UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of Earliest Event Reported): July 24, 2018

MKS Instruments, Inc.

(Exact name of registrant as specified in its charter)

Massachusetts	000-23621	04-2277512
(State or other jurisdiction of incorporation)	(Commission File Number)	(I.R.S. Employer Identification No.)

2 Tech Drive, Suite 201, Andover, Massachusetts	01810
(Address of principal executive offices)	(Zip Code)

Registrant’s telephone number, including area code: 978-645-5500

Not Applicable

Former name or former address, if changed since last report

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

[ ] Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
[ ] Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
[ ] Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
[ ] Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Top of the Form

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company [ ]

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. [ ]

[Top of the Form](#)

Item 2.02 Results of Operations and Financial Condition.

On July 24, 2018, MKS Instruments, Inc. announced its financial results for the quarter ended June 30, 2018. The full text of the press release is attached as Exhibit 99.1 to this Current Report on Form 8-K.

The information in this Form 8-K and the Exhibit attached hereto shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act") or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, except as expressly set forth by specific reference in such a filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

99.1 Press Release dated July 24, 2018

Top of the Form

Exhibit Index

Exhibit No.	**Description**
99.1	Press Release dated July 24, 2018

Top of the Form

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

		MKS Instruments, Inc.
July 24, 2018	*By:*	*/s/ Seth H. Bagshaw*
		Name: Seth H. Bagshaw *Title: Sr. Vice President, Chief Financial Officer and Treasurer*

Top of the Form

(MKS LOGO)

EXHIBIT 99.1

MKS Instruments Reports Second Quarter 2018 Financial Results

Achieved new quarterly records for revenue and Non-GAAP net earnings

Achieved new quarterly record for revenue to the semiconductor market

Quarterly revenue up 19% compared to Q2 2017

Light and Motion Division achieves new Non-GAAP operating income record

Andover, MA, July 24, 2018 — MKS Instruments, Inc. (NASDAQ: MKSI), a global provider of technologies that enable advanced processes and improve productivity, today reported second quarter 2018 financial results.

Quarterly Financial Results
(in millions, except per share data)

	Q2 2018	Q1 2018
GAAP Results		
Net revenues	$ 573	$ 554
Gross margin	48.0%	47.4%
Operating margin	26.4%	23.8%
Net income	$ 123	$ 105
Diluted EPS	$2.22	$ 1.90
Non-GAAP Results		
Gross margin	48.0%	47.4%
Operating margin	28.3%	26.2%
Net earnings	$ 129	$114.3
Diluted EPS	$2.33	$ 2.07

Second Quarter 2018 Financial Results

Revenue was $573 million, an increase of 3% from $554 million in the first quarter of 2018 and an increase of 19% from $481 million in the second quarter of 2017.

Net income was $123 million, or $2.22 per diluted share, compared to net income of $105 million, or $1.90 per diluted share, in the first quarter of 2018, and $120.4 million, or $2.19 per diluted share, in the second quarter of 2017, which included a gain of $72 million from the sale of its Data Analytics Business Unit.

Non-GAAP net earnings, which exclude special charges and credits, were $129 million, or $2.33 per diluted share, compared to $114.3 million, or $2.07 per diluted share, in the first quarter of 2018, and $77.7 million, or $1.41 per diluted share, in the second quarter of 2017.

Sales to semiconductor customers were a record $336 million, an increase of 19% compared to the second quarter of 2017, and sales to Advanced Markets were $237 million, an increase of 19% compared to the second quarter of 2017.

Sales in the Vacuum and Analysis Division were $368 million, an increase of 19% from the second quarter a year ago. Sales in the Light and Motion Division were $205 million, an increase of 20% from the prior year period.

“We are very pleased with our results for the second quarter of 2018, as we achieved new records for total and semiconductor revenue as well as Non-GAAP net earnings,” said Gerald Colella, Chief Executive Officer. “We set a strategy five years ago to augment our semi-focused business model with additional solutions that serve the industrial technology sector and other Advanced Markets. Our results demonstrate that this strategy is working, and we are confident that our diverse end markets, combined with our global leadership position in Semiconductor, will continue to drive sustainable and profitable growth for MKS.”

“Since acquiring Newport Corporation two years ago, we have expanded the portion of our revenue from Advanced Markets from approximately 25% to over 40%, a nearly $1 billion annual run rate, based on second quarter revenue,” said Seth Bagshaw, Chief Financial Officer. “At the same time, we more than doubled the Non-GAAP operating margin for our Light and Motion Division, from approximately 11% in the second quarter of 2016 to over 27% in the second quarter of 2018, demonstrating our ability to drive profitable growth.”

Additional Financial Information

The Company had $631 million in cash and short-term investments and $348 million of Term Loan Debt as of June 30, 2018 and during the second quarter of 2018, MKS paid a dividend of $10.9 million or $0.20 per diluted share, an 11% increase over the previous quarter.

Third Quarter 2018 Outlook

Based on current business levels, the Company expects that revenue in the third quarter of 2018 could range from $470 to $510 million.

At these volumes, GAAP net income could range from $1.40 to $1.66 per diluted share and Non-GAAP net earnings could range from $1.60 to $1.86 per diluted share. This financial guidance incorporates assumptions made based upon the Company's current interpretation of the 2017 Tax Cut and Jobs Act and may change as additional clarification and implementation guidance is issued.

Conference Call Details

A conference call with management will be held on Wednesday, July 25, 2018 at 8:30 a.m. (Eastern Time). To participate in the conference call, please dial (877) 212-6076 for domestic callers and (707) 287-9331 for international callers, and an operator will connect you. Participants will need to provide the operator with the Conference ID of 4876837, which has been reserved for this call. A live and archived webcast of the call will be available on the Company's website at www.mksinst.com, along with the Company's earnings press release and supplemental financial information.

About MKS Instruments

MKS Instruments, Inc. is a global provider of instruments, subsystems and process control solutions that measure, monitor, deliver, analyze, power and control critical parameters of advanced manufacturing processes to improve process performance and productivity for our customers. Our products are derived from our core competencies 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, power, reactive gas generation, vacuum technology, lasers, photonics, sub-micron positioning, vibration control and optics. We also provide services relating to the maintenance and repair of our products, installation services and training. Our primary served markets include semiconductor, industrial technologies, life and health sciences, research and defense. Additional information can be found at www.mksinst.com.

Use of Non-GAAP Financial Results

This release includes measures that are not in accordance with U.S. generally accepted accounting principles ("Non-GAAP measures"). Non-GAAP measures exclude amortization of acquired intangible assets, asset impairments, costs associated with completed and announced acquisitions, acquisition integration costs, an inventory step-up adjustment related to an acquisition, restructuring charges, certain excess and obsolete inventory charges, fees and expenses related to the re-pricings of our term loan, amortization of debt issuance costs, net proceeds from an insurance policy, costs associated with the sale of a business, the tax effect of the 2017 Tax Cut and Jobs Act, the tax effect of legal entity restructurings, other discrete tax benefits and charges, and the related tax effect of these adjustments. These Non-GAAP measures should be viewed in addition to, and not as a substitute for, MKS' reported results, and may be different from Non-GAAP measures used by other companies. In addition, these Non-GAAP measures are not based on any comprehensive set of accounting rules or principles. MKS management believes the presentation of these Non-GAAP measures is useful to investors for comparing prior periods and analyzing ongoing business trends and operating results.

SAFE HARBOR FOR FORWARD-LOOKING STATEMENTS

This release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 regarding the future financial performance, business prospects and growth of MKS. These statements are only predictions based on current assumptions and expectations. Actual events or results may differ materially from those in the forward-looking statements set forth herein. Among the important factors that could cause actual events to differ materially from those in the forward-looking statements are the conditions affecting the markets in which MKS operates, including the fluctuations in capital spending in the semiconductor industry and other advanced manufacturing markets, fluctuations in net sales to our major customers, the challenges, risks and costs involved with integrating the operations of the companies we have acquired, including our most recent acquisition of Newport Corporation, the Company's ability to successfully grow our business, potential fluctuations in quarterly results, the terms of our term loan, dependence on new product development, rapid technological and market change, acquisition strategy, manufacturing and sourcing risks, volatility of stock price, international operations, financial risk management, and the other factors described in MKS' most recent Annual Report on Form 10-K for the year ended December 31, 2017 filed with SEC. MKS is under no obligation to, and expressly disclaims any obligation to, update or alter these forward-looking statements, whether as a result of new information, future events or otherwise after the date of this press release.

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MKS Instruments, Inc.
Unaudited Consolidated Statements of Operations
(In thousands, except per share data)

	Three Months Ended		
	June 30, 2018	June 30, 2017 (Note 19)	March 31, 2018
Net revenues:			
Products	$509,999	$426,317	$496,677
Services	63,141	54,440	57,598
Total net revenues	573,140	480,757	554,275
Cost of revenues:			
Products	266,890	230,706	261,321
Services	31,373	30,468	30,099
Total cost of revenues	298,263	261,174	291,420
Gross profit	274,877	219,583	262,855
Research and development	36,504	33,680	34,857
Selling, general and administrative	76,181	71,979	82,949
Acquisition and integration costs	(1,168)	790	—
Restructuring	790	2,064	1,220
Environmental costs	—	—	1,000
Asset impairment	—	6,719	—
Fees and expenses related to repricing of term loan	378	—	—
Amortization of intangible assets	10,901	11,468	11,190
Income from operations	151,291	92,883	131,639
Interest income	1,456	507	1,105
Interest expense	3,922	6,997	5,430
Gain on sale of business	—	74,856	—
Other expense, net	281	3,277	572
Income from operations before income taxes	148,544	157,972	126,742
Provision for income taxes	25,682	37,532	21,621
Net income	$122,862	$120,440	$105,121
Net income per share:			
Basic	$ 2.25	$ 2.22	$ 1.93
Diluted	$ 2.22	$ 2.19	$ 1.90
Cash dividends per common share	$ 0.20	$ 0.18	$ 0.18
Weighted average shares outstanding:			
Basic	54,719	54,178	54,423
Diluted	55,274	55,001	55,286
The following supplemental Non-GAAP earnings information is presented to aid in understanding MKS' operating results:			
Net income	$122,862	$120,440	$105,121
Adjustments:			
Acquisition and integration costs (Note 1)	(1,168)	790	—
Expenses related to sale of a business (Note 2)	—	436	—
Excess and obsolete inventory charge (Note 3)	—	1,160	—
Fees and expenses related to repricing of term loan (Note 4)	378	—	—
Amortization of debt issuance costs (Note 5)	660	694	1,831
Restructuring (Note 6)	790	2,064	1,220
Environmental costs (Note 7)	—	—	1,000
Asset impairment (Note 8)	—	6,719	—
Gain on sale of business (Note 9)	—	(74,856)	—
Amortization of intangible assets	10,901	11,468	11,190
Windfall tax benefit on stock-based compensation (Note 10)	(4,752)	(3,169)	(3,036)
Tax adjustment related to the sale of a business (Note 11)	—	15,007	—
Deferred tax adjustment (Note 12)	—	—	878
Transition tax on accumulated foreign earnings (Note 13)	(659)	—	(1,668)
Pro-forma tax adjustments	(200)	(3,047)	(2,247)
Non-GAAP net earnings (Note 14)	$128,812	$ 77,706	$114,289
Non-GAAP net earnings per share (Note 14)	$ 2.33	$ 1.41	$ 2.07
Weighted average shares outstanding	55,274	55,001	55,286
Income from operations	$151,291	$ 92,883	$131,639
Adjustments:			
Acquisition and integration costs (Note 1)	(1,168)	790	—
Expenses related to sale of a business (Note 2)	—	436	—
Excess and obsolete inventory charge (Note 3)	—	1,160	—
Fees and expenses related to repricing of term loan (Note 4)	378	—	—
Restructuring (Note 6)	790	2,064	1,220

Environmental costs (Note 7)	—	—	1,000
Asset impairment (Note 8)	—	6,719	—
Amortization of intangible assets	10,901	11,468	11,190
Non-GAAP income from operations (Note 15)	$162,192	$115,520	$145,049
Non-GAAP operating margin percentage (Note 15)	28.3%	24.0%	26.2%
Gross profit	$274,877	$219,583	$262,855
Excess and obsolete inventory charge (Note 3)	—	1,160	—
Non-GAAP gross profit (Note 16)	$274,877	$220,743	$262,855
Non-GAAP gross profit percentage (Note 16)	48.0%	45.9%	47.4%
Interest expense	$ 3,922	$ 6,997	$ 5,430
Amortization of debt issuance costs (Note 5)	660	694	1,831
Non-GAAP interest expense	$ 3,262	$ 6,303	$ 3,599
Net income	$122,862	$120,440	$105,121
Interest expense, net	2,466	6,490	4,325
Provision for income taxes	25,682	37,532	21,621
Depreciation	8,984	9,120	9,302
Amortization	10,901	11,468	11,190
EBITDA (Note 17)	$170,895	$185,050	$151,559
Stock-based compensation	6,366	6,207	10,426
Acquisition and integration costs (Note 1)	(1,168)	790	—
Expenses related to sale of a business (Note 2)	—	436	—
Excess and obsolete inventory charge (Note 3)	—	1,160	—
Fees and expenses related to repricing of term loan (Note 4)	378	—	—
Restructuring (Note 6)	790	2,064	1,220
Environmental costs (Note 7)	—	—	1,000
Asset impairment (Note 8)	—	6,719	—
Gain on sale of business (Note 9)	—	(74,856)	—
Other adjustments	—	822	772
Adjusted EBITDA (Note 18)	$177,261	$128,392	$164,977

Note 1: We recorded acquisition and integration costs related to the Newport Corporation acquisition, which closed during the second quarter of 2016, during the three months ended June 30, 2017. During the second quarter of 2018, we reversed a portion of these costs related to severance agreement provisions that were not met.

Note 2: We recorded legal and consulting expenses during the three months ended June 30, 2017 related to the sale of a business, which was completed in April 2017.

Note 3: We recorded excess and obsolete inventory charges in cost of sales during the three months ended June 30, 2017, related to the discontinuation of a product line in connection with the consolidation of two manufacturing sites.

Note 4: We recorded fees and expenses during the three months ended June 30, 2018 related to the fourth repricing of our Term Loan Credit Agreement.

Note 5: We recorded additional interest expense related to the amortization of debt issuance costs affiliated with our Term Loan Credit Agreement and ABL Facility.

Note 6: We recorded restructuring costs during the three months ended June 30, 2018 and March 31, 2018 which were primarily comprised of severance costs related to transferring a portion of our shared services functions to a third party as well as the consolidation of certain shared service functions in Asia. We recorded restructuring costs during the three months ended June 30, 2017, primarily related to the restructuring of one of our international facilities and the consolidation of sales offices.

Note 7: We recorded additional environmental costs during the three months ended March 31, 2018, related to an EPA-designated Superfund site, which was acquired as part of our Newport acquisition.

Note 8: We recorded an asset impairment charge, primarily related to the write-off of goodwill and intangible assets during the three months ended June 30, 2017, in connection with the consolidation of two manufacturing plants.

Note 9: We recorded a gain during the three months ended June 30, 2017, related to the sale of our Data Analytics Solutions business.

Note 10: We recorded windfall tax benefits on the vesting of stock-based compensation related to an accounting standard issued by the Financial Statement Accounting Standards Board (Accounting Standards update 2016-09).

Note 11: We recorded taxes related to the sale of our Data Analytics Solutions business during the three months ended June 30, 2017.

Note 12*: We recorded a provisional deferred tax adjustment, which also includes the reversal of a tax accrual on a French dividend, related to U.S. tax reform legislation during the fourth quarter of 2017 and updated the provisional transition tax during the three months ended June 30, 2018 and March 31, 2018.

Note 13*: We adjusted the transition tax on accumulated foreign earnings related to the 2017 Tax Cut and Jobs Act during the three months ended June 30, 2018.

Note 14: The Non-GAAP net earnings and Non-GAAP net earnings per share amounts exclude acquisition and integration costs, expenses related to the sale of a business, an excess and obsolete inventory charge, fees and expenses related to the repricing of the Term Loan Credit Agreement, amortization of debt issuance costs, restructuring costs, environmental costs, an asset impairment charge, a gain on the sale of a business, amortization of intangible assets, a windfall tax benefit related to stock compensation expense, taxes related to the sale of a business, a deferred tax adjustment, transition tax on accumulated foreign earnings and the related tax effect of these adjustments to reflect the expected full year effective tax rate in the related period.

Note 15: The Non-GAAP income from operations and Non-GAAP operating margin percentages exclude acquisition and integration costs, expenses related to the sale of a business, an excess and obsolete inventory charge, fees and expenses related to the repricing of the Term Loan Credit Agreement, restructuring costs, environmental costs, an asset impairment charge and amortization of intangible assets.

Note 16: The Non-GAAP gross profit amounts and Non-GAAP gross profit percentages exclude an excess and obsolete inventory charge related to the discontinuation of a product line.

Note 17: EBITDA excludes net interest, income taxes, depreciation and amortization of intangible assets.

Note 18: Adjusted EBITDA excludes stock-based compensation, acquisition and integration costs, expenses related to the sale of a business, an excess and obsolete inventory charge, fees and expenses related to the repricing of the Term Loan Credit Agreement, restructuring costs, environmental costs, an asset impairment charge, a gain on the sale of a business and other adjustments as defined in our Term Loan Credit Agreement.

*The computation of the one-time tax on our offshore earnings pursuant to the 2017 Tax Cut and Jobs Act (the "Tax Act") as well as our net deferred tax liability is based on our current understanding and assumptions regarding the impact of the Tax Act, and may change as additional clarification and implementation guidance is issued and as the interpretation of the Tax Act evolves over time.

Note 19: We historically recorded the revenue and related cost of revenue for our spare parts within Products in our Statement of Operations for the Vacuum and Analysis Division. We have now determined that these items are better reflected within Services in our Statement of Operations and have revised the presentation of our previously issued financial statements as shown below:

	Three Months Ended June 30, 2017		
	As previously reported	Adjustment	As revised
Net revenues:			
Products	$431,950	$(5,633)	$426,317
Services	48,807	5,633	54,440
Total net revenues	480,757	—	480,757
Cost of revenues:			
Cost of products	229,304	1,402	230,706
Cost of services	31,870	(1,402)	30,468
Total cost of revenues	$261,174	$ —	$261,174

MKS Instruments, Inc.
Unaudited Consolidated Statements of Operations
(In thousands, except per share data)

	Six Months Ended June 30,	
	2018	2017 (Note 19)
Net revenues:		
Products	$1,006,676	$814,255
Services	120,739	103,655
Total net revenues	1,127,415	917,910
Cost of revenues:		
Products	528,211	436,540
Services	61,472	56,240
Total cost of revenues	589,683	492,780
Gross profit	537,732	425,130
Research and development	71,361	66,962
Selling, general and administrative	159,130	146,199
Acquisition and integration costs	(1,168)	2,232
Restructuring	2,010	2,586
Environmental costs	1,000	—
Asset impairment	—	6,719
Fees and expenses related to repricing of term loan	378	—
Amortization of intangible assets	22,091	23,969
Income from operations	282,930	176,463
Interest income	2,561	1,023
Interest expense	9,352	15,829
Gain on sale of business	—	74,856
Other expense, net	853	1,256
Income from operations before income taxes	275,286	235,257
Provision for income taxes	47,303	49,757
Net income	$ 227,983	$185,500
Net income per share:		
Basic	$ 4.18	$ 3.44
Diluted	$ 4.12	$ 3.37
Cash dividends per common share	$ 0.38	$ 0.35
Weighted average shares outstanding:		
Basic	54,571	53,973
Diluted	55,280	54,979
The following supplemental Non-GAAP earnings information is presented to aid in understanding MKS' operating results:		
Net income	$ 227,983	$185,500
Adjustments:		

Acquisition and integration costs (Note 1)	(1,168)	2,232
Expenses related to sale of a business (Note 2)	—	859
Excess and obsolete inventory charge (Note 3)	—	1,160
Fees and expenses related to repricing of term loan (Note 4)	378	—
Amortization of debt issuance costs (Note 5)	2,491	3,108
Restructuring (Note 6)	2,010	2,586
Environmental costs (Note 7)	1,000	—
Asset impairment (Note 8)	—	6,719
Gain on sale of business (Note 9)	—	(74,856)
Amortization of intangible assets	22,091	23,969
Windfall tax benefit on stock-based compensation (Note 10)	(7,788)	(9,819)
Tax adjustment related to the sale of a business (Note 11)	—	15,007
Deferred tax adjustment (Note 12)	878	—
Transition tax on accumulated foreign earnings (Note 13)	(2,327)	—
Pro-forma tax adjustments	(2,447)	(9,710)
Non-GAAP net earnings (Note 14)	$ 243,101	$146,755
Non-GAAP net earnings per share (Note 14)	$ 4.40	$ 2.67
Weighted average shares outstanding	55,280	54,979
Income from operations	$ 282,930	$176,463
Adjustments:		
Acquisition and integration costs (Note 1)	(1,168)	2,232
Expenses related to sale of a business (Note 2)	—	859
Excess and obsolete inventory charge (Note 3)	—	1,160
Fees and expenses related to repricing of term loan (Note 4)	378	—
Restructuring (Note 6)	2,010	2,586
Environmental costs (Note 7)	1,000	—
Asset impairment (Note 8)	—	6,719
Amortization of intangible assets	22,091	23,969
Non-GAAP income from operations (Note 15)	$ 307,241	$213,988
Non-GAAP operating margin percentage (Note 15)	27.3%	23.3%
Gross profit	$ 537,732	$425,130
Excess and obsolete inventory charge (Note 3)	—	1,160
Non-GAAP gross profit (Note 16)	$ 537,732	$426,290
Non-GAAP gross profit percentage (Note 16)	47.7%	46.4%
Interest expense	$ 9,352	$ 15,829
Amortization of debt issuance costs (Note 5)	2,491	3,108
Non-GAAP interest expense	$ 6,861	$ 12,721
Net income	$ 227,983	$185,500
Interest expense, net	6,791	14,806
Provision for income taxes	47,303	49,757
Depreciation	18,286	18,452
Amortization	22,091	23,969
EBITDA (Note 17)	$ 322,454	$292,484
Stock-based compensation	16,792	14,989
Acquisition and integration costs (Note 1)	(1,168)	2,232
Expenses related to sale of a business (Note 2)	—	859
Excess and obsolete inventory charge (Note 3)	—	1,160
Fees and expenses related to repricing of term loan (Note 4)	378	—
Restructuring (Note 6)	2,010	2,586
Environmental costs (Note 7)	1,000	—
Asset impairment (Note 8)	—	6,719
Gain on sale of business (Note 9)	—	(74,856)
Other adjustments	772	1,569
Adjusted EBITDA (Note 18)	$ 342,238	$247,742

Note 1: We recorded acquisition and integration costs related to the Newport Corporation acquisition, which closed during the second quarter of 2016, during the six months ended June 30, 2017. During the second quarter of 2018, we reversed a portion of these costs related to severance agreement provisions that were not met.

Note 2: We recorded legal and consulting expenses during the six months ended June 30, 2017 related to the sale of a business, which was completed in April 2017.

Note 3: We recorded excess and obsolete inventory charges in cost of sales during the six months ended June 30, 2017, related to the discontinuation of a product line in connection with the consolidation of two manufacturing sites.

Note 4: We recorded fees and expenses during the six months ended June 30, 2018 related to the fourth repricing of our Term Loan Credit Agreement.

Note 5: We recorded additional interest expense related to the amortization of debt issuance costs affiliated with our Term Loan Credit Agreement and ABL Facility.

Note 6: We recorded restructuring costs during the six months ended June 30, 2018, which were primarily comprised of severance costs related to transferring a portion of our shared services functions to a third party as well as the consolidation of certain shared service functions in Asia. We recorded restructuring costs during the six months ended June 30, 2017, primarily related to the restructuring of one of our international facilities and the consolidation of sales offices.

Note 7: We recorded additional environmental costs during the six months ended June 30, 2018, related to an EPA-designated Superfund site, which was acquired as part of our Newport acquisition.

Note 8: We recorded an asset impairment charge, primarily related to the write-off of goodwill and intangible assets, during the six months ended June 30, 2017, in connection with the consolidation of two manufacturing plants.

Note 9: We recorded a gain during the six months ended June 30, 2017, related to the sale of our Data Analytics Solutions business.

Note 10: Windfall tax benefits on the vesting of stock-based compensation related to an accounting standard issued by the Financial Statement Accounting Standards Board (Accounting Standards update 2016-09).

Note 11: We recorded taxes related to the sale of our Data Analytics Solutions business during the six months ended June 30, 2017.

Note 12*: We recorded a provisional deferred tax adjustment, which also includes the reversal of a tax accrual on a French dividend, related to U.S. tax reform legislation during the fourth quarter of 2017 and updated the provisional transition tax during the six months ended June 30, 2018.

Note 13*: We adjusted the transition tax on accumulated foreign earnings related to the 2017 Tax Cut and Jobs Act during the six months ended June 30, 2018.

Note 14: The Non-GAAP net earnings and Non-GAAP net earnings per share amounts exclude acquisition and integration costs, expenses related to the sale of a business, an excess and obsolete inventory charge, fees and expenses related to the repricing of the Term Loan Credit Agreement, amortization of debt issuance costs, restructuring costs, environmental costs, an asset impairment charge, a gain on the sale of a business, amortization of intangible assets, a windfall tax benefit related to stock compensation expense, taxes related to the sale of a business, a deferred tax adjustment, transition tax on accumulated foreign earnings and the related tax effect of these adjustments to reflect the expected full year effective tax rate in the related period.

Note 15: The Non-GAAP income from operations and Non-GAAP operating margin percentages exclude acquisition and integration costs, expenses related to the sale of a business, an excess and obsolete inventory charge, fees and expenses related to the repricing of the Term Loan Credit Agreement, restructuring costs, environmental costs, an asset impairment charge and amortization of intangible assets.

Note 16: The Non-GAAP gross profit amounts and Non-GAAP gross profit percentages exclude an excess and obsolete inventory charge related to the discontinuation of a product line.

Note 17: EBITDA excludes net interest, income taxes, depreciation and amortization of intangible assets.

Note 18: Adjusted EBITDA excludes stock-based compensation, acquisition and integration costs, expenses related to the sale of a business, an excess and obsolete inventory charge, fees and expenses related to the repricing of the Term Loan Credit Agreement, restructuring costs, environmental costs, an asset impairment charge, a gain on the sale of a business and other adjustments as defined in our Term Loan Credit Agreement.

*The computation of the one-time tax on our offshore earnings pursuant to the 2017 Tax Cut and Jobs Act (the "Tax Act") as well as our net deferred tax liability is based on our current understanding and assumptions regarding the impact of the Tax Act, and may change as additional clarification and implementation guidance is issued and as the interpretation of the Tax Act evolves over time.

Note 19: We historically recorded the revenue and related cost of revenue for our spare parts within Products in our Statement of Operations for the Vacuum and Analysis Division. We have now determined that these items are better reflected within Services in our Statement of Operations and have revised the presentation of our previously issued financial statements as shown below:

	Six Months Ended June 30, 2017		
	As previously reported	Adjustment	As revised
Net revenues:			
Products	$824,872	$(10,617)	$814,255
Services	93,038	10,617	103,655
Total net revenues	917,910	—	917,910
Cost of revenues:			
Cost of products	434,364	2,176	436,540
Cost of services	58,416	(2,176)	56,240
Total cost of revenues	$492,780	$ —	$492,780

MKS Instruments, Inc.
Unaudited Consolidated Statements of Cash Flows
(In thousands, except per share data)

	Three Months Ended		
	June 30, 2018	June 30, 2017	March 31, 2018
Cash flows from operating activities:			
Net income	$122,862	$120,440	$105,121
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	19,885	20,588	20,492
Amortization of debt issuance costs and original issue discount	868	1,027	2,019
Asset impairment	—	6,719	—
Gain on sale of business	—	(74,856)	—
Stock-based compensation	6,366	6,207	10,426
Provision for excess and obsolete inventory	4,959	5,971	5,333
Provision for doubtful accounts	261	195	335
Deferred income taxes	1,875	9,607	(705)
Other	426	711	34
Changes in operating assets and liabilities	(47,891)	12,807	(70,299)
Net cash provided by operating activities	109,611	109,416	72,756

Cash flows from investing activities:			
Net proceeds from sale of business	—	72,509	—
Purchases of investments	(99,063)	(27,290)	(49,753)
Sales of investments	54,433	4,140	8,930
Maturities of investments	41,138	29,562	49,596
Purchases of property, plant and equipment	(12,428)	(5,640)	(9,390)
Net cash (used in) provided by investing activities	(15,920)	73,281	(617)
Cash flows from financing activities:			
Payments of short-term borrowings	(17,788)	(7,863)	(10,274)
Proceeds from short and long-term borrowings	25,082	7,901	11,907
Payments of long-term borrowings	—	(1,571)	(50,000)
Dividend payments	(10,942)	(9,484)	(9,808)
Net payments related to employee stock awards	(4,131)	(10,519)	(8,921)
Net cash used in financing activities	(7,779)	(21,536)	(67,096)
Effect of exchange rate changes on cash and cash equivalents	631	5,765	1,958
Increase in cash and cash equivalents and restricted cash	86,543	166,926	7,001
Cash and cash equivalents, including restricted cash at beginning of period	340,888	261,186	333,887
Cash and cash equivalents, including restricted cash at end of period	$427,431	$428,112	$340,888

MKS Instruments, Inc.
Reconciliation of GAAP Income Tax Rate to Non-GAAP Income Tax Rate
(In thousands)

	Three Months Ended June 30, 2018			Three Months Ended March 31, 2018		
	Income Before Income Taxes	Provision (benefit) for Income Taxes	Effective Tax Rate	Income Before Income Taxes	Provision (benefit) for Income Taxes	Effective Tax Rate
GAAP	$ 148,544	$ 25,682	17.3%	$ 126,742	$ 21,621	17.1%
Adjustments:						
Acquisition and integration costs (Note 1)	(1,168)	—		—	—	
Fees and expenses related to repricing of term loan (Note 4)	378	—		—	—	
Amortization of debt issuance costs (Note 5)	660	—		1,831	—	
Restructuring (Note 6)	790	—		1,220	—	
Environmental costs (Note 7)	—	—		1,000	—	
Amortization of intangible assets	10,901	—		11,190	—	
Windfall tax benefit on stock-based compensation (Note 10)	—	4,752		—	3,036	
Deferred tax adjustment (Note 12)	—	—		—	(878)	
Transition tax on accumulated foreign earnings (Note 13)	—	659		—	1,668	
Tax effect of pro-forma adjustments	—	200		—	2,247	
Non-GAAP	$ 160,105	$ 31,293	19.5%	$ 141,983	$ 27,694	19.5%

	Three Months Ended June 30, 2017		
	Income Before Income Taxes	Provision (benefit) for Income Taxes	Effective Tax Rate
GAAP	$ 157,972	$ 37,532	23.8%
Adjustments:			
Acquisition and integration costs (Note 1)	790	—	
Expenses related to sale of a business (Note 2)	436	—	
Excess and obsolete inventory charge (Note 3)	1,160	—	
Amortization of debt issuance costs (Note 5)	694	—	
Restructuring (Note 6)	2,064	—	
Asset impairment (Note 8)	6,719	—	
Gain on sale of business (Note 9)	(74,856)	—	
Amortization of intangible assets	11,468	—	
Windfall tax benefit on stock-based compensation (Note 10)	—	3,169	
Tax adjustment related to the sale of a business (Note 11)	—	(15,007)	

Adjustment to pro-forma tax rate	—	3,047	
Non-GAAP	$ 106,447	$ 28,741	27.0%

	Six Months Ended June 30, 2018			Six Months Ended June 30, 2017		
	Income Before Income Taxes	Provision (benefit) for Income Taxes	Effective Tax Rate	Income Before Income Taxes	Provision (benefit) for Income Taxes	Effective Tax Rate
GAAP	$ 275,286	$ 47,303	17.2%	$ 235,257	$ 49,757	21.2%
Adjustments:						
Acquisition and integration costs (Note 1)	(1,168)	—		2,232	—	
Expenses related to sale of a business (Note 2)	—	—		859	—	
Excess and obsolete inventory charge (Note 3)	—	—		1,160	—	
Fees and expenses related to repricing of term loan (Note 4)	378	—		—	—	
Amortization of debt issuance costs (Note 5)	2,491	—		3,108	—	
Restructuring (Note 6)	2,010	—		2,586	—	
Environmental costs (Note 7)	1,000	—		—	—	
Asset impairment (Note 8)	—	—		6,719	—	
Gain on sale of business (Note 9)	—	—		(74,856)	—	
Amortization of intangible assets	22,091	—		23,969	—	
Windfall tax benefit on stock-based compensation (Note 10)	—	7,788		—	9,819	
Tax adjustment related to the sale of a business (Note 11)	—	—		—	(15,007)	
Deferred tax adjustment (Note 12)	—	(878)		—	—	
Transition tax on accumulated foreign earnings (Note 13)	—	2,327		—	—	
Tax effect of pro-forma adjustments	—	2,447		—	9,710	
Non-GAAP	$ 302,088	$ 58,987	19.5%	$ 201,034	$ 54,279	27.0%

Note 1: We recorded acquisition and integration costs related to the Newport Corporation acquisition, which closed during the second quarter of 2016, during the three and six months ended June 30, 2017. During the second quarter of 2018, we reversed a portion of these costs related to severance agreement provisions that were not met.

Note 2: We recorded legal and consulting expenses during the three and six months ended June 30, 2017 related to the sale of a business, which was completed in April 2017.

Note 3: We recorded excess and obsolete inventory charges in cost of sales during the three and six months ended June 30, 2017, related to the discontinuation of a product line in connection with the consolidation of two manufacturing sites.

Note 4: We recorded fees and expenses during the three and six months ended June 30, 2018 related to the fourth repricing of our Term Loan Credit Agreement.

Note 5: We recorded additional interest expense related to the amortization of debt issuance costs affiliated with our Term Loan Credit Agreement and ABL Facility.

Note 6: We recorded restructuring costs during the three and six months ended June 30, 2018 and three months ended March 31, 2018, primarily comprised of severance costs related to transferring a portion of our shared services functions to a third party as well as the consolidation of certain shared service functions in Asia. We recorded restructuring costs during the three and six months ended June 30, 2017, primarily related to the restructuring of one of our international facilities and the consolidation of sales offices.

Note 7: We recorded additional environmental costs during the three months ended March 31, 2018 and six months ended June 30, 2018, related to an EPA-designated Superfund site, which was acquired as part of our Newport acquisition.

Note 8: We recorded an asset impairment charge, primarily related to the write-off of goodwill and intangible assets during the three and six months ended June 30, 2017, in connection with the consolidation of two manufacturing plants.

Note 9: We recorded a gain during the three and six months ended June 30, 2017, related to the sale of our Data Analytics Solutions business.

Note 10: We recorded windfall tax benefits on the vesting of stock-based compensation related to an accounting standard issued by the Financial Statement Accounting Standards Board (Accounting Standards update 2016-09).

Note 11: We recorded taxes related to the sale of our Data Analytics Solutions business during the three and six months ended June 30, 2017.

Note 12*: We recorded a provisional deferred tax adjustment, which also includes the reversal of a tax accrual on a French dividend, related to U.S. tax reform legislation during the fourth quarter of 2017 and updated the provisional transition tax during the three and six months ended June 30, 2018 and three months ended March 31, 2018.

Note 13*: We adjusted the transition tax on accumulated foreign earnings related to the 2017 Tax Cut and Jobs Act during the three and six months ended June 30, 2018.

*The computation of the one-time tax on our offshore earnings pursuant to the 2017 Tax Cut and Jobs Act (the "Tax Act") as well as our net deferred tax liability is based on our current understanding and assumptions regarding the impact of the Tax Act, and may change as additional clarification and implementation guidance is issued and as the interpretation of the Tax Act evolves over time.

MKS Instruments, Inc.
Reconciliation of Q3-18 Guidance — GAAP Net Income to Non-GAAP Net Earnings
(In thousands, except per share data)

	Three Months Ended September 30, 2018			
	Low Guidance		High Guidance	
	$ Amount	$ Per Share	$ Amount	$ Per Share
GAAP net income	$77,600	$ 1.40	$ 91,600	$ 1.66
Amortization	10,800	0.20	10,800	0.20
Deferred financing costs	600	0.01	600	0.01
Restructuring	300	0.01	300	0.01
Tax effect of adjustments (Note 1)	(800)	(0.02)	(600)	(0.02)
Non-GAAP net earnings	$88,500	$ 1.60	$102,700	$ 1.86
Q3-18 forecasted shares		55,300		55,300

Note 1: The Non-GAAP adjustments are tax effected at the applicable statutory rates and the difference between the GAAP and Non-GAAP tax rates.

MKS Instruments, Inc.
Unaudited Consolidated Balance Sheet
(In thousands)

	June 30, 2018	December 31, 2017
ASSETS		
Cash and cash equivalents, including restricted cash	$ 427,431	$ 333,887
Short-term investments	203,686	209,434
Trade accounts receivable, net	339,958	300,308
Inventories	384,929	339,081
Other current assets	61,720	53,543
Total current assets	1,417,724	1,236,253
Property, plant and equipment, net	174,054	171,782
Goodwill	588,718	591,047
Intangible assets, net	342,684	366,398
Long-term investments	10,476	10,655
Other assets	39,832	37,883
Total assets	$2,573,488	$2,414,018
LIABILITIES AND STOCKHOLDERS' EQUITY		
Short-term debt	$ 12,511	$ 2,972
Accounts payable	87,699	82,518
Accrued compensation	75,637	96,147
Income taxes payable	17,294	21,398
Deferred revenue	10,729	12,842
Other current liabilities	78,201	73,945
Total current liabilities	282,071	289,822
Long-term debt, net	342,096	389,993
Non-current deferred taxes	64,752	61,571
Non-current accrued compensation	55,627	51,700
Other liabilities	27,504	32,025
Total liabilities	772,050	825,111
Stockholders' equity:		
Common stock	113	113
Additional paid-in capital	793,384	789,644

Retained earnings	1,004,698	795,698
Accumulated other comprehensive income	3,243	3,452
Total stockholders’ equity	1,801,438	1,588,907
Total liabilities and stockholders’ equity	$2,573,488	$2,414,018