

## MKS Instruments (MKS)

**\$108.70** (As of 01/07/20)

Price Target (6-12 Months): **\$125.00**

Long Term: 6-12 Months

**Zacks Recommendation:**

**Outperform**

(Since: 01/06/20)

Prior Recommendation: Neutral

Short Term: 1-3 Months

**Zacks Rank:** (1-5)

**1-Strong Buy**

Zacks Style Scores:

VGM:D

Value: C

Growth: F

Momentum: A

## Summary

MKS Instruments' fourth-quarter 2019 results are expected to benefit from a lean cost structure. Estimates have been rising ahead of the company's fourth-quarter earnings release. The company has a mixed record of earnings surprises in recent quarters. Moreover, the Electro Scientific Industries acquisition has strengthened the company's offerings in optics, photonics and laser markets. Also, solid demand for laser-based solutions for advanced industrial manufacturing, including solar market applications and flexible PCB, is a key growth driver. Additionally, improving demand and pricing for NAND and DRAM, and an anticipated rise in the semiconductor capital equipment spending in 2020 bode well for MKS Instruments. The company's shares have outperformed the industry in the past six months.

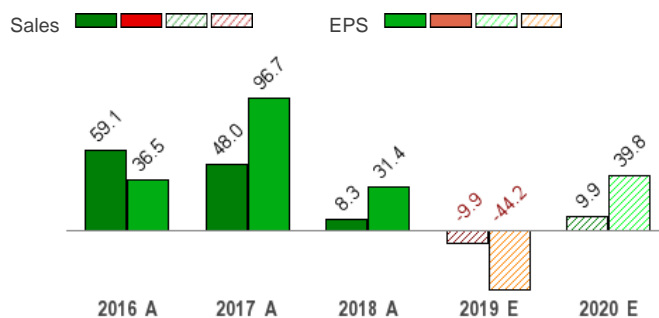
## Price, Consensus & Surprise



## Data Overview

52 Week High-Low	\$115.12 - \$66.23
20 Day Average Volume (sh)	386,489
Market Cap	\$5.9 B
YTD Price Change	-1.2%
Beta	1.47
Dividend / Div Yld	\$0.80 / 0.7%
Industry	<a href="#">Electronics - Manufacturing Machinery</a>
Zacks Industry Rank	Top 28% (70 out of 254)

## Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	30.2%
Last Sales Surprise	4.4%
EPS F1 Est- 4 week change	1.0%
Expected Report Date	02/04/2020
Earnings ESP	8.4%
P/E TTM	22.3
P/E F1	17.8
PEG F1	1.5
P/S TTM	3.2

## Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2020	488 E	513 E	525 E	522 E	2,056 E
2019	464 A	474 A	462 A	470 E	1,870 E
2018	554 A	573 A	487 A	461 A	2,075 A

## EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2020	\$1.25 E	\$1.45 E	\$1.55 E	\$1.59 E	\$6.11 E
2019	\$1.12 A	\$1.09 A	\$1.12 A	\$1.07 E	\$4.37 E
2018	\$2.07 A	\$2.33 A	\$1.88 A	\$1.54 A	\$7.83 A

\*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 01/07/2020. The reports text is as of 01/08/2020.

## Overview

Massachusetts-based MKS Instruments, Inc. global provider of instruments, subsystems and process control solutions that measure, monitor, deliver, analyze, power and control critical parameters of advanced manufacturing processes.

MKS solutions are used in pressure measurement and control, flow measurement and control, gas and vapor delivery, gas composition analysis, residual gas analysis, leak detection, control technology, ozone generation and delivery, RF & DC power, reactive gas generation, vacuum technology, lasers, photonics, sub-micron positioning, vibration control, and optics.

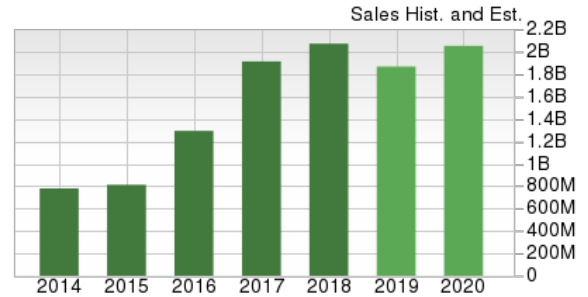
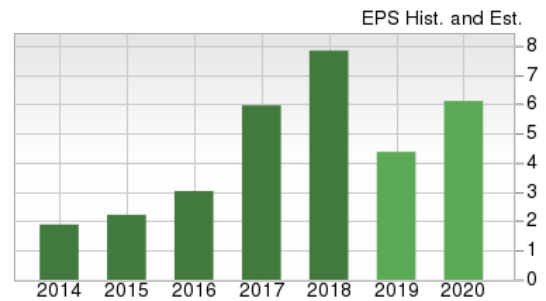
Total revenues in 2018 were \$2.08 billion. The company has six product groups: Analytical and Controls Solutions; Power, Plasma and Reactive Gas Solutions; Vacuum Solutions; Photonics; Optics; and Laser Products.

Since the acquisition of Newport Corporation (Apr 2016), MKS Instruments has been reporting results via two business segments as discussed below:

The Vacuum and Analysis segment (60.8% of 2018 revenues) provides a wide range of components, instruments, software and subsystems. The Analytical and Controls Solutions, the Power, Plasma and Reactive Gas Solutions and the Vacuum Solutions are included under this segment.

The Light and Motion (39.2% of 2018 revenues) offers several components, instruments and subsystems. The Photonics, Optics and Laser product groups are included under this segment.

On Feb 1, 2019, MKS completed its previously announced acquisition of Electro Scientific Industries (ESI). The company expects to add a third segment to report ESI results.



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## Reasons To Buy:

- ▲ MKS Instruments' is expected to gain from solid demand for laser-based solutions for advanced industrial manufacturing, including solar market applications and flexible PCB. The company won a number of orders in this space in China and Korea, which bodes well for top-line growth.
- ▲ MKS Instruments' has solid growth prospects in the semiconductor market due to its exposure to 3D NAND, DRAM and logic-based devices. The company continues to develop innovative solutions for 5-nm logic devices, 3D NAND stacks of 128 layers and beyond and next-generation DRAM structures. Moreover, broad exposure to almost 85% of WFE spending including deposition, etch, lithography, metrology and inspection presents significant growth opportunity over the long term.
- ▲ Moreover, rapid adoption of 5G technology presents significant growth opportunity for MKS Instruments over the next few years. This is due to the fact that implementation of 5G will require upgraded wireless infrastructure and new mobile devices. This will require increased data processing and storage capabilities, which is positive for the company's semiconductor and laser diode testing businesses.
- ▲ The acquisition of Electro Scientific Industries (ESI) expands MKS Instruments' total addressable market by nearly \$2.2 billion. The deal also strengthens its lasers, photonics and optic product portfolio.

Robust semiconductor portfolio, increasing demand for solutions related 5G and the Electro Scientific Industries (ESI) buyout are key catalysts.

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## Risks

- Notably, International business accounted for 53% of MKS Instruments' revenues in the first half of 2019. A significant portion of sales now originates from Asia (especially South Korea, Japan, Israel, China and Taiwan) post ESI acquisition. Since, the company conducts businesses in major foreign currencies, unfavorable movement in foreign currency exchange rates often adversely impact sales. Moreover, the uncertainty regarding the resolution of the ongoing U.S.-China trade war doesn't bode well for MKS Instruments.
  - A significant portion of MKS Instruments revenue comes from a handful of customers including Applied Materials and Lam Research Corporation, which accounted for 12% and 11% of net revenues in 2018, respectively. Top ten customers accounted for 41% of the company's top-line in 2018. Loss of any of these top customers can significantly hurt revenue growth.
  - The acquisitions of Newport and ESI have negatively impacted the company's balance sheet in the form of high level of goodwill and intangible assets, which totaled \$1.63 billion or almost 49% of total assets as of Sep 30, 2019.
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## Last Earnings Report

### MKS Instruments' Q3 Earnings Beat, Revenues Miss

MKS Instruments reported third-quarter 2019 adjusted earnings of \$1.12 per share, which beat the Zacks Consensus Estimate by a whopping 26 cents but slumped 40.4% year over year.

Revenues of \$462.5 million lagged the consensus mark of \$471 million and declined 5.1% year over year.

Products revenues (83.5% of total revenues) were \$386.2 million, down 9.4% from the year-ago quarter. Services revenues (16.5%) increased 25.3% year over year to \$76.3 million.

Quarter Ending **09/2019**

Report Date	Oct 23, 2019
Sales Surprise	4.36%
EPS Surprise	30.23%
Quarterly EPS	1.12
Annual EPS (TTM)	4.87

### Quarter Details

Revenues from the semiconductor market (48.2% of total revenues) decreased 14.1% year over year to \$222.9 million.

Revenues from advanced markets (51.8% of total revenues) were \$239.5 million, up 5.2% from the year-ago quarter.

Segment-wise, Vacuum and Analysis (52% of total revenues) revenues were \$240.7 million, down 15.9% year over year.

Light and Motion division revenues (37.3% of total revenues) were \$172.6 million, down 14.2% year over year.

Equipment & Solutions segment revenues (12.1% of total revenues) were \$55.9 million.

### Operating Details

In the third quarter, MKS Instruments' adjusted gross margin contracted 330 basis points (bps) on a year-over-year basis to 44.3%.

Adjusted EBITDA decreased 31.2% year over year to \$98.2 million. Adjusted EBITDA margin was 21.2%, significantly down from 29.3% reported in the year-ago quarter.

Research & development and sales, general & administrative expenses, as a percentage of revenues, expanded 240 bps and 320 bps, respectively.

MKS Instruments reported non-GAAP operating income of \$81.3 million, down 37% year over year. Adjusted operating margin was 17.6%, significantly down from 26.5% reported in the year-ago quarter.

### Balance Sheet & Cash Flow

As of Sep 30, 2019, MKS Instruments had cash and short-term investments of \$475 million compared with \$460 million as of Jun 30, 2019.

Term-loan debt outstanding was \$895 million after a payment of \$50 million made during the third quarter of 2019.

MKS Instruments also paid out dividends worth \$10.9 million or 20 cents per diluted share during the reported quarter.

### Q4 Guidance

For the fourth quarter of 2019, MKS Instruments anticipates revenues between \$445 million and \$495 million. Non-GAAP earnings are expected between 85 cents and \$1.19 per share.

## Recent News

On Oct 29, MKS Instruments announced that its board of directors has authorized a quarterly cash dividend of \$0.20 per share, payable on Dec 6, 2019 to shareholders of record as of Nov 25, 2019.

On Oct 1, MKS Instruments announced that it has successfully completed the repricing of its existing secured term loan. The lenders have agreed to an amendment that results in a reduction of the interest rate spread on the two existing tranches of the secured term loan from LIBOR plus 2.0% and LIBOR plus 2.25%, respectively, to LIBOR plus 1.75%. This transaction also combined the two existing tranches into one tranche, with a maturity date in February 2026.

Moreover, the company announced that it has made a voluntary \$50-million prepayment of principal on its secured term loan, reducing the outstanding principal to approximately \$897 million as of Sep 27, from roughly \$947 million as of Jun 30.

On May 9, 2019, the company also announced that Gerald G. Colella will retire as the CEO, and Dr. John T.C. Lee will succeed him, effective Jan 1, 2020.

## Valuation

MKS Instruments shares are up 40% in the six-months period and 53.1% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector are up 36% and 13.4% in the six-months period, respectively. Over the past year, the Zacks sub-industry and the sector are up 57.5% and 30.6%, respectively.

The S&P 500 index is up 9.3% in the six-months period and 24.2% in the past year.

The stock is currently trading at 17.89X forward 12-month earnings, which compares to 20.7X for the Zacks sub-industry, 22.31X for the Zacks sector and 18.79X for the S&P 500 index.

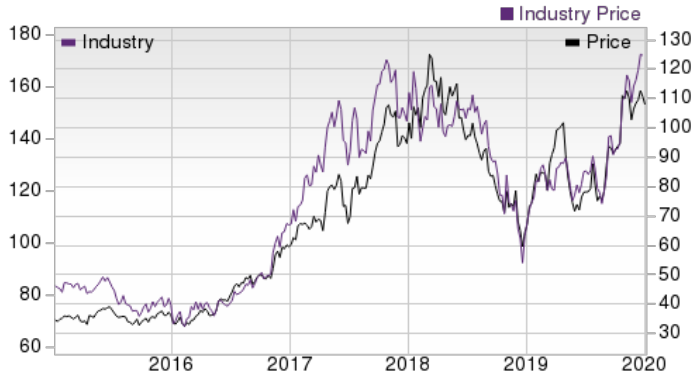
Over the past five years, the stock has traded as high as 25.58X and as low as 7.14X, with a 5-year median of 15.35X. Our Outperform recommendation indicates that the stock will perform better than the market. Our \$125 price target reflects 20.56X forward 12-month earnings.

The table below shows summary valuation data for MKSI

Valuation Multiples - MKSI					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	17.89	20.7	22.31	18.79
	5-Year High	25.58	23.12	22.31	19.34
	5-Year Low	7.14	10.44	16.86	15.17
	5-Year Median	15.35	18.76	19.24	17.44
P/S F12M	Current	2.88	2.58	3.59	3.48
	5-Year High	3.26	2.58	3.59	3.48
	5-Year Low	1.46	1.45	2.3	2.54
	5-Year Median	2.25	2.04	3.01	3
EV/EBITDA TTM	Current	13.65	16.3	12.12	11.99
	5-Year High	16.74	16.47	12.6	12.86
	5-Year Low	4.51	5.65	7.67	8.48
	5-Year Median	10.06	10.57	10.52	10.67

As of 01/07/2020

## Industry Analysis Zacks Industry Rank: Top 28% (70 out of 254)



## Top Peers

Advanced Energy Industries, Inc. (AEIS)	Outperform
Applied Materials, Inc. (AMAT)	Outperform
AMETEK, Inc. (AME)	Neutral
Entegris, Inc. (ENTG)	Neutral
KLA Corporation (KLAC)	Neutral
Lam Research Corporation (LRCX)	Neutral
Teradyne, Inc. (TER)	Neutral
Coherent, Inc. (COHR)	Underperform

Industry Comparison Industry: Electronics - Manufacturing Machinery				Industry Peers		
	MKSI Outperform	X Industry	S&P 500	AEIS Outperform	AME Neutral	COHR Underperform
<b>VGM Score</b>	<b>D</b>	-	-	<b>D</b>	<b>B</b>	<b>F</b>
Market Cap	5.93 B	1.33 B	23.72 B	2.73 B	23.23 B	4.10 B
# of Analysts	5	3	13	5	9	3
Dividend Yield	0.74%	0.00%	1.79%	0.00%	0.55%	0.00%
<b>Value Score</b>	<b>C</b>	-	-	<b>C</b>	<b>C</b>	<b>F</b>
Cash/Price	0.08	0.18	0.04	0.12	0.03	0.08
EV/EBITDA	10.86	12.88	13.90	15.09	19.48	20.92
PEG Ratio	1.48	9.53	2.00	NA	2.12	NA
Price/Book (P/B)	3.00	1.95	3.34	4.12	4.77	3.17
Price/Cash Flow (P/CF)	11.40	15.72	13.67	15.40	24.43	16.98
P/E (F1)	17.79	20.95	18.72	21.43	23.02	33.65
Price/Sales (P/S)	3.18	2.06	2.66	4.51	4.53	2.87
Earnings Yield	5.62%	4.76%	5.31%	4.67%	4.34%	2.97%
Debt/Equity	0.44	0.31	0.72	0.64	0.46	0.31
Cash Flow (\$/share)	9.54	1.85	6.94	4.62	4.16	10.00
<b>Growth Score</b>	<b>F</b>	-	-	<b>F</b>	<b>B</b>	<b>F</b>
Hist. EPS Growth (3-5 yrs)	38.63%	38.07%	10.56%	20.12%	9.46%	36.01%
Proj. EPS Growth (F1/F0)	39.71%	65.68%	7.42%	45.87%	6.68%	-14.75%
Curr. Cash Flow Growth	22.18%	10.05%	14.83%	-0.85%	22.35%	-46.32%
Hist. Cash Flow Growth (3-5 yrs)	51.05%	28.25%	9.00%	20.48%	8.72%	18.56%
Current Ratio	4.38	3.41	1.23	2.47	2.05	4.56
Debt/Capital	30.68%	23.14%	42.92%	38.93%	31.42%	23.39%
Net Margin	9.10%	5.14%	11.08%	12.25%	16.63%	3.76%
Return on Equity	13.84%	5.26%	17.16%	13.00%	20.04%	8.95%
Sales/Assets	0.58	0.58	0.55	0.59	0.57	0.66
Proj. Sales Growth (F1/F0)	9.90%	13.50%	4.15%	69.14%	5.35%	-2.18%
<b>Momentum Score</b>	<b>A</b>	-	-	<b>A</b>	<b>B</b>	<b>B</b>
Daily Price Chg	2.63%	1.75%	0.10%	2.07%	0.57%	2.09%
1 Week Price Chg	-2.43%	0.54%	-0.30%	0.10%	0.99%	0.49%
4 Week Price Chg	1.92%	5.98%	2.33%	8.08%	3.62%	16.54%
12 Week Price Chg	15.74%	17.40%	7.02%	30.57%	14.11%	11.10%
52 Week Price Chg	60.09%	48.48%	24.61%	65.58%	47.42%	58.28%
20 Day Average Volume	386,489	204,131	1,589,897	248,361	736,716	185,284
(F1) EPS Est 1 week change	0.99%	0.00%	0.00%	0.26%	0.00%	0.00%
(F1) EPS Est 4 week change	0.99%	0.00%	0.00%	2.14%	0.36%	0.00%
(F1) EPS Est 12 week change	2.35%	3.41%	-0.56%	24.49%	1.11%	-27.79%
(Q1) EPS Est Mthly Chg	0.00%	0.00%	0.00%	2.94%	0.00%	0.00%

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## Zacks Stock Rating System

We offer two rating systems that take into account investors' holding horizons: Zacks Rank and Zacks Recommendation. Each provides valuable insights into the future profitability of the stock and can be used separately or in combination with each other depending on your investment style.

### Zacks Recommendation

The Zacks Recommendation aims to predict performance over the next 6 to 12 months. The foundation for the quantitatively determined Zacks Recommendation is trends in the company's estimate revisions and earnings outlook. The Zacks Recommendation is broken down into 3 Levels; Outperform, Neutral and Underperform. Unlike many Wall Street firms, we have an excellent balance between the number of Outperform and Neutral recommendations. Our team of 70 analysts are fully versed in the benefits of earnings estimate revisions and how that is harnessed through the Zacks quantitative rating system. But we have given our analysts the ability to override the Zacks Recommendation for the 1200 stocks that they follow. The reason for the analyst over-rides is that there are often factors such as valuation, industry conditions and management effectiveness that a trained investment professional can spot better than a quantitative model.

### Zacks Rank

The Zacks Rank is our short-term rating system that is most effective over the one- to three-month holding horizon. The underlying driver for the quantitatively-determined Zacks Rank is the same as the Zacks Recommendation, and reflects trends in earnings estimate revisions.

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### Zacks Style Scores

The Zacks Style Score is as a complementary indicator to the Zacks rating system, giving investors a way to focus on the highest rated stocks that best fit their own stock picking preferences.

Academic research has proven that stocks with the best Value, Growth and Momentum characteristics outperform the market. The Zacks Style Scores rate stocks on each of these individual styles and assigns a rating of A, B, C, D and F. We also produce the VGM Score (V for Value, G for Growth and M for Momentum), which combines the weighted average of the individual Style Scores into one score. This is perfectly suited for those who want their stocks to have the best scores across the board.

Value Score	C
Growth Score	F
Momentum Score	A
VGM Score	D

As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

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