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Industry Observations – December 31, 2019

Building Products Industry

Select Building Products Public Company Industry Data As of December 31, 2019

(USD in millions, except per share data)

Company Name	Ticker	Market Data					LTM Operating Data			Forward Estimates	
		Price at 12/31/19	% 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
Lumber, Millwork, Plywood and Structural Wood											
American Woodmark Corporation	AMWD	\$104.51	95.6%	\$1,768.47	\$2,571.79	51.3%	\$1,598.66	\$1,646.86	\$236.60	\$1,748.07	\$265.63
Fortune Brands Home & Security, Inc.	FBHS	\$65.34	98.8%	\$9,092.14	\$11,844.89	51.9%	\$6,285.60	\$5,714.80	\$892.90	\$6,028.58	\$979.54
Trex Company, Inc.	TREX	\$89.88	96.0%	\$5,243.29	\$5,619.32	9.1%	\$570.77	\$720.55	\$187.52	\$845.88	\$245.53
Builders FirstSource, Inc.	BLDR	\$25.41	97.5%	\$2,942.14	\$4,719.72	68.0%	\$3,297.76	\$7,332.84	\$504.63	\$7,751.59	\$552.11
Universal Forest Products, Inc.	UFPI	\$47.70	90.3%	\$2,928.31	\$3,136.32	16.2%	\$1,880.63	\$4,406.15	\$305.81	\$4,897.93	\$345.04
Refrigeration and Heating Equipment											
AAON, Inc.	AAON	\$49.41	92.8%	\$2,574.14	\$2,726.55	0.0%	\$352.15	\$459.10	\$85.98	\$523.19	\$117.08
Lennox International Inc.	LII	\$243.97	81.7%	\$9,400.55	\$10,964.65	120.6%	\$2,214.80	\$3,765.70	\$535.60	\$3,989.70	\$688.61
Masco Corporation	MAS	\$47.99	99.2%	\$13,283.63	\$16,464.11	99.3%	\$5,520.00	\$8,403.00	\$1,453.00	\$6,930.99	\$1,275.54
A. O. Smith Corporation	AOS	\$47.64	84.1%	\$7,770.65	\$7,512.04	18.3%	\$3,067.90	\$3,054.30	\$587.70	\$3,086.16	\$603.10
Roofing, Siding and Insulation											
Owens Corning	OC	\$65.12	94.8%	\$7,084.24	\$10,543.90	42.9%	\$9,955.00	\$7,192.00	\$1,300.00	\$7,345.78	\$1,360.33
Armstrong World Industries, Inc.	AWI	\$93.97	89.9%	\$4,557.35	\$5,551.54	65.7%	\$1,509.70	\$1,030.10	\$280.10	\$1,115.70	\$433.90
Cornerstone Building Brands, Inc.	USG	\$8.51	91.5%	\$1,068.57	\$4,669.57	76.4%	\$5,141.19	\$3,359.22	\$132.17	\$0.00	\$0.00
Windows and Doors											
Griffon Corporation	GFF	\$20.33	79.7%	\$953.65	\$2,042.84	69.8%	\$2,074.94	\$2,209.29	\$198.62	\$2,292.90	\$214.37
PGT Innovations, Inc.	PGTI	\$14.91	80.7%	\$870.81	\$1,255.62	48.3%	\$921.79	\$760.02	\$129.85	\$762.65	\$137.07
Masonite International Corporation	DOOR	\$72.21	97.0%	\$1,796.77	\$2,777.67	60.6%	\$1,909.88	\$2,173.80	\$264.79	\$2,252.05	\$311.31
Quanex Building Products Corporation	NX	\$17.08	83.6%	\$560.04	\$711.58	32.2%	\$645.11	\$893.84	\$100.09	\$883.75	\$107.40
Building Products - Other											
Gibraltar Industries, Inc.	ROCK	\$50.44	91.5%	\$1,627.82	\$1,628.09	4.2%	\$984.82	\$1,030.22	\$116.53	\$1,087.96	\$144.40
Insteel Industries, Inc.	IIIN	\$21.49	83.9%	\$413.91	\$435.84	0.8%	\$306.45	\$449.17	\$14.90	\$427.97	\$35.54
Simpson Manufacturing Co., Inc.	SSD	\$80.23	94.0%	\$3,556.37	\$3,538.12	4.0%	\$1,086.31	\$1,115.87	\$200.18	\$1,203.24	\$252.50

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 Building Products Public Company Valuation Metrics As of December 31, 2019

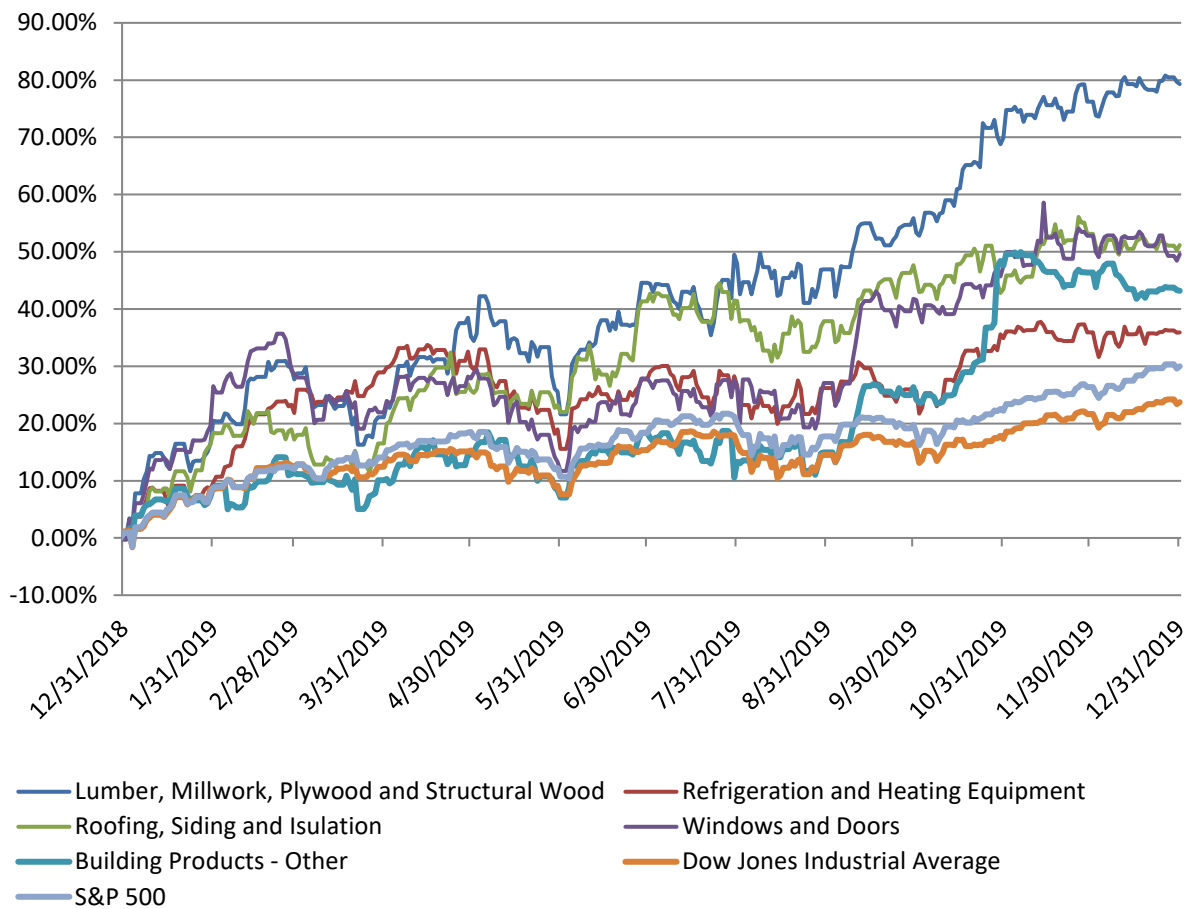
(USD in millions, except per share data)

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 2018 Revenue	TEV/ LTM EBITDA	TEV/ CY 2018 EBITDA
Lumber, Millwork, Plywood and Structural Wood											
American Woodmark Corporation	AMWD	5.8%	13.9%	6.7%	6.1%	7.8%	14.4%	1.5x	1.4x	10.6x	9.4x
Fortune Brands Home & Security, Inc.	FBHS	7.4%	18.1%	9.6%	4.9%	6.6%	15.6%	2.0x	1.9x	13.1x	11.9x
Trex Company, Inc.	TREX	21.7%	35.7%	27.4%	8.1%	-0.4%	26.0%	7.8x	6.6x	29.8x	22.8x
Buuilders FirstSource, Inc.	BLDR	7.8%	35.3%	10.6%	-4.6%	15.2%	6.9%	0.6x	0.6x	9.3x	8.5x
Universal Forest Products, Inc.	UFPI	8.4%	15.1%	10.8%	-1.4%	20.8%	6.9%	0.7x	0.7x	10.5x	9.3x
	Mean	10.2%	23.6%	13.0%	2.6%	10.0%	14.0%	2.5x	2.2x	14.7x	12.4x
	Median	7.8%	18.1%	10.6%	4.9%	7.8%	14.4%	1.5x	1.4x	10.6x	9.4x
Refrigeration and Heating Equipment											
AAON, Inc.	AAON	11.9%	19.0%	15.0%	7.8%	15.5%	18.7%	5.8x	5.1x	31.1x	22.9x
Lennox International Inc.	LII	14.1%	N/A	24.4%	-4.2%	-7.8%	14.2%	2.9x	2.8x	20.6x	16.0x
Masco Corporation	MAS	14.5%	706.1%	25.2%	10.6%	15.5%	17.3%	1.9x	2.3x	11.1x	12.6x
A. O. Smith Corporation	AOS	10.5%	23.7%	16.1%	-2.9%	-5.4%	19.2%	2.5x	2.5x	13.2x	12.9x
	Mean	12.7%	249.6%	20.2%	2.8%	4.4%	17.4%	3.3x	3.2x	19.0x	16.1x
	Median	14.1%	23.7%	20.2%	2.5%	5.0%	18.0%	2.7x	2.6x	16.9x	14.5x
Roofing, Siding and Isulation											
Owens Corning	OC	5.3%	11.5%	6.8%	3.6%	16.3%	18.1%	1.5x	1.4x	8.1x	7.7x
Armstrong World Industries, Inc.	AWI	8.4%	65.1%	13.2%	8.4%	8.6%	27.2%	5.3x	4.9x	19.5x	12.6x
Cornerstone Building Brands, Inc.	USG	0.0%	0.0%	0.0%	0.0%	0.0%	3.9%	1.4x	N/A	34.8x	N/A
	Mean	4.6%	25.6%	6.7%	4.0%	8.3%	16.4%	2.7x	3.2x	20.8x	10.2x
	Median	5.3%	11.5%	6.8%	3.6%	8.6%	18.1%	1.5x	3.2x	19.5x	10.2x
Windows and Doors											
Griffon Corporation	GFF	4.1%	9.6%	5.4%	11.7%	24.3%	9.0%	0.9x	0.9x	9.8x	9.1x
PGT Innovations, Inc.	PGTI	6.8%	12.7%	7.7%	18.3%	12.6%	17.1%	1.6x	1.6x	9.2x	8.7x
Masonite International Corporation	DOOR	5.5%	9.1%	6.8%	1.1%	1.9%	12.2%	1.2x	1.2x	10.2x	8.7x
Quanex Building Products Corporation	NX	4.5%	-12.9%	5.8%	0.5%	12.4%	11.2%	0.8x	0.8x	6.9x	6.4x
	Mean	5.3%	4.6%	6.4%	7.9%	12.8%	12.4%	1.1x	1.1x	9.0x	8.2x
	Median	5.0%	9.3%	6.3%	6.4%	12.5%	11.7%	1.1x	1.0x	9.5x	8.7x
Building Products - Other											
Gibraltar Industries, Inc.	ROCK	5.9%	10.3%	8.2%	1.0%	-5.3%	11.3%	1.5x	1.4x	13.5x	10.9x
Insteel Industries, Inc.	IIIN	1.0%	2.3%	1.2%	0.6%	-66.4%	4.0%	0.8x	0.9x	20.5x	11.1x
Simpson Manufacturing Co., Inc.	SSD	9.2%	13.3%	11.0%	4.4%	-5.3%	17.9%	3.2x	2.9x	17.6x	14.0x
	Mean	5.4%	8.6%	6.8%	2.0%	-25.7%	11.1%	1.8x	1.8x	17.2x	12.0x
	Median	5.9%	10.3%	8.2%	1.0%	-5.3%	11.3%	1.5x	1.4x	17.6x	11.1x

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

Source: Capital IQ

Building Products Public Company LTM Equity Performance As of December 31, 2019



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

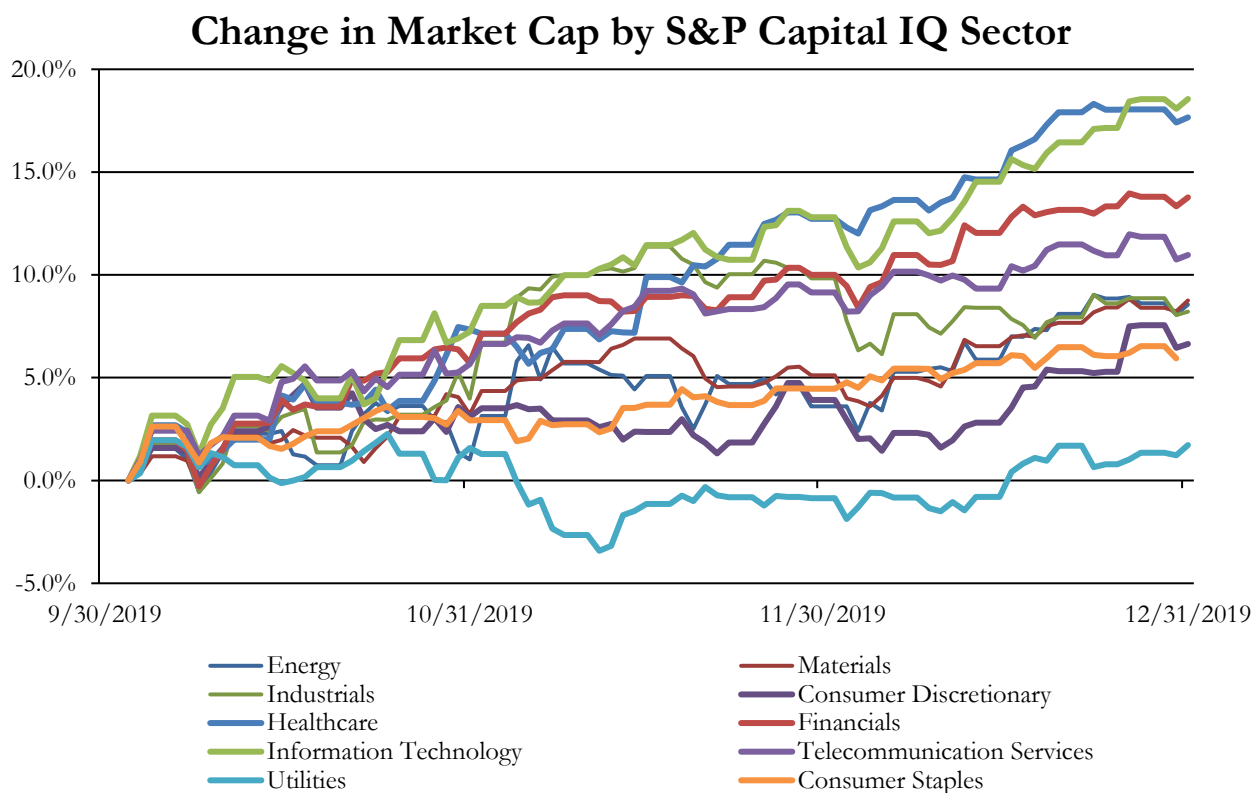
Recent M&A Activity in the Building Products Industry December 31, 2018 to December 31, 2019

(USD in millions)

Close Date	Target	Acquirer	Target Company Primary Industry	Implied Enterprise Value
4/24/2019	USG Corporation	Gebr. Knauf KG.	Building Products	\$6,937.26
6/4/2019	Formica Corporation	Broadview Holding B.V.	Building Products	\$840.00
11/7/2019	Milgard Manufacturing Incorporated	MI Windows and Doors, LLC	Building Products	\$725.00
2/20/2019	Environmental Materials, LLC	Ply Gem Industries, Inc.	Construction Materials	\$186.00
6/7/2019	DaVinci Roofscapes, L.L.C.	Royal Building Products (USA) Inc.	Building Products	\$100.00
5/30/2019	Sargent and Greenleaf, Inc.	OpenGate Capital, LLC	Building Products	\$79.10
3/29/2019	VPI Quality Windows, Inc.	JELD-WEN Holding, Inc.	Building Products	\$57.49
3/4/2019	Business and Assets of Architectural Components Group, Inc.	Armstrong World Industries, Inc.	Building Products	\$43.10
7/31/2019	Certain Assets and Operations of Sun State Components	Builders FirstSource, Inc.	Building Products	\$43.00
8/27/2019	Sioux City Brick & Tile Company	Brickworks Limited	Construction Materials	\$32.00
10/17/2019	Advanced Window, Inc.	Exchange Income Corporation	Building Products	\$17.85
6/18/2019	US Bath Group, LLC	N/A	Building Products	\$16.70
2/28/2019	Liquid Asphalt Terminal in Panama City, Florida	Construction Partners, Inc.	Building Products	\$10.85
1/31/2019	MSD Research, Inc.	CSW Industrials, Inc.	Building Products	\$10.10
6/7/2019	SurePods, LLC	WND Ventures	Building Products	\$2.00
8/30/2019	Ruby Concrete Company	Wright Concrete & Construction, Inc.	Construction Materials	\$1.50
12/31/2019	Two Asphalt Plants of Hamm, Inc.	Superior Bowen Asphalt Company, L.L.C.	Construction Materials	NA
12/30/2019	Assets of Northwestern Industries	Glasswerks, Inc.	Building Products	NA
12/27/2019	Quality Acrylic Baths, Inc.	Royal Baths Manufacturing Company	Building Products	NA
12/23/2019	Topline Counters, LLC	Patrick Industries, Inc.	Construction Materials	NA
12/19/2019	AVO Fence & Supply, Inc.	N/A	Building Products	NA
12/17/2019	Swisstrax Corporation	The Recreational Group LLC	Building Products	NA
12/17/2019	Speedway Tile	The Recreational Group LLC	Building Products	NA
12/2/2019	Builders' Hardware and Specialty Company, Inc.	The Cook & Boardman Group, LLC	Building Products	NA
11/27/2019	Ascension Ready Mix, Inc.	Quality Concrete Group LLC	Construction Materials	NA
11/25/2019	Built Strong Exteriors LLC	Restoration Builders Inc.	Building Products	NA
11/20/2019	C-Thru Sunrooms	Latium USA Trading, Inc.	Building Products	NA
11/20/2019	Specified Fittings, Inc.	The Harrington Corporation	Building Products	NA
11/6/2019	Any Old Stone, LLC	Construction Resources, Inc.	Construction Materials	NA
11/5/2019	Certain Assets of The Keeney Manufacturing Company	Oatey Company, Inc.	Building Products	NA
11/4/2019	Silver-Line Plastics Corporation	IPEX USA, LLC	Building Products	NA
10/31/2019	LAMVIN, Inc.	Sound Seal Inc.	Building Products	NA
10/31/2019	Foster Lumber Yard, Inc.	Central Valley Builders Supply, Inc.	Building Products	NA
10/28/2019	Substantially all of the Assets of Pacific Mutual Door Company	Hardwoods Distribution Inc.	Building Products	NA
10/25/2019	Rappahannock Concrete Corporation	Vulcan Materials Company	Construction Materials	NA
10/21/2019	All Assets of Kovach (nka:Kovach Enclosure Systems, LLC)	N/A	Building Products	NA
10/11/2019	A2Z Coatings LLC	TGM Coatings, LLC	Building Products	NA
10/8/2019	Prefinishing Assets Located at Granite City, Illinois and Prefinish	Louisiana-Pacific Corporation	Building Products	NA
10/7/2019	Oberon, Inc.	Chatsworth Products, Inc.	Building Products	NA
10/3/2019	Custom Window Systems, Inc.	Pella Corporation	Building Products	NA
10/1/2019	Elliot Stone Company, Inc.	Polycor Inc.	Construction Materials	NA
10/1/2019	Stiles Custom Metal, Inc.	ASSA ABLOY AB (publ)	Building Products	NA
9/23/2019	Global Foam Company	Fifty-Five Manufacturing Inc.	Building Products	NA
9/19/2019	Bel Shower Door Corporation	Denver Glass Interiors, Inc.	Building Products	NA
9/6/2019	Standard Gravel Company, LLC	StonePoint Materials, LLC	Construction Materials	NA
8/30/2019	Refractories Division of Bucher Emhart Glass SA	Rath Inc.	Construction Materials	NA
8/29/2019	Clearline, Inc (nka:WindowMaster Clearline Inc.)	WindowMaster Control Systems Inc.	Building Products	NA
8/22/2019	Barrett Roofs, Inc.	Keene Building Products, Inc.	Construction Materials	NA
8/21/2019	Acoustical & Tackable Surfaces, Inc.	Sound Seal Inc.	Building Products	NA
8/19/2019	Therm-Con, LLC and Foamtech, Inc.	Installed Building Products, Inc.	Building Products	NA
8/14/2019	Operating Assets of Northwest Painting/Northwest Factory	Universal Forest Products, Inc.	Building Products	NA
8/14/2019	Carolina Counter's, Inc.	Majestic Marble And Glass Company	Building Products	NA
8/6/2019	Majestic Stone, Inc.	Horizon Stone, LLC	Construction Materials	NA
8/2/2019	Watermark Designs, LLC.	Dimora Brands, Inc.	Building Products	NA
8/1/2019	Assets of Western Access Controls	U.S. Fence Solutions Company	Building Products	NA
8/1/2019	Champion Valves Inc	Airtex Vacuum Inc.	Building Products	NA
7/31/2019	All Manufacturing Assets in the U.S. of Molding Acquisition Corp.	Tank Holdings Corp.	Building Products	NA
7/19/2019	Engineered Specialties, LLC	Pfingsten Partners, L.L.C.; Pfingsten Partners Fund	Building Products	NA
7/1/2019	Shaw Alloy Piping Products, LLC	N/A	Building Products	NA
6/25/2019	Soho Studio Corp./TileBar	LongueVue Capital, LLC; LongueVue Capital	Building Products	NA
6/25/2019	Noise Barriers, LLC	Sound Seal Inc.	Building Products	NA
6/19/2019	MPL Holdings, LLC	Wynnchurch Capital, LLC; Wynnchurch Capital	Building Products	NA
6/17/2019	Stellar Materials LLC	Unifrax Corporation	Construction Materials	NA
6/11/2019	Silvercote, LLC and the Assets of Silvercote's Canadian	Distribution International, Inc.	Building Products	NA
6/11/2019	United Poly Systems, LLC	Industrial Opportunity Partners, LLC; Industrial	Building Products	NA

Source: Capital IQ

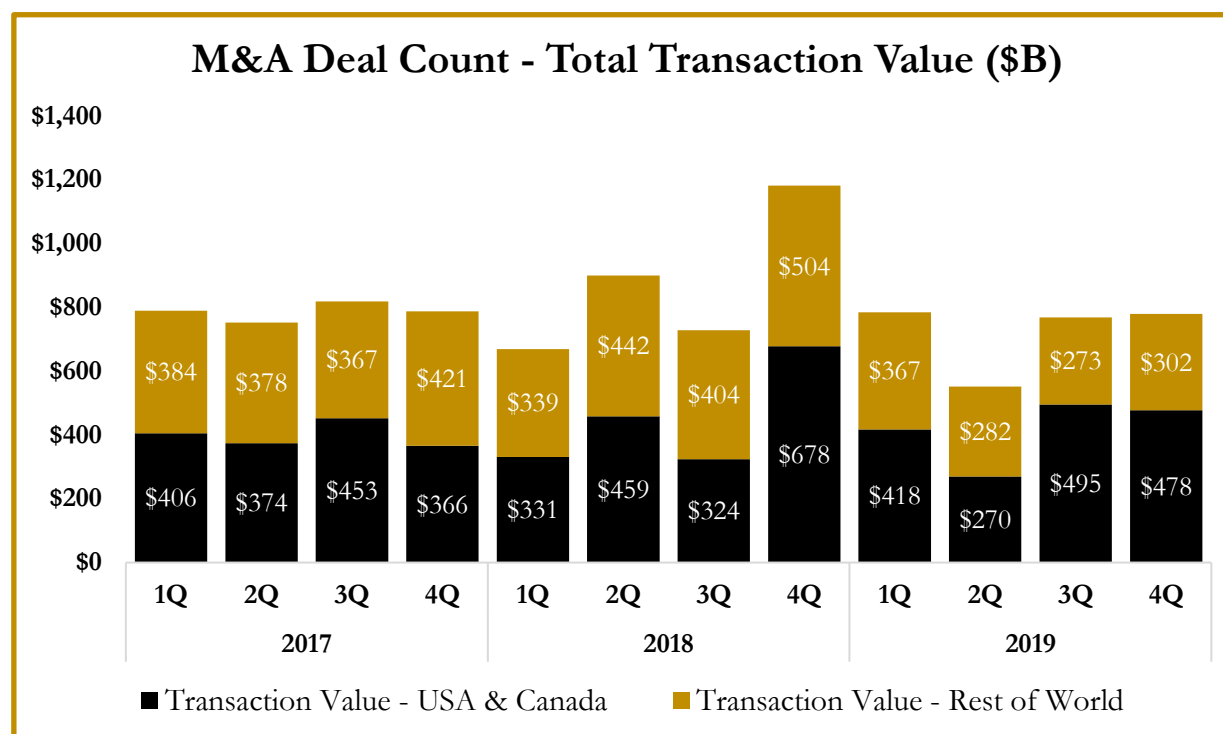
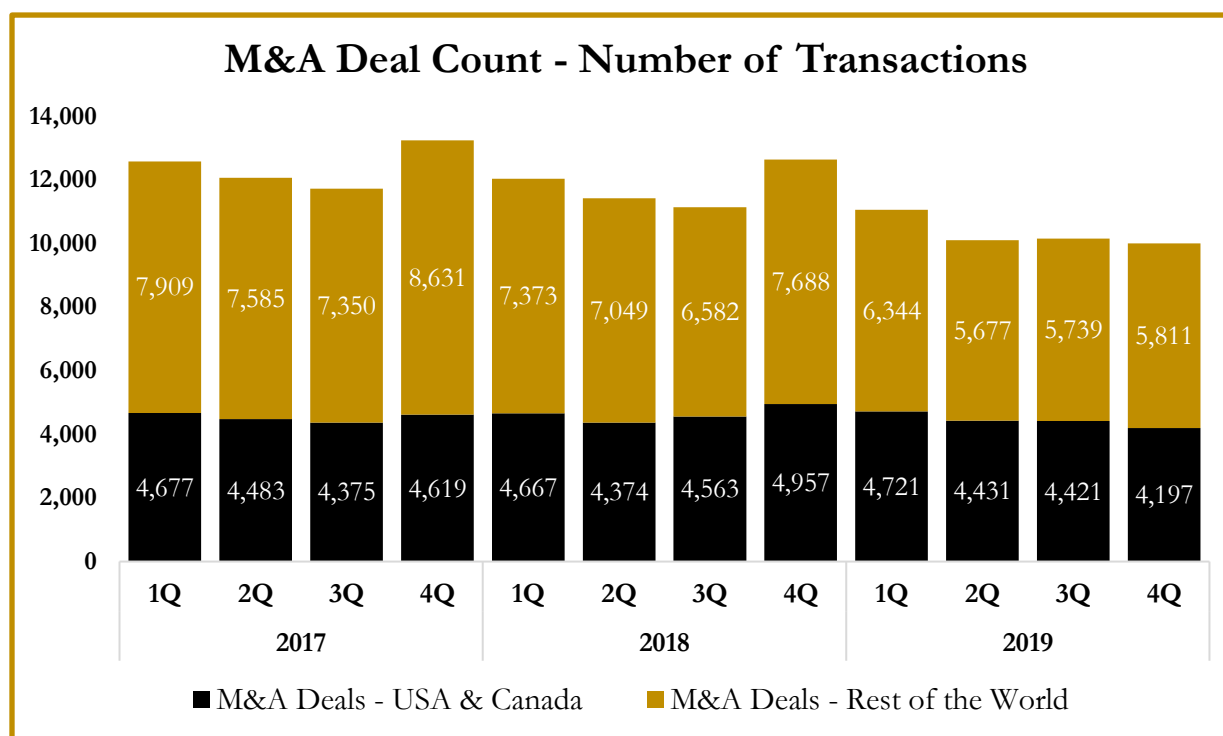
S&P Capital IQ - Sector Last 3 Month Equity Performance As of December 31, 2019



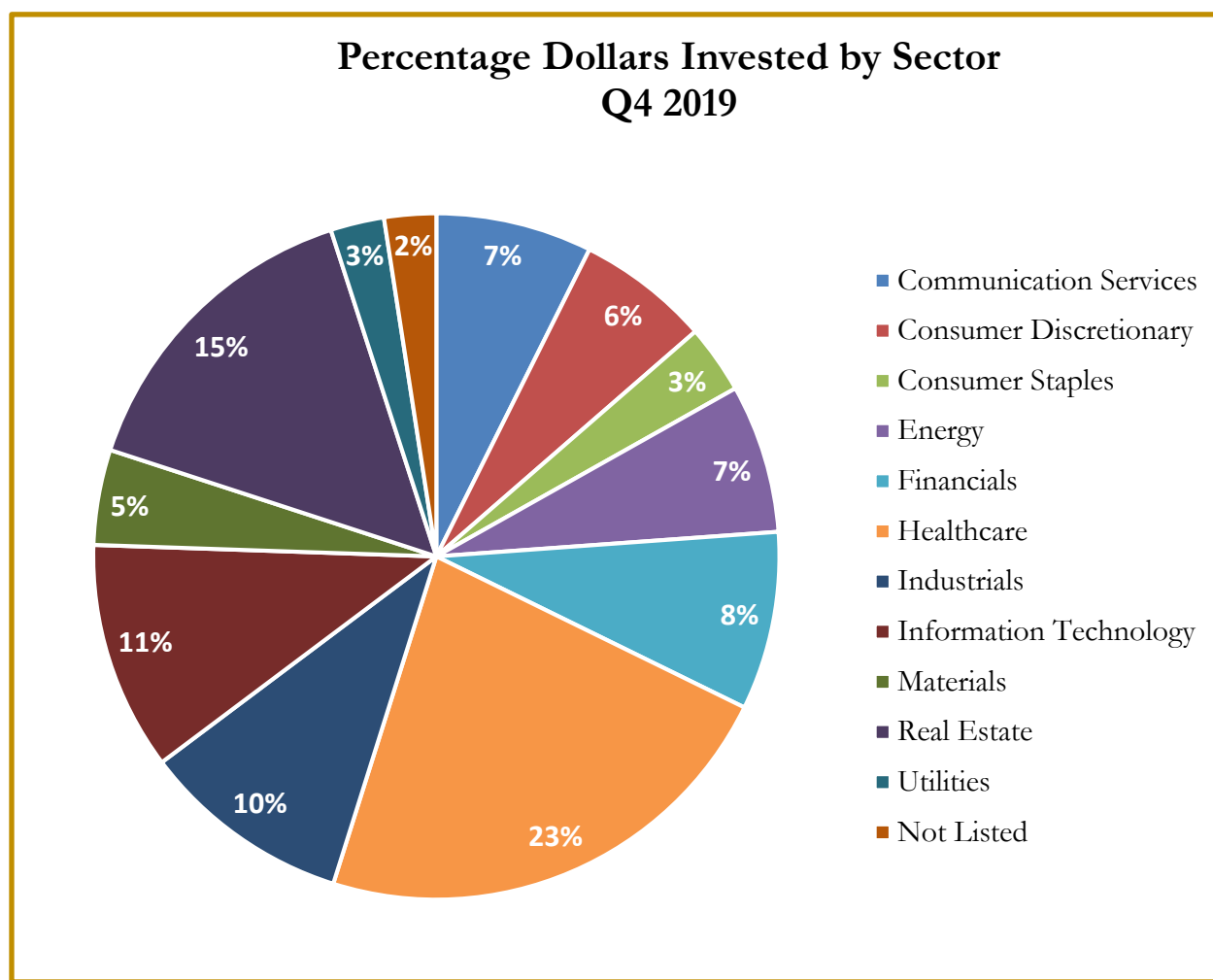
Note: The indices are derived from the equity performance of the S&P Capital IQ Sectors. Source: Capital IQ

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

As of December 31, 2019



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





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