

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

Form 10-Q

☒ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 26, 2020

or

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____.

Commission File Number: 01-14010

Waters Corporation
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

13-3668640
(I.R.S. Employer
Identification No.)

34 Maple Street
Milford, Massachusetts 01757
(Address, including zip code, of principal executive offices)

(508) 478-2000
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$0.01 per share	WAT	New York Stock Exchange, Inc.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of “large accelerated filer”, “accelerated filer”, “smaller reporting company”, and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		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. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

Indicate the number of shares outstanding of the registrant’s common stock as of October 23, 2020: 62,047,666

WATERS CORPORATION AND SUBSIDIARIES

QUARTERLY REPORT ON FORM 10-Q

INDEX

		Page
PART I	FINANCIAL INFORMATION	
Item 1.	Financial Statements	
	Consolidated Balance Sheets (unaudited) as of September 26, 2020 and December 31, 2019	3
	Consolidated Statements of Operations (unaudited) for the three months ended September 26, 2020 and September 28, 2019	4
	Consolidated Statements of Operations (unaudited) for the nine months ended September 26, 2020 and September 28, 2019	5
	Consolidated Statements of Comprehensive Income (unaudited) for the three and nine months ended September 26, 2020 and September 28, 2019	6
	Consolidated Statements of Cash Flows (unaudited) for the nine months ended September 26, 2020 and September 28, 2019	7
	Consolidated Statements of Stockholders' Equity (Deficit) (unaudited) for the three months ended September 26, 2020 and September 28, 2019	8
	Consolidated Statements of Stockholders' Equity (Deficit) (unaudited) for the nine months ended September 26, 2020 and September 28, 2019	9
	Condensed Notes to Consolidated Financial Statements (unaudited)	10
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	30
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	42
Item 4.	Controls and Procedures	42
PART II	OTHER INFORMATION	
Item 1.	Legal Proceedings	43
Item 1A.	Risk Factors	43
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds	44
Item 6.	Exhibits	45
	Signature	46

Item 1: Financial Statements

WATERS CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(unaudited)

	September 26, 2020	December 31, 2019
	(In thousands, except per share data)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 374,934	\$ 335,715
Investments	22,136	1,429
Accounts receivable, net	494,432	587,734
Inventories	326,946	320,551
Other current assets	73,225	67,062
Total current assets	1,291,673	1,312,491
Property, plant and equipment, net	469,721	417,342
Intangible assets, net	255,168	240,203
Goodwill	431,078	356,128
Operating lease assets	86,757	93,358
Other assets	144,889	137,533
Total assets	\$ 2,679,286	\$ 2,557,055
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Notes payable and debt	\$ 150,000	\$ 100,366
Accounts payable	60,357	49,001
Accrued employee compensation	46,015	43,467
Deferred revenue and customer advances	211,348	176,360
Current operating lease liabilities	26,745	27,125
Accrued income taxes	60,444	45,967
Accrued warranty	10,261	11,964
Other current liabilities	157,018	137,084
Total current liabilities	722,188	591,334
Long-term liabilities:		
Long-term debt	1,421,337	1,580,797
Long-term portion of retirement benefits	65,003	59,159
Long-term income tax liabilities	356,953	394,562
Long-term operating lease liabilities	62,471	66,881
Other long-term liabilities	92,915	80,603
Total long-term liabilities	1,998,679	2,182,002
Total liabilities	2,720,867	2,773,336
Commitments and contingencies (Notes 7, 8 and 12)		
Stockholders' deficit:		
Preferred stock, par value \$0.01 per share, 5,000 shares authorized, none issued at September 26, 2020 and December 31, 2019	—	—
Common stock, par value \$0.01 per share, 400,000 shares authorized, 161,381 and 161,030 shares issued, 62,024 and 62,587 shares outstanding at September 26, 2020 and December 31, 2019, respectively	1,614	1,610
Additional paid-in capital	1,982,731	1,926,753
Retained earnings	6,889,678	6,587,403
Treasury stock, at cost, 99,357 and 98,443 shares at September 26, 2020 and December 31, 2019, respectively	(8,788,928)	(8,612,576)
Accumulated other comprehensive loss	(126,676)	(119,471)
Total stockholders' deficit	(41,581)	(216,281)
Total liabilities and stockholders' deficit	\$ 2,679,286	\$ 2,557,055

The accompanying notes are an integral part of the interim consolidated financial statements.

WATERS CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
(unaudited)

	Three Months Ended	
	September 26, 2020	September 28, 2019
	(In thousands, except per share data)	
Revenues:		
Product sales	\$ 376,239	\$ 370,573
Service sales	217,545	206,705
Total net sales	593,784	577,278
Costs and operating expenses:		
Cost of product sales	166,330	149,793
Cost of service sales	96,012	91,262
Selling and administrative expenses	135,430	126,036
Research and development expenses	34,971	34,333
Purchased intangibles amortization	2,657	2,619
Total costs and operating expenses	435,400	404,043
Operating income	158,384	173,235
Other expense	(1,039)	(496)
Interest expense	(10,915)	(11,456)
Interest income	4,007	3,455
Income before income taxes	150,437	164,738
Provision for income taxes	23,668	26,605
Net income	\$ 126,769	\$ 138,133
Net income per basic common share	\$ 2.04	\$ 2.09
Weighted-average number of basic common shares	62,002	66,226
Net income per diluted common share	\$ 2.03	\$ 2.07
Weighted-average number of diluted common shares and equivalents	62,303	66,768

The accompanying notes are an integral part of the interim consolidated financial statements.

WATERS CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
(unaudited)

	Nine Months Ended	
	September 26, 2020	September 28, 2019
	(In thousands, except per share data)	
Revenues:		
Product sales	\$ 965,342	\$ 1,078,341
Service sales	613,365	611,961
Total net sales	1,578,707	1,690,302
Costs and operating expenses:		
Cost of product sales	420,971	439,158
Cost of service sales	265,149	272,474
Selling and administrative expenses	400,614	393,583
Research and development expenses	101,115	105,883
Purchased intangibles amortization	7,900	7,164
Litigation provision	1,180	—
Total costs and operating expenses	1,196,929	1,218,262
Operating income	381,778	472,040
Other expense	(2,149)	(1,363)
Interest expense	(38,012)	(34,467)
Interest income	12,046	17,641
Income before income taxes	353,663	453,851
Provision for income taxes	50,403	62,322
Net income	\$ 303,260	\$ 391,529
Net income per basic common share	\$ 4.89	\$ 5.68
Weighted-average number of basic common shares	62,057	68,952
Net income per diluted common share	\$ 4.86	\$ 5.63
Weighted-average number of diluted common shares and equivalents	62,371	69,533

The accompanying notes are an integral part of the interim consolidated financial statements.

WATERS CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(unaudited)

	Three Months Ended		Nine Months Ended	
	September 26, 2020	September 28, 2019	September 26, 2020	September 28, 2019
	(In thousands)		(In thousands)	
Net income	\$ 126,769	\$ 138,133	\$ 303,260	\$ 391,529
Other comprehensive income (loss):				
Foreign currency translation	601	(4,894)	(7,156)	(4,403)
Unrealized (losses) gains on investments before income taxes	—	(8)	—	3,046
Income tax benefit (expense)	—	2	—	(702)
Unrealized (losses) gains on investments, net of tax	—	(6)	—	2,344
Retirement liability adjustment before reclassifications	(654)	267	(880)	165
Amounts reclassified to other income	352	88	1,028	271
Retirement liability adjustment before income taxes	(302)	355	148	436
Income tax (expense) benefit	(85)	60	(197)	13
Retirement liability adjustment, net of tax	(387)	415	(49)	449
Other comprehensive income (loss)	214	(4,485)	(7,205)	(1,610)
Comprehensive income	<u>\$ 126,983</u>	<u>\$ 133,648</u>	<u>\$ 296,055</u>	<u>\$ 389,919</u>

The accompanying notes are an integral part of the interim consolidated financial statements.

WATERS CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(unaudited)

	Nine Months Ended	
	September 26, 2020	September 28, 2019
Cash flows from operating activities:	(In thousands)	
Net income	\$ 303,260	\$ 391,529
Adjustments to reconcile net income to net cash provided by operating activities:		
Stock-based compensation	27,715	28,917
Deferred income taxes	1,089	1,817
Depreciation	49,407	42,168
Amortization of intangibles	41,684	38,151
Change in operating assets and liabilities:		
Decrease in accounts receivable	96,955	57,897
Increase in inventories	(8,139)	(83,973)
Increase in other current assets	(16,776)	(6,259)
Increase in other assets	(2,612)	(9,302)
Increase (decrease) in accounts payable and other current liabilities	46,721	(493)
Increase in deferred revenue and customer advances	32,053	34,926
Effect of the 2017 Tax Cuts & Jobs Act	—	(3,229)
Decrease in other liabilities	(48,332)	(40,957)
Net cash provided by operating activities	523,025	451,192
Cash flows from investing activities:		
Additions to property, plant, equipment and software capitalization	(125,340)	(110,205)
Business acquisitions, net of cash acquired	(76,664)	—
Investment in unaffiliated companies	(3,850)	(7,250)
Purchases of investments	(22,458)	(35,523)
Maturities and sales of investments	1,751	978,419
Net cash (used in) provided by investing activities	(226,561)	825,441
Cash flows from financing activities:		
Proceeds from debt issuances	315,000	600,362
Payments on debt	(425,366)	(390,482)
Payments of debt issuance costs	—	(2,932)
Proceeds from stock plans	28,421	34,311
Purchases of treasury shares	(196,353)	(1,909,700)
Proceeds from derivative contracts	10,330	6,900
Net cash used in financing activities	(267,968)	(1,661,541)
Effect of exchange rate changes on cash and cash equivalents	10,723	(6,723)
Increase (decrease) in cash and cash equivalents	39,219	(391,631)
Cash and cash equivalents at beginning of period	335,715	796,280
Cash and cash equivalents at end of period	<u>\$ 374,934</u>	<u>\$ 404,649</u>

The accompanying notes are an integral part of the interim consolidated financial statements.

WATERS CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)
(unaudited, in thousands)

	Number of Common Shares	Common Stock	Additional Paid-In Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
Balance June 29, 2019	160,841	\$ 1,608	\$1,883,958	\$6,248,601	\$(7,462,826)	\$ (115,096)	\$ 556,245
Net income	—	—	—	138,133	—	—	138,133
Other comprehensive loss	—	—	—	—	—	(4,485)	(4,485)
Issuance of common stock for employees:							
Employee Stock Purchase Plan	8	—	1,803	—	—	—	1,803
Stock options exercised	19	—	2,378	—	—	—	2,378
Treasury stock	—	—	—	—	(588,207)	—	(588,207)
Stock-based compensation	1	1	9,632	—	—	—	9,633
Balance September 28, 2019	<u>160,869</u>	<u>\$ 1,609</u>	<u>\$1,897,771</u>	<u>\$6,386,734</u>	<u>\$(8,051,033)</u>	<u>\$ (119,581)</u>	<u>\$ 115,500</u>
	Number of Common Shares	Common Stock	Additional Paid-In Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Deficit
Balance June 27, 2020	161,273	\$ 1,613	\$1,959,498	\$6,762,909	\$(8,788,872)	\$ (126,890)	\$ (191,742)
Net income	—	—	—	126,769	—	—	126,769
Other comprehensive income	—	—	—	—	—	214	214
Issuance of common stock for employees:							
Employee Stock Purchase Plan	10	—	1,641	—	—	—	1,641
Stock options exercised	97	1	12,040	—	—	—	12,041
Treasury stock	—	—	—	—	(56)	—	(56)
Stock-based compensation	1	—	9,552	—	—	—	9,552
Balance September 26, 2020	<u>161,381</u>	<u>\$ 1,614</u>	<u>\$1,982,731</u>	<u>\$6,889,678</u>	<u>\$(8,788,928)</u>	<u>\$ (126,676)</u>	<u>\$ (41,581)</u>

The accompanying notes are an integral part of the consolidated financial statements.

WATERS CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)
(unaudited, in thousands)

	Number of Common Shares	Common Stock	Additional Paid-In Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
Balance December 31, 2018	160,472	\$ 1,605	\$1,834,741	\$5,995,205	\$(6,146,322)	\$ (117,971)	\$ 1,567,258
Net income	—	—	—	391,529	—	—	391,529
Other comprehensive loss	—	—	—	—	—	(1,610)	(1,610)
Issuance of common stock for employees:							
Employee Stock Purchase Plan	33	—	5,971	—	—	—	5,971
Stock options exercised	256	3	28,475	—	—	—	28,478
Treasury stock	—	—	—	—	(1,904,711)	—	(1,904,711)
Stock-based compensation	108	1	28,584	—	—	—	28,585
Balance September 28, 2019	<u>160,869</u>	<u>\$ 1,609</u>	<u>\$1,897,771</u>	<u>\$6,386,734</u>	<u>\$(8,051,033)</u>	<u>\$ (119,581)</u>	<u>\$ 115,500</u>

	Number of Common Shares	Common Stock	Additional Paid-In Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Loss	Total Stockholders' Deficit
Balance December 31, 2019	161,030	\$ 1,610	\$1,926,753	\$6,587,403	\$(8,612,576)	\$ (119,471)	\$ (216,281)
Net income	—	—	—	303,260	—	—	303,260
Adoption of new accounting pronouncement	—	—	—	(985)	—	—	(985)
Other comprehensive loss	—	—	—	—	—	(7,205)	(7,205)
Issuance of common stock for employees:							
Employee Stock Purchase Plan	31	—	5,593	—	—	—	5,593
Stock options exercised	184	2	22,944	—	—	—	22,946
Treasury stock	—	—	—	—	(176,352)	—	(176,352)
Stock-based compensation	136	2	27,441	—	—	—	27,443
Balance September 26, 2020	<u>161,381</u>	<u>\$ 1,614</u>	<u>\$1,982,731</u>	<u>\$6,889,678</u>	<u>\$(8,788,928)</u>	<u>\$ (126,676)</u>	<u>\$ (41,581)</u>

The accompanying notes are an integral part of the consolidated financial statements.

CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(unaudited)

1 Basis of Presentation and Summary of Significant Accounting Policies

Waters Corporation (the “Company,” “we,” “our,” or “us”) is a specialty measurement company that operates with a fundamental underlying purpose to advance the science that enables our customers to enhance human health and well-being. The Company has pioneered analytical workflow solutions involving liquid chromatography, mass spectrometry and thermal analysis innovations serving the life, materials and food sciences for more than 60 years. The Company primarily designs, manufactures, sells and services high performance liquid chromatography (“HPLC”), ultra performance liquid chromatography (“UPLC™”) and, together with HPLC, referred to as “LC”) and mass spectrometry (“MS”) technology systems and support products, including chromatography columns, other consumable products and comprehensive post-warranty service plans. These systems are complementary products that are frequently employed together (“LC-MS”) and sold as integrated instrument systems using common software platforms. LC is a standard technique and is utilized in a broad range of industries to detect, identify, monitor and measure the chemical, physical and biological composition of materials, and to purify a full range of compounds. MS technology, principally in conjunction with chromatography, is employed in drug discovery and development, including clinical trial testing, the analysis of proteins in disease processes (known as “proteomics”), nutritional safety analysis and environmental testing. LC-MS instruments combine a liquid phase sample introduction and separation system with mass spectrometric compound identification and quantification. In addition, the Company designs, manufactures, sells and services thermal analysis, rheometry and calorimetry instruments through its TA™ product line. These instruments are used in predicting the suitability and stability of fine chemicals, pharmaceuticals, water, polymers, metals and viscous liquids for various industrial, consumer goods and healthcare products, as well as for life science research. The Company is also a developer and supplier of advanced software-based products that interface with the Company’s instruments, as well as other manufacturers’ instruments.

The Company’s interim fiscal quarter typically ends on the thirteenth Saturday of each quarter. Since the Company’s fiscal year end is December 31, the first and fourth fiscal quarters may have more or less than thirteen complete weeks. The Company’s third fiscal quarters for 2020 and 2019 ended on September 26, 2020 and September 28, 2019, respectively.

The accompanying unaudited interim consolidated financial statements have been prepared in accordance with the instructions to the Quarterly Report on Form 10-Q and do not include all of the information and footnote disclosures required for annual financial statements prepared in accordance with generally accepted accounting principles (“U.S. GAAP”) in the United States of America. The consolidated financial statements include the accounts of the Company and its subsidiaries, which are wholly owned. All inter-company balances and transactions have been eliminated.

The preparation of consolidated financial statements in conformity with U.S. GAAP requires the Company to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent liabilities at the dates of the financial statements. Actual amounts may differ from these estimates under different assumptions or conditions.

It is management’s opinion that the accompanying interim consolidated financial statements reflect all adjustments (which are normal and recurring) that are necessary for a fair statement of the results for the interim periods. The interim consolidated financial statements should be read in conjunction with the consolidated financial statements included in the Company’s Annual Report on Form 10-K for the year ended December 31, 2019, as filed with the U.S. Securities and Exchange Commission (“SEC”) on February 25, 2020.

Risks and Uncertainties

The Company is subject to risks common to companies in the analytical instrument industry, including, but not limited to, global economic and financial market conditions, fluctuations in foreign currency exchange rates, fluctuations in customer demand, development by its competitors of new technological innovations, costs of developing new technologies, levels of debt and debt service requirements, risk of disruption, dependence on key personnel, protection and litigation of proprietary technology, shifts in taxable income between tax jurisdictions and compliance with regulations of the U.S. Food and Drug Administration and similar foreign regulatory authorities and agencies.

Both the Company’s domestic and international operations have been and continue to be adversely affected by the ongoing global pandemic of a novel strain of coronavirus (“COVID-19”) and the resulting volatility and uncertainty it has caused in the U.S. and international markets. In March 2020, the World Health Organization declared COVID-19 a pandemic and recommended containment and mitigation measures worldwide. On March 13, 2020, President

CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(unaudited)

Trump announced a National Emergency relating to the disease. Since then, COVID-19 has continued to spread throughout the U.S. and globally. The COVID-19 pandemic has caused significant volatility and uncertainty in U.S. and international markets, which has disrupted and is expected to continue to disrupt the Company's business and could result in a prolonged economic downturn. It is unclear whether increases in the number of infections will continue and amplify as certain areas of the economy are re-opened and restrictions are eased, or whether so called "second waves" of COVID-19 infections will be experienced in the U.S. and globally. The Company operates in over 35 countries, including those in the regions most impacted by the COVID-19 pandemic.

In the nine months ended September 26, 2020 as compared to the nine months ended September 28, 2019, the Company experienced a decline in net sales of 7% due in large part to the COVID-19 pandemic and related economic uncertainty; however, through the date of the issuance of these financial statements, the Company's consolidated financial position, results of operations and cash flows have not been materially impacted and, thus, the Company concluded that no interim goodwill or long-lived asset impairment analyses were required. Further, there have been no violations of debt covenants. Any prolonged material disruption to the Company's employees, suppliers, manufacturing, or customers could result in a material impact to its consolidated financial position, results of operations or cash flows in the future.

Translation of Foreign Currencies

The functional currency of each of the Company's foreign operating subsidiaries is the local currency of its country of domicile, except for the Company's subsidiaries in Hong Kong, Singapore and the Cayman Islands, where the underlying transactional cash flows are denominated in currencies other than the respective local currency of domicile. The functional currency of the Hong Kong, Singapore and Cayman Islands subsidiaries is the U.S. dollar, based on the respective entity's cash flows.

For most of the Company's foreign operations, assets and liabilities are translated into U.S. dollars at exchange rates prevailing on the balance sheet date, while revenues and expenses are translated at average exchange rates prevailing during the respective period. Any resulting translation gains or losses are included in accumulated other comprehensive income in the consolidated balance sheets.

Cash, Cash Equivalents and Investments

Cash equivalents represent highly liquid investments, with original maturities of 90 days or less, while investments with longer maturities are classified as investments. The Company maintains cash balances in various operating accounts in excess of federally insured limits, and in foreign subsidiary accounts in currencies other than the U.S. dollar. As of September 26, 2020 and December 31, 2019, \$359 million out of \$397 million and \$249 million out of \$337 million, respectively, of the Company's total cash, cash equivalents and investments were held by foreign subsidiaries. In addition, \$262 million out of \$397 million and \$176 million out of \$337 million of cash, cash equivalents and investments were held in currencies other than the U.S. dollar at September 26, 2020 and December 31, 2019, respectively.

Accounts Receivable and Allowance for Credit Losses

The Company adopted new accounting guidance regarding the accounting for credit losses as of January 1, 2020 using a modified retrospective transition approach that was applied to the trade receivable balance as of January 1, 2020. This new accounting guidance required the Company to move from an incurred loss model to a current expected credit loss ("CECL") model. Upon adoption, the Company recorded a net decrease of approximately \$1 million to the Company's stockholders' deficit as of January 1, 2020. The adoption of this standard did not have a material impact on the Company's balance sheets, results of operations or cash flows.

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The Company has very limited use of rebates and other cash considerations payable to customers and, as a result, the transaction price determination does not have any material variable consideration. The Company does not consider there to be significant concentrations of credit risk with respect to trade receivables due to the short-term nature of the balances, the Company having a large and diverse customer base, and the Company having a strong historical experience of collecting

CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (unaudited) – (Continued)

receivables with minimal defaults. As a result, credit risk is considered low across territories and trade receivables are considered to be a single class of financial asset. The allowance for credit losses is based on a number of factors and is calculated by applying a historical loss rate to trade receivable aging balances to estimate a general reserve balance along with an additional adjustment for any specific receivables with known or anticipated issues affecting the likelihood of recovery. Past due balances with a probability of default based on historical data as well as relevant available forward-looking information are included in the specific adjustment. The historical loss rate is reviewed on at least an annual basis and the allowance for credit losses is reviewed quarterly for any required adjustments. The Company does not have any off-balance sheet credit exposure related to its customers.

Trade receivables related to instrument sales are collateralized by the instrument that is sold. If there is a risk of default related to a receivable that is collateralized, then the fair value of the collateral is calculated and adjusted for the cost to re-possess, refurbish and re-sell the instrument. This adjusted fair value is compared to the receivable balance and the difference would be recorded as the expected credit loss.

Any recovery of amounts that were written off prior to adoption of the new CECL standard that are received after adoption are recorded in income in the period in which they are received.

The following is a summary of the activity of the Company's allowance for doubtful accounts for the nine months ended September 26, 2020 and September 28, 2019 (in thousands). The September 26, 2020 balance is calculated using the CECL method and the September 28, 2019 balance is calculated using the incurred loss method under legacy GAAP:

	Balance at Beginning of Period	Impact of CECL Adoption	Additions	Deduction	Balance at End of Period
Allowance for Doubtful Accounts					
September 26, 2020	\$ 9,560	\$ 985	\$ 7,826	\$ (5,784)	\$ 12,587
September 28, 2019	\$ 7,663	\$ —	\$ 6,014	\$ (5,461)	\$ 8,216

Other Investments

During the nine months ended September 26, 2020 and September 28, 2019, the Company made investments in unaffiliated companies of \$4 million and \$7 million, respectively.

During the nine months ended September 26, 2020, the Company recorded an unrealized loss on an equity security still held at the reporting date of approximately \$1 million within other expense on the income statement. This unrealized loss was recorded as a downward price adjustment to the carrying value of the investment due to an observable price change of a similar security issued during the current period.

Fair Value Measurements

In accordance with the accounting standards for fair value measurements and disclosures, certain of the Company's assets and liabilities are measured at fair value on a recurring basis as of September 26, 2020 and December 31, 2019. Fair values determined by Level 1 inputs utilize observable data, such as quoted prices in active markets. Fair values determined by Level 2 inputs utilize data points other than quoted prices in active markets that are observable either directly or indirectly. Fair values determined by Level 3 inputs utilize unobservable data points for which there is little or no market data, which require the reporting entity to develop its own assumptions.

CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (unaudited) – (Continued)

The following table represents the Company's assets and liabilities measured at fair value on a recurring basis at September 26, 2020 (in thousands):

	Total at September 26, 2020	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Time deposits	\$ 22,136	\$ —	\$ 22,136	\$ —
Waters 401(k) Restoration Plan assets	34,466	34,466	—	—
Foreign currency exchange contracts	832	—	832	—
Total	<u>\$ 57,434</u>	<u>\$ 34,466</u>	<u>\$ 22,968</u>	<u>\$ —</u>
Liabilities:				
Contingent consideration	\$ 2,903	\$ —	\$ —	\$ 2,903
Foreign currency exchange contracts	390	—	390	—
Interest rate cross-currency swap agreements	15,190	—	15,190	—
Total	<u>\$ 18,483</u>	<u>\$ —</u>	<u>\$ 15,580</u>	<u>\$ 2,903</u>

The following table represents the Company's assets and liabilities measured at fair value on a recurring basis at December 31, 2019 (in thousands):

	Total at December 31, 2019	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Time deposits	\$ 1,642	\$ —	\$ 1,642	\$ —
Waters 401(k) Restoration Plan assets	30,158	30,158	—	—
Foreign currency exchange contracts	16	—	16	—
Interest rate cross-currency swap agreements	4,485	—	4,485	—
Total	<u>\$ 36,301</u>	<u>\$ 30,158</u>	<u>\$ 6,143</u>	<u>\$ —</u>
Liabilities:				
Contingent consideration	\$ 2,557	\$ —	\$ —	\$ 2,557
Foreign currency exchange contracts	1,028	—	1,028	—
Total	<u>\$ 3,585</u>	<u>\$ —</u>	<u>\$ 1,028</u>	<u>\$ 2,557</u>

Fair Value of 401(k) Restoration Plan Assets

The 401(k) Restoration Plan is a nonqualified defined contribution plan and the assets were held in registered mutual funds and have been classified as Level 1. The fair values of the assets in the plan are determined through market and observable sources from daily quoted prices on nationally recognized securities exchanges.

CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (unaudited) – (Continued)*Fair Value of Cash Equivalents, Investments, Foreign Currency Exchange Contracts and Interest Rate Cross-Currency Swap Agreements*

The fair values of the Company's cash equivalents, investments and foreign currency exchange contracts are determined through market and observable sources and have been classified as Level 2. These assets and liabilities have been initially valued at the transaction price and subsequently valued, typically utilizing third-party pricing services. The pricing services use many inputs to determine value, including reportable trades, benchmark yields, credit spreads, broker/dealer quotes, current spot rates and other industry and economic events. The Company validates the prices provided by third-party pricing services by reviewing their pricing methods and obtaining market values from other pricing sources.

Fair Value of Contingent Consideration

The fair value of the Company's liability for contingent consideration relates to earnout payments in connection with the July 2014 acquisition of Medimass Research, Development and Service Kft. and is determined using a probability-weighted discounted cash flow model, which uses significant unobservable inputs, and has been classified as Level 3. Subsequent changes in the fair value of the contingent consideration liability are recorded in the results of operations. The fair value of the contingent consideration liability associated with future earnout payments is based on several factors, including the estimated future results and a discount rate that reflects both the likelihood of achieving the estimated future results and the Company's creditworthiness. A change in any of these unobservable inputs can significantly change the fair value of the contingent consideration. Although there is no contractual limit, the fair value of future contingent consideration payments was estimated to be \$3 million at both September 26, 2020 and December 31, 2019, based on the Company's best estimate, as the earnout is based on future sales of certain products, some of which are currently in development, through 2034.

Fair Value of Other Financial Instruments

The Company's accounts receivable, accounts payable and variable interest rate debt are recorded at cost, which approximates fair value due to their short-term nature. The carrying value of the Company's fixed interest rate debt was \$910 million and \$1.0 billion at September 26, 2020 and December 31, 2019, respectively. The fair value of the Company's fixed interest rate debt was estimated using discounted cash flow models, based on estimated current rates offered for similar debt under current market conditions for the Company. The fair value of the Company's fixed interest rate debt was estimated to be \$938 million and \$1.0 billion at September 26, 2020 and December 31, 2019, respectively, using Level 2 inputs.

Derivative Transactions

The Company is a global company that operates in over 35 countries and, as a result, the Company's net sales, cost of sales, operating expenses and balance sheet amounts are significantly impacted by fluctuations in foreign currency exchange rates. The Company is exposed to currency price risk on foreign currency exchange rate fluctuations when it translates its non-U.S. dollar foreign subsidiaries' financial statements into U.S. dollars and when any of the Company's subsidiaries purchase or sell products or services in a currency other than its own currency.

The Company's principal strategies in managing exposures to changes in foreign currency exchange rates are to (1) naturally hedge the foreign-currency-denominated liabilities on the Company's balance sheet against corresponding assets of the same currency, such that any changes in liabilities due to fluctuations in foreign currency exchange rates are typically offset by corresponding changes in assets and (2) mitigate foreign exchange risk exposure of international operations by hedging the variability in the movement of foreign currency exchange rates on a portion of its Euro-denominated net asset investments. The Company presents the derivative transactions in financing activities in the statement of cash flows.

Foreign Currency Exchange Contracts

The Company does not specifically enter into any derivatives that hedge foreign-currency-denominated operating assets, liabilities or commitments on its balance sheet, other than a portion of certain third-party accounts receivable and accounts payable, and the Company's net worldwide intercompany receivables and payables, which are eliminated in consolidation. The Company periodically aggregates its net worldwide balances by currency and then enters into foreign currency exchange contracts that mature within 90 days to hedge a portion of the remaining balance to minimize some of the Company's currency price risk exposure. The foreign currency exchange contracts are not designated for hedge accounting treatment. Principal hedged currencies include the Euro, Japanese yen, British pound, Mexican peso and Brazilian real.

CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (unaudited) – (Continued)

Interest Rate Cross-Currency Swap Agreements

As of September 26, 2020, the Company had entered into three-year interest rate cross-currency swap derivative agreements with an aggregate notional value of \$560 million to hedge the variability in the movement of foreign currency exchange rates on a portion of its Euro-denominated net asset investments. Under hedge accounting, the change in fair value of the derivative that relates to changes in the foreign currency spot rate are recorded in the currency translation adjustment in other comprehensive income and remain in accumulated comprehensive income in stockholders' (deficit) equity until the sale or substantial liquidation of the foreign operation. The difference between the interest rate received and paid under the interest rate cross-currency swap derivative agreement is recorded in interest income in the statement of operations.

The Company's foreign currency exchange contracts and interest rate cross-currency swap agreements included in the consolidated balance sheets are classified as follows (in thousands):

	September 26, 2020		December 31, 2019	
	Notional Value	Fair Value	Notional Value	Fair Value
Foreign currency exchange contracts:				
Other current assets	\$ 57,380	\$ 832	\$ 119,576	\$ 16
Other current liabilities	\$ 65,536	\$ 390	\$ 29,495	\$ 1,028
Interest rate cross-currency swap agreements:				
Other (liabilities) assets	\$560,000	\$(15,190)	\$560,000	\$ 4,485
Accumulated other comprehensive loss (income)		\$ 15,190		\$(4,485)

The following is a summary of the activity included in the statements of comprehensive income related to the foreign currency exchange contracts (in thousands):

	Financial Statement Classification	Three Months Ended		Nine Months Ended	
		September 26, 2020	September 28, 2019	September 26, 2020	September 28, 2019
Foreign currency exchange contracts:					
Realized gains (losses) on closed contracts	Cost of sales	\$ 1,113	\$ (3,340)	\$ (45)	\$ (5,858)
Unrealized gains (losses) on open contracts	Cost of sales	808	(633)	1,455	(1,040)
Cumulative net pre-tax gains (losses)	Cost of sales	\$ 1,921	\$ (3,973)	\$ 1,410	\$ (6,898)
Interest rate cross-currency swap agreements:					
Interest earned	Interest income	\$ 3,777	\$ 2,698	\$ 11,275	\$ 7,848
Unrealized gains on open contracts	Stockholders' deficit	\$ 19,582	\$ 15,847	\$ 19,675	\$ 15,852

Stockholders' Equity

In January 2019, the Company's Board of Directors authorized the Company to repurchase up to \$4 billion of its outstanding common stock over a two-year period. This program replaced the remaining amounts available from the pre-existing program. During the nine months ended September 26, 2020 and September 28, 2019, the Company repurchased 0.8 million and 8.6 million shares of the Company's outstanding common stock at a cost of \$167 million and \$1.9 billion, respectively, under the January 2019 authorization and other previously announced programs. As of September 26, 2020, the Company had repurchased an aggregate of 11.1 million shares at a cost of \$2.5 billion under the January 2019 repurchase program and had a total of \$1.5 billion authorized for future repurchases. In addition, the Company repurchased \$10 million and \$8 million of common stock related to the vesting of restricted stock units during the nine months ended September 26, 2020 and September 28, 2019, respectively. While the Company believes that it has the financial flexibility to fund these share repurchases given current cash levels and debt borrowing capacity, as well as to invest in research, technology and business acquisitions, the Company has temporarily suspended its share repurchases due to the uncertain business conditions caused by the COVID-19 pandemic.

CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (unaudited) – (Continued)

The Company had \$20 million of treasury stock purchases that were accrued and unsettled at December 31, 2019. These transactions were settled in January 2020. There were no unsettled treasury stock purchases as of September 26, 2020, while the Company had accrued \$18 million for such purchases as of September 28, 2019, which settled in the subsequent quarter.

Product Warranty Costs

The Company accrues estimated product warranty costs at the time of sale, which are included in cost of sales in the consolidated statements of operations. While the Company engages in extensive product quality programs and processes, including actively monitoring and evaluating the quality of its component suppliers, the Company's warranty obligation is affected by product failure rates, material usage and service delivery costs incurred in correcting a product failure. The amount of the accrued warranty liability is based on historical information, such as past experience, product failure rates, number of units repaired and estimated costs of material and labor. The liability is reviewed for reasonableness at least quarterly.

The following is a summary of the activity of the Company's accrued warranty liability for the nine months ended September 26, 2020 and September 28, 2019 (in thousands):

	Balance at Beginning of Period	Accruals for Warranties	Settlements Made	Balance at End of Period
Accrued warranty liability:				
September 26, 2020	\$ 11,964	\$ 5,442	\$ (7,145)	\$ 10,261
September 28, 2019	\$ 12,300	\$ 5,271	\$ (6,094)	\$ 11,477

Restructuring

In January 2020, the Company made organizational changes to better align its resources with its growth and innovation strategies, resulting in a worldwide workforce reduction, impacting 3% of the Company's employees. During the three and nine months ended September 26, 2020, the Company incurred \$6 million and \$27 million, respectively, of severance-related costs, lease termination costs and other related costs. The Company expects to incur an additional \$4 million of costs for the remainder of the year.

2 Revenue Recognition

The Company's deferred revenue liabilities on the consolidated balance sheets consist of the obligation on instrument service contracts and customer payments received in advance, prior to transfer of control of the instrument. The Company records deferred revenue primarily related to its service contracts, where consideration is billable at the beginning of the service period.

The following is a summary of the activity of the Company's deferred revenue and customer advances for the nine months ended September 26, 2020 and September 28, 2019 (in thousands):

	September 26, 2020	September 28, 2019
Balance at the beginning of the period	\$ 213,695	\$ 204,257
Recognition of revenue included in balance at beginning of the period	(177,667)	(174,929)
Revenue deferred during the period, net of revenue recognized	213,895	206,093
Balance at the end of the period	<u>\$ 249,923</u>	<u>\$ 235,421</u>

The Company classified \$39 million and \$38 million of deferred revenue and customer advances in other long-term liabilities at September 26, 2020 and December 31, 2019, respectively.

CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (unaudited) – (Continued)

The amount of deferred revenue and customer advances equals the transaction price allocated to unfulfilled performance obligations for the period presented. Such amounts are expected to be recognized in the future as follows (in thousands):

	September 26, 2020
Deferred revenue and customer advances expected to be recognized in:	
One year or less	\$ 211,348
13-24 months	22,452
25 months and beyond	16,123
Total	\$ 249,923

3 Marketable Securities

The Company's marketable securities within cash equivalents and investments included in the consolidated balance sheets are detailed as follows (in thousands):

	September 26, 2020			
	Amortized Cost	Unrealized Gain	Unrealized Loss	Fair Value
Time deposits	22,136	—	—	22,136
Total	\$ 22,136	\$ —	\$ —	\$22,136
Amounts included in:				
Investments	22,136	—	—	22,136
Total	\$ 22,136	\$ —	\$ —	\$22,136

	December 31, 2019			
	Amortized Cost	Unrealized Gain	Unrealized Loss	Fair Value
Time deposits	1,642	—	—	1,642
Total	\$ 1,642	\$ —	\$ —	\$1,642
Amounts included in:				
Cash equivalents	\$ 213	\$ —	\$ —	\$ 213
Investments	1,429	—	—	1,429
Total	\$ 1,642	\$ —	\$ —	\$1,642

The estimated fair value of marketable debt securities by maturity date is as follows (in thousands):

	September 26, 2020	December 31, 2019
Due in one year or less	\$ 22,136	\$ 1,642
Total	\$ 22,136	\$ 1,642

CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (unaudited) – (Continued)

4 Inventories

Inventories are classified as follows (in thousands):

	September 26, 2020	December 31, 2019
Raw materials	\$ 134,527	\$ 126,850
Work in progress	20,183	15,457
Finished goods	172,236	178,244
Total inventories	<u>\$ 326,946</u>	<u>\$ 320,551</u>

5 Acquisitions

On January 15, 2020, the Company acquired all of the outstanding stock of Andrew Alliance, S.A. and its two operating subsidiaries, Andrew Alliance USA, Inc. and Andrew Alliance France, SASU (collectively, “Andrew Alliance”), for \$80 million, net of cash acquired. The Company had an equity investment in Andrew Alliance that was valued at \$4 million and included as part of the total consideration.

Andrew Alliance offers lab workflow automation solutions with the combination of its software platform and smart, connected laboratory equipment and accessories.

The Company allocated \$7 million of the purchase price to intangible assets comprised of developed technology, trade name and customer relationships. The developed technology and customer relationships will be amortized over ten years and the trade name will be amortized over 3 years. The Company allocated \$72 million of the purchase price to goodwill, which is not deductible for tax purposes. The principal factor that resulted in recognition of goodwill in the acquisition was that the purchase price was based, in part, on cash flow projections assuming the integration of any acquired technology, distribution channels and products with the Company’s products, which are higher than if the acquired companies’ technology, customer access or products were utilized on a stand-alone basis. The goodwill also includes value assigned to assembled workforce, which cannot be recognized as an intangible asset.

In addition, the sellers provided the Company with customary representations, warranties and indemnification, which would be settled in the future if and when a breach of the contractual representation or warranty condition occurs.

The fair values of the assets and liabilities acquired were determined using various income-approach valuation techniques, which use Level 3 inputs. The following table presents the fair values as of the acquisition date, as determined by the Company, of 100% of the assets and liabilities owned and recorded in connection with the acquisition of Andrew Alliance (in thousands):

Cash	\$ 713
Accounts receivable and current other assets	806
Inventory	669
Prepaid and other assets	611
Property, plant and equipment, net	757
Operating lease assets	847
Intangible assets	6,960
Goodwill	71,632
Total assets acquired	82,995
Accrued expenses and other liabilities	2,093
Total consideration	<u>80,902</u>
Fair value of minority investment	3,525
Cash consideration paid	<u>\$77,377</u>

CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (unaudited) – (Continued)

The impact of the Andrew Alliance acquisition on the Company's revenues and net income during the quarter was immaterial. The year-to-date pro forma effect on the ongoing operations of the Company as though this acquisition had occurred at the beginning of the periods covered by this report was also immaterial.

6 Goodwill and Other Intangibles

The carrying amount of goodwill was \$431 million and \$356 million at September 26, 2020 and December 31, 2019, respectively. The acquisition of Andrew Alliance increased goodwill by \$72 million while the effect of foreign currency translation decreased goodwill by \$3 million.

The Company's intangible assets included in the consolidated balance sheets are detailed as follows (dollars in thousands):

	September 26, 2020			December 31, 2019		
	Gross Carrying Amount	Accumulated Amortization	Weighted-Average Amortization Period	Gross Carrying Amount	Accumulated Amortization	Weighted-Average Amortization Period
Capitalized software	\$542,127	\$ 378,999	5 years	\$481,986	\$ 333,255	5 years
Purchased intangibles	209,877	159,747	11 years	200,523	151,722	11 years
Trademarks and IPR&D	13,702	—	—	13,782	—	—
Licenses	5,600	5,345	6 years	5,669	5,298	6 years
Patents and other intangibles	86,972	59,019	8 years	83,035	54,517	8 years
Total	<u>\$858,278</u>	<u>\$ 603,110</u>	7 years	<u>\$784,995</u>	<u>\$ 544,792</u>	7 years

The gross carrying value of intangible assets and accumulated amortization for intangible assets increased by \$25 million and \$17 million, respectively, in the nine months ended September 26, 2020 due to the effects of foreign currency translation. Amortization expense for intangible assets was \$15 million and \$13 million for the three months ended September 26, 2020 and September 28, 2019, respectively. Amortization expense for intangible assets was \$42 million and \$38 million for the nine months ended September 26, 2020 and September 28, 2019, respectively. Amortization expense for intangible assets is estimated to be \$55 million per year for each of the next five years.

7 Debt

In November 2017, the Company entered into a credit agreement (the "2017 Credit Agreement") that provides for a \$1.5 billion revolving facility and a \$300 million term loan. As of September 26, 2020 and December 31, 2019, the revolving facility and term loan had a total of \$615 million and \$625 million, respectively, outstanding and mature on November 30, 2022 and require no scheduled prepayments before that date.

The interest rates applicable to the 2017 Credit Agreement are, at the Company's option, equal to either the alternate base rate (which is a rate per annum equal to the greatest of (1) the prime rate in effect on such day, (2) the Federal Reserve Bank of New York Rate on such day plus 1/2 of 1% per annum and (3) the adjusted LIBO rate on such day (or if such day is not a business day, the immediately preceding business day) for a deposit in U.S. dollars with a maturity of one month plus 1% per annum) or the applicable 1, 2, 3 or 6 month adjusted LIBO rate or EURIBO rate for Euro-denominated loans, in each case, plus an interest rate margin based upon the Company's leverage ratio, which can range between 0 and 12.5 basis points for alternate base rate loans and between 80 and 112.5 basis points for LIBO rate or EURIBO rate loans. The facility fee on the 2017 Credit Agreement ranges between 7.5 and 25 basis points per annum, based on the leverage ratio, of the amount of the revolving facility commitments and the outstanding term loan. The 2017 Credit Agreement requires that the Company comply with an interest coverage ratio test of not less than 3.50:1 as of the end of any fiscal quarter for any period of four consecutive fiscal quarters and a leverage ratio test of not more than 3.50:1 as of the end of any fiscal quarter. In addition, the 2017 Credit Agreement includes negative covenants, affirmative covenants, representations and warranties and events of default that are customary for investment grade credit facilities.

CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (unaudited) – (Continued)

As of September 26, 2020 and December 31, 2019, the Company had a total of \$960 million and \$1.1 billion, respectively, of outstanding senior unsecured notes. Interest on the fixed rate senior unsecured notes is payable semi-annually each year. Interest on the floating rate senior unsecured notes is payable quarterly. The Company may prepay all or some of the senior unsecured notes at any time in an amount not less than 10% of the aggregate principal amount outstanding, plus the applicable make-whole amount or prepayment premium for the Series H senior unsecured note. In the event of a change in control of the Company (as defined in the note purchase agreement), the Company may be required to prepay the senior unsecured notes at a price equal to 100% of the principal amount thereof, plus accrued and unpaid interest. These senior unsecured notes require that the Company comply with an interest coverage ratio test of not less than 3.50:1 for any period of four consecutive fiscal quarters and a leverage ratio test of not more than 3.50:1 as of the end of any fiscal quarter. In addition, these senior unsecured notes include customary negative covenants, affirmative covenants, representations and warranties and events of default.

In February 2019, certain defined terms related to the subsidiary guarantors were amended in the 2017 Credit Agreement and senior unsecured note agreements. In addition, the Company amended the senior unsecured note agreements to allow the Company to elect an increase in the permitted leverage ratio from 3.50:1 to 4.0:1, for a period of three consecutive quarters, for a material acquisition of \$400 million or more. During the period of time where the leverage ratio exceeds 3.50:1, the interest payable on the senior unsecured notes shall increase by 0.50%. The debt covenants in the senior unsecured note agreements were also modified to address the change in accounting guidance for leases.

The Company had the following outstanding debt at September 26, 2020 and December 31, 2019 (in thousands):

	September 26, 2020	December 31, 2019
Foreign subsidiary lines of credit	\$ —	\$ 366
Senior unsecured notes – Series B – 5.00%, due February 2020	—	100,000
Senior unsecured notes – Series E – 3.97%, due March 2021	50,000	—
Senior unsecured notes – Series F – 3.40%, due June 2021	100,000	—
Total notes payable and debt, current	150,000	100,366
Senior unsecured notes – Series E – 3.97%, due March 2021	—	50,000
Senior unsecured notes – Series F – 3.40%, due June 2021	—	100,000
Senior unsecured notes – Series G – 3.92%, due June 2024	50,000	50,000
Senior unsecured notes – Series H – floating rate*, due June 2024	50,000	50,000
Senior unsecured notes – Series I – 3.13%, due May 2023	50,000	50,000
Senior unsecured notes – Series K – 3.44%, due May 2026	160,000	160,000
Senior unsecured notes – Series L – 3.31%, due September 2026	200,000	200,000
Senior unsecured notes – Series M – 3.53%, due September 2029	300,000	300,000
Credit agreement	615,000	625,000
Unamortized debt issuance costs	(3,663)	(4,203)
Total long-term debt	1,421,337	1,580,797
Total debt	\$ 1,571,337	\$ 1,681,163

* Series H senior unsecured notes bear interest at a 3-month LIBOR for that floating rate interest period plus 1.25%.

As of both September 26, 2020 and December 31, 2019, the Company had a total amount available to borrow under the 2017 Credit Agreement of \$1.2 billion after outstanding letters of credit. The weighted-average interest rates applicable to the senior unsecured notes and credit agreement borrowings collectively were 2.68% and 3.39% at September 26, 2020 and December 31, 2019, respectively. As of September 26, 2020, the Company was in compliance with all debt covenants.

The Company and its foreign subsidiaries also had available short-term lines of credit totaling \$108 million and \$105 million at September 26, 2020 and December 31, 2019, respectively, for the purpose of short-term borrowing and issuance of commercial guarantees. The weighted-average interest rate applicable to these short-term borrowings was 1.48% for December 31, 2019. None of the Company's foreign subsidiaries had outstanding short-term borrowings as of September 26, 2020.

CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (unaudited) – (Continued)

As of September 26, 2020, the Company had entered into three-year interest rate cross-currency swap derivative agreements with an aggregate notional value of \$560 million to hedge the variability in the movement of foreign currency exchange rates on a portion of its Euro-denominated net asset investments.

8 Income Taxes

The four principal jurisdictions in which the Company manufactures are the U.S., Ireland, the U.K. and Singapore, where the statutory tax rates were 21%, 12.5%, 19% and 17%, respectively, as of September 26, 2020. The Company has a contractual tax rate of 0% on qualifying activities in Singapore through March 2021, based upon the achievement of certain contractual milestones, which the Company expects to meet. The effect of applying the contractual tax rate rather than the statutory tax rate to income from qualifying activities in Singapore increased the Company's net income for the nine months ended September 26, 2020 and September 28, 2019 by \$12 million and \$15 million, respectively, and increased the Company's net income per diluted share by \$0.20 and \$0.21, respectively.

The Company's effective tax rate for the three months ended September 26, 2020 and September 28, 2019 was 15.7% and 16.1%, respectively. The decrease in the effective income tax rate can be attributed to differences in the proportionate amounts of pre-tax income recognized in jurisdictions with different effective tax rates.

The Company's effective tax rate for the nine months ended September 26, 2020 and September 28, 2019 was 14.3% and 13.7%, respectively. The effective tax rate for the nine months ended September 26, 2020 includes a \$6 million income tax benefit related to certain restructuring charges and a \$3 million tax benefit related to stock-based compensation. These income tax benefits decreased the effective tax rate by 1.8 percentage points and 0.9 percentage points, respectively, for the nine months ended September 26, 2020. The effective tax rate for the nine months ended September 28, 2019 includes a \$3 million income tax benefit related to the finalization of certain regulations relating to the Tax Cuts and Jobs Act of 2017 and a \$7 million income tax benefit related to stock-based compensation. These income tax benefits decreased the effective tax rate by 0.7 percentage points and 1.5 percentage points, respectively, for the nine months ended September 28, 2019. The remaining differences between the effective tax rates can primarily be attributed to differences in the proportionate amounts of pre-tax income recognized in jurisdictions with different effective tax rates.

The Company accounts for its uncertain tax return reporting positions in accordance with the accounting standards for income taxes, which require financial statement reporting of the expected future tax consequences of uncertain tax reporting positions on the presumption that all concerned tax authorities possess full knowledge of those tax reporting positions, as well as all of the pertinent facts and circumstances, but prohibit any discounting of unrecognized tax benefits associated with those reporting positions for the time value of money. The Company continues to classify interest and penalties related to unrecognized tax benefits as a component of the provision for income taxes.

The following is a summary of the activity of the Company's gross unrecognized tax benefits, excluding interest and penalties, for the nine months ended September 26, 2020 and September 28, 2019 (in thousands):

	September 26, 2020	September 28, 2019
Balance at the beginning of the period	\$ 27,790	\$ 26,108
Net reductions for lapse of statutes taken during the period	(427)	(173)
Net additions for tax positions taken during the current period	907	1,314
Balance at the end of the period	<u>\$ 28,270</u>	<u>\$ 27,249</u>

With limited exceptions, the Company is no longer subject to tax audit examinations in significant jurisdictions for the years ended on or before December 31, 2014. The Company continuously monitors the lapsing of statutes of limitations on potential tax assessments for related changes in the measurement of unrecognized tax benefits, related net interest and penalties, and deferred tax assets and liabilities. As of September 26, 2020, the Company expects to record reductions in the measurement of its unrecognized tax benefits and related net interest and penalties of less than \$1 million within the next twelve months due to potential tax audit settlements and the lapsing of statutes of limitations on potential tax assessments. The Company does not expect to record any other material reductions in the measurement of its unrecognized tax benefits within the next twelve months.

CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (unaudited) – (Continued)

9 Stock-Based Compensation

The Company maintains various stockholder-approved, stock-based compensation plans which allow for the issuance of incentive or non-qualified stock options, stock appreciation rights, restricted stock or other types of awards (e.g. restricted stock units and performance stock units).

In May 2020, the Company's stockholders approved the Company's 2020 Equity Incentive Plan ("2020 Plan"). As of September 26, 2020, the 2020 Plan had 6.5 million shares available for grant in the form of incentive or non-qualified stock options, stock appreciation rights ("SARs"), restricted stock, restricted stock units or other types of awards (e.g. restricted stock units and performance stock units). The Company issues new shares of common stock upon exercise of stock options or restricted stock unit conversion. Under the 2020 Plan, the exercise price for stock options may not be less than the fair market value of the underlying stock at the date of grant. The 2020 Plan is scheduled to terminate on May 13, 2030. Options generally will expire no later than ten years after the date on which they are granted and will become exercisable as directed by the Compensation Committee of the Board of Directors and generally vest in equal annual installments over a five-year period. A SAR may be granted alone or in conjunction with an option or other award. Shares of restricted stock, restricted stock units and performance stock units may be issued under the 2020 Plan for such consideration as is determined by the Compensation Committee of the Board of Directors. As of September 26, 2020, the Company had stock options, restricted stock, and restricted and performance stock unit awards outstanding under the 2020 Plan.

The Company accounts for stock-based compensation costs in accordance with the accounting standards for stock-based compensation, which require that all share-based payments to employees be recognized in the statements of operations, based on their grant date fair values. The Company recognizes the expense using the straight-line attribution method. The stock-based compensation expense recognized in the consolidated statements of operations is based on awards that ultimately are expected to vest; therefore, the amount of expense has been reduced for estimated forfeitures. Forfeitures are estimated based on historical experience. If actual results differ significantly from these estimates, stock-based compensation expense and the Company's results of operations could be materially impacted. In addition, if the Company employs different assumptions in the application of these standards, the compensation expense that the Company records in the future periods may differ significantly from what the Company has recorded in the current period.

The consolidated statements of operations for the three and nine months ended September 26, 2020 and September 28, 2019 include the following stock-based compensation expense related to stock option awards, restricted stock awards, restricted stock unit awards, performance stock unit awards and the employee stock purchase plan (in thousands):

	Three Months Ended		Nine Months Ended	
	September 26, 2020	September 28, 2019	September 26, 2020	September 28, 2019
Cost of sales	\$ 645	\$ 531	\$ 1,850	\$ 1,673
Selling and administrative expenses	7,747	7,766	22,472	23,293
Research and development expenses	1,201	1,365	3,393	3,951
Total stock-based compensation	<u>\$ 9,593</u>	<u>\$ 9,662</u>	<u>\$ 27,715</u>	<u>\$ 28,917</u>

Stock Options

In determining the fair value of the stock options, the Company makes a variety of assumptions and estimates, including volatility measures, expected yields and expected stock option lives. The fair value of each option grant was estimated on the date of grant using the Black-Scholes option pricing model. The Company uses implied volatility on its publicly-traded options as the basis for its estimate of expected volatility. The Company believes that implied volatility is the most appropriate indicator of expected volatility because it is generally reflective of historical volatility and expectations of how future volatility will differ from historical volatility. The expected life assumption for grants is based on historical experience for the population of non-qualified stock option exercises. The risk-free interest rate

CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (unaudited) – (Continued)

is the yield currently available on U.S. Treasury zero-coupon issues with a remaining term approximating the expected term used as the input to the Black-Scholes model. The relevant data used to determine the value of the stock options granted during the nine months ended September 26, 2020 and September 28, 2019 are as follows:

Options Issued and Significant Assumptions Used to Estimate Option Fair Values	Nine Months Ended	
	September 26, 2020	September 28, 2019
Options issued in thousands	267	139
Risk-free interest rate	1.2%	2.5%
Expected life in years	6	5
Expected volatility	27.8%	24.3%
Expected dividends	—	—

Weighted-Average Exercise Price and Fair Value of Options on the Date of Grant	Nine Months Ended	
	September 26, 2020	September 28, 2019
Exercise price	\$ 215.12	\$ 231.30
Fair value	\$ 62.93	\$ 61.85

The following table summarizes stock option activity for the plans for the nine months ended September 26, 2020 (in thousands, except per share data):

	Number of Shares	Exercise Price per Share		Weighted-Average Exercise Price per Share
Outstanding at December 31, 2019	1,455	\$ 61.63	to \$238.52	\$ 158.61
Granted	267	\$188.63	to \$235.06	\$ 215.12
Exercised	(184)	\$ 61.63	to \$208.47	\$ 124.58
Canceled	(150)	\$128.93	to \$238.52	\$ 176.27
Outstanding at September 26, 2020	<u>1,388</u>	\$ 75.94	to \$238.52	\$ 172.08

Restricted Stock

During the nine months ended September 26, 2020, the Company granted six thousand shares of restricted stock. The weighted-average fair value per share of these awards on the grant date was \$229.67.

Restricted Stock Units

The following table summarizes the unvested restricted stock unit award activity for the nine months ended September 26, 2020 (in thousands, except per share data):

	Shares	Weighted-Average Grant Date Fair Value per Share
Unvested at December 31, 2019	260	\$ 184.70
Granted	119	\$ 206.99
Vested	(87)	\$ 162.12
Forfeited	(18)	\$ 187.90
Unvested at September 26, 2020	<u>274</u>	\$ 201.34

Restricted stock units are generally granted annually in February and vest in equal annual installments over a five-year period.

CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (unaudited) – (Continued)

Performance Stock Units

The Company's performance stock units are equity compensation awards with a market vesting condition based on the Company's Total Shareholder Return ("TSR") relative to the TSR of the components of the S&P Health Care Index. TSR is the change in value of a stock price over time, including the reinvestment of dividends. The vesting schedule ranges from 0% to 200% of the target shares awarded. Beginning with the grants made in 2020, the vesting conditions for performance stock units now include a performance condition based on future sales growth.

In determining the fair value of the performance stock units, the Company makes a variety of assumptions and estimates, including volatility measures, expected yields and expected terms. The fair value of each performance stock unit grant was estimated on the date of grant using the Monte Carlo simulation model. The Company uses implied volatility on its publicly-traded options as the basis for its estimate of expected volatility. The Company believes that implied volatility is the most appropriate indicator of expected volatility because it is generally reflective of historical volatility and expectations of how future volatility will differ from historical volatility. The expected life assumption for grants is based on the performance period of the underlying performance stock units. The risk-free interest rate is the yield currently available on U.S. Treasury zero-coupon issues with a remaining term approximating the expected term used as the input to the Monte Carlo simulation model. The correlation coefficient is used to model the way in which each company in the S&P Health Care Index tends to move in relation to each other during the performance period. The relevant data used to determine the value of the performance stock units granted during the nine months ended September 26, 2020 and September 28, 2019 are as follows:

Performance Stock Units Issued and Significant Assumptions Used to Estimate Fair Values	Nine Months Ended	
	September 26, 2020	September 28, 2019
Performance stock units issued (in thousands)	58	13
Risk-free interest rate	1.3%	2.4%
Expected life in years	2.9	2.8
Expected volatility	25.1%	23.5%
Average volatility of peer companies	26.1%	26.2%
Correlation coefficient	36.6%	34.2%
Expected dividends	—	—

The following table summarizes the unvested performance stock unit award activity for the nine months ended September 26, 2020 (in thousands, except per share data):

	Shares	Weighted-Average Fair Value per Share
Unvested at December 31, 2019	105	\$ 233.11
Granted	58	\$ 190.45
Vested	(36)	\$ 184.51
Forfeited	(25)	\$ 231.35
Unvested at September 26, 2020	<u>102</u>	<u>\$ 226.44</u>

CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (unaudited) – (Continued)

10 Earnings Per Share

Basic and diluted EPS calculations are detailed as follows (in thousands, except per share data):

Three Months Ended September 26, 2020			
	Net Income (Numerator)	Weighted- Average Shares (Denominator)	Per Share Amount
Net income per basic common share	\$ 126,769	62,002	\$ 2.04
Effect of dilutive stock option, restricted stock, performance stock unit and restricted stock unit securities	—	301	(0.01)
Net income per diluted common share	<u>\$ 126,769</u>	<u>62,303</u>	<u>\$ 2.03</u>
Three Months Ended September 28, 2019			
	Net Income (Numerator)	Weighted- Average Shares (Denominator)	Per Share Amount
Net income per basic common share	\$ 138,133	66,226	\$ 2.09
Effect of dilutive stock option, restricted stock, performance stock unit and restricted stock unit securities	—	542	(0.02)
Net income per diluted common share	<u>\$ 138,133</u>	<u>66,768</u>	<u>\$ 2.07</u>
Nine Months Ended September 26, 2020			
	Net Income (Numerator)	Weighted- Average Shares (Denominator)	Per Share Amount
Net income per basic common share	\$ 303,260	62,057	\$ 4.89
Effect of dilutive stock option, restricted stock, performance stock unit and restricted stock unit securities	—	314	(0.03)
Net income per diluted common share	<u>\$ 303,260</u>	<u>62,371</u>	<u>\$ 4.86</u>
Nine Months Ended September 28, 2019			
	Net Income (Numerator)	Weighted- Average Shares (Denominator)	Per Share Amount
Net income per basic common share	\$ 391,529	68,952	\$ 5.68
Effect of dilutive stock option, restricted stock, performance stock unit and restricted stock unit securities	—	581	(0.05)
Net income per diluted common share	<u>\$ 391,529</u>	<u>69,533</u>	<u>\$ 5.63</u>

For the three and nine months ended September 26, 2020, the Company had 0.4 million and 0.5 million stock options, respectively, that were antidilutive due to having higher exercise prices than the Company's average stock price during the period. For both the three and nine months ended September 28, 2019, the Company had 0.1 million stock options that were antidilutive. These securities were not included in the computation of diluted EPS. The effect of dilutive securities was calculated using the treasury stock method.

CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (unaudited) – (Continued)

11 Accumulated Other Comprehensive Income

The components of accumulated other comprehensive loss are detailed as follows (in thousands):

	Currency Translation	Unrealized Loss on Retirement Plans	Accumulated Other Comprehensive Loss
Balance at December 31, 2019	\$ (104,066)	\$ (15,405)	\$ (119,471)
Other comprehensive loss, net of tax	(7,156)	(49)	(7,205)
Balance at September 26, 2020	<u>\$ (111,222)</u>	<u>\$ (15,454)</u>	<u>\$ (126,676)</u>

12 Retirement Plans

The Company sponsors various retirement plans. The components of net periodic benefit cost other than the service cost component are included in other expense in the consolidated statements of operations. The summary of the components of net periodic pension costs for the plans for the three and nine months ended September 26, 2020 and September 28, 2019 is as follows (in thousands):

	Three Months Ended					
	September 26, 2020			September 28, 2019		
	U.S. Pension Plans	U.S. Retiree Healthcare Plan	Non-U.S. Pension Plans	U.S. Pension Plans	U.S. Retiree Healthcare Plan	Non-U.S. Pension Plans
Service cost	\$ —	\$ 197	\$ 1,140	\$ —	\$ 124	\$ 1,081
Interest cost	—	180	353	—	194	426
Expected return on plan assets	—	(214)	(476)	—	(177)	(535)
Net amortization:						
Prior service credit	—	(4)	(41)	—	(5)	(38)
Net actuarial loss	—	—	397	—	—	132
Net periodic pension cost	<u>\$ —</u>	<u>\$ 159</u>	<u>\$ 1,373</u>	<u>\$ —</u>	<u>\$ 136</u>	<u>\$ 1,066</u>

	Nine Months Ended					
	September 26, 2020			September 28, 2019		
	U.S. Pension Plans	U.S. Retiree Healthcare Plan	Non-U.S. Pension Plans	U.S. Pension Plans	U.S. Retiree Healthcare Plan	Non-U.S. Pension Plans
Service cost	\$ —	\$ 499	\$ 3,334	\$ —	\$ 374	\$ 3,238
Interest cost	—	533	1,036	23	583	1,291
Expected return on plan assets	—	(653)	(1,386)	—	(531)	(1,616)
Net amortization:						
Prior service credit	—	(14)	(122)	—	(15)	(113)
Net actuarial loss	—	—	1,164	—	—	399
Net periodic pension cost	<u>\$ —</u>	<u>\$ 365</u>	<u>\$ 4,026</u>	<u>\$ 23</u>	<u>\$ 411</u>	<u>\$ 3,199</u>

In 2019, the Company completed the termination of the Waters Retirement Restoration Plan.

During fiscal year 2020, the Company expects to contribute a total of approximately \$3 million to \$6 million to the Company's defined benefit plans.

CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (unaudited) – (Continued)

13 Business Segment Information

The Company's business activities, for which discrete financial information is available, are regularly reviewed and evaluated by the chief operating decision maker. As a result of this evaluation, the Company determined that it has two operating segments: Waters™ and TA™.

The Waters operating segment is primarily in the business of designing, manufacturing, selling and servicing LC and MS instruments, columns and other precision chemistry consumables that can be integrated and used along with other analytical instruments. The TA operating segment is primarily in the business of designing, manufacturing, selling and servicing thermal analysis, rheometry and calorimetry instruments. The Company's two operating segments have similar economic characteristics; product processes; products and services; types and classes of customers; methods of distribution; and regulatory environments. Because of these similarities, the two segments have been aggregated into one reporting segment for financial statement purposes. Please refer to the consolidated financial statements for financial information regarding the one reportable segment of the Company.

Net sales for the Company's products and services are as follows for the three and nine months ended September 26, 2020 and September 28, 2019 (in thousands):

	Three Months Ended		Nine Months Ended	
	September 26, 2020	September 28, 2019	September 26, 2020	September 28, 2019
Product net sales:				
Waters instrument systems	\$ 225,790	\$ 223,859	\$ 550,018	\$ 647,248
Chemistry consumables	108,175	100,256	300,525	299,801
TA instrument systems	42,274	46,458	114,799	131,292
Total product sales	376,239	370,573	965,342	1,078,341
Service net sales:				
Waters service	199,501	188,031	562,843	556,128
TA service	18,044	18,674	50,522	55,833
Total service sales	217,545	206,705	613,365	611,961
Total net sales	\$ 593,784	\$ 577,278	\$ 1,578,707	\$ 1,690,302

Net sales are attributable to geographic areas based on the region of destination. Geographic sales information is presented below for the three and nine months ended September 26, 2020 and September 28, 2019 (in thousands):

	Three Months Ended		Nine Months Ended	
	September 26, 2020	September 28, 2019	September 26, 2020	September 28, 2019
Net Sales:				
Asia:				
China	\$ 115,666	\$ 111,657	\$ 252,713	\$ 314,544
Japan	44,779	46,840	131,098	136,302
Asia Other	75,737	79,278	219,660	226,276
Total Asia	236,182	237,775	603,471	677,122
Americas:				
United States	172,267	164,164	465,093	487,261
Americas Other	27,180	32,294	81,312	97,840
Total Americas	199,447	196,458	546,405	585,101
Europe	158,155	143,045	428,831	428,079
Total net sales	\$ 593,784	\$ 577,278	\$ 1,578,707	\$ 1,690,302

CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (unaudited) – (Continued)

Net sales by customer class are as follows for the three and nine months ended September 26, 2020 and September 28, 2019 (in thousands):

	Three Months Ended		Nine Months Ended	
	September 26, 2020	September 28, 2019	September 26, 2020	September 28, 2019
Pharmaceutical	\$ 343,001	\$ 328,227	\$ 926,582	\$ 972,884
Industrial	179,128	171,352	474,592	502,679
Academic and governmental	71,655	77,699	177,533	214,739
Total net sales	<u>\$ 593,784</u>	<u>\$ 577,278</u>	<u>\$ 1,578,707</u>	<u>\$ 1,690,302</u>

Net sales for the Company recognized at a point in time versus over time are as follows for the three and nine months ended September 26, 2020 and September 28, 2019 (in thousands):

	Three Months Ended		Nine Months Ended	
	September 26, 2020	September 28, 2019	September 26, 2020	September 28, 2019
Net sales recognized at a point in time:				
Instrument systems	\$ 268,064	\$ 270,317	\$ 664,817	\$ 778,540
Chemistry consumables	108,175	100,256	300,525	299,801
Service sales recognized at a point in time (time & materials)	92,145	75,240	238,754	232,806
Total net sales recognized at a point in time	468,384	445,813	1,204,096	1,311,147
Net sales recognized over time:				
Service and software maintenance sales recognized over time (contracts)	125,400	131,465	374,611	379,155
Total net sales	<u>\$ 593,784</u>	<u>\$ 577,278</u>	<u>\$ 1,578,707</u>	<u>\$ 1,690,302</u>

14 Recent Accounting Standard Changes and Developments

Recently Adopted Accounting Standards

In June 2016, accounting guidance was issued that modifies the recognition of credit losses related to financial assets, such as debt securities, trade receivables, net investments in leases, off-balance sheet credit exposures, and other financial assets that have the contractual right to receive cash. Current guidance requires the recognition of a credit loss when it is considered probable that a loss event has occurred. The new guidance requires the measurement of expected credit losses to be based upon relevant information, including historical experience, current conditions, and reasonable and supportable forecasts that affect the collectability of the asset. As such, expected credit losses may be recognized sooner under the new guidance due to the broader range of information that will be required to determine credit loss estimates. The new guidance also amends the current other-than-temporary impairment model used for debt securities classified as available-for-sale. When the fair value of an available-for-sale debt security is below its amortized cost, the new guidance requires the total unrealized loss to be bifurcated into its credit and non-credit components. Any expected credit losses or subsequent recoveries will be recognized in earnings and any changes not considered credit related will continue to be recognized within other comprehensive income. This guidance is effective for annual and interim periods beginning after December 15, 2019. On January 1, 2020 the Company adopted this new standard using a modified retrospective method for all financial assets measured at amortized cost which only impacted the Company's allowance on trade accounts receivable. The Company did not have any significant off-balance sheet credit exposures which would be impacted by the new guidance. Results for reporting periods beginning after January 1, 2020 are presented under the new standard while prior period amounts continue to be reported in accordance with previously applicable GAAP. The Company recorded a net decrease of \$1 million to stockholders' deficit as of January 1, 2020 for the cumulative effect of adopting the new standard due to converting to the current expected credit loss model for the allowance recorded against trade accounts receivables. This accounting standard did not have an impact on the Company's results of operations and cash flows.

CONDENSED NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (unaudited) – (Continued)

In January 2017, accounting guidance was issued that simplifies the accounting for goodwill impairment. The guidance eliminates step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. This guidance is effective for annual and interim periods beginning after December 15, 2019. The Company adopted this standard on January 1, 2020. The adoption of this standard did not have a material effect on the Company's financial position, results of operations and cash flows.

In August 2018, accounting guidance was issued that modifies the disclosure requirements of fair value measurements. The amendments remove disclosures that are no longer considered cost beneficial, clarify the specific requirements of disclosure and add disclosure requirements identified as relevant. This guidance is effective for annual and interim periods beginning after December 15, 2019. The Company adopted this standard on January 1, 2020. The adoption of this standard did not have a material impact on the Company's financial position, results of operations and cash flows.

Recently Issued Accounting Standards

In August 2018, accounting guidance was issued that modifies the disclosure requirements of retirement benefit plans. The amendments remove disclosures that are no longer considered cost beneficial, clarify the specific requirements of disclosure and add disclosure requirement identified as relevant. This guidance is effective for annual and interim periods beginning after December 15, 2020 and early adoption is permitted. The Company does not expect that the adoption of this standard will have a material impact on the Company's financial position, results of operations and cash flows.

In December 2019, accounting guidance was issued that simplifies the accounting for income taxes by removing certain exceptions within the current guidance, including the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. The amendment also improves consistent application by clarifying and amending existing guidance related to aspects of the accounting for franchise taxes and enacted changes in tax laws or rates and clarifies the accounting for transactions that result in a step up in the tax basis of goodwill. This guidance is effective for annual and interim periods beginning after December 15, 2020 and early adoption is permitted. The Company does not expect that the adoption of this standard will have a material impact on the Company's financial position, results of operations and cash flows.

In January 2020, accounting guidance was issued that clarifies the accounting guidance for equity method investments, joint ventures, and derivatives and hedging. The update clarifies the interaction between different sections of the accounting guidance that could be applicable and helps clarify which guidance should be applied in certain situations which should increase relevance and comparability of financial statement information. This guidance is effective for annual and interim periods beginning after December 15, 2020 and early adoption is permitted. The Company does not expect that the adoption of this standard will have a material impact on the Company's financial position, results of operations and cash flows.

In March 2020, accounting guidance was issued that facilitates the effects of reference rate reform on financial reporting. The amendments in the update provide optional guidance for a limited period of time to ease the potential burden in accounting for or recognizing the effects of reference rate reform on financial reporting and apply to all entities, subject to meeting certain criteria, that have contracts, hedging relationships, and other transactions that reference LIBOR or another reference rate expected to be discontinued because of reference rate reform. This temporary guidance is effective for all entities as of March 12, 2020 through December 31, 2022. The Company may elect to apply this guidance for all contract modifications or eligible hedging relationships during that time period subject to certain criteria. The Company is still evaluating the impact of reference rate reform and whether this guidance will be adopted.

In March 2020, the U.S. federal government enacted the Coronavirus Aid, Relief and Economic Security Act (the "CARES Act"). The CARES Act is an emergency economic stimulus package in response to the COVID-19 outbreak which, among other things, contains numerous income tax provisions. While the Company continues to evaluate the impact of the CARES Act, it does not currently believe it will have a material impact on the Company's consolidated financial statements or related disclosures.

Item 2: Management's Discussion and Analysis of Financial Condition and Results of Operations

Business and Financial Overview

The Company has two operating segments: Waters TM and TA TM. Waters products and services primarily consist of high performance liquid chromatography ("HPLC"), ultra performance liquid chromatography ("UPLC TM" and, together with HPLC, referred to as "LC"), mass spectrometry ("MS") and precision chemistry consumable products and related services. TA products and services primarily consist of thermal analysis, rheometry and calorimetry instrument systems and service sales. The Company's products are used by pharmaceutical, biochemical, industrial, nutritional safety, environmental, academic and governmental customers. These customers use the Company's products to detect, identify, monitor and measure the chemical, physical and biological composition of materials and to predict the suitability and stability of fine chemicals, pharmaceuticals, water, polymers, metals and viscous liquids in various industrial, consumer goods and healthcare products.

Both the Company's domestic and international operations have been and continue to be adversely affected by the ongoing global pandemic of a novel strain of coronavirus ("COVID-19") and the resulting volatility and uncertainty it has caused in the U.S. and international markets. The Company is actively managing its business to respond to the COVID-19 impact; however, the Company cannot reasonably estimate the length or severity of the COVID-19 pandemic or the related response, or the extent to which the disruption may materially impact the Company's business, consolidated financial position, consolidated results of operations or consolidated cash flows in the future.

To date, the COVID-19 pandemic has not materially impacted our manufacturing facilities or those of the third parties to whom we outsource certain manufacturing processes, the distribution centers where our inventory is managed or the operations of our logistics and other service providers. We have also not seen material disruptions or delays in shipments of certain materials or components of our products.

At every stage of the pandemic, we have taken decisive and appropriate actions, including a mandatory remote work policy for all employees with the exception of those in manufacturing, distribution, and certain laboratory environments, as well as restrictions on non-essential travel and visitors into our facilities. We have engaged a medical advisor to guide our policy deployment, and we continue to take proactive measures to guard the health of our global employee base, and the safety of all customer interactions. We have implemented rigorous protocols to promote a safe work environment in all of our locations around the world and during the quarter we began implementation of the second phase of a multi-phase process for the safe return of employees to our physical workplaces as social distancing, governmental requirements and other protocols allow.

The vast majority of the markets we serve, most notably the pharmaceutical, biomedical research, food/environmental and clinical markets, have continued to operate at various levels, and we are working closely with these customers to facilitate their seamless operation. Over the last several years, we have executed on a digital workplace strategy focused on providing modern connectivity and collaboration tools to our employees. Our strategic technology investments have enabled us to swiftly meet remote working needs as the COVID-19 situation has escalated and evolved. From a customer-facing perspective, we are leveraging digital demand generation activities, including virtual demos across all regions in which we operate, remote instrument installations, virtual sales seminars, online product training, and a rapid acceleration in one-on-one communications over emails, phone and video conferencing.

While we initially anticipated that the COVID-19 pandemic would have the biggest impact on the Company's financial results in the second quarter of 2020, and future quarters would improve as countries lifted their business restrictions, the new outbreaks of COVID-19 in the U.S. and elsewhere have demonstrated that the COVID-19 pandemic continues to be fluid with uncertainties and risks remaining across the global economy. The Company is taking a proactive approach to managing through this unpredictability and has implemented a series of cost reduction actions that include salary reductions, furloughs and reductions in non-essential spending and other working capital reductions in order to preserve liquidity and enhance financial flexibility. A significant portion of these cost reduction actions were completed at the end of July 2020, and the Company's costs of sales and operating expenses are expected to gradually increase to more normal levels as we move through the remainder of 2020. These cost reductions reflect our core assumption that business conditions improve through the remainder of 2020 and into 2021; however, our plan will be adjusted accordingly depending on the pace of the recovery.

Table of Contents

The Company's operating results are as follows for the three and nine months ended September 26, 2020 and September 28, 2019 (dollars in thousands, except per share data):

	Three Months Ended			Nine Months Ended		
	September 26, 2020	September 28, 2019	% change	September 26, 2020	September 28, 2019	% change
Revenues:						
Product sales	\$ 376,239	\$ 370,573	2%	\$ 965,342	\$ 1,078,341	(10%)
Service sales	217,545	206,705	5%	613,365	611,961	—
Total net sales	593,784	577,278	3%	1,578,707	1,690,302	(7%)
Costs and operating expenses:						
Cost of sales	262,342	241,055	9%	686,120	711,632	(4%)
Selling and administrative expenses	135,430	126,036	7%	400,614	393,583	2%
Research and development expenses	34,971	34,333	2%	101,115	105,883	(5%)
Purchased intangibles amortization	2,657	2,619	1%	7,900	7,164	10%
Litigation provision	—	—	—	1,180	—	—
Operating income	158,384	173,235	(9%)	381,778	472,040	(19%)
Operating income as a % of sales	26.7%	30.0%		24.2%	27.9%	
Other expense	(1,039)	(496)	109%	(2,149)	(1,363)	58%
Interest expense, net	(6,908)	(8,001)	(14%)	(25,966)	(16,826)	54%
Income before income taxes	150,437	164,738	(9%)	353,663	453,851	(22%)
Provision for income taxes	23,668	26,605	(11%)	50,403	62,322	(19%)
Net income	\$ 126,769	\$ 138,133	(8%)	\$ 303,260	\$ 391,529	(23%)
Net income per diluted common share	\$ 2.03	\$ 2.07	(2%)	\$ 4.86	\$ 5.63	(14%)

In the third quarter of 2020, the Company's sales increased 3% as compared to the third quarter of 2019. This increase in sales can be attributed to the increased demand for the Company's products and services as business conditions improved as the interruption in business activities caused by the COVID-19 pandemic across the world in 2020 were somewhat alleviated as our customers began to resume laboratory and manufacturing operations. Foreign currency translation increased sales by 1% for the third quarter of 2020.

For the first nine months of 2020, sales decreased by 7% as compared to the first nine months of 2019, as the response to the COVID-19 pandemic caused interruptions in business activities and uncertainties that resulted in our customers reducing purchases of our products and services. Foreign currency translation decreased sales by 1% year-to-date in 2020.

The Company's year-to-date sales in 2020 have one less calendar day as compared to the prior year. The Company will have two more calendar days in the fourth quarter of 2020 as compared to the fourth quarter of 2019. Unless otherwise noted, sales growth or decline percentages are presented as compared with the same period in the prior year. The Company's acquisition of Andrew Alliance (as defined below) did not have a material impact on sales on either the quarter or year-to-date in 2020.

Instrument system sales decreased 1% and 15% for the third quarter and first nine months of 2020, respectively, as a result of weaker demand for our products by our customers due to interruption of business activities and the uncertainty caused by the COVID-19 pandemic. Foreign currency translation in the third quarter was neutral and decreased instrument system sales by 1% for the first nine months of 2020.

Recurring revenues (combined sales of precision chemistry consumables and services) increased 6% and were flat for the third quarter and first nine months of 2020, respectively, also due to the interruption of business activities and the uncertainty caused by the COVID-19 pandemic. Chemistry consumable sales increased 8% and were flat in the third quarter and first nine months of 2020, respectively, while service sales increased 5% and were flat in the third quarter and first nine months of 2020, respectively. In the third quarter, both chemistry consumable and service sales benefited from the increased demand for our products and services as our customers began to reopen laboratory and manufacturing operations. Recurring revenues were positively impacted by foreign currency translation, which increased sales by 1% in the third quarter; however, foreign currency translation negatively impacted sales by 1% year-to-date in 2020.

[Table of Contents](#)

In the third quarter of 2020, the Company's sales in Europe increased 11% with foreign currency translation adding 6% to Europe's sales growth. The Americas' sales grew 2%, as a 5% sales growth in the U.S. was partially offset by a decline in sales in Americas Other. Asia's sales declined by 1% as China's 4% sales growth was offset by declines in Japan as well as the other geographies in Asia.

Year-to-date, the sales declines were broad-based across the world and were due to the weaker demand and disruption of business activities caused by the COVID-19 lockdowns, except in Europe where sales were flat as compared to the prior year. Foreign currency translation was neutral to Europe's sales year-to-date. The Americas' sales declined 7% year-to-date and Asia's sales declined 11% with foreign currency translation negatively impacting sales by 1%.

The year-to-date sales decline in Asia was primarily driven by the 20% decrease in sales in China. Sales in China increased 4% in the third quarter of 2020, improving from the 32% decline experienced in the first half of 2020, as the COVID-19 business restrictions in China were slowly lifted. Excluding China's sales, the Company's year-to-date sales declined 4% with foreign currency translation negatively impacting sales by 1%.

Sales to our pharmaceutical and industrial customers in the third quarter improved as compared to the first half of 2020, as the demand for our products and services increased as these customers began to resume laboratory and manufacturing operations after the COVID-19 lockdowns. Sales to pharmaceutical customers increased 5% in the third quarter and decreased 5% year-to-date, as the decline was primarily driven by the disruption in business activities caused by COVID-19, and the effect of foreign currency translation increasing sales by 1% for the third quarter and decreasing sales by 1% year-to-date. Combined sales to industrial customers, which include material characterization, food, environmental and fine chemical markets, increased 5% in the third quarter and declined 6% year-to-date, primarily due to lower demand caused by the COVID-19 pandemic, with the effect of foreign currency translation increasing sales by 2% for the third quarter and being neutral year-to-date. In addition, TA's sales declined 7% and 12% in the third quarter and first nine months of 2020, respectively.

Sales to academic and governmental customers declined by 8% and 17% in the third quarter and first nine months of 2020, respectively, as the demand for our products and services declined as the academic and governmental institutions adjusted their spending to mitigate the effects of the COVID-19 pandemic. The most significant decline in academic and governmental sales in both the third quarter and year-to-date occurred in China where sales declined 32% and 42%, respectively, as the government mandated spending reductions. Foreign currency translation decreased academic and governmental sales by 1% for both the third quarter and first nine months of 2020. Sales to our academic and governmental customers are highly dependent on when institutions receive funding to purchase our instrument systems and, as such, sales can vary significantly from period to period.

Operating income decreased 9% and 19% for the third quarter and first nine months of 2020, respectively. The third quarter operating income decrease can be attributed to the change in sales mix, unfavorable manufacturing absorption and unfavorable foreign currency translation. The year-to-date decline in operating income can be attributed to the decline in sales volumes caused by the COVID-19 pandemic, unfavorable manufacturing absorption and unfavorable foreign currency translation. Both the quarter and year-to-date operating income declines were somewhat mitigated by a series of cost reduction actions that included salary reductions, furloughs and reductions in non-essential spending that increased operating income by approximately \$22 million in the third quarter and \$81 million year-to-date versus our operating plan. Operating income in the third quarter and first nine months of 2020 also included \$6 million and \$27 million, respectively, of severance-related costs in connection with a reduction in workforce and lease termination and exit costs. The Company's plan was to reduce its expenses by approximately \$100 million during 2020 to improve its financial position and liquidity to mitigate the impact of the decline in sales caused by COVID-19. The Company was able to realize approximately 85% of the cost action and restructuring savings year-to-date and the Company anticipates the remaining 15% of this savings plan will be achieved in the fourth quarter and the Company expects its spending to gradually return to more normal levels. This plan reflects our core assumption that business conditions improve throughout the remainder of 2020 and into 2021; however, this plan will be adjusted accordingly depending on the pace of recovery.

The Company generated \$523 million and \$451 million of net cash flows from operations in the first nine months of 2020 and 2019, respectively. This increase in operating cash flow was primarily a result of the \$81 million reduction in expense from the cost actions implemented and working capital improvement during the third quarter of 2020.

[Table of Contents](#)

Cash flows used in investing activities included capital expenditures related to property, plant, equipment and software capitalization of \$125 million and \$110 million in the first nine months of 2020 and 2019, respectively. In January of 2020, the Company acquired all of the outstanding stock of Andrew Alliance, S.A. and its two operating subsidiaries, Andrew Alliance USA, Inc. and Andrew Alliance France, SASU (collectively “Andrew Alliance”), for \$80 million, net of cash acquired. The Company had an equity investment in Andrew Alliance that was valued at \$4 million and included as part of the total consideration. This acquisition is not expected to have a material effect on the Company’s sales and expenses. The cash flows from investing activities in the first nine months of 2020 also included \$50 million of capital expenditures related to the expansion of the Company’s precision chemistry consumable operations in the U.S. The Company has incurred \$131 million on this facility through the end of the first nine months of 2020 and anticipates spending a total of \$215 million to build and equip this new state-of-the-art manufacturing facility. Due to the uncertain business conditions caused by the COVID-19 pandemic, in the second and third quarters of 2020 the Company temporarily slowed down the remaining construction and buildout of this facility.

In January 2019, the Company’s Board of Directors authorized the Company to repurchase up to \$4 billion of its outstanding common stock over a two-year period. During the first nine months of 2020 and 2019, the Company repurchased \$167 million and \$1.9 billion of the Company’s outstanding common stock, respectively, under authorized share repurchase programs. While the Company believes that it has the financial flexibility to fund these share repurchases given current cash and investment levels and debt borrowing capacity, as well as to invest in research, technology and business acquisitions to further grow the Company’s sales and profits, the Company has temporarily suspended its share repurchases due to the uncertain business conditions caused by the COVID-19 pandemic.

Results of Operations

Sales by Geography

Geographic sales information is presented below for the three and nine months ended September 26, 2020 and September 28, 2019 (dollars in thousands):

	Three Months Ended			Nine Months Ended		
	September 26, 2020	September 28, 2019	% change	September 26, 2020	September 28, 2019	% change
Net Sales:						
Asia:						
China	\$ 115,666	\$ 111,657	4%	\$ 252,713	\$ 314,544	(20%)
Japan	44,779	46,840	(4%)	131,098	136,302	(4%)
Asia Other	75,737	79,278	(4%)	219,660	226,276	(3%)
Total Asia	236,182	237,775	(1%)	603,471	677,122	(11%)
Americas:						
United States	172,267	164,164	5%	465,093	487,261	(5%)
Americas Other	27,180	32,294	(16%)	81,312	97,840	(17%)
Total Americas	199,447	196,458	2%	546,405	585,101	(7%)
Europe	158,155	143,045	11%	428,831	428,079	—
Total net sales	\$ 593,784	\$ 577,278	3%	\$ 1,578,707	\$ 1,690,302	(7%)

In the third quarter of 2020, the Company’s sales increased 3% as compared to the third quarter of 2019. This increase in sales in the third quarter can be attributed to an improvement in business conditions as the interruption in business activities caused by the COVID-19 pandemic improved as customers began to return from lockdowns. In the third quarter of 2020, the Company’s sales increased 5% in the U.S., 4% in China and 11% in Europe. Foreign currency translation added 6% to Europe’s sales growth in the third quarter of 2020. The Company’s sales decreased 4% in both Asia Other and Japan and 16% in Americas Other as the impact of the COVID-19 pandemic continued affecting the business activities in these areas of the world.

For the first nine months of 2020, sales decreased 7% as compared to the first nine months of 2019, as the response to the COVID-19 pandemic caused interruptions in business activities and uncertainties that resulted in our customers reducing purchases of our products and services. Foreign currency translation decreased sales by 1% year-to-date. The year-to-date sales declines occurred in all geographies and were a result of the weaker demand and disruption of business activities caused by the COVID-19 lockdowns, except in Europe where sales were flat year-to-date as compared to the prior year. The most significant decline in sales year-to-date occurred in China, where sales declined 20%, as well as declines of 5% in the U.S., 4% in Japan and 17% in Americas Other.

[Table of Contents](#)

Sales by Trade Class

Net sales by customer class are presented below for the three and nine months ended September 26, 2020 and September 28, 2019 (dollars in thousands):

	Three Months Ended			Nine Months Ended		
	September 26, 2020	September 28, 2019	% change	September 26, 2020	September 28, 2019	% change
Pharmaceutical	\$ 343,001	\$ 328,227	5%	\$ 926,582	\$ 972,884	(5%)
Industrial	179,128	171,352	5%	474,592	502,679	(6%)
Academic and governmental	71,655	77,699	(8%)	177,533	214,739	(17%)
Total net sales	\$ 593,784	\$ 577,278	3%	\$ 1,578,707	\$ 1,690,302	(7%)

Sales to pharmaceutical customers increased 5% in the third quarter as our customer demand improved during the quarter as customers began to return from the lockdowns. Year-to-date, sales declined 5% and can be attributed to the disruption in business activities caused by COVID-19, despite increased demand for our products and services from certain pharmaceutical customers who are involved with COVID-19 diagnostic testing and the development of new drugs and therapies. Foreign currency translation increased sales to pharmaceutical customers by 1% in the third quarter of 2020 and decreased sales by 1% year-to-date. Sales to industrial customers in the third quarter grew 5% as customer demand increased as customers began to resume laboratory and manufacturing operations as the COVID-19 lockdowns were lifted. Sales to industrial customers year-to-date declined 6%. Sales to industrial customers were significantly impacted by the TA sales declines of 7% and 12% for the third quarter and first nine months of 2020, respectively. The decreases in sales to academic and governmental customers were broad-based across all product classes as academic and governmental customers adjusted their spending to mitigate the effects of the COVID-19 pandemic.

Waters Products and Services Net Sales

Net sales for Waters products and services were as follows for the three and nine months ended September 26, 2020 and September 28, 2019 (dollars in thousands):

	Three Months Ended				
	September 26, 2020	% of Total	September 28, 2019	% of Total	% change
Waters instrument systems	\$ 225,790	42%	\$ 223,859	44%	1%
Chemistry consumables	108,175	21%	100,256	19%	8%
Total Waters product sales	333,965	63%	324,115	63%	3%
Waters service	199,501	37%	188,031	37%	6%
Total Waters net sales	\$ 533,466	100%	\$ 512,146	100%	4%

[Table of Contents](#)

	Nine Months Ended				
	September 26, 2020	% of Total	September 28, 2019	% of Total	% change
Waters instrument systems	\$ 550,018	39%	\$ 647,248	43%	(15%)
Chemistry consumables	300,525	21%	299,801	20%	—
Total Waters product sales	850,543	60%	947,049	63%	(10%)
Waters service	562,843	40%	556,128	37%	1%
Total Waters net sales	\$ 1,413,386	100%	\$ 1,503,177	100%	(6%)

Waters products and service sales increased 4% for the quarter and declined 6% year-to-date. Waters instrument system sales (LC and MS technology-based) increased 1% in the quarter as the weaker demand for our products and services by our customers due to the disruption and uncertainty caused by the COVID-19 pandemic were partially alleviated as customers began to return to their workplaces as the lockdowns were lifted. Precision chemistry consumables sales increased in the quarter by 8% and were driven by the increase in demand in all geographies with Asia's chemistry sales increasing 17% for the quarter. Chemistry sales year-to-date were flat. Waters service sales increased 6% and 1% in the third quarter and first nine months of 2020, respectively, on an increase in service demand billings as customers began to return to work after business restrictions were lifted. Waters recurring revenues were also negatively impacted by one less calendar day in the first nine months of 2020 and the negative impact of foreign currency translation, which lowered sales by 1% year-to-date and increased sales by 1% in the third quarter of 2020.

In the third quarter of 2020, Waters sales increased 13% in Europe, 5% in the U.S. and 2% in China as customer demand improved. Foreign currency translation increased Europe's sales growth by 5%. All other geographies' sales declined during the quarter. Year-to-date, Waters sales in Europe increased 2% while all other geographies' sales declined year-to-date with the most significant decline in sales occurring in China, which was down 21% year-to-date. Year-to-date the impact of foreign currency on Europe's sales were neutral.

TA Product and Services Net Sales

Net sales for TA products and services were as follows for the three and nine months ended September 26, 2020 and September 28, 2019 (dollars in thousands):

	Three Months Ended				
	September 26, 2020	% of Total	September 28, 2019	% of Total	% change
TA instrument systems	\$ 42,274	70%	\$ 46,458	71%	(9%)
TA service	18,044	30%	18,674	29%	(3%)
Total TA net sales	\$ 60,318	100%	\$ 65,132	100%	(7%)

	Nine Months Ended				
	September 26, 2020	% of Total	September 28, 2019	% of Total	% change
TA instrument systems	\$ 114,799	69%	\$ 131,292	70%	(13%)
TA service	50,522	31%	55,833	30%	(10%)
Total TA net sales	\$ 165,321	100%	\$ 187,125	100%	(12%)

The decline in TA instrument system and service sales in the third quarter and first nine months of 2020 was primarily due to lower customer demand due to the COVID-19 pandemic. The effect of foreign currency translation had a minimal impact on both the third quarter and the first nine months of 2020.

TA sales declined in all major regions in the third quarter and year-to-date, except for the U.S. and China where sales grew 3% and 16%, during the third quarter of 2020, respectively.

[Table of Contents](#)

Cost of Sales

Cost of sales for the third quarter of 2020 increased 9% due to the increase in sales volume, change in sales mix, unfavorable manufacturing absorption and unfavorable foreign currency exchange. Cost of sales year-to-date decreased 4% on the lower sales volume, change in sales mix, unfavorable manufacturing absorption and unfavorable foreign currency exchange. Cost of sales is affected by many factors, including, but not limited to, foreign currency translation, product mix, product costs of instrument systems and amortization of software platforms. At current foreign currency exchange rates, the Company expects foreign currency translation to be neutral to gross profit for the remainder of 2020. To date, the Company has not had significant issues with its supply chain; however, the prolonged impact of COVID-19 on businesses could negatively impact our suppliers' ability to deliver goods to us, as well as possibly increase the cost of those goods used in our manufacturing operations.

Selling and Administrative Expenses

Selling and administrative expenses increased 7% and 2% for the third quarter and first nine months of 2020, respectively. The increase in selling and administrative expenses in these periods can be attributed to the salary merit and incentive compensation increases along with the severance-related costs in connection with a reduction in workforce and lease-termination and exit costs. Severance and lease termination and exit costs were \$6 million and \$27 million for the third quarter and year-to-date in 2020, respectively. Offsetting these increases in selling and administrative expenses were \$16 million and \$54 million of savings, in the third quarter and year-to-date, respectively, which includes COVID-19 and restructuring cost saving actions that reduced planned salaries and non-essential spending. In addition, the effect of foreign currency translation increased selling and administrative expenses by 2% for the third quarter and was neutral year-to-date.

As a percentage of net sales, selling and administrative expenses were 22.8% and 25.4% for the third quarter of 2020 and year-to-date, respectively, and 22.3% and 23.7% for the third quarter and first nine months of 2019, respectively.

Research and Development Expenses

Research and development expenses increased 2% in the third quarter and decreased 5% year-to-date in 2020. The research and development expenses for the third quarter and year-to-date include \$5 million and \$14 million, respectively, of cost action savings from salary reductions, furloughs and reductions in non-essential spending. The year-to-date impact of foreign currency exchange was neutral.

Interest Expense, Net

The decrease in net interest expense in the third quarter of 2020 can be attributed to lower interest rates as compared to the prior year. The increase in net interest expense year-to-date in 2020 can be attributed to higher debt balances in 2020 compared to 2019.

Provision for Income Taxes

The four principal jurisdictions in which the Company manufactures are the U.S., Ireland, the U.K. and Singapore, where the statutory tax rates were 21%, 12.5%, 19% and 17%, respectively, as of September 26, 2020. The Company has a contractual tax rate of 0% on qualifying activities in Singapore through March 2021, based upon the achievement of certain contractual milestones, which the Company expects to continue to meet. The effect of applying the contractual tax rate rather than the statutory tax rate to income from qualifying activities in Singapore increased the Company's net income for the nine months of 2020 and 2019 by \$12 million and \$15 million, respectively, and increased the Company's net income per diluted share by \$0.20 and \$0.21, respectively.

The Company's effective tax rate for the third quarter of 2020 and 2019 was 15.7% and 16.1%, respectively. The decrease in the effective income tax rate can be attributed to differences in the proportionate amounts of pre-tax income recognized in jurisdictions with different effective tax rates.

The Company's effective tax rate for the first nine months of 2020 and 2019 was 14.3% and 13.7%, respectively. The effective tax rate for the first nine months of September 26, 2020 includes a \$6 million income tax benefit related to certain restructuring charges and a \$3 million tax benefit related to stock-based compensation. These income tax benefits decreased the effective tax rate by 1.8 percentage points and 0.9 percentage points, respectively, for the first

nine months of September 26, 2020. The effective tax rate for the first nine months of September 28, 2019 includes a \$3 million income tax benefit related to the finalization of certain regulations relating to the Tax Cuts and Jobs Act of 2017 and a \$7 million income tax benefit related to stock-based compensation. These income tax benefits decreased the effective tax rate by 0.7 percentage points and 1.5 percentage points, respectively, for the first nine months of September 28, 2019. The remaining differences between the effective tax rates can primarily be attributed to differences in the proportionate amounts of pre-tax income recognized in jurisdictions with different effective tax rates.

Liquidity and Capital Resources

Condensed Consolidated Statements of Cash Flows (in thousands):

	Nine Months Ended	
	September 26, 2020	September 28, 2019
Net income	\$ 303,260	\$ 391,529
Depreciation and amortization	91,091	80,319
Stock-based compensation	27,715	28,917
Deferred income taxes	1,089	1,817
Change in accounts receivable	96,955	57,897
Change in inventories	(8,139)	(83,973)
Change in accounts payable and other current liabilities	46,721	(493)
Change in deferred revenue and customer advances	32,053	34,926
Effect of the 2017 Tax Cuts & Jobs Act	—	(3,229)
Other changes	(67,720)	(56,518)
Net cash provided by operating activities	523,025	451,192
Net cash (used in) provided by investing activities	(226,561)	825,441
Net cash used in financing activities	(267,968)	(1,661,541)
Effect of exchange rate changes on cash and cash equivalents	10,723	(6,723)
Increase (decrease) in cash and cash equivalents	\$ 39,219	\$ (391,631)

Cash Flow from Operating Activities

Net cash provided by operating activities was \$523 million and \$451 million during the nine months ended September 26, 2020 and September 28, 2019, respectively. This increase in operating cash flow was primarily a result of the \$54 million reduction in expense from the cost actions and working capital reductions implemented in 2020. The changes within net cash provided by operating activities include the following significant changes in the sources and uses of net cash provided by operating activities, aside from the changes in net income:

- The changes in accounts receivable were primarily attributable to timing of payments made by customers and timing of sales. Days sales outstanding decreased to 76 days at September 26, 2020 as compared to 80 days at September 28, 2019.
- The changes in inventory were primarily attributable to the reduction in the inventory build plan to adjust inventory levels for lower anticipated sales volume due to the COVID-19 pandemic.
- The changes in accounts payable and other current liabilities were a result of the timing of payments to vendors, as well as the annual payment of management incentive compensation.
- Net cash provided from deferred revenue and customer advances results from annual increases in new service contracts as a higher installed base of customers renew annual service contracts.
- Other changes were attributable to variation in the timing of various provisions, expenditures, prepaid income taxes and accruals in other current assets, other assets and other liabilities.

Cash Flow from Investing Activities

Net cash used in investing activities totaled \$227 million in the nine months ended September 26, 2020 compared to net cash provided by investing activities that totaled \$825 million in the nine months ended September 28, 2019. Additions to fixed assets and capitalized software were \$125 million and \$110 million in the nine months ended September 26, 2020 and September 28, 2019, respectively. In February 2018, the Company's Board of Directors approved expanding its precision chemistry consumable manufacturing operations in the U.S. The Company anticipates spending an estimated \$215 million to build and equip this new state-of-the-art manufacturing facility, which will be paid for with existing cash, investments and debt capacity. The Company incurred \$50 million of costs associated with the construction of this facility during the nine months ended September 26, 2020. The Company has incurred \$131 million on this facility through the end of the third quarter of 2020. Due to the uncertain business conditions caused by the COVID-19 pandemic, the Company temporarily slowed down the completion of the remaining construction and buildout of this facility.

[Table of Contents](#)

During the nine months ended September 26, 2020 and September 28, 2019, the Company purchased \$22 million and \$36 million of investments, respectively, while \$2 million and \$978 million of investments matured, respectively, and were used for financing activities described below.

On January 15, 2020, the Company acquired all of the outstanding stock of Andrew Alliance, for \$80 million, net of cash acquired. The Company had an equity investment in Andrew Alliance that was valued at \$4 million and included as part of the total consideration.

Cash Flow from Financing Activities

During the nine months ended September 26, 2020 and September 28, 2019, the Company's net debt borrowings increased by \$110 million and \$210 million, respectively. As of September 26, 2020, the Company had a total of \$1.6 billion in outstanding debt, which consisted of \$960 million in outstanding senior unsecured notes and \$615 million borrowed under a term loan under the credit agreement dated November 2017 ("2017 Credit Agreement"). As of September 26, 2020, the Company had a total amount available to borrow under the 2017 Credit Agreement of \$1.2 billion after outstanding letters of credit. As of September 26, 2020, the Company was in compliance with all debt covenants.

In 2018 and 2019, the Company entered into a total of \$560 million of U.S.-to-Euro interest rate cross-currency swap agreements that hedge the Company's net investment in its Euro denominated net assets. As a result of entering into these agreements, the Company anticipates lowering net interest expense by approximately \$12 million annually over the three-year term of the agreements.

In January 2019, the Company's Board of Directors authorized the Company to repurchase up to \$4 billion of its outstanding common stock over a two-year period. This new program replaced the remaining amounts available from the pre-existing program. During the first half of 2020 and 2019, the Company repurchased \$167 million and \$1.9 billion, respectively, of the Company's outstanding common stock under authorized share repurchase programs. In addition, the Company repurchased \$10 million and \$8 million of common stock related to the vesting of restricted stock units during both the nine months ended September 26, 2020 and September 28, 2019, respectively.

The Company received \$28 million and \$34 million of proceeds from the exercise of stock options and the purchase of shares pursuant to the Company's employee stock purchase plan during the nine months ended September 26, 2020 and September 28, 2019, respectively.

The Company had cash and cash equivalents of \$397 million as of September 26, 2020. The majority of the Company's cash and cash equivalents are generated from foreign operations, with \$359 million held by foreign subsidiaries at September 26, 2020, of which \$262 million was held in currencies other than U.S. dollars. While the Company believes it has sufficient levels of cash flow and access to its existing cash and cash equivalents, as well as the ability to raise funds from external sources and the borrowing capacity from existing, committed credit facilities, to fund operations and capital expenditures, service debt interest, finance potential acquisitions and continue the authorized stock repurchase program in the U.S., we have temporarily suspended our share repurchases due to the uncertain business conditions caused by the COVID-19 pandemic.

Management believes, despite the impact of COVID-19 on our business, as of the date of this report, that the Company's financial position, along with expected future cash flows from earnings based on historical trends and the ability to raise funds from external sources and the borrowing capacity from existing, committed credit facilities, will be sufficient to service debt and fund working capital and capital spending requirements, authorized share repurchase amounts and potential acquisitions for at least the next twelve months.

Contractual Obligations, Commercial Commitments, Contingent Liabilities and Dividends

A summary of the Company's contractual obligations and commercial commitments is included in the Company's Annual Report on Form 10-K for the year ended December 31, 2019, as filed with the SEC on February 25, 2020. The Company reviewed its contractual obligations and commercial commitments as of September 26, 2020 and determined that there were no material changes outside the ordinary course of business from the information set forth in the Annual Report on Form 10-K.

[Table of Contents](#)

From time to time, the Company and its subsidiaries are involved in various litigation matters arising in the ordinary course of business. The Company believes that it has meritorious arguments in its current litigation matters and that any outcome, either individually or in the aggregate, will not be material to the Company's financial position or results of operations.

During fiscal year 2020, the Company expects to contribute a total of approximately \$3 million to \$6 million to its defined benefit plans, excluding the U.S. defined benefit pension plans.

The Company has not paid any dividends and has no plans, at this time, to pay any dividends in the future.

Off-Balance Sheet Arrangements

The Company has not created, and is not party to, any special-purpose or off-balance sheet entities for the purpose of raising capital, incurring debt or operating parts of its business that are not consolidated (to the extent of the Company's ownership interest therein) into the consolidated financial statements. The Company has not entered into any transactions with unconsolidated entities whereby it has subordinated retained interests, derivative instruments or other contingent arrangements that expose the Company to material continuing risks, contingent liabilities or any other obligation under a variable interest in an unconsolidated entity that provides financing, liquidity, market risk or credit risk support to the Company.

The Company enters into standard indemnification agreements in its ordinary course of business. Pursuant to these agreements, the Company indemnifies, holds harmless and agrees to reimburse the indemnified party for losses suffered or incurred by the indemnified party, generally the Company's business partners or customers, in connection with patent, copyright or other intellectual property infringement claims by any third party with respect to its current products, as well as claims relating to property damage or personal injury resulting from the performance of services by the Company or its subcontractors. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is unlimited. Historically, the Company's costs to defend lawsuits or settle claims relating to such indemnity agreements have been minimal and management accordingly believes the estimated fair value of these agreements is immaterial.

Critical Accounting Policies and Estimates

In the Company's Annual Report on Form 10-K for the year ended December 31, 2019, as filed with the SEC on February 25, 2020, the Company's most critical accounting policies and estimates upon which its financial status depends were identified as those relating to revenue recognition, loss provisions on accounts receivable and inventory, valuation of long-lived assets, intangible assets and goodwill, income taxes, uncertain tax positions, warranty, litigation, pension and other postretirement benefit obligations, stock-based compensation and business combinations and asset acquisitions. The Company reviewed its policies and determined that those policies remain the Company's most critical accounting policies for the nine months ended September 26, 2020. The Company did not make any changes in those policies during the nine months ended September 26, 2020.

New Accounting Pronouncements

Please refer to Note 14, Recent Accounting Standard Changes and Developments, in the Condensed Notes to Consolidated Financial Statements.

Special Note Regarding Forward-Looking Statements

Certain of the statements in this Quarterly Report on Form 10-Q, including the information incorporated by reference herein, may contain forward-looking statements with respect to future results and events, including any statements regarding, among other items, anticipated trends or growth in the Company's business, including, but not limited to, the impact of the ongoing COVID-19 pandemic; the impact of new or proposed tariff or trade regulations or changes in the interpretation or enforcement of existing regulations; the impact of foreign currency translation on financial results; development of products by acquired businesses; the growth rate of sales and research and development expenses; the impact of costs associated with developing new technologies and bringing these new technologies to market; the impact of new product launches and the associated costs, such as the amortization expense related to

[Table of Contents](#)

software platforms; geographic sales mix of business; development of products by acquired businesses and the amount of contingent payments to the sellers of an acquired business; anticipated expenses, including interest expense, capitalized software costs and effective tax rates; the impact of the 2017 Tax Act in the U.S.; the impact and outcome of the Company's various ongoing tax audit examinations; the achievement of contractual milestones to preserve foreign tax rates; the impact and outcome of litigation matters; the impact of the loss of intellectual property protection; the impact of new accounting standards and pronouncements; the adequacy of the Company's supply chain and manufacturing capabilities and facilities; the impact of regulatory compliance; the Company's expected cash flow, borrowing capacity, debt repayment and refinancing; the Company's ability to fund working capital, capital expenditures, service debt, repay outstanding lines of credit, make authorized share repurchases, fund potential acquisitions and pay any adverse litigation or tax audit liabilities, particularly in the U.S.; future impairment charges; the Company's contributions to defined benefit plans; the Company's expectations regarding changes to its financial position; compliance with applicable environmental laws; and the impact of recent acquisitions on sales and earnings.

Many of these statements appear, in particular, under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part I, Item 2 of this Quarterly Report on Form 10-Q. Statements that are not statements of historical fact may be deemed forward-looking statements. You can identify these forward-looking statements by the use of the words "feels", "believes", "anticipates", "plans", "expects", "may", "will", "would", "intends", "suggests", "appears", "estimates", "projects", "should" and similar expressions, whether in the negative or affirmative. These statements are subject to various risks and uncertainties, many of which are outside the control of the Company, including, and without limitation:

- Risks related to the effects of the COVID-19 pandemic on our business, including: portions of our global workforce being unable to work fully and/or effectively due to working remotely, illness, quarantines, government actions, facility closures or other reasons related to the pandemic, increased risks of cyber attacks resulting from our temporary remote working model, disruptions in our manufacturing capabilities or to our supply chain, volatility and uncertainty in global capital markets limiting our ability to access capital, customers being unable to make timely payment for purchases and volatility in demand for our products.
- Foreign currency exchange rate fluctuations that could adversely affect translation of the Company's future sales, financial operating results and the condition of its non-U.S. operations, especially when a currency weakens against the U.S. dollar.
- Current global economic, sovereign and political conditions and uncertainties, particularly regarding the effect of the COVID-19 pandemic; new or proposed tariffs or trade regulations or changes in the interpretation or enforcement of existing regulations; the U.K. voting to exit the European Union as well as the Chinese government's ongoing tightening of restrictions on procurement by government-funded customers; the Company's ability to access capital and maintain liquidity in volatile market conditions; changes in timing and demand for the Company's products among the Company's customers and various market sectors or geographies, particularly if they should reduce capital expenditures or are unable to obtain funding, as in the cases of governmental, academic and research institutions; the effect of mergers and acquisitions on customer demand for the Company's products; and the Company's ability to sustain and enhance service.
- Negative industry trends; changes in the competitive landscape as a result of changes in ownership, mergers and continued consolidation among the Company's competitors; introduction of competing products by other companies and loss of market share; pressures on prices from customers or resulting from competition; regulatory, economic and competitive obstacles to new product introductions; lack of acceptance of new products; expansion of our business in developing markets; spending by certain end-markets; ability to obtain alternative sources for components and modules; and the possibility that future sales of new products related to acquisitions, which trigger contingent purchase payments, may exceed the Company's expectations.
- Increased regulatory burdens as the Company's business evolves, especially with respect to the United States Food and Drug Administration and the United States Environmental Protection Agency, among others, as well as regulatory, environmental and logistical obstacles affecting the distribution of the Company's products, completion of purchase order documentation by our customers and ability of customers to obtain letters of credit or other financing alternatives.
- Risks associated with lawsuits, particularly involving claims for infringement of patents and other intellectual property rights.

- The impact and costs incurred from changes in accounting principles and practices; the impact and costs of changes in statutory or contractual tax rates in jurisdictions in which the Company operates, specifically as it relates to the 2017 Tax Act in the U.S.; shifts in taxable income among jurisdictions with different effective tax rates; and the outcome of and costs associated with ongoing and future tax audit examinations or changes in respective country legislation affecting the Company's effective rates.

Certain of these and other factors are discussed under the heading "Risk Factors" under Part I, Item 1A of the Company's Annual Report on Form 10-K for the year ended December 31, 2019, as filed with the SEC on February 25, 2020. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements, whether because of these factors or for other reasons. All forward-looking statements speak only as of the date of this Quarterly Report on Form 10-Q and are expressly qualified in their entirety by the cautionary statements included in this report. Except as required by law, the Company does not assume any obligation to update any forward-looking statements.

Item 3: Quantitative and Qualitative Disclosures About Market Risk

The Company is exposed to the risk of interest rate fluctuations from the investments of cash generated from operations. Investments with maturities greater than 90 days are classified as investments, and are held primarily in U.S. dollar-denominated treasury bills and commercial paper, bank deposits and corporate debt securities. As of September 26, 2020, the Company estimates that a hypothetical adverse change of 100 basis points across all maturities would not have a material effect on the fair market value of its portfolio.

The Company is also exposed to the risk of exchange rate fluctuations. The Company maintains cash balances in various operating accounts in excess of federally insured limits, and in foreign subsidiary accounts in currencies other than the U.S. dollar. As of September 26, 2020 and December 31, 2019, \$359 million out of \$397 million and \$249 million out of \$337 million, respectively, of the Company's total cash, cash equivalents and investments were held by foreign subsidiaries. In addition, \$262 million out of \$397 million and \$176 million out of \$337 million of cash, cash equivalents and investments were held in currencies other than the U.S. dollar at September 26, 2020 and December 31, 2019, respectively. As of September 26, 2020, the Company had no holdings in auction rate securities or commercial paper issued by structured investment vehicles.

Assuming a hypothetical adverse change of 10% in year-end exchange rates (a strengthening of the U.S. dollar), the fair market value of the Company's cash, cash equivalents and investments held in currencies other than the U.S. dollar as of September 26, 2020 would decrease by approximately \$18 million, of which the majority would be recorded to foreign currency translation in other comprehensive income within stockholders' (deficit) equity.

There have been no other material changes in the Company's market risk during the nine months ended September 26, 2020. For information regarding the Company's market risk, refer to Item 7A of Part II of the Company's Annual Report on Form 10-K for the year ended December 31, 2019, as filed with the SEC on February 25, 2020.

Item 4: Controls and Procedures

Evaluation of Disclosure Controls and Procedures

The Company's chief executive officer and chief financial officer (principal executive officer and principal financial officer), with the participation of management, evaluated the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on this evaluation, the Company's chief executive officer and chief financial officer concluded that the Company's disclosure controls and procedures were effective as of September 26, 2020 (1) to ensure that information required to be disclosed by the Company, including its consolidated subsidiaries, in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company's management, including its chief executive officer and chief financial officer, to allow timely decisions regarding the required disclosure and (2) to provide reasonable assurance that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms.

Changes in Internal Control Over Financial Reporting

No change was identified in the Company's internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter ended September 26, 2020 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

Part II: Other Information

Item 1: Legal Proceedings

There have been no material changes in the Company's legal proceedings during the three months ended September 26, 2020 as described in Item 3 of Part I of the Company's Annual Report on Form 10-K for the year ended December 31, 2019, as filed with the SEC on February 25, 2020.

Item 1A: Risk Factors

Information regarding risk factors of the Company is set forth under the heading "Risk Factors" under Part I, Item 1A in the Company's Annual Report on Form 10-K for the year ended December 31, 2019, as filed with the SEC on February 25, 2020. The Company reviewed its risk factors as of September 26, 2020 and determined that there were no material changes from the ones set forth in the Form 10-K, other than those included below. Note, however, the discussion under the subheading "Special Note Regarding Forward-Looking Statements" in Part I, Item 2 of this Quarterly Report on Form 10-Q. These risks are not the only ones facing the Company. Additional risks and uncertainties not currently known to the Company or that the Company currently deems to be immaterial also may materially adversely affect the Company's business, financial condition and operating results.

The Company's business has been and may continue to be negatively affected by outbreaks of disease, such as epidemics or pandemics, including the ongoing COVID-19 pandemic.

Outbreaks of disease, such as epidemics or pandemics, have and could continue to negatively affect the Company's business. Both the Company's domestic and international operations have been and continue to be adversely affected by the ongoing global COVID-19 pandemic and the resulting volatility and uncertainty it has caused in the U.S. and international markets. In March 2020, the World Health Organization declared COVID-19 a pandemic and recommended containment and mitigation measures worldwide. On March 13, 2020, President Trump announced a National Emergency relating to the disease. Since then, COVID-19 has continued to spread throughout the U.S. and globally. The COVID-19 pandemic has caused significant volatility and uncertainty in U.S. and international markets, which has disrupted and is expected to continue to disrupt the Company's business and could result in a prolonged economic downturn. The Company operates in over 35 countries, including those in the regions most impacted by the COVID-19 pandemic. Many countries, including the U.S., have implemented measures such as quarantine, shelter-in-place, curfew and similar isolation measures, including government orders and other restrictions on the conduct of business operations. Such measures have had and are expected to continue to have adverse impacts on the U.S. and foreign economies of uncertain severity and duration and have had and may continue to have a negative impact on the Company's operations, including the Company's sales, supply chain and cash flow. Certain jurisdictions have experienced increased numbers of COVID-19 infections following the re-openings of their economies and easing of restrictions, which, in some cases, has required closings of certain business activity and the imposition of other restrictions in response. It is unclear whether the increases in the number of infections will continue and amplify or whether any so-called "second waves" of COVID-19 infections will be experienced in the United States or elsewhere and, if so, what the impact of that would be on human health and safety, the economy and our business. Additionally, the widespread pandemic has caused and is expected to continue to cause significant disruption of global financial markets, which may reduce the Company's ability to access capital.

The COVID-19 pandemic also has the potential to significantly impact our supply chain if our manufacturing facilities or those of third parties to whom we outsource certain manufacturing processes, the distribution centers where our inventory is managed or the operations of our logistics and other service providers are disrupted, temporarily closed or experience worker shortages. We may also see disruptions or delays in shipments of certain materials or components of our products.

As a result of the ongoing COVID-19 pandemic, the Company has transitioned the majority of its workforce to a temporary remote working model, which may result in the Company experiencing lower workforce efficiency and productivity, which in turn may adversely affect the Company's business, results of operations and financial condition. As company employees work from home and access the Company's system remotely, the Company may be subject to heightened security risks, including the risks of cyber attacks. Additionally, if any of the Company's key management employees are unable to perform their duties for a period of time, including as the result of illness, the Company's business, results of operations and financial condition could be adversely affected.

[Table of Contents](#)

The Company cannot reasonably estimate the length or severity of the COVID-19 pandemic or the related response, or the extent to which the disruption may continue to impact the Company's business, financial position, results of operations and cash flows. Ultimately, the COVID-19 pandemic could have a material adverse impact on the Company's business, financial positions, results of operations and cash flows.

Item 2: Unregistered Sales of Equity Securities and Use of Proceeds

Purchases of Equity Securities by the Issuer

The following table provides information about purchases by the Company during the three months ended September 26, 2020 of equity securities registered by the Company under the Exchange Act (in thousands, except per share data):

Period	Total Number of Shares Purchased (1)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Programs	Maximum Dollar Value of Shares that May Yet Be Purchased Under the Programs (2)
June 28, 2020 to July 25, 2020	—	\$ —	—	\$ 1,524,905
July 26, 2020 to August 22, 2020	—	\$ —	—	\$ 1,524,905
August 23, 2020 to September 26, 2020	—	\$ —	—	\$ 1,524,905
Total	—	\$ —	—	\$ 1,524,905

- (1) The Company repurchased less than one thousand shares of common stock at a cost of less than \$1 million related to the vesting of restricted stock during the three months ended September 26, 2020.
- (2) In January 2019, the Company's Board of Directors authorized the Company to repurchase up to \$4 billion of its outstanding common stock in open market or private transactions over a two-year period. This new program replaced the remaining amounts available under the pre-existing authorization. During the second quarter of 2020, the Company has temporarily suspended its share repurchases due to the uncertain business conditions caused by the COVID-19 pandemic.

Table of Contents

Item 6: Exhibits

Exhibit Number	Description of Document
10.1	<u>President and Chief Executive Employment Agreement (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarterly period ended June 27, 2020 (File No. 001-14010)).</u>
10.2	<u>Change of Control/Severance Agreement, dated July 14, 2020 between Waters Corporation and Udit Batra (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarterly period ended June 27, 2020 (File No. 001-14010)).</u>
31.1	<u>Chief Executive Officer Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
31.2	<u>Chief Financial Officer Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
32.1	<u>Chief Executive Officer Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.(*)</u>
32.2	<u>Chief Financial Officer Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.(*)</u>
101	The following materials from Waters Corporation's Quarterly Report on Form 10-Q for the quarter ended September 26, 2020, formatted in iXBRL (Inline eXtensible Business Reporting Language): (i) the Consolidated Balance Sheets (unaudited), (ii) the Consolidated Statements of Operations (unaudited), (iii) the Consolidated Statements of Comprehensive Income (unaudited), (iv) the Consolidated Statements of Cash Flows (unaudited) and (v) Condensed Notes to Consolidated Financial Statements (unaudited).
104	Cover Page Interactive Data File (formatted in iXBRL and contained in Exhibit 101).

- (*) This exhibit shall not be deemed "filed" for purposes of Section 18 of the Exchange Act, or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any filing, except to the extent the Company specifically incorporates it by reference.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

WATERS CORPORATION

/s/ Sherry L. Buck

Sherry L. Buck

*Senior Vice President and
Chief Financial Officer*

Date: October 28, 2020

**CHIEF EXECUTIVE OFFICER CERTIFICATION PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002**

I, Udit Batra, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Waters Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 28, 2020

/s/ Udit Batra

Udit Batra

Chief Executive Officer

**CHIEF FINANCIAL OFFICER CERTIFICATION PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002**

I, Sherry L. Buck, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Waters Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 28, 2020

/s/ Sherry L. Buck

Sherry L. Buck
Chief Financial Officer

**CHIEF EXECUTIVE OFFICER CERTIFICATION PURSUANT TO 18 U.S.C.
SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

The certification set forth below is hereby made solely for the purpose of satisfying the requirements of Section 906 of the Sarbanes-Oxley Act of 2002 and may not be relied upon or used for any other purposes.

In connection with the Quarterly Report of Waters Corporation (the “Company”) on Form 10-Q for the period ended September 26, 2020, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Udit Batra, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge: (1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

A signed original of this written statement required by Section 906 or other document authenticating, acknowledging or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

Date: October 28, 2020

By: /s/ Udit Batra

Udit Batra

Chief Executive Officer

**CHIEF FINANCIAL OFFICER CERTIFICATION PURSUANT TO 18 U.S.C.
SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

The certification set forth below is hereby made solely for the purpose of satisfying the requirements of Section 906 of the Sarbanes-Oxley Act of 2002 and may not be relied upon or used for any other purposes.

In connection with the Quarterly Report of Waters Corporation (the "Company") on Form 10-Q for the period ended September 26, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Sherry L. Buck, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge: (1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

A signed original of this written statement required by Section 906 or other document authenticating, acknowledging or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

Date: October 28, 2020

By: /s/ Sherry L. Buck

Sherry L. Buck

Chief Financial Officer