37.15
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
8/21/2018	Accu-Tube Corporation	Washington Equity Partners	Steel	NA
5/16/2018	Contractors Steel Company, Inc.	Union Partners I LLC	Steel	NA
3/16/2018	Weldcote Metals, Inc.	ZIKA INDUSTRIES Ltd.	Steel	NA
3/2/2018	Tower Support Services LLC	Edsco Fasteners LLC	Steel	NA

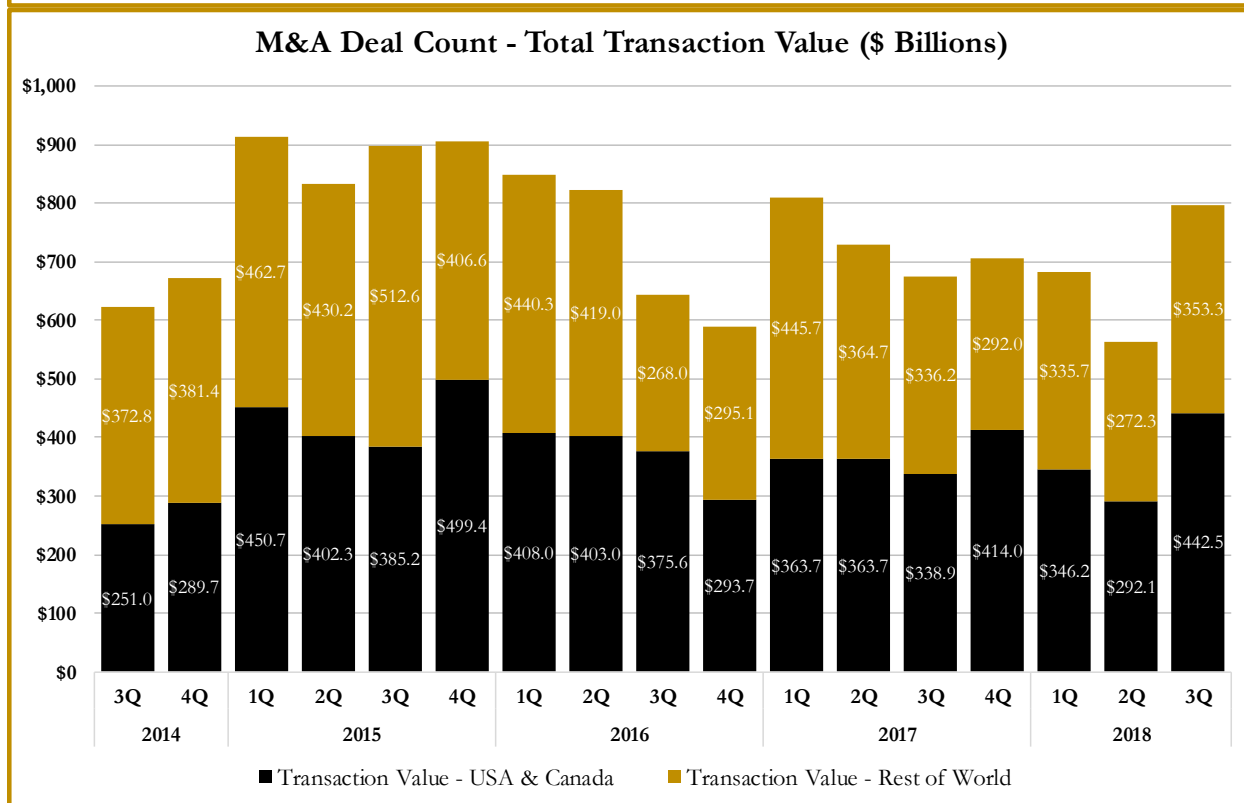
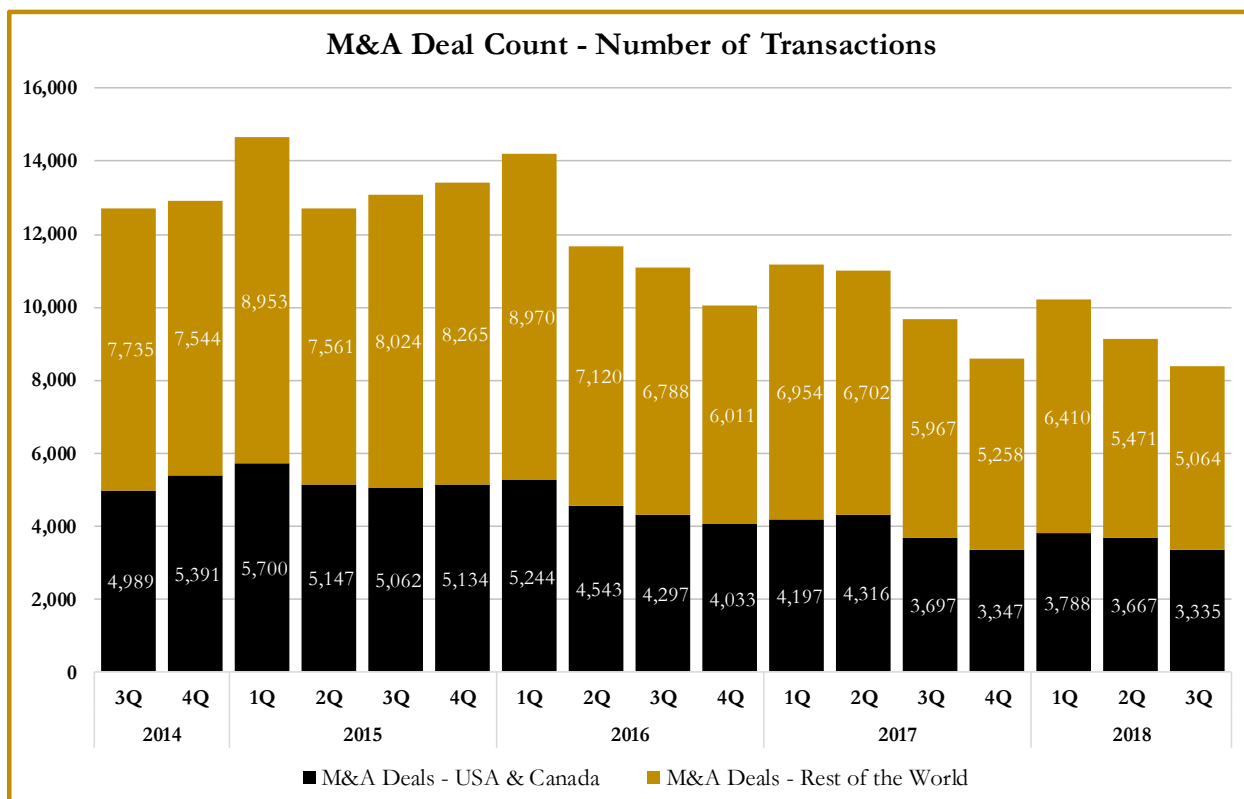
Source: Capital IQ

S&P Capital IQ - Sector Last 3 Month Equity Performance
As of September 30, 2018

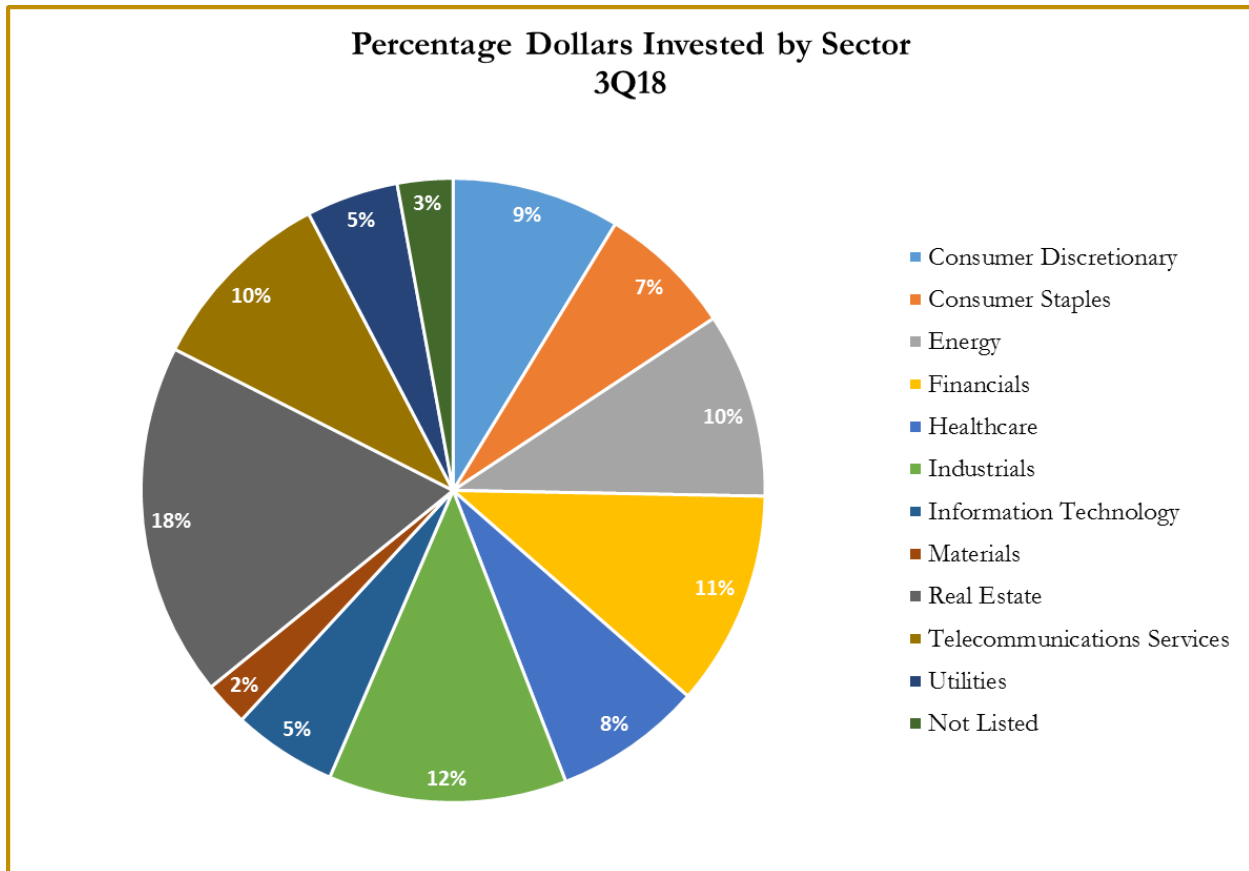


Note: The indices are derived from the equity performance of the S&P Capital IQ Sectors. Source: Capital IQ

M&A Deal Flow Statistics by S&P Capital IQ Sector As of September 30, 2018



M&A Deal Flow Statistics by S&P Capital IQ Sector
As of September 30, 2018





About Us

Houlihan Capital is a leading, solutions-driven valuation, financial advisory and boutique investment banking firm. We pride ourselves on being thought leaders in an ever-changing landscape.

Houlihan Capital is SOC-compliant, a FINRA and SIPC member and committed to the highest levels of professional ethics and standards.

Valuation & Financial Advisory

We provide an array of services that include enterprise valuations, portfolio valuation, valuation of carried interest, transaction opinions, tax and financial reporting compliance, purchase price allocations, and a wide variety of consulting services through our Financial Advisory Group.

Investment Banking

Through our Investment Banking Group, we offer sell side/buy side advisory and capital raises. Through our Special Situations desk, we provide services that fit outside the archetypal verticals, including liquidity solutions, transactional advisory, and secondary market advisory and trading.

Litigation Support

Our team provides support for a wide variety of situations including commercial and shareholder disputes, derivatives and structured finance litigation, and fraudulent conveyance.

For additional information about our industry expertise and services, visit:

www.houlihancapital.com

Andrew Smith

asmith@houlihancapital.com
312.450.8610

Paul Clark

pclark@houlihancapital.com
312.450.8656

Michael Norton

mnorton@houlihancapital.com
312.450.8628

Monica Blocker

mblocker@houlihancapital.com
312.450.8699
