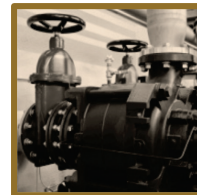


# FLOW CONTROL

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# Industry In-Sight™

FOURTH QUARTER 2019



**JORDAN KNAUFF  
& COMPANY**

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# Introduction

BY G. COOK JORDAN, JR.

## *Who is JKC and What Do We Do?*

Jordan Knauff & Company (JKC) was founded in 2001 to undertake a distinct mission: to assemble and maintain a staff of top-notch investment banking personnel and offer their knowledge and experience to provide the best available investment banking services to middle-market companies, the entrepreneurs that lead them and the financial entities that transact with them. On a combined basis, over the course of their careers our employees have completed over 200 transactions as investors, owners, operators, investment bankers, buyers of middle-market businesses or sellers of middle-market businesses across a variety of industries. The majority of our firm's broad transaction experience has been with private companies owned by one shareholder, a partnership, a family or private equity investors.

Experience has taught us that the owners and executives of middle-market businesses tend to have very different needs and goals in capital transactions from those that are common to capital events related to larger companies. Our personnel apply their considerable expertise to accomplish important goals: delivery of successful outcomes for our clients. Pursuant to that, we direct and manage all aspects of the capital transaction process, assist our clients with the management of important constituents (employees, customers, vendors and lenders), act as a teammate to other important client advisors (legal counsel, accountant, tax advisor) and collaborate with transaction counsel in the negotiations with the parties on the other side of the transaction.

## *The Services We Provide*

### ■ **Sell Companies**

- Representation of owners who are seeking the sale of their business – ranging from the sale of part of the equity of a company to a full liquidity transaction involving the sale of the entire business. In either case, our objective is to transfer the inherent value of the business into an exchange which yields the best price and structure that meet the specific transaction goals of our client.

### ■ **Raise Debt and Equity Capital**

- We represent clients in the raising of all forms of capital: senior debt, mezzanine debt and equity capital. Proceeds may be typically used for a variety of applications, including: funding growth, recapitalization, expansion of assets, acquisitions or partial liquidity for shareholders.

***Experience has taught us that the owners and executives of middle-market businesses tend to have very different needs and goals ... than... larger companies.***

■ **Acquisition Advisory**

- Assistance to clients in the successful closing of an acquisition. Pertinent services include: valuation, optimization of structure, direction of the due diligence process and negotiation of transaction documents. Acquisition advisory services encompass work on a standalone target or a series of acquisitions that form a strategic consolidation plan.

■ **Strategic Business Services**

- A suite of consulting projects designed specifically for middle-market business owners and executives to enable them to make better decisions about their companies or industries. Services include:
  - Company Specific Valuations
  - Capital Road Maps®
  - Strategic Industry Analyses

**Areas of Expertise**

Our team of professionals has notable experience in a broad portfolio of industries. While each project is evaluated on a case-by-case basis and the firm has the capabilities to service middle-market companies in almost any industry, JKC has significant expertise in the following industries:

**Manufacturing & Distribution**

- Manufacturing / Valued Added Manufacturing
- Manufacturing Process Technology
- Distribution / Value Added Distribution

**Energy Logistics & Distribution**

- Natural Gas Liquids: Direct to Consumer, Wholesale & Midstream
- Light Fuels
- Lubricants
- Petro Chemicals

**Building Products & Services**

- Windows & Doors
- Pre-fabricated Forms and Components
- Caulks & Sealants
- Flooring Products

**Flow Control**

- Pumps, Valves & Filtration
- Water Management
- Related Technology

**Business Services**

**Real Estate**

**Closing Thoughts**

Thank you for taking the time to review this quarterly publication. We hope that you will find it to be relevant and informative. With that purpose in mind, we would welcome any thoughts or comments that you may have about it. Visit our research library at [www.jordanknauff.com/research-library](http://www.jordanknauff.com/research-library) to view our previous Flow Control quarterly publications, as well as our other industry publications.

If you desire more information about our firm and its mission, please contact any member of our team listed on the back cover of this report. Our website is [www.jordanknauff.com](http://www.jordanknauff.com) and our main telephone number is (312) 254-5900.

**... please contact any member of our team listed on the back cover of this report.**

## Current Events / Trends

BY G. COOK JORDAN, JR.  
LORI A. CALLAWAY

### *Wilo USA Acquires American-Marsh Pumps*



Wilo USA LLC acquired American-Marsh Pumps based in Collierville, Tennessee. Founded in 1873, American-Marsh Pumps is a leading manufacturer of centrifugal and positive displacement pumps, electrical motors, mechanical seals and fire protection fittings, couplings and pumping equipment. Collectively its five divisions cover the industrial, municipal, commercial, irrigation and fire protection markets, with brands including American-Marsh, J-Line, NOVO and Delta.

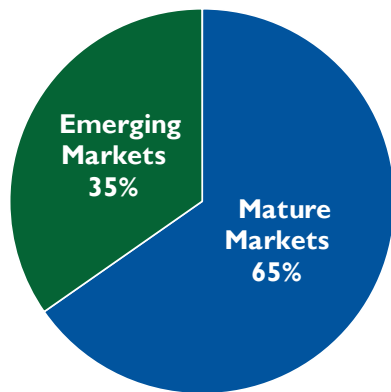
- **American-Marsh Pumps** focuses on the industrial, municipal, commercial and fire protection markets worldwide. This division offers a full featured pump product line, encompassing the highest level of engineering and packaging available. This product offering covers the gear, end suction, process sump, non-clog, split case, vertical multistage, ANSI process, vertical turbine and self-primer pumping products.
- **J-Line Pumps** focuses on the irrigation, water well and fire protection markets worldwide. This division offers a full featured pump product line covering the end suction, sump and sewage, split case, vertical multistage, vertical turbine and self-primer pumping products.
- **NOVO Pumps** focuses on the construction and dewatering markets worldwide. This product offering covers the complete centrifugal and positive displacement self-primer product lines.
- **Delta Pumps** focuses on the irrigation markets in North America. This division offers a full pump product line covering the end suction, sump and sewage, and vertical turbine pumping products.

The acquisition strengthens Wilo's strategic market position in the U.S. and expands its product portfolio in the water management, industry and building services segments.

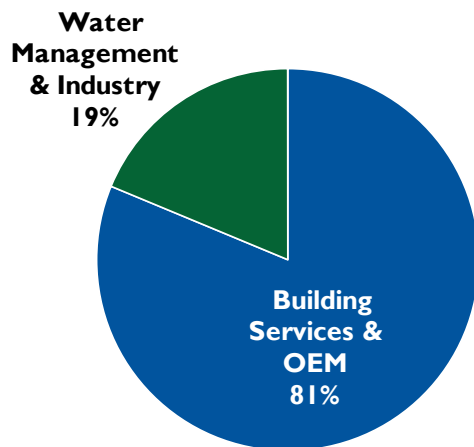
Wilo USA LLC manufactures and supplies water pumps and circulators for residential, commercial, industrial and institutional applications. Its products include centrifugal, stainless steel submersible and vertical turbine pumps, as well as wet rotor circulators. The company's products are used in heating, building, air conditioning, process and water treatment, municipal supply and sewage applications. It serves the agriculture, electric power, water utility, export, mining, defense, education, electronics, hospital and healthcare, government, and irrigation markets, as well as manufacturing, recreational, pulp and paper, and marine industries. The company was founded in 2004 and is based in Rosemont, Illinois.

Wilo USA LLC operates as a subsidiary of the Wilo Group. The Wilo Group was founded in 1872 and is headquartered in Dortmund, Germany. The Wilo Group is a global provider of pumps and pump systems for residential and commercial building services, original equipment manufacturers, water management and industry market segments. With more than 60 production and distribution companies worldwide, the company maintains a presence on every continent. In 2018, the company had sales of approximately \$1.6 billion and 7,800 employees.

**Wilo Group Revenue by Region<sup>(1)</sup>**



**Wilo Group Revenue by Segment<sup>(1)</sup>**



<sup>(1)</sup> Wilo Group. The Mature Markets cover Europe, Russia, Belarus, Ukraine, the Caucasus nations and the American continent. The Emerging Markets encompass China, India, Korea, the Southeast Asian nations, Australia and Oceania, Turkey, the Middle East and Africa.

# Mergers & Acquisitions Activity

BY DAVID A. KAKAREKA

Flow Control M&A activity continues to be resilient as evidenced by the recent transactions listed below.

**TABLE II: SELECTED VALVE M&A TRANSACTIONS: 4Q 2019<sup>(1)</sup>**

Announced Date	Target	Acquirer(s)
12/9/2019	Siekman Econosto GmbH & Co. KG	Neway Valve (Suzhou) Co., Ltd.
12/6/2019	G5S Energy Services LLC	Centurion Group Ltd.
11/11/2019	C&D Valve LLC	JB Industries, Inc.
11/5/2019	Pima Valve LLC	Hunt Valve Company, Inc.
10/30/2019	Backflow Direct LLC	Watts Water Technologies, Inc.
10/12/2019	Rostra Vernatherm LLC	Vernet SAS

**TABLE III: SELECTED PUMP M&A TRANSACTIONS: 4Q 2019<sup>(1)</sup>**

Announced Date	Target	Acquirer(s)
12/4/2019	Industrial Equipment & Parts	Winsupply Inc.
11/26/2019	American-Marsh Pumps	Wilo USA LLC
10/17/2019	Alpha Pump & Equipment Inc.	Holland Pump Company

**TABLE IV: SELECTED FILTER M&A TRANSACTIONS: 4Q 2019<sup>(1)</sup>**

Announced Date	Target	Acquirer(s)
12/11/2019	Desalitech, Inc.	DuPont de Nemours Inc.
12/6/2019	Osprey3 Ltd.	Centurion Group Ltd.
12/3/2019	TVS Filters	Pleatco LLC
12/3/2019	Marsulex Environmental Technologies Corporation	KraftPowercon Sweden AB
11/12/2019	Air/Tak, Inc.	Purification Solutions LLC
11/8/2019	Delta Filter Services Ltd.	Arville Textiles Ltd.
11/6/2019	Sidco Filter Corporation	Fairchild Capital Partners; Redmount Capital Partners LLC
11/4/2019	Eco-Tec Inc.	Koch Separation Solutions
10/28/2019	Genesys Holdings Ltd.	H2O Innovation Inc.
10/3/2019	Membrane Business of Evoqua Water Technologies Corp.	DuPont de Nemours, Inc.

(1) Source: S&P Capital IQ and JKC research.

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# Public Equity and Valuation Analysis

BY DAVID A. KAKAREKA

## Wall Street Valve Watch

The JKC Valve Stock Index was up 24.8% over the last 12 months, while the broader S&P 500 Index was up 28.7%.

The U.S. Energy Information Administration (EIA) expects U.S. crude oil production to average 13.2 million barrels per day (b/d) in 2020, an increase of 0.9 million b/d from the 2019 level. The expected growth is slower than the 2018 growth of 1.6 million b/d and 2019 growth of 1.3 million b/d. The slowing growth is the result of a decline in drilling rigs over the past year which is expected to continue into 2020.<sup>(1)</sup>

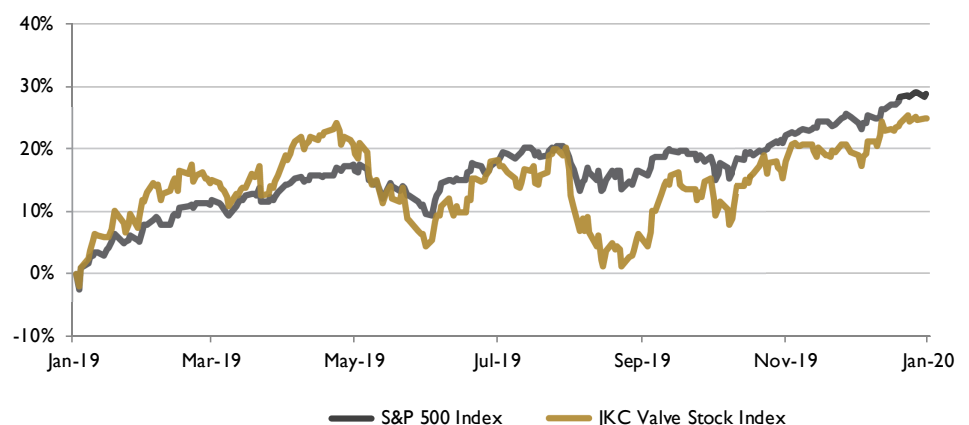
In December the Organization of the Petroleum Exporting Countries (OPEC) and a group of other oil producers announced they were deepening production cuts. Amid a forecast of rising oil inventories the EIA forecasts OPEC crude oil production will average 29.3 million b/d in 2020, down by 0.5 million b/d from 2019.

Brent crude oil prices are expected to average \$61 per barrel in 2020, down from an average of \$64 per barrel in 2019, due to rising global oil inventories, particularly in the first half of the year. West Texas Intermediate prices are forecast to average \$55.50 per barrel in 2020.

On Wall Street, despite a slump in the manufacturing sector and the lengthy trade war with China, the stock market soared in 2019. The Dow Jones Industrial Average, the S&P 500 Index and the NASDAQ Composite rose 22.3%, 28.9% and 35.2%, respectively for the year. During the month of December, the Dow rose 1.7%, the S&P 500 2.9% and the NASDAQ 3.6% with major indexes closing at new all-time highs. The market was helped by healthy American consumers and The Federal Reserve Bank policies. Another push came from a strong holiday season where online sales rose 18% from last year.

**Brent crude oil prices are expected to average \$61 per barrel in 2020, down from an average of \$64 per barrel in 2019 ...**

**CHART I: JKC VALVE STOCK INDEX<sup>(2)</sup>**



(1) See Economic Indicators section of this report for more detailed information on these indicators.

(2) Source: S&P Capital IQ and JKC research. Local currency converted to USD using historical spot rates. The JKC Valve Stock Index includes a select list of publicly-traded companies involved in the valve industry weighted by market capitalization.



Valve Companies

As shown in Tables V and VI, as of December 31, 2019, domestic and international Valve companies were trading at median total enterprise value / latest twelve months (“TEV/LTM”) EBITDA multiples of 13.4x and 10.1x, respectively, while both groups have median EBITDA margins of 18.8% and 11.8%, respectively. The median stock price as a percentage of the 52-week high for both groups is 97% and 93%, respectively, of their 52-week highs. With the exception of a few companies, we believe both groups are fairly well capitalized.

TABLE V: SELECTED DOMESTIC VALVE COMPANIES<sup>(1)</sup>

(US\$ in millions, except per share data)

Company	LTM			Stock Price 12/31/2019	% of 52-Week High	Market Cap	Total Enterprise Value <sup>(3)</sup>	TEV / LTM		Net Debt <sup>(4)</sup> EBITDA
	Revenues <sup>(2)</sup>	EBITDA <sup>(2)</sup>	Margin					Revenues	EBITDA	
Badger Meter Inc. (BMI)	\$425	\$89	21.0%	\$64.93	97.4%	\$1,890	\$1,866	4.4x	20.9x	(0.4x)
CIRCOR International Inc. (CIR)	1,151	135	11.7	46.24	96.7	921	1,522	1.3	11.3	4.5
Crane Co. (CR)	3,283	617	18.8	86.38	94.7	5,181	5,844	1.8	9.5	1.2
Curtiss-Wright Corp. (CW)	2,481	536	21.6	140.89	97.3	6,014	6,631	2.7	12.4	1.1
Dover Corp. (DOV)	7,136	1,406	19.7	115.26	99.3	16,743	19,663	2.8	14.0	2.0
Emerson Electric Co. (EMR)	18,376	3,709	20.2	76.26	98.7	46,588	50,855	2.8	13.7	1.3
Flowserve Corp. (FLS)	3,945	574	14.5	49.77	91.9	6,513	7,533	1.9	13.1	1.6
General Electric Co. (GE)	95,214	13,314	14.0	11.16	94.3	97,466	181,249	1.9	13.6	6.0
Honeywell International Inc. (HON)	36,709	8,905	24.3	177.00	96.7	126,472	133,634	3.6	15.0	0.7
ITT Corporation (ITT)	2,846	540	19.0	73.91	99.0	6,482	6,156	2.2	11.4	(0.8)
Mueller Water Products, Inc. (MWA)	988	194	19.6	11.98	97.7	1,891	2,163	2.2	11.2	1.8
Parker Hannifin Corporation (PH)	14,201	2,655	18.7	205.82	97.1	26,441	31,777	2.2	12.0	3.3
Schlumberger Limited (SLB)	32,917	8,303	25.2	40.20	82.2	55,652	70,447	2.1	8.5	1.8
SPX Flow Inc. (FLOW)	1,507	192	12.8	48.87	98.4	2,080	2,650	1.8	13.8	2.4
TechnipFMC plc (FTI)	13,409	(1,017)	(7.6)	21.44	75.0	9,585	10,040	0.7	NM	NM
Watts Water Technologies, Inc. (WTS)	1,601	264	16.5	99.76	98.9	3,380	3,593	2.2	13.6	0.5
Xylem Inc. (XYL)	5,249	954	18.2	78.79	92.0	14,188	16,324	3.1	17.1	1.7
<b>Median</b>			<b>18.8%</b>		<b>97.1%</b>			<b>2.2x</b>	<b>13.4x</b>	<b>1.6x</b>
<b>Mean</b>			<b>17.0</b>		<b>94.6</b>			<b>2.3</b>	<b>13.2</b>	<b>1.8</b>

(1) Source: S&P Capital IQ and JKC research.

(2) Revenues and EBITDA are for the latest twelve months as of 12/31/19.

(3) Total enterprise value is defined as market capitalization plus total debt less cash and cash equivalents.

(4) Net debt is defined as total debt less cash and cash equivalents.

**TABLE VI: SELECTED INTERNATIONAL VALVE COMPANIES<sup>(1)</sup>**

(US\$ in millions, except per share data)

Company	LTM			Stock Price 12/31/2019	% of 52-Week High	Market Cap	Total Enterprise Value <sup>(3)</sup>	TEV / LTM		Net Debt <sup>(4)</sup> EBITDA
	Revenues <sup>(2)</sup>	EBITDA <sup>(2)</sup>	Margin					Revenues	EBITDA	
Aalberts Industries NV (AALB)	\$3,151	\$488	15.5%	\$44.90	97.8%	\$4,965	\$6,010	1.9x	12.3x	2.1x
Alfa Laval AB (ALFA)	4,792	893	18.6	25.25	97.3	10,592	11,732	2.4	13.1	0.8
Georg Fischer AG (FI-N)	4,242	475	11.2	1,014.98	92.8	4,155	4,623	1.1	9.7	0.9
Hisaka Works Ltd. (6247)	293	29	9.9	9.30	96.7	261	148	0.5	5.1	(3.8)
Hitachi Ltd. (6501)	84,747	9,369	11.1	42.57	98.6	41,128	53,778	0.6	5.7	0.5
IMI plc (IMI)	2,520	485	19.3	15.61	97.1	4,229	4,908	1.9	10.1	1.3
Kitz Corp. (6498)	1,206	135	11.2	7.12	80.9	660	877	0.7	6.5	1.6
KSB Aktiengesellschaft (KSB)	2,627	169	6.4	343.40	92.2	609	645	0.2	3.8	(1.0)
Kubota Corp. (6326)	17,912	2,478	13.8	15.88	94.8	19,375	26,554	1.5	10.7	2.5
Lupatech S.A. (LUPA3)	31	(8)	(26.3)	0.48	86.9	11	42	1.4	NM	(3.7)
Metso Corp. (METSO)	4,005	574	14.3	39.48	88.4	5,925	6,414	1.6	11.2	0.1
Okano Valve Manufacturing Co. (6492)	61	(4)	(5.9)	20.18	90.8	35	27	0.4	NM	1.2
Saint Gobain (SGO)	47,878	5,664	11.8	40.96	92.3	22,269	36,829	0.8	6.5	2.5
SMC Corp. (6273)	4,959	1,588	32.0	462.75	95.7	30,781	25,969	5.2	16.3	(3.3)
Spirax-Sarco Engineering plc (SPX)	1,585	468	29.5	117.74	94.1	8,668	9,243	5.8	19.7	1.2
The Weir Group PLC (WEIR)	3,594	595	16.5	19.99	83.0	5,178	7,184	2.0	12.1	2.6
Velan, Inc. (VLN)	376	18	4.7	6.45	67.0	140	139	0.4	7.9	(0.3)
<b>Median</b>			11.8%		92.8%			1.4x	10.1x	0.9x
<b>Mean</b>			11.4		91.0			1.7	10.1	0.3

(1) Source: S&amp;P Capital IQ and JKC research.

(2) Revenues and EBITDA are for the latest twelve months as of 12/31/19.

(3) Total enterprise value is defined as market capitalization plus total debt less cash and cash equivalents.

(4) Net debt is defined as total debt less cash and cash equivalents.

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**Wall Street Pump Watch**

The JKC Pump Stock Index was up 28.8% over the last twelve months, while the S&P 500 Index was up 28.7% over the same time period.

The Institute for Supply Management’s Purchasing Managers’ Index (PMI) for December was 47.2%, a decrease of 0.9 percentage points and the lowest reading since June 2009. New Orders fell 0.4 percentage points to 46.8%; the Production Index reading was 43.2%, down 5.9 percentage points; and the Employment Index declined 1.5 percentage points to 45.1%. Of the 18 manufacturing industries, only three reported growth in December, including miscellaneous manufacturing. While the PMI demonstrated contraction for the fifth straight month, the 12-month average is 51.2%.<sup>(1)</sup>

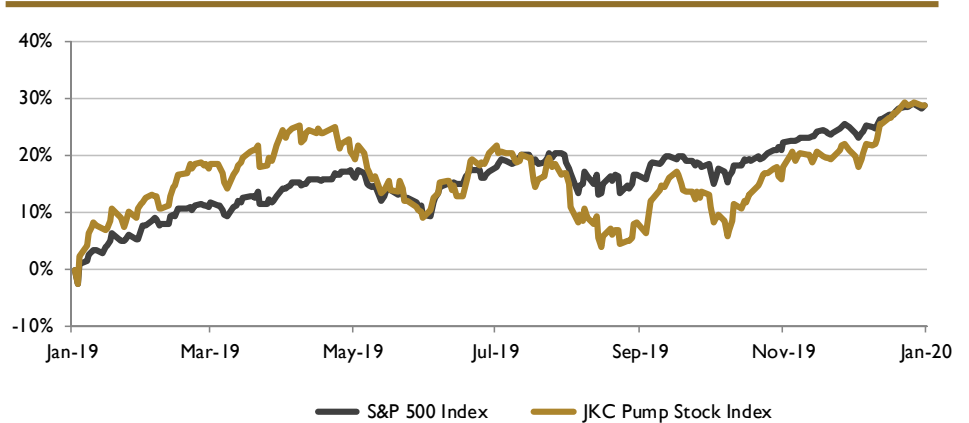
After declines in three out of the four preceding months, U.S. industrial production rose 1.1% in November led by the manufacturing component which comprises three quarters of all industrial activity. This was the largest monthly increase since February 2018. The gain comes after manufacturing was down in seven of the first ten months of the year. However, the level of factory output is still down 0.7% compared to a year ago.

The U.S. economy produced a robust 266,000 new jobs in November and the unemployment rate returned to a 50-year low of 3.5%. The increase was the biggest since January and was partly inflated by the return of nearly 50,000 striking auto workers at General Motors. Manufacturers have added almost no jobs this year, hurt by a slowing global economy and by the U.S. trade war with China.

On Wall Street, despite a slump in the manufacturing sector and the lengthy trade war with China, the stock market soared in 2019. The Dow Jones Industrial Average, the S&P 500 Index and the NASDAQ Composite rose 22.3%, 28.9% and 35.2%, respectively for the year. During the month of December, the Dow rose 1.7%, the S&P 500 2.9% and the NASDAQ 3.6% with major indexes closing at new all-time highs. The market was helped by healthy American consumers and The Federal Reserve Bank policies. Another push came from a strong holiday season where online sales rose 18% from last year.

**After declines in three out of the four preceding months, U.S. industrial production rose 1.1% in November**

**CHART II: JKC PUMP STOCK INDEX<sup>(2)</sup>**



(1) See Economic Indicators section of this report for more detailed information on these indicators.  
 (2) Source: S&P Capital IQ and JKC research. Local currency converted to USD using historical spot rates. The JKC Pump Stock Index includes a select list of publicly-traded companies involved in the pump industry weighted by market capitalization.

**Pump Companies**

Domestic Pump companies (as listed in Table VII) and international Pump companies (in Table VIII) were trading at median TEV/LTM EBITDA multiples of 13.7x and 9.8x, respectively, as of December 31, 2019. As you can see, both groups are similarly leveraged with a median net debt/LTM EBITDA ratio of 1.6x for domestic Pump companies compared to 0.7x for international Pump companies. In our assessment, both groups are extremely well capitalized and could afford to take on additional indebtedness.

**TABLE VII: SELECTED DOMESTIC PUMP COMPANIES<sup>(1)</sup>**

(US\$ in millions, except per share data)

Company	LTM			Stock Price 12/31/2019	% of 52-Week High	Market Cap	Total Enterprise Value <sup>(3)</sup>	TEV / LTM		Net Debt <sup>(4)</sup> EBITDA
	Revenues <sup>(2)</sup>	EBITDA <sup>(2)</sup>	Margin					Revenues	EBITDA	
Ampco-Pittsburgh Corp. (AP)	\$397	\$12	3.0%	\$3.01	61.2%	\$38	\$115	0.3x	9.7x	6.0x
Baker Hughes Inc. (BKR)	23,838	4,025	16.9	25.63	89.5	16,656	34,230	1.4	8.5	1.0
Colfax Corporation (CFX)	3,327	628	18.9	36.38	98.9	4,284	8,500	2.6	13.5	3.8
Crane Co. (CR)	3,283	617	18.8	86.38	94.7	5,181	5,844	1.8	9.5	1.2
Curtiss-Wright Corp. (CW)	2,481	536	21.6	140.89	97.3	6,014	6,631	2.7	12.4	1.1
Danaher Corp. (DHR)	17,911	4,712	26.3	153.48	99.7	110,521	117,229	6.5	24.9	0.6
Dover Corp. (DOV)	7,136	1,406	19.7	115.26	99.3	16,743	19,663	2.8	14.0	2.0
Energy Recovery, Inc. (ERII)	85	19	22.8	9.79	81.3	540	463	5.4	23.9	(4.0)
Flowserve Corp. (FLS)	3,945	574	14.5	49.77	91.9	6,513	7,533	1.9	13.1	1.6
Franklin Electric Co. Inc. (FELE)	1,315	179	13.6	57.32	99.3	2,657	2,810	2.1	15.7	0.4
General Electric Co. (GE)	95,214	13,314	14.0	11.16	94.3	97,466	181,249	1.9	13.6	6.0
Gorman-Rupp Co. (GRC)	398	58	14.5	37.50	94.7	980	896	2.3	15.5	(1.4)
Graco Inc. (GGG)	1,646	480	29.2	52.00	96.5	8,673	8,725	5.3	18.2	(0.0)
IDEX Corp. (IEX)	2,495	704	28.2	172.00	98.9	13,082	13,483	5.4	19.2	0.4
Illinois Tool Works Inc. (ITW)	14,109	3,896	27.6	179.63	98.5	57,734	63,739	4.5	16.4	1.5
Ingersoll-Rand Co. Ltd. (IR)	16,599	2,784	16.8	132.92	96.1	31,677	37,024	2.2	13.3	1.7
ITT Corporation (ITT)	2,846	540	19.0	73.91	99.0	6,482	6,156	2.2	11.4	(0.8)
National Oilwell Varco, Incorporated (NOV)	8,479	234	2.8	25.05	76.8	9,665	11,694	1.4	50.0	6.9
Pentair, Inc. (PNR)	2,957	559	18.9	45.87	98.8	7,710	8,799	3.0	15.7	1.8
Roper Technologies Inc. (ROP)	5,367	1,914	35.7	354.23	91.9	36,860	43,022	8.0	22.5	2.4
Schlumberger Limited (SLB)	32,917	8,303	25.2	40.20	82.2	55,652	70,447	2.1	8.5	1.8
SPX Flow Inc. (FLOW)	1,507	192	12.8	48.87	98.4	2,080	2,650	1.8	13.8	2.4
Standex International Corp. (SXI)	790	116	14.6	79.35	95.4	989	1,131	1.4	9.8	1.1
United Technologies Corp. (UTX)	77,046	14,776	19.2	149.76	99.1	127,850	170,222	2.2	11.5	2.6
Weatherford International Ltd. (WFT)	5,398	595	11.0	27.95	96.4	1,956	3,368	0.6	5.7	2.3
Xylem Inc. (XYL)	5,249	954	18.2	78.79	92.0	14,188	16,324	3.1	17.1	1.7
<b>Median</b>			<b>18.8%</b>		<b>96.2%</b>			<b>2.2x</b>	<b>13.7x</b>	<b>1.6x</b>
<b>Mean</b>			<b>18.6</b>		<b>93.1</b>			<b>2.9</b>	<b>15.7</b>	<b>1.7</b>

(1) Source: S&P Capital IQ and JKC research.

(2) Revenues and EBITDA are for the latest twelve months as of 12/31/19.

(3) Total enterprise value is defined as market capitalization plus total debt less cash and cash equivalents.

(4) Net debt is defined as total debt less cash and cash equivalents.

**TABLE VIII: SELECTED INTERNATIONAL PUMP COMPANIES<sup>(1)</sup>**

(US\$ in millions, except per share data)

Company	LTM			Stock Price 12/31/2019	% of 52-Week High	Market Cap	Total Enterprise Value <sup>(3)</sup>	TEV / LTM		Net Debt <sup>(4)</sup> EBITDA
	Revenues <sup>(2)</sup>	EBITDA <sup>(2)</sup>	Margin					Revenues	EBITDA	
Alfa Laval AB (ALFA)	\$4,792	\$893	18.6%	\$25.25	97.3%	\$10,592	\$11,732	2.4x	13.1x	0.8x
Andritz AG (ANDR)	7,388	568	7.7	43.09	84.4	4,351	4,756	0.6	8.4	0.7
DMW Corp. (6365)	173	17	9.7	21.38	94.9	92	14	0.1	0.8	(3.9)
Ebara Corp. (6361)	4,671	436	9.3	30.60	95.0	2,910	2,837	0.6	6.5	(0.3)
FLSmidth & Co. A/S (FLS)	3,015	285	9.4	39.86	79.3	1,995	2,399	0.8	8.4	1.3
Gevelot SA (ALGEV)	107	13	12.4	223.32	98.5	172	1	0.0	0.0	(13.3)
GUD Holdings Ltd. (GUD)	305	63	20.8	7.80	82.5	676	770	2.5	12.1	2.6
Hyundai Heavy Industries Co. Ltd. (A009540)	12,574	239	1.9	109.57	86.6	7,748	9,314	0.7	39.0	0.4
John Wood Group plc (WG)	10,304	682	6.6	5.28	65.6	3,556	6,073	0.6	8.9	3.5
Kirloskar Brothers Ltd. (500241)	483	22	4.5	2.09	74.1	166	220	0.5	10.1	2.5
KSB Aktiengesellschaft (KSB)	2,627	169	6.4	343.40	92.2	609	645	0.2	3.8	(1.0)
Kubota Corp. (6326)	17,912	2,478	13.8	15.88	94.8	19,375	26,554	1.5	10.7	2.5
Metso Corp. (METSO)	4,005	574	14.3	39.48	88.4	5,925	6,414	1.6	11.2	0.1
Nikkiso Co. Ltd. (6376)	1,574	199	12.6	13.26	95.6	944	1,880	1.2	9.4	4.6
Pfeiffer Vacuum Technology AG (PFV)	713	105	14.6	178.77	99.4	1,761	1,730	2.4	16.6	(0.3)
SKF AB (SKF B)	9,206	1,283	13.9	20.27	95.5	9,230	10,373	1.1	8.1	0.6
Spirax-Sarco Engineering plc (SPX)	1,585	468	29.5	117.74	94.1	8,668	9,243	5.8	19.7	1.2
Sulzer, Ltd. (SUN)	3,663	378	10.3	111.51	95.2	3,798	4,311	1.2	11.4	0.9
Teikoku Electric Mfg.Co.,Ltd. (6333)	214	35	16.2	13.35	99.2	263	186	0.9	5.4	(2.2)
The Weir Group PLC (WEIR)	3,594	595	16.5	19.99	83.0	5,178	7,184	2.0	12.1	2.6
Torishima Pump Manufacturing Co. Ltd. (6363)	429	21	4.8	8.47	83.7	229	230	0.5	11.1	1.2
Tsurumi Manufacturing Co. Ltd. (6351)	413	54	13.1	18.86	93.4	472	351	0.9	6.5	(1.9)
<b>Median</b>			<b>12.5%</b>		<b>93.8%</b>			<b>0.9x</b>	<b>9.8x</b>	<b>0.7x</b>
<b>Mean</b>			<b>12.2</b>		<b>89.7</b>			<b>1.3</b>	<b>10.6</b>	<b>0.1</b>

(1) Source: S&amp;P Capital IQ and JKC research.

(2) Revenues and EBITDA are for the latest twelve months as of 12/31/19.

(3) Total enterprise value is defined as market capitalization plus total debt less cash and cash equivalents.

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**Wall Street Filter Watch**

The JKC Filter Stock Index was up 16.7% over the last twelve months, while the S&P 500 Index was up 28.7%.

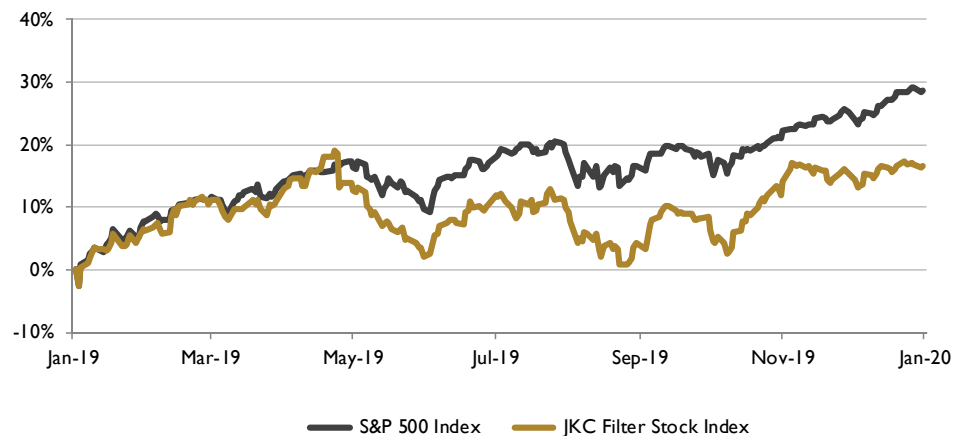
Housing starts jumped 16.9% in December compared to November to a seasonally adjusted annual rate of 1.608 million units, the highest level since December 2006. On a year-on-year basis, housing starts soared 40.8% in December. An estimated 1.290 million housing units were started in 2019, up 3.2% compared to 2018. Single-family homebuilding, which accounts for the largest share of the housing market, jumped 11.2% to a rate of 1.055 units in December, the highest level since June 2007. Single-family housing starts rose in the Midwest and the South. However, they fell in the Northeast and West. Starts for the volatile multi-family housing segment vaulted 29.8% to a rate of 553,000 units in December. The 30-year fixed mortgage rate dropped to an average of 3.65% from its peak of 4.94% in November 2018.<sup>(1)</sup>

In December, U.S. light vehicle sales were down 5.8% compared to December 2018. Truck and SUV sales fell 3.2% from last December, while passenger car sales declined 12.5%. December had 25 selling days in 2019, one less than in 2018. Total 2019 full-year sales were down 1.3% from 2018 year-end totals. Truck and SUV full-year sales were up 2.6%, while passenger car sales were down 10.1% for 2019. For all of 2019, General Motors sales were down 2.5%, Ford sales were down 3.2% and Fiat Chrysler sales were down 1.4% compared to 2018. Toyota sales were down 1.8%, Nissan sales were down 9.9%, Honda sales were up 0.2% and Subaru sales were up 2.9%.

On Wall Street, despite a slump in the manufacturing sector and the lengthy trade war with China, the stock market soared in 2019. The Dow Jones Industrial Average, the S&P 500 Index and the NASDAQ Composite rose 22.3%, 28.9% and 35.2%, respectively for the year. During the month of December, the Dow rose 1.7%, the S&P 500 2.9% and the NASDAQ 3.6% with major indexes closing at new all-time highs. The market was helped by healthy American consumers and The Federal Reserve Bank policies. Another push came from a strong holiday season where online sales rose 18% from last year.

**An estimated 1.290 million housing units were started in 2019, up 3.2% compared to 2018.**

**CHART III: JKC FILTER STOCK INDEX<sup>(2)</sup>**



(1) See Economic Indicators section of this report for more detailed information on these indicators.  
 (2) Source: S&P Capital IQ and JKC research. Local currency converted to USD using historical spot rates. The JKC Filter Stock Index includes a select list of publicly-traded companies involved in the filter industry weighted by market capitalization.



**Filter Companies**

As of December 31, 2019, domestic and international Filter companies (listed in Table IX and Table X, respectively) were trading at medians of 13.6x and 10.2x, respectively, of TEV/LTM EBITDA with median LTM EBITDA margins of 18.6% and 11.7%, respectively. With the exception of a few companies, both the domestic and international Filter companies are conservatively capitalized.

**TABLE IX: SELECTED DOMESTIC FILTER COMPANIES<sup>(1)</sup>**

(US\$ in millions, except per share data)

Company	LTM			Stock Price 12/31/2019	% of 52-Week High	Market Cap	Total Enterprise Value <sup>(3)</sup>	TEV / LTM		Net Debt <sup>(4)</sup> EBITDA
	Revenues <sup>(2)</sup>	EBITDA <sup>(2)</sup>	Margin					Revenues	EBITDA	
3M Co. (MMM)	\$32,136	\$9,130	28.4%	\$176.42	80.3%	\$101,450	\$114,150	3.6x	12.5x	2.1x
Cantel Medical Corp. (CMD)	950	170	17.9	70.90	75.5	2,987	3,889	4.1	22.8	5.3
CECO Environmental Corp. (CECE)	346	32	9.2	7.66	77.8	270	330	1.0	10.3	1.9
Corning Inc. (GLW)	11,503	2,809	24.4	29.11	82.4	22,389	30,857	2.7	11.0	2.1
Crane Co. (CR)	3,283	617	18.8	86.38	94.7	5,181	5,844	1.8	9.5	1.2
Cummins Inc. (CMI)	23,571	3,803	16.1	178.96	95.8	27,077	29,275	1.2	7.7	0.4
Donaldson Company Inc. (DCI)	2,816	461	16.4	57.62	98.8	7,292	7,885	2.8	17.1	1.3
Eaton Corporation (ETN)	21,390	3,984	18.6	94.72	99.2	39,157	46,934	2.2	11.8	2.0
Entegris, Inc. (ENTG)	1,591	446	28.0	50.09	97.2	6,756	7,464	4.7	16.7	1.4
ESCO Technologies Inc. (ESE)	821	154	18.7	92.50	99.2	2,403	2,661	3.2	17.3	0.7
General Electric Co. (GE)	95,214	13,314	14.0	11.16	94.3	97,466	181,249	1.9	13.6	6.0
Honeywell International Inc. (HON)	36,709	8,905	24.3	177.00	96.7	126,472	133,634	3.6	15.0	0.7
Illinois Tool Works Inc. (ITW)	14,109	3,896	27.6	179.63	98.5	57,734	63,739	4.5	16.4	1.5
Lydall Inc. (LDL)	837	66	7.9	20.52	64.7	360	622	0.7	9.4	4.0
Parker Hannifin Corporation (PH)	14,201	2,655	18.7	205.82	97.1	26,441	31,777	2.2	12.0	3.3
Pentair, Inc. (PNR)	2,957	559	18.9	45.87	98.8	7,710	8,799	3.0	15.7	1.8
Tenneco Inc. (TEN)	17,450	1,135	6.5	13.10	35.1	1,060	6,914	0.4	6.1	4.4
Watts Water Technologies, Inc. (WTS)	1,601	264	16.5	99.76	98.9	3,380	3,593	2.2	13.6	0.5
Xylem Inc. (XYL)	5,249	954	18.2	78.79	92.0	14,188	16,324	3.1	17.1	1.7
<b>Median</b>			<b>18.6%</b>		<b>95.8%</b>			<b>2.7x</b>	<b>13.6x</b>	<b>1.8x</b>
<b>Mean</b>			<b>18.4</b>		<b>88.3</b>			<b>2.6</b>	<b>13.5</b>	<b>2.2</b>

(1) Source: S&P Capital IQ and JKC research.

(2) Revenues and EBITDA are for the latest twelve months as of 12/31/19.

(3) Total enterprise value is defined as market capitalization plus total debt less cash and cash equivalents.

(4) Net debt is defined as total debt less cash and cash equivalents.

**TABLE X: SELECTED INTERNATIONAL FILTER COMPANIES<sup>(1)</sup>**

(US\$ in millions, except per share data)

Company	LTM			Stock Price 12/31/2019	% of 52-Week High	Market Cap	Total Enterprise Value <sup>(3)</sup>	TEV / LTM		Net Debt <sup>(4)</sup> EBITDA
	Revenues <sup>(2)</sup>	EBITDA <sup>(2)</sup>	Margin					Revenues	EBITDA	
Ahlstrom-Munksjo Oyj (AMI)	\$3,287	\$283	8.6%	\$16.07	94.3%	\$1,853	\$2,966	0.9x	10.5x	3.5x
Alfa Laval AB (ALFA)	4,792	893	18.6	25.25	97.3	10,592	11,732	2.4	13.1	0.8
Amiad Filtration Systems Ltd (AFS)	121	10	8.4	3.35	86.1	76	117	1.0	11.6	3.6
Andritz AG (ANDR)	7,388	568	7.7	43.09	84.4	4,351	4,756	0.6	8.4	0.7
Asahi Kasei Corp. (3407)	20,221	3,026	15.0	11.35	95.3	15,637	18,405	0.9	6.1	1.0
Daikin Industries Ltd. (6367)	23,338	3,629	15.6	142.16	94.9	41,591	43,164	1.8	11.9	0.3
Denso Corp. (6902)	49,286	5,614	11.4	45.70	95.0	35,408	34,642	0.7	6.2	(0.4)
Faurecia SA (EO)	19,645	2,045	10.4	53.90	90.6	7,347	10,458	0.5	5.1	1.4
FLSmidth & Co. A/S (FLS)	3,015	285	9.4	39.86	79.3	1,995	2,399	0.8	8.4	1.3
GEA Group AG (GIA)	5,513	462	8.4	33.16	97.5	5,971	5,438	1.0	11.8	(1.1)
GUD Holdings Ltd. (GUD)	305	63	20.8	7.80	82.5	676	770	2.5	12.1	2.6
Ibiden Co., Ltd. (4062)	2,680	334	12.5	23.97	97.0	3,349	3,126	1.2	9.3	(0.6)
Johnson Matthey plc (JMAT)	16,682	944	5.7	39.68	86.2	7,622	9,613	0.6	10.2	2.0
NGK Insulators Ltd. (5333)	4,188	918	21.9	17.52	98.3	5,603	6,590	1.6	7.2	1.2
Nitto Denko Corp. (6988)	7,187	1,169	16.3	56.87	95.1	8,922	6,321	0.9	5.4	(2.3)
Porvair plc (PRV)	187	24	12.9	8.85	99.4	405	401	2.1	16.6	(0.2)
Sartorius AG (SRT)	1,984	533	26.8	196.95	98.6	14,037	15,453	7.8	29.0	2.1
Siemens AG (SIE)	97,463	11,369	11.7	131.12	97.5	106,147	134,107	1.4	11.8	2.8
Toray Industries Inc. (3402)	21,348	2,408	11.3	6.82	87.3	10,910	18,849	0.9	7.8	2.9
<b>Median</b>			<b>11.7%</b>		<b>95.0%</b>			<b>1.0x</b>	<b>10.2x</b>	<b>1.2x</b>
<b>Mean</b>			<b>13.3</b>		<b>92.5</b>			<b>1.6</b>	<b>10.7</b>	<b>1.1</b>

(1) Source: S&amp;P Capital IQ and JKC research.

(2) Revenues and EBITDA are for the latest twelve months as of 12/31/19.

(3) Total enterprise value is defined as market capitalization plus total debt less cash and cash equivalents.

(4) Net debt is defined as total debt less cash and cash equivalents.

Valuation Trends over Time

Quarterly median TEV/LTM EBITDA valuation multiples are generally higher than last quarter levels for all companies. Annual multiples for both domestic and international companies were generally higher than last year.

CHART IV: QTRLY MEDIAN TEV/LTM EBITDA VALUATION MULTIPLES<sup>(1)</sup>

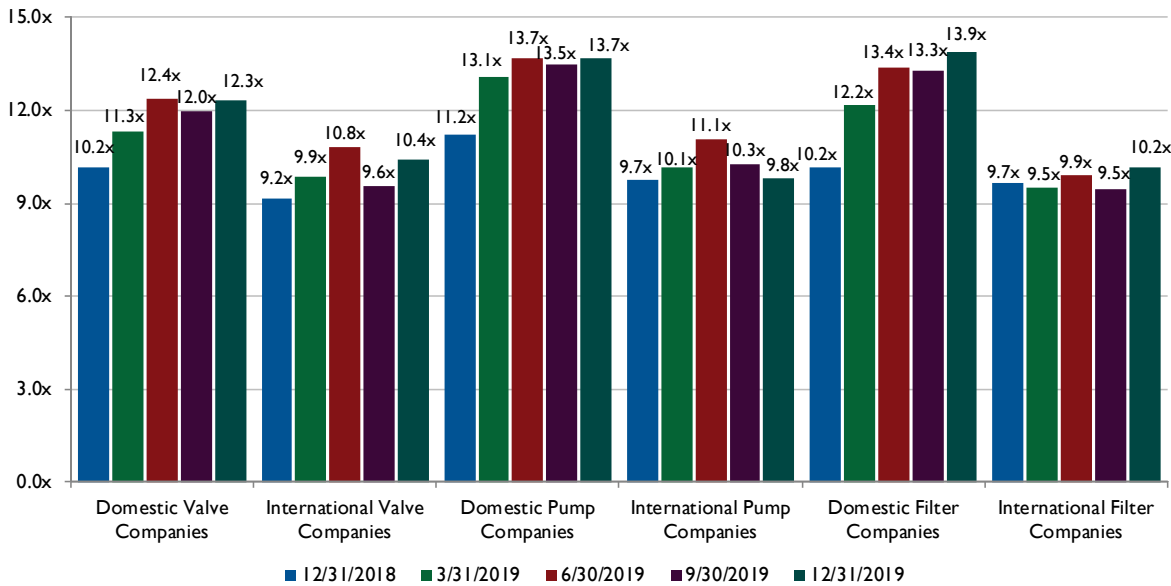
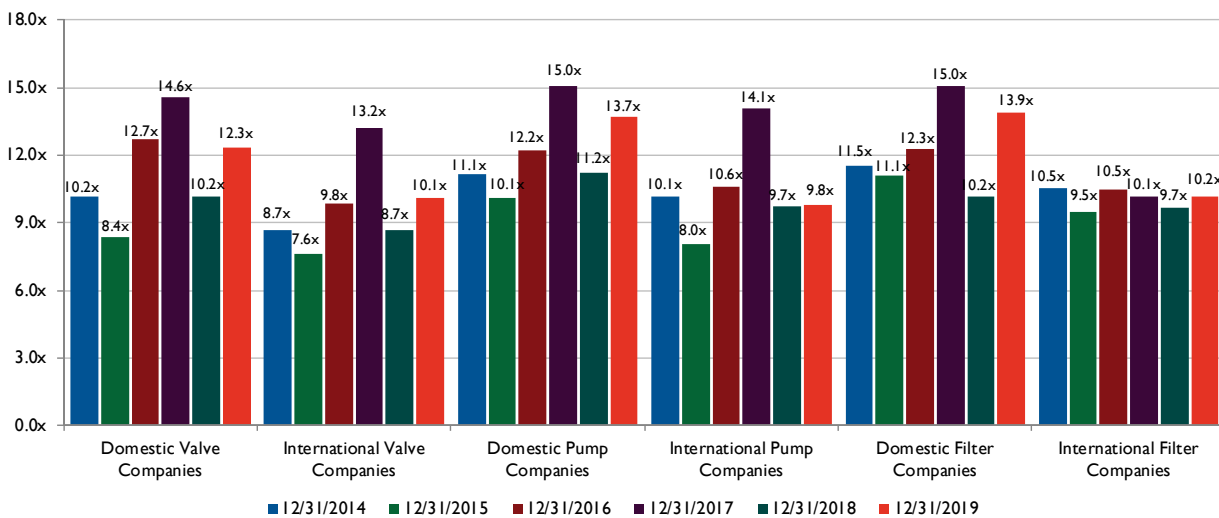


CHART V: ANNUAL MEDIAN TEV/LTM EBITDA VALUATION MULTIPLES<sup>(1)</sup>

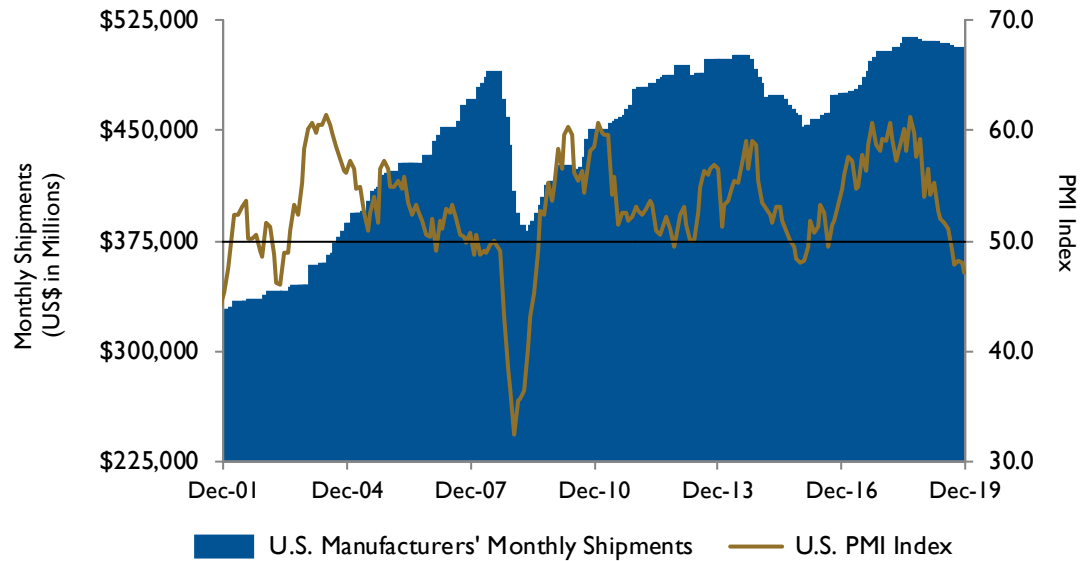


(1) Source: S&P Capital IQ and JKC research.

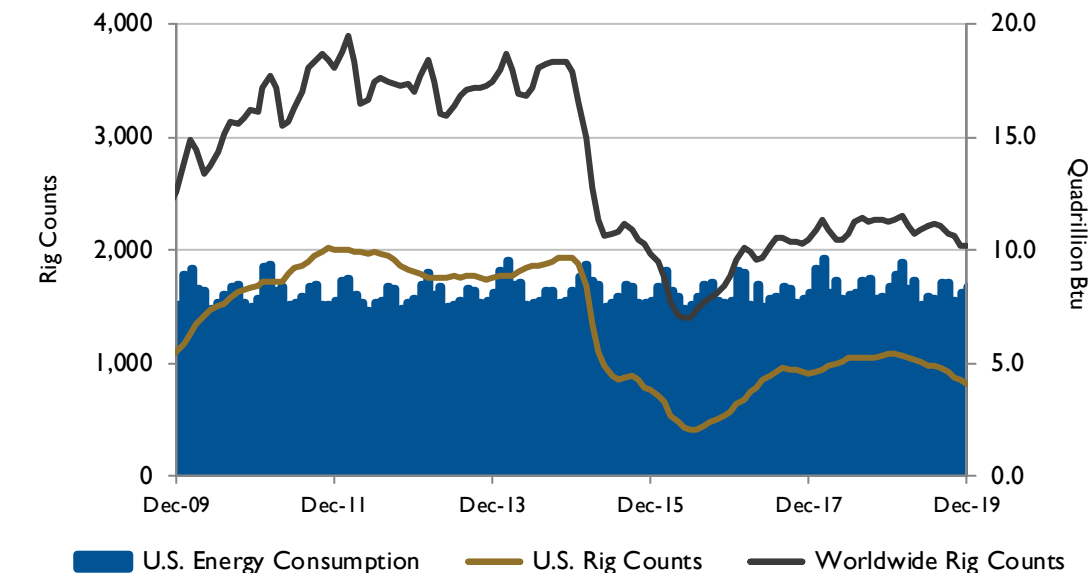
# Economic Indicators – Valves and Pumps<sup>(1)</sup>

BY DAVID A. KAKAREKA

**CHART VI: U.S. PMI INDEX<sup>(2)</sup> AND MANUFACTURING SHIPMENTS<sup>(3)</sup>**



**CHART VII: U.S. ENERGY CONSUMPTION<sup>(4)</sup> AND RIG COUNTS<sup>(5)</sup>**

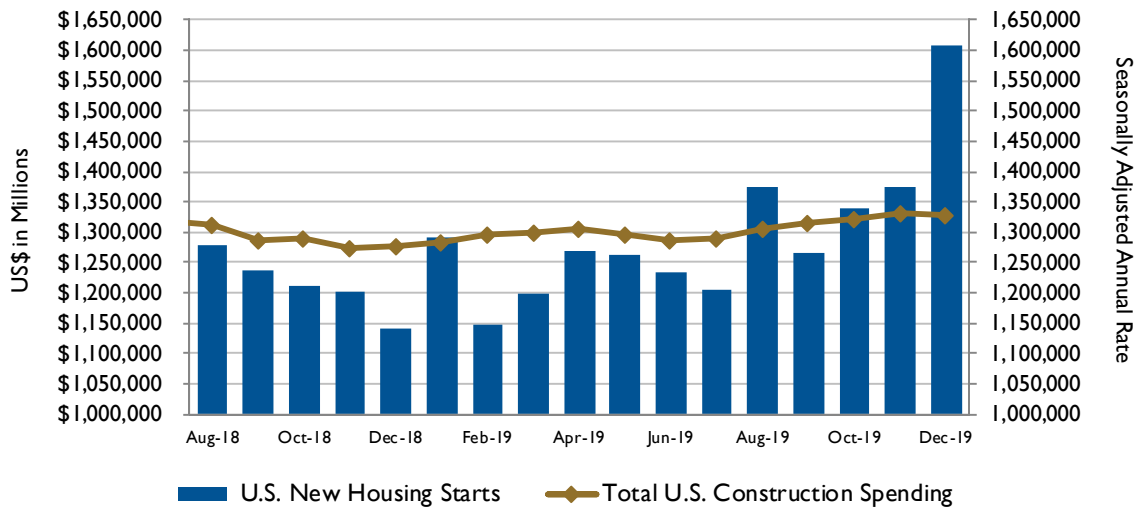


(1) Economic indicators used in Public Equity and Valuation Analysis section of this report.  
 (2) Source: Institute for Supply Management Manufacturing Report on Business®. A PMI Index above 50 represents expansion within the manufacturing sector compared with the prior month.  
 (3) Source: U.S. Census Bureau; Manufacturers' Shipments, Inventories and Orders Survey.  
 (4) Source: U.S. Energy Information Administration, Short-term Energy Outlook.  
 (5) Source: Baker Hughes Inc.

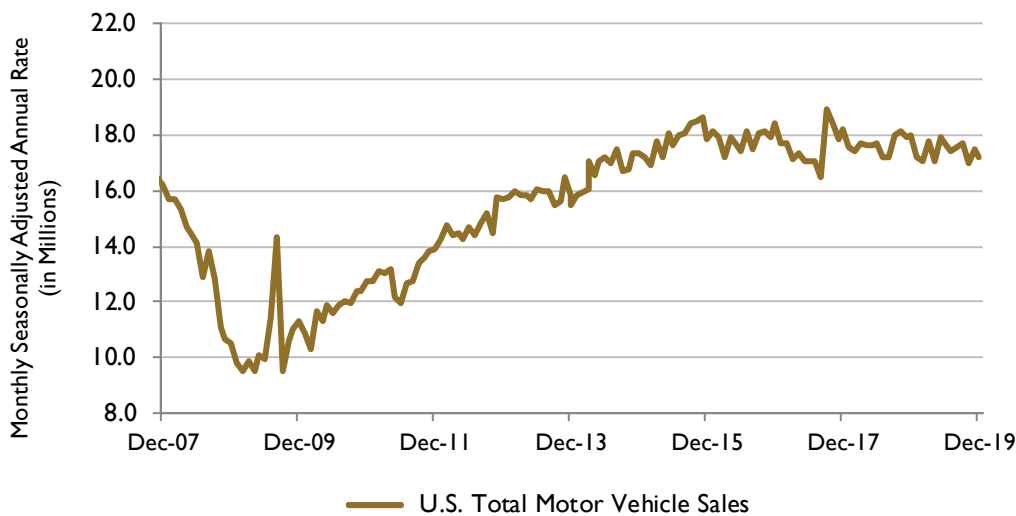
# Economic Indicators – Filters<sup>(1)</sup>

BY DAVID A. KAKAREKA

**CHART VIII: U.S. HOUSING STARTS AND CONSTRUCTION SPENDING<sup>(2)</sup>**



**CHART IX: U.S. MOTOR VEHICLE SALES<sup>(3)</sup>**



(1) Economic indicators used in Public Equity and Valuation Analysis section of this report.  
 (2) Source: U.S. Census Bureau; Manufacturing, Mining and Construction Statistics.  
 (3) Source: U.S. Department of Commerce, Bureau of Economic Analysis.

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## ABOUT JORDAN KNAUFF & COMPANY

Jordan Knauff & Company was founded in 2001 to undertake a distinct mission: to assemble and maintain a staff of top-notch investment banking personnel and offer their knowledge and experience to provide the best available investment banking services to middle-market companies, the entrepreneurs that lead them and the financial entities that transact with them. On a combined basis, over the course of their careers our employees have completed over 200 transactions as investors, owners, operators, buyers, sellers and investment bankers of middle-market businesses across a variety of industries. The majority of our firm's broad transaction experience has been with private companies owned by one shareholder, a partnership, a family or private equity investors.



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