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 Quarter Ended March 28, 2020 or

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

Commission File Number 1-8002

THERMO FISHER SCIENTIFIC INC.

(Exact name of Registrant as specified in its charter)

Delaware	04-2209186
(State of incorporation)	*(I.R.S. Employer Identification No.)*

168 Third Avenue
Waltham, Massachusetts 02451
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (781) 622-1000

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, $1.00 par value	TMO	New York Stock Exchange
Floating Rate Notes due 2020	TMO /20A	New York Stock Exchange
2.150% Notes due 2022	TMO 22A	New York Stock Exchange
0.750% Notes due 2024	TMO 24A	New York Stock Exchange
0.125% Notes due 2025	TMO 25B	New York Stock Exchange
2.000% Notes due 2025	TMO 25	New York Stock Exchange
1.400% Notes due 2026	TMO 26A	New York Stock Exchange
1.450% Notes due 2027	TMO 27	New York Stock Exchange
1.750% Notes due 2027	TMO 27B	New York Stock Exchange
0.500% Notes due 2028	TMO 28A	New York Stock Exchange
1.375% Notes due 2028	TMO 28	New York Stock Exchange
1.950% Notes due 2029	TMO 29	New York Stock Exchange
0.875% Notes due 2031	TMO 31	New York Stock Exchange
2.375% Notes due 2032	TMO 32	New York Stock Exchange
2.875% Notes due 2037	TMO 37	New York Stock Exchange
1.500% Notes due 2039	TMO 39	New York Stock Exchange
1.875% Notes due 2049	TMO 49	New York Stock Exchange

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 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 during the preceding 12 months. 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 ☐

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

As of March 28, 2020, the Registrant had 394,951,104 shares of Common Stock outstanding.

THERMO FISHER SCIENTIFIC INC.
QUARTERLY REPORT ON FORM 10-Q
FOR THE QUARTER ENDED MARCH 28, 2020

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PART I FINANCIAL INFORMATION

Item 1. Financial Statements

CONSOLIDATED BALANCE SHEET
(Unaudited)

(In millions except share and per share amounts)	March 28, 2020	December 31, 2019
Assets		
Current Assets:		
Cash and cash equivalents	$ 2,981	$ 2,399
Accounts receivable, less allowances of $101 and $102	4,508	4,349
Inventories	3,454	3,370
Contract assets, net	658	603
Other current assets	1,137	1,172
Total current assets	12,738	11,893
Property, Plant and Equipment, Net	4,736	4,749
Acquisition-related Intangible Assets, Net	13,543	14,014
Other Assets	2,057	2,011
Goodwill	25,614	25,714
Total Assets	$ 58,688	$ 58,381
Liabilities and Shareholders' Equity		
Current Liabilities:		
Short-term obligations and current maturities of long-term obligations	$ 738	$ 676
Accounts payable	1,599	1,920
Accrued payroll and employee benefits	755	1,010
Contract liabilities	938	916
Other accrued expenses	1,470	1,675
Total current liabilities	5,500	6,197
Deferred Income Taxes	2,137	2,192
Other Long-term Liabilities	3,261	3,241
Long-term Obligations	19,231	17,076
Shareholders' Equity:		
Preferred stock, $100 par value, 50,000 shares authorized; none issued		
Common stock, $1 par value, 1,200,000,000 shares authorized; 435,242,143 and 434,416,804 shares issued	435	434
Capital in excess of par value	15,186	15,064
Retained earnings	22,791	22,092
Treasury stock at cost, 40,291,039 and 35,676,421 shares	(6,765)	(5,236)
Accumulated other comprehensive items	(3,088)	(2,679)
Total shareholders' equity	28,559	29,675
Total Liabilities and Shareholders' Equity	$ 58,688	$ 58,381

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

THERMO FISHER SCIENTIFIC INC.

CONSOLIDATED STATEMENT OF INCOME
(Unaudited)

(In millions except per share amounts)	Three Months Ended March 28, 2020	Three Months Ended March 30, 2019
Revenues		
Product revenues	$ 4,630	$ 4,720
Service revenues	1,600	1,405
Total revenues	6,230	6,125
Costs and Operating Expenses:		
Cost of product revenues	2,340	2,414
Cost of service revenues	1,150	1,004
Selling, general and administrative expenses	1,551	1,528
Research and development expenses	245	248
Restructuring and other costs, net	38	11
Total costs and operating expenses	5,324	5,205
Operating Income	906	920
Interest Income	36	67
Interest Expense	(126)	(189)
Other Income, Net	12	19
Income Before Income Taxes	828	817
Provision for Income Taxes	(40)	(2)
Net Income	$ 788	$ 815
Earnings per Share		
Basic	$ 1.99	$ 2.04
Diluted	$ 1.97	$ 2.02
Weighted Average Shares		
Basic	397	400
Diluted	400	403

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

THERMO FISHER SCIENTIFIC INC.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME
(Unaudited)

(In millions)	Three Months Ended March 28, 2020	Three Months Ended March 30, 2019
Comprehensive Income		
Net Income	$ 788	$ 815
Other Comprehensive Items:		
Currency translation adjustment:		
Currency translation adjustment (net of tax provision of $22 and $45)	(357)	(15)
Unrealized gains and losses on hedging instruments:		
Unrealized losses on hedging instruments (net of tax benefit of $19 and $0)	(62)	—
Reclassification adjustment for losses included in net income (net of tax benefit of $1 and $1)	1	2
Pension and other postretirement benefit liability adjustments:		
Pension and other postretirement benefit liability adjustments arising during the period (net of tax provision of $5 and $0)	5	1
Amortization of net loss included in net periodic pension cost (net of tax benefit of $1 and $1)	4	1
Total other comprehensive items	(409)	(11)
Comprehensive Income	$ 379	$ 804

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

THERMO FISHER SCIENTIFIC INC.

CONSOLIDATED STATEMENT OF CASH FLOWS
(Unaudited)

(In millions)	Three Months Ended March 28, 2020	Three Months Ended March 30, 2019
Operating Activities		
Net income	$ 788	$ 815
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation of property, plant and equipment	149	133
Amortization of acquisition-related intangible assets	425	422
Change in deferred income taxes	(41)	(106)
Stock-based compensation	46	44
Other non-cash expenses, net	64	18
Changes in assets and liabilities, excluding the effects of acquisitions and disposition:		
Accounts receivable	(218)	(29)
Inventories	(141)	(140)
Accounts payable	(241)	(129)
Contributions to retirement plans	(32)	(32)
Other	(443)	(347)
Net cash provided by operating activities	356	649
Investing Activities		
Acquisitions, net of cash acquired	(4)	(1)
Purchase of property, plant and equipment	(253)	(201)
Proceeds from sale of property, plant and equipment	4	6
Other investing activities, net	(7)	15
Net cash used in investing activities	(260)	(181)
Financing Activities		
Net proceeds from issuance of debt	2,185	—
Repayment of debt	(1)	(1)
Proceeds from issuance of commercial paper	382	100
Repayments of commercial paper	(321)	(787)
Purchases of company common stock	(1,500)	(750)
Dividends paid	(76)	(68)
Net proceeds from issuance of company common stock under employee stock plans	48	81
Other financing activities, net	(98)	—
Net cash provided by (used in) financing activities	619	(1,425)
Exchange Rate Effect on Cash	(127)	(32)
Increase (Decrease) in Cash, Cash Equivalents and Restricted Cash	588	(989)
Cash, Cash Equivalents and Restricted Cash at Beginning of Period	2,422	2,117
Cash, Cash Equivalents and Restricted Cash at End of Period	$ 3,010	$ 1,128

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

THERMO FISHER SCIENTIFIC INC.

CONSOLIDATED STATEMENT OF SHAREHOLDERS' EQUITY
(Unaudited)

(In millions)	Common Stock Shares	Common Stock Amount	Capital in Excess of Par Value	Retained Earnings	Treasury Stock Shares	Treasury Stock Amount	Accumulated Other Comprehensive Items	Total Shareholders' Equity
				Three Months Ended March 28, 2020				
Balance at December 31, 2019	434	$ 434	$ 15,064	$ 22,092	36	$ (5,236)	$ (2,679)	$ 29,675
Cumulative effect of accounting change	—	—	—	(1)	—	—	—	(1)
Issuance of shares under employees' and directors' stock plans	1	1	76	—	—	(29)	—	48
Stock-based compensation	—	—	46	—	—	—	—	46
Purchases of company common stock	—	—	—	—	4	(1,500)	—	(1,500)
Dividends declared ($0.22 per share)	—	—	—	(88)	—	—	—	(88)
Net income	—	—	—	788	—	—	—	788
Other comprehensive items	—	—	—	—	—	—	(409)	(409)
Balance at March 28, 2020	435	$ 435	$ 15,186	$ 22,791	40	$ (6,765)	$ (3,088)	$ 28,559
				Three Months Ended March 30, 2019				
Balance at December 31, 2018	432	$ 432	$ 14,621	$ 18,696	29	$ (3,665)	$ (2,498)	$ 27,586
Cumulative effect of accounting changes	—	—	—	4	—	—	—	4
Issuance of shares under employees' and directors' stock plans	1	1	106	—	1	(26)	—	81
Stock-based compensation	—	—	44	—	—	—	—	44
Purchases of company common stock	—	—	—	—	3	(750)	—	(750)
Dividends declared ($0.19 per share)	—	—	—	(76)	—	—	—	(76)
Net income	—	—	—	815	—	—	—	815
Other comprehensive items	—	—	—	—	—	—	(11)	(11)
Balance at March 30, 2019	433	$ 433	$ 14,771	$ 19,439	33	$ (4,441)	$ (2,509)	$ 27,693

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

Note 1. Nature of Operations and Summary of Significant Accounting Policies

Nature of Operations

Thermo Fisher Scientific Inc. (the company or Thermo Fisher) enables customers to make the world healthier, cleaner and safer by helping them accelerate life sciences research, solve complex analytical challenges, improve patient diagnostics, deliver medicines to market and increase laboratory productivity. Markets served include pharmaceutical and biotech, academic and government, industrial and applied, as well as healthcare and diagnostics.

Interim Financial Statements

The interim consolidated financial statements presented herein have been prepared by the company, are unaudited and, in the opinion of management, reflect all adjustments of a normal recurring nature necessary for a fair statement of the financial position at March 28, 2020, the results of operations for the three-month periods ended March 28, 2020 and March 30, 2019, and the cash flows for the three-month periods ended March 28, 2020 and March 30, 2019. Interim results are not necessarily indicative of results for a full year.

The consolidated balance sheet presented as of December 31, 2019, has been derived from the audited consolidated financial statements as of that date. The consolidated financial statements and notes are presented as permitted by Form 10-Q and do not contain all information that is included in the annual financial statements and notes thereto of the company. The consolidated financial statements and notes included in this report should be read in conjunction with the 2019 financial statements and notes included in the company's Annual Report on Form 10-K filed with the Securities and Exchange Commission (SEC).

Note 1 to the consolidated financial statements for 2019 describes the significant accounting estimates and policies used in preparation of the consolidated financial statements. There have been no material changes in the company's significant accounting policies during the three months ended March 28, 2020.

Contract-related Balances

Accounts receivable include amounts that have been billed and are currently due from customers. They are recorded at the invoiced amount and do not bear interest. The company maintains allowances for doubtful accounts for estimates of expected losses resulting from the inability of its customers to pay amounts due. The allowance for doubtful accounts is the company's best estimate of the amount of probable credit losses in existing accounts receivable. The company determines the allowance based on history of similarly aged receivables, the creditworthiness of the customer, reasons for delinquency, current economic conditions, expectations associated with future events and circumstances where reasonable and supportable forecasts are available and any other information that is relevant to the judgment. Receivables from academic and government customers as well as large, well-capitalized commercial customers have historically experienced less collectability risk. Account balances are charged off against the allowance when the company believes it is probable the receivable will not be recovered. The company does not have any off-balance-sheet credit exposure related to customers.

The changes in the allowance for doubtful accounts are as follows:

	Three Months Ended	
(In millions)	March 28, 2020	March 30, 2019
Beginning Balance	$ 102	$ 117
Cumulative effect of accounting change	1	—
Provision charged to expense	10	2
Accounts written off	(11)	(5)
Acquisitions, currency translation and other	(1)	—
Ending Balance	$ 101	$ 114

Contract assets include revenues recognized in advance of billings and are recorded net of estimated losses resulting from the inability to invoice customers, which is primarily due to risk associated with the company's performance. Contract assets are classified as current or noncurrent based on the amount of time expected to lapse until the company's right to consideration

becomes unconditional. Noncurrent contract assets are included within other assets in the accompanying balance sheet. Noncurrent contract liabilities are included within other long-term liabilities in the accompanying balance sheet. Contract assets and liabilities are presented on a net basis in the consolidated balance sheet if they arise from different performance obligations in the same contract. Contract asset and liability balances are as follows:

(In millions)	March 28, 2020	December 31, 2019
Current Contract Assets, Net	$ 658	$ 603
Noncurrent Contract Assets, Net	17	17
Current Contract Liabilities	938	916
Noncurrent Contract Liabilities	617	594

In the first three months of 2020, the company recognized revenue of $405 million that was included in the contract liabilities balance at December 31, 2019.

Warranty Obligations

The liability for warranties is included in other accrued expenses in the accompanying balance sheet. The changes in the carrying amount of standard product warranty obligations are as follows:

	Three Months Ended	
(In millions)	March 28, 2020	March 30, 2019
Beginning Balance	$ 93	$ 92
Provision charged to expense	22	27
Usage	(25)	(28)
Adjustments to previously provided warranties, net	—	(1)
Currency translation	(1)	—
Ending Balance	$ 89	$ 90

Inventories

The components of inventories are as follows:

(In millions)	March 28, 2020	December 31, 2019
Raw Materials	$ 1,069	$ 971
Work in Process	503	517
Finished Goods	1,882	1,882
Inventories	$ 3,454	$ 3,370

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period.

The company's estimates include, among others, asset reserve requirements as well as the amounts of future cash flows associated with certain assets and businesses that are used in assessing the risk of impairment. Risks and uncertainties associated with the ongoing COVID-19 global pandemic will materially adversely affect the company's operations through at

least the second quarter of 2020. The extent and duration of such impacts are uncertain and may require changes to estimates. Actual results could differ from those estimates.

Recent Accounting Pronouncements

In January 2020, the FASB issued new guidance to clarify the interaction of the accounting for certain equity securities, equity method investments, and certain forward contracts and purchased options. Among other things, the new guidance clarifies that an entity should consider observable transactions that require it to either apply or discontinue the equity method of accounting for the purposes of applying measurement principles for certain equity securities immediately before applying or discontinuing the equity method. The company adopted this guidance in 2020 using a prospective method. The adoption of this guidance did not have a material impact on the company's consolidated financial statements.

In December 2019, the FASB issued new guidance to simplify the accounting for income taxes. Among other things, the new guidance requires the effects of enacted changes in tax laws or rates to be reflected in the annual effective tax rate computation in the interim period that includes the enactment date. The company expects to adopt this guidance when it is effective in 2021 using a prospective method. The adoption of this guidance is not expected to have a material impact on the company's consolidated financial statements; however, the impact in future periods will be dependent on the extent of future events or conditions that would be affected such as enacted changes in tax laws or rates.

In August 2018, the FASB issued new guidance to modify the disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans. The company adopted the guidance in 2020 using a retrospective method. The adoption of this guidance did not have a material impact on the company's disclosures.

In August 2018, the FASB issued new guidance to modify the disclosure requirements on fair value measurements. The company adopted the guidance in 2020 with some items requiring a prospective method and others requiring a retrospective method. The adoption of this guidance did not have a material impact on the company's disclosures.

In June 2016, the FASB issued new guidance to require a financial asset measured at amortized cost basis, such as accounts receivable, to be presented at the net amount expected to be collected based on relevant information about past events, including historical experience, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported amount. During 2018 and 2019, the FASB issued additional guidance and clarification. The company adopted the guidance in 2020 using a modified retrospective method. The adoption of this guidance reduced accounts receivable and retained earnings by $1 million on January 1, 2020.

Note 2. Acquisitions

The company's acquisitions have historically been made at prices above the determined fair value of the acquired identifiable net assets, resulting in goodwill, primarily due to expectations of the synergies that will be realized by combining the businesses. These synergies include the elimination of redundant facilities, functions and staffing; use of the company's existing commercial infrastructure to expand sales of the acquired businesses' products; and use of the commercial infrastructure of the acquired businesses to cost-effectively expand sales of company products.

Acquisitions have been accounted for using the acquisition method of accounting, and the acquired companies' results have been included in the accompanying financial statements from their respective dates of acquisition. Acquisition transaction costs are recorded in selling, general and administrative expenses as incurred.

Pending Acquisition

On March 3, 2020, the company entered into a purchase agreement to acquire all of the issued and outstanding shares of QIAGEN N.V. at a price of €39.00 per share or approximately $11.5 billion (based on exchange rates at the time of the announcement), which includes the assumption of approximately $1.4 billion of net debt. QIAGEN is a leading provider of life science and molecular diagnostic solutions that will expand the company's capabilities in these fields. QIAGEN reported 2019 revenues of $1.5 billion. The company will commence a tender offer to acquire all of the ordinary shares of QIAGEN. The transaction is expected to close during the first half of 2021, subject to the satisfaction of customary closing conditions including receipt of applicable regulatory approvals, the adoption of certain resolutions relating to the transaction at an Extraordinary General Meeting of QIAGEN's shareholders, and completion of the tender offer.

The company intends to finance the purchase price, including the repayment of indebtedness of QIAGEN, with cash on hand and the net proceeds from issuances of debt. The company is currently evaluating future debt financings and the timing of

such transactions is subject to market and other conditions. The company also has available, but does not currently expect to utilize, up to €9.25 billion of committed financing (Note 7).

Note 3. Revenue

Disaggregated Revenue

Revenue by type is as follows:

	Three Months Ended	
(In millions)	March 28, 2020	March 30, 2019
Revenues		
Consumables	$ 3,379	$ 3,230
Instruments	1,251	1,490
Services	1,600	1,405
Consolidated revenues	$ 6,230	$ 6,125

Revenue by geographic region is as follows:

	Three Months Ended	
(In millions)	March 28, 2020	March 30, 2019
Revenues (a)		
North America	$ 3,287	$ 3,059
Europe	1,649	1,519
Asia-Pacific	1,118	1,363
Other regions	176	184
Consolidated revenues	$ 6,230	$ 6,125

(a) Revenues are attributed to regions based on customer location.

Each reportable segment earns revenues from consumables, instruments and services in North America, Europe, Asia-Pacific and other regions. See Note 4 for revenue by reportable segment and other geographic data.

Remaining Performance Obligations

The aggregate amount of the transaction price allocated to the remaining performance obligations for all open customer contracts as of March 28, 2020 was $8.36 billion. The company will recognize revenue for these performance obligations as they are satisfied, approximately 65% of which is expected to occur within the next twelve months.

Note 4. Business Segment and Geographical Information

Business Segment Information

(In millions)	Three Months Ended March 28, 2020	Three Months Ended March 30, 2019
Revenues		
Life Sciences Solutions	$ 1,774	$ 1,607
Analytical Instruments	1,101	1,322
Specialty Diagnostics	958	957
Laboratory Products and Services	2,730	2,513
Eliminations	(333)	(274)
Consolidated revenues	6,230	6,125
Segment Income (a)		
Life Sciences Solutions	675	561
Analytical Instruments	171	282
Specialty Diagnostics	236	242
Laboratory Products and Services	295	285
Subtotal reportable segments (a)	1,377	1,370
Cost of revenues charges, net	(2)	(6)
Selling, general and administrative charges, net	(6)	(11)
Restructuring and other costs, net	(38)	(11)
Amortization of acquisition-related intangible assets	(425)	(422)
Consolidated operating income	906	920
Interest income (b)	36	67
Interest expense (b)	(126)	(189)
Other income, net (b)	12	19
Income before income taxes	$ 828	$ 817

(a) Represents operating income before certain charges to cost of revenues and selling, general and administrative expenses; restructuring and other costs/income, net; and amortization of acquisition-related intangibles.
(b) The company does not allocate interest or other expense/income, net to its segments.

Geographical Information

(In millions)	Three Months Ended March 28, 2020	Three Months Ended March 30, 2019
Revenues (c)		
United States	$ 3,139	$ 2,918
China	464	654
Other	2,627	2,553
Consolidated revenues	$ 6,230	$ 6,125

(c) Revenues are attributed to countries based on customer location.

Note 5. Income Taxes

The provision for income taxes in the accompanying statement of income differs from the provision calculated by applying the statutory federal income tax rate to income before provision for income taxes due to the following:

(In millions)	Three Months Ended March 28, 2020	Three Months Ended March 30, 2019
Statutory Federal Income Tax Rate	21 %	21 %
Provision for Income Taxes at Statutory Rate	$ 174	$ 172
Increases (Decreases) Resulting From:		
Foreign rate differential	(88)	(36)
Foreign exchange loss on inter-company debt refinancing	—	(62)
Income tax credits	(67)	(72)
Global intangible low-taxed income	61	70
Foreign-derived intangible income	(17)	(12)
Transition tax and other impacts of U.S. tax reform	—	(20)
Excess tax benefits from stock options and restricted stock units	(28)	(36)
Other, net	5	(2)
Provision for Income Taxes	$ 40	$ 2

The company has operations and a taxable presence in approximately 50 countries outside the U.S. The company's effective income tax rate differs from the U.S. federal statutory rate each year due to certain operations that are subject to tax incentives, state and local taxes, and foreign taxes that are different than the U.S. federal statutory rate.

Unrecognized Tax Benefits

As of March 28, 2020, the company had $1.55 billion of unrecognized tax benefits substantially all of which, if recognized, would reduce the effective tax rate.

A reconciliation of the beginning and ending amounts of unrecognized tax benefits is as follows:

(In millions)	2020
Balance at Beginning of Year	$ 1,552
Additions for tax positions of current year	2
Settlements	(7)
Balance at End of Period	$ 1,547

Note 6. Earnings per Share

	Three Months Ended	
(In millions except per share amounts)	March 28, 2020	March 30, 2019
Net Income	$ 788	$ 815
Basic Weighted Average Shares	397	400
Plus Effect of:		
Stock options and restricted units	3	3
Diluted Weighted Average Shares	400	403
Basic Earnings per Share	$ 1.99	$ 2.04
Diluted Earnings per Share	$ 1.97	$ 2.02
Antidilutive Stock Options Excluded from Diluted Weighted Average Shares	1	2

Note 7. Debt and Other Financing Arrangements

(Dollars in millions)	Effective Interest Rate at March 28, 2020	March 28, 2020	December 31, 2019
Commercial Paper	3.00 %	$ 66	$ —
Floating Rate 2-Year Senior Notes, Due 8/7/2020 (euro-denominated)	0.16 %	668	673
2.15% 7-Year Senior Notes, Due 7/21/2022 (euro-denominated)	2.27 %	557	561
3.00% 7-Year Senior Notes, Due 4/15/2023	2.72 %	1,000	1,000
4.15% 10-Year Senior Notes, Due 2/1/2024	4.16 %	1,000	1,000
0.75% 8-Year Senior Notes, Due 9/12/2024 (euro-denominated)	0.94 %	1,114	1,121
0.125% 5.5-Year Senior Notes, Due 3/1/2025 (euro-denominated)	0.41 %	891	897
4.133% 5-Year Senior Notes, Due 3/25/2025	4.28 %	1,100	—
2.00% 10-Year Senior Notes, Due 4/15/2025 (euro-denominated)	2.10 %	713	717
3.65% 10-Year Senior Notes, Due 12/15/2025	3.77 %	350	350
1.40% 8.5-Year Senior Notes, Due 1/23/2026 (euro-denominated)	1.53 %	780	785
2.95% 10-Year Senior Notes, Due 9/19/2026	3.19 %	1,200	1,200
1.45% 10-Year Senior Notes, Due 3/16/2027 (euro-denominated)	1.65 %	557	561
3.20% 10-Year Senior Notes, Due 8/15/2027	3.39 %	750	750
0.50% 8.5-Year Senior Notes, Due 3/1/2028 (euro-denominated)	0.77 %	891	897
1.375% 12-Year Senior Notes, Due 9/12/2028 (euro-denominated)	1.46 %	668	673
1.95% 12-Year Senior Notes, Due 7/24/2029 (euro-denominated)	2.08 %	780	785
2.60% 10-Year Senior Notes, Due 10/1/2029	2.74 %	900	900
4.497% 10-Year Senior Notes, Due 3/25/2030	5.32 %	1,100	—
0.875% 12-Year Senior Notes, Due 10/1/2031 (euro-denominated)	1.13 %	1,003	1,009
2.875% 20-Year Senior Notes, Due 7/24/2037 (euro-denominated)	2.94 %	780	785
1.50% 20-Year Senior Notes, Due 10/1/2039 (euro-denominated)	1.73 %	1,003	1,009
5.30% 30-Year Senior Notes, Due 2/1/2044	5.37 %	400	400
4.10% 30-Year Senior Notes, Due 8/15/2047	4.23 %	750	750
1.875% 30-Year Senior Notes, Due 10/1/2049 (euro-denominated)	1.98 %	1,114	1,121
Other		16	16
Total Borrowings at Par Value		20,151	17,960
Fair Value Hedge Accounting Adjustments		22	(13)
Unamortized Discount, Net		(91)	(94)
Unamortized Debt Issuance Costs		(113)	(101)
Total Borrowings at Carrying Value		19,969	17,752
Less: Short-term Obligations and Current Maturities		738	676
Long-term Obligations		$ 19,231	$ 17,076

The effective interest rates for the fixed-rate debt include the stated interest on the notes, the accretion of any discount or amortization of any premium, the amortization of any debt issuance costs and, if applicable, adjustments related to hedging.

See Note 10 for fair value information pertaining to the company’s long-term obligations.

In connection with the agreement to acquire QIAGEN (Note 2), the company obtained, but does not currently expect to utilize, up to €9.25 billion of committed financing. The company intends to finance the purchase price, including the repayment of indebtedness of QIAGEN, with cash on hand and the net proceeds from issuances of debt. The company issued senior notes in March and April 2020 (Note 13) to partly fund the acquisition and for general corporate purposes. The company is currently evaluating future debt financings and the timing of such transactions is subject to market and other conditions. The company had a cash outlay of $36 million in 2020 associated with obtaining the bridge commitment included in other financing activities, net, in the accompanying statement of cash flows. In 2020, other income, net includes $17 million of costs for the QIAGEN acquisition, primarily for entering into hedging contracts and amortization of bridge loan commitment fees.

Credit Facilities

The company has a revolving credit facility with a bank group that provides for up to $2.50 billion of unsecured multi-currency revolving credit. The facility expires in July 2021. The agreement calls for interest at either a LIBOR-based rate, a EURIBOR-based rate (for funds drawn in euro) or a rate based on the prime lending rate of the agent bank, at the company's option. The agreement contains affirmative, negative and financial covenants, and events of default customary for facilities of this type. The covenants in our revolving credit facility (the Facility) include a Consolidated Leverage Ratio (total debt-to-Consolidated EBITDA) and a Consolidated Interest Coverage Ratio (Consolidated EBITDA to Consolidated Interest Expense), as such terms are defined in the Facility. Specifically, the company has agreed that, so long as any lender has any commitment under the Facility, any letter of credit is outstanding under the Facility, or any loan or other obligation is outstanding under the Facility, it will maintain a maximum Consolidated Leverage Ratio of 3.5:1.0. The company has also agreed that so long as any lender has any commitment under the Facility or any letter of credit is outstanding under the Facility, or any loan or other obligation is outstanding under the Facility, it will maintain a minimum Consolidated Interest Coverage Ratio of 3.0:1.0 as of the last day of any fiscal quarter. As of March 28, 2020, no borrowings were outstanding under the Facility, although available capacity was reduced by approximately $71 million as a result of outstanding letters of credit.

Commercial Paper Programs

The company has commercial paper programs pursuant to which it may issue and sell unsecured, short-term promissory notes (CP Notes). Under the U.S. program, a) maturities may not exceed 397 days from the date of issue and b) the CP Notes are issued on a private placement basis under customary terms in the commercial paper market and are not redeemable prior to maturity nor subject to voluntary prepayment. Under the euro program, maturities may not exceed 183 days and may be denominated in euro, U.S. dollars, Japanese yen, British pounds sterling, Swiss franc, Canadian dollars or other currencies. Under both programs, the CP Notes are issued at a discount from par (or premium to par, in the case of negative interest rates), or, alternatively, are sold at par and bear varying interest rates on a fixed or floating basis. As of March 28, 2020, outstanding borrowings under these programs were $66 million with a weighted average remaining period to maturity of 31 days and are classified as short-term obligations in the accompanying balance sheet.

Senior Notes

Interest on the floating rate senior notes is payable quarterly. Interest is payable annually on the other euro-denominated senior notes and semi-annually on all other senior notes. Each of the notes may be redeemed at a redemption price of 100% of the principal amount plus a specified make-whole premium and accrued interest. The company is subject to certain affirmative and negative covenants under the indentures governing the senior notes, the most restrictive of which limits the ability of the company to pledge principal properties as security under borrowing arrangements.

In 2018, Thermo Fisher Scientific (Finance I) B.V., a wholly-owned finance subsidiary of the company, issued the Floating Rate Senior Notes due 2020 included in the table above. This subsidiary has no independent function other than financing activities. The Floating Rate Senior Notes due 2020 are fully and unconditionally guaranteed by the company and no other subsidiaries of the company have guaranteed the obligations.

Interest Rate Swap Arrangements and related Cross-currency Interest Rate Swap Arrangements

The company has entered into LIBOR-based interest rate swap arrangements with various banks. The aggregate amounts of the swaps are equal to the principal amount of the notes and the payment dates of the swaps coincide with the interest payment dates of the note. The swap contracts provide for the company to pay a variable interest rate and receive a fixed rate. The variable interest rates reset monthly. The swaps have been accounted for as fair value hedges of the notes. See Note 10 for additional information on the interest rate swap arrangements and related cross-currency interest rate swap arrangements. The following table summarizes the outstanding interest rate swap arrangements on the company's senior notes at March 28, 2020:

(Dollars in millions)	Aggregate Notional Amount	Pay Rate	Pay Rate as of March 28, 2020	Receive Rate
3.00% Senior Notes due 2023 (a)	1,000	1-month LIBOR + 1.7640%	2.4686 %	3.00 %

(a) The payments on $900 million notional value of these interest rate swaps are offset in part by cross-currency interest rate swaps which effectively reduced the pay rate as of March 28, 2020 from 2.47% to a weighted average of 1.17%.

The company has entered into $900 million notional value of cross-currency interest rate swaps, which effectively convert a portion of the semi-annual payments related to the variable rate, U.S. dollar denominated, LIBOR-based interest rate swaps to payments on variable rate, euro denominated, EURIBOR-based cross-currency interest rate swaps.

Note 8. Commitments and Contingencies

Environmental Matters

The company is currently involved in various stages of investigation and remediation related to environmental matters. The company cannot predict all potential costs related to environmental remediation matters and the possible impact on future operations given the uncertainties regarding the extent of the required cleanup, the complexity and interpretation of applicable laws and regulations, the varying costs of alternative cleanup methods and the extent of the company's responsibility. Expenses for environmental remediation matters related to the costs of installing, operating and maintaining groundwater-treatment systems and other remedial activities related to historical environmental contamination at the company's domestic and international facilities were not material in any period presented. The company records accruals for environmental remediation liabilities, based on current interpretations of environmental laws and regulations, when it is probable that a liability has been incurred and the amount of such liability can be reasonably estimated. The company calculates estimates based upon several factors, including input from environmental specialists and management's knowledge of and experience with these environmental matters. The company includes in these estimates potential costs for investigation, remediation and operation and maintenance of cleanup sites. At March 28, 2020, the company's total environmental liability was approximately $70 million. While management believes the accruals for environmental remediation are adequate based on current estimates of remediation costs, the company may be subject to additional remedial or compliance costs due to future events such as changes in existing laws and regulations, changes in agency direction or enforcement policies, developments in remediation technologies or changes in the conduct of the company's operations, which could have a material adverse effect on the company's financial position, results of operations or cash flows.

Litigation and Related Contingencies

There are various lawsuits and claims pending against the company including matters involving product liability, intellectual property, employment and commercial issues. The company determines the probability and range of possible loss based on the current status of each of these matters. A liability is recorded in the financial statements if it is believed to be probable that a loss has been incurred and the amount of the loss can be reasonably estimated. The company establishes a liability that is an estimate of amounts expected to be paid in the future for events that have already occurred. The company accrues the most likely amount or at least the minimum of the range of probable loss when a range of probable loss can be estimated. The accrued liabilities are based on management's judgment as to the probability of losses for asserted and unasserted claims and, where applicable, actuarially determined estimates. Accrual estimates are adjusted as additional information becomes known or payments are made. The amount of ultimate loss may differ from these estimates. Due to the inherent uncertainties associated with pending litigation or claims, the company cannot predict the outcome, nor, with respect to certain pending litigation or claims where no liability has been accrued, make a meaningful estimate of the reasonably possible loss or range of loss that could result from an unfavorable outcome. The company has no material accruals for pending litigation or claims for which accrual amounts are not disclosed below or in the company's 2019 financial statements and notes included in the company's Annual Report on Form 10-K filed with the SEC, nor are material losses deemed probable for such matters. It is reasonably possible, however, that an unfavorable outcome that exceeds the company's current accrual estimate, if any, for one or more of the matters described below could have a material adverse effect on the company's results of operations, financial position and cash flows.

Product Liability, Workers Compensation and Other Personal Injury Matters

For product liability, workers compensation and other personal injury matters, the company accrues the most likely amount or at least the minimum of the range of possible loss when a range of possible loss can be estimated. The company records estimated amounts due from insurers related to certain product liabilities as an asset. Although the company believes that the amounts accrued and estimated recoveries are probable and appropriate based on available information, including actuarial studies of loss estimates, the process of estimating losses and insurance recoveries involves a considerable degree of judgment by management and the ultimate amounts could vary materially. Insurance contracts do not relieve the company of its primary obligation with respect to any losses incurred. The collectability of amounts due from its insurers is subject to the solvency and willingness of the insurer to pay, as well as the legal sufficiency of the insurance claims. Management monitors the payment history as well as the financial condition and ratings of its insurers on an ongoing basis.

Intellectual Property Matters

On June 3, 2013, Unisone Strategic IP filed a complaint against Life Technologies, a subsidiary of the company, in the United States District Court for the Southern District of California alleging patent infringement by Life Technologies' supply chain management system software, which operates with product "supply centers" installed at customer sites. Plaintiff seeks damages for alleged willful infringement, attorneys' fees, costs, and injunctive relief. On August 24, 2017, Unisone filed an appeal from a decision by the Patent Trial and Appeal Board (PTAB) that found the challenged patent claims invalid. The United States Court of Appeals for the Federal Circuit upheld the PTAB's ruling finding the challenged claims in the Unisone patent invalid. Unisone had until March 11, 2019 to file an appeal with the United States Supreme Court. Unisone did not appeal that decision, and consequently the case before the United States District Court, which had been stayed pending the outcome of the PTAB decision, resumed with Unisone filing an amended complaint on September 12, 2019 regarding similar patent claims that were not included in the PTAB proceeding. On November 1, 2019, Life Technologies filed two additional covered business method (CBM) challenges with the PTAB regarding Unisone's new patent claims. On December 16, 2019, the United States District Court granted Life Technologies' motion to stay the case pending the PTAB's decision whether to institute a CBM review of the new patent claims. On April 28, 2020, the PTAB granted Life Technologies' November 1, 2019 CBM petitions and instituted review of all of Unisone's remaining patent claims.

Note 9. Comprehensive Income

Comprehensive income combines net income and other comprehensive items. Other comprehensive items represent certain amounts that are reported as components of shareholders' equity in the accompanying balance sheet.

Changes in each component of accumulated other comprehensive items, net of tax, are as follows:

(In millions)	Currency Translation Adjustment	Unrealized Losses on Hedging Instruments	Pension and Other Postretirement Benefit Liability Adjustment	Total
Balance at December 31, 2019	$ (2,320)	$ (71)	$ (288)	$ (2,679)
Other comprehensive items before reclassifications	(357)	(62)	5	(414)
Amounts reclassified from accumulated other comprehensive items	—	1	4	5
Net other comprehensive items	(357)	(61)	9	(409)
Balance at March 28, 2020	$ (2,677)	$ (132)	$ (279)	$ (3,088)

Note 10. Fair Value Measurements and Fair Value of Financial Instruments

Fair Value Measurements

The following tables present information about the company's financial assets and liabilities measured at fair value on a recurring basis as of March 28, 2020 and December 31, 2019:

(In millions)	March 28, 2020	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets				
Cash equivalents	$ 1,727	$ 1,727	$ —	$ —
Investments in common stock, mutual funds and other similar instruments	17	17	—	—
Warrants	6	—	6	—
Insurance contracts	115	—	115	—
Derivative contracts	110	—	110	—
Total Assets	$ 1,975	$ 1,744	$ 231	$ —
Liabilities				
Derivative contracts	$ 32	$ —	$ 32	$ —
Contingent consideration	54	—	—	54
Total Liabilities	$ 86	$ —	$ 32	$ 54

(In millions)	December 31, 2019	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets				
Cash equivalents	$ 1,280	$ 1,280	$ —	$ —
Investments in common stock, mutual funds and other similar instruments	19	19	—	—
Warrants	6	—	6	—
Insurance contracts	131	—	131	—
Derivative contracts	37	—	37	—
Total Assets	$ 1,473	$ 1,299	$ 174	$ —
Liabilities				
Derivative contracts	$ 24	$ —	$ 24	$ —
Contingent consideration	55	—	—	55
Total Liabilities	$ 79	$ —	$ 24	$ 55

The company uses the Black-Scholes model to value its warrants. The company determines the fair value of its insurance contracts by obtaining the cash surrender value of the contracts from the issuer. The fair value of derivative contracts is the estimated amount that the company would receive/pay upon liquidation of the contracts, taking into account the change in interest rates and currency exchange rates. The company determines the fair value of acquisition-related contingent consideration based on the probability-weighted discounted cash flows associated with such future payments. Changes to the fair value of contingent consideration are recorded in selling, general and administrative expense. The following table provides a rollforward of the fair value, as determined by level 3 inputs, of the contingent consideration.

	Three Months Ended	
(In millions)	March 28, 2020	March 30, 2019
Contingent Consideration		
Beginning Balance	$ 55	$ 37
Payments	(1)	—
Ending Balance	$ 54	$ 37

Derivative Contracts

The following table provides the aggregate notional value of outstanding derivative contracts.

(In millions)	March 28, 2020	December 31, 2019
Notional Amount		
Interest rate swaps - fair value hedges (described in Note 7)	$ 1,000	$ 1,000
Interest rate swaps - cash flow hedges	750	—
Cross-currency interest rate swaps - designated as net investment hedges	900	900
Cross-currency interest rate swaps	1,000	—
Currency exchange contracts	6,109	2,846

While certain derivatives are subject to netting arrangements with counterparties, the company does not offset derivative assets and liabilities within the consolidated balance sheet. The following tables present the fair value of derivative instruments in the consolidated balance sheet and statement of income.

	Fair Value – Assets		Fair Value – Liabilities	
(In millions)	March 28, 2020	December 31, 2019	March 28, 2020	December 31, 2019
Derivatives Designated as Hedging Instruments				
Interest rate swaps (a)	$ 22	$ —	$ 20	$ 13
Cross-currency interest rate swaps (a)	43	33	—	—
Derivatives Not Designated as Hedging Instruments				
Currency exchange contracts (b)	45	4	2	11
Cross-currency interest rate swaps (a)	—	—	10	—
Total Derivatives	$ 110	$ 37	$ 32	$ 24

(a) The fair values of the interest rate swaps and cross-currency interest rate swaps are included in the consolidated balance sheet under the caption other assets or other long-term liabilities.
(b) The fair value of the currency exchange contracts is included in the consolidated balance sheet under the captions other current assets or other accrued expenses.

The following amounts related to cumulative basis adjustments for fair value hedges were included in the consolidated balance sheet under the caption long-term obligations:

	Carrying Amount of the Hedged Liability		Cumulative Amount of Fair Value Hedging Adjustment - Increase (Decrease) Included in Carrying Amount of Liability	
(In millions)	March 28, 2020	December 31, 2019	March 28, 2020	December 31, 2019
Long-term Obligations	$ 1,016	$ 980	$ 22	$ (13)

	Gain (Loss) Recognized	
	Three Months Ended	
(In millions)	March 28, 2020	March 30, 2019
Fair Value Hedging Relationships		
Interest rate swaps		
Hedged long-term obligations - included in other expense, net	$ (36)	$ (28)
Derivatives designated as hedging instruments - included in other expense, net	36	29
Derivatives Designated as Cash Flow Hedges		
Interest rate swaps		
Included in unrealized losses on hedging instruments within other comprehensive items	(81)	—
Amount reclassified from accumulated other comprehensive items to other expense, net	(2)	(3)
Financial Instruments Designated as Net Investment Hedges		
Foreign currency-denominated debt		
Included in currency translation adjustment within other comprehensive items	83	156
Cross-currency interest rate swaps		
Included in currency translation adjustment within other comprehensive items	9	37
Included in other expense, net	5	14
Derivatives Not Designated as Hedging Instruments		
Currency exchange contracts		
Included in cost of product revenues	3	2
Included in other expense, net	40	17
Cross-currency interest rate swaps		
Included in other expense, net	(10)	—

Gains and losses recognized on currency exchange contracts and the interest rate swaps designated as fair value hedges are included in the consolidated statement of income together with the corresponding, offsetting losses and gains on the underlying hedged transactions.

The company also uses foreign currency-denominated debt and cross-currency interest rate swaps to partially hedge its net investments in foreign operations against adverse movements in exchange rates. The majority of the company's euro-denominated senior notes and certain of its cross-currency interest rate swaps have been designated as, and are effective as, economic hedges of part of the net investment in a foreign operation. Accordingly, foreign currency transaction gains or losses due to spot rate fluctuations on the euro-denominated debt instruments and contract fair value changes on the cross-currency interest rate swaps, excluding interest accruals, are included in currency translation adjustment within other comprehensive items and shareholders' equity.

The company has also entered into $1 billion notional value of cross currency swaps in anticipation of U.S. dollar term loan borrowings to partially finance the euro purchase price of the QIAGEN acquisition (Note 2). Gains and losses associated with these swaps are recorded in other expense, net.

See Note 1 to the consolidated financial statements for 2019 included in the company's Annual Report on Form 10-K and Note 7 herein for additional information on the company's risk management objectives and strategies.

Cash Flow Hedge Arrangements

In March 2020, the company entered into interest rate swap arrangements to mitigate the risk of interest rates rising prior to completion of future debt offerings. Based on the company's conclusion that the debt offerings are probable, the swaps hedge the cash flow risk for each of the interest payments on the planned fixed-rate debt issues. The aggregate fair value of these hedges, net of tax, at March 28, 2020 has been classified as a reduction to accumulated other comprehensive items. One of these hedges was terminated in March 2020, in connection with the debt offering completed in that month. The aggregate fair value of the terminated hedge at that time, net of tax, has been classified as a reduction to accumulated other comprehensive items and will be amortized to interest expense over the term of the related debt issuance. The company had a cash outlay of $62 million in 2020 associated with termination of the arrangement, included in other financing activities, net, in the accompanying statement of cash flows.

Fair Value of Other Financial Instruments

The carrying value and fair value of the company’s notes receivable and debt obligations are as follows:

	March 28, 2020		December 31, 2019	
(In millions)	Carrying Value	Fair Value	Carrying Value	Fair Value
Debt Obligations:				
Senior notes	$ 19,887	$ 19,795	$ 17,736	$ 18,650
Commercial paper	66	66	—	—
Other	16	16	16	16
	$ 19,969	$ 19,877	$ 17,752	$ 18,666

The fair value of debt obligations was determined based on quoted market prices and on borrowing rates available to the company at the respective period ends which represent level 2 measurements.

Note 11. Supplemental Cash Flow Information

	Three Months Ended	
(In millions)	March 28, 2020	March 30, 2019
Non-cash Investing and Financing Activities		
Declared but unpaid dividends	$ 88	$ 77
Issuance of stock upon vesting of restricted stock units	73	69

Cash, cash equivalents and restricted cash is included in the consolidated balance sheet as follows:

(In millions)	March 28, 2020	December 31, 2019
Cash and Cash Equivalents	$ 2,981	$ 2,399
Restricted Cash Included in Other Current Assets	27	21
Restricted Cash Included in Other Assets	2	2
Cash, Cash Equivalents and Restricted Cash	$ 3,010	$ 2,422

Amounts included in restricted cash represent funds held as collateral for bank guarantees and incoming cash in China awaiting government administrative clearance.

Note 12. Restructuring and Other Costs, Net

Restructuring and other costs, net, in the first three months of 2020 primarily included continuing charges for headcount reductions and facility consolidations in an effort to streamline operations, and, to a lesser extent, transaction/integration costs related to recent and pending acquisitions. In the first three months of 2020, severance actions associated with facility consolidations and cost reduction measures affected less than 0.5% of the company's workforce.

As of May 1, 2020, the company has identified restructuring actions that will result in additional charges of approximately $65 million, primarily in 2020, and expects to identify additional actions during 2020 which will be recorded when specified criteria are met, such as communication of benefit arrangements or when the costs have been incurred.

During the first three months of 2020, the company recorded net restructuring and other costs by segment as follows:

(In millions)	Cost of Revenues	Selling, General and Administrative Expenses	Restructuring and Other Costs, Net	Total
Life Sciences Solutions	$ —	$ —	$ 1	$ 1
Analytical Instruments	—	—	14	14
Specialty Diagnostics	—	4	2	6
Laboratory Products and Services	2	2	18	22
Corporate	—	—	3	3
	$ 2	$ 6	$ 38	$ 46

The principal components of net restructuring and other costs by segment are as follows:

Analytical Instruments

In the first three months of 2020, the Analytical Instruments segment recorded $14 million of net restructuring and other charges, primarily for employee severance associated with headcount reductions in the U.S. and Europe, and, to a lesser extent, abandoned facility costs.

Specialty Diagnostics

In the first three months of 2020, the Specialty Diagnostics segment recorded $6 million of net restructuring and other charges, primarily $4 million of charges to selling, general, and administrative expense for third-party transaction/acquisition-related costs. The segment also recorded $2 million of cash restructuring charges for severance and other costs associated with headcount reductions in Europe and the U.S.

Laboratory Products and Services

In the first three months of 2020, the Laboratory Products and Services segment recorded $22 million of net restructuring and other charges. The segment recorded $2 million of charges to cost of revenues to conform the accounting policies of a recently acquired business with the company's accounting policies and $2 million of charges to selling, general, and administrative expense for third-party integration costs in connection with this acquisition. The segment recorded $18 million of restructuring and other costs, including $10 million of cash charges for employee severance at businesses streamlining operations. The segment also recorded $8 million of non-cash charges for writedowns of fixed assets to estimated disposal value in connection with the consolidation of commercial production operations in the U.S.

Corporate

In the first three months of 2020, the company recorded $3 million of net restructuring and other costs for severance at its corporate operations, and, to a lesser extent, abandoned facility costs.

The following table summarizes the cash components of the company's restructuring plans. The non-cash components and other amounts reported as restructuring and other costs, net, in the accompanying statement of income have been summarized in the notes to the tables. Accrued restructuring costs are included in other accrued expenses in the accompanying balance sheet.

(In millions)	Severance	Abandonment of Excess Facilities	Other (a)	Total
Balance at December 31, 2019	18	$ 10	$ 6	$ 34
Costs incurred in 2020 (c)	23	4	3	30
Reserves reversed (b)	(1)	—	—	(1)
Payments	(10)	(3)	(2)	(15)
Balance at March 28, 2020	$ 30	$ 11	$ 7	$ 48

(a) Other includes relocation and moving expenses associated with facility consolidations, as well as employee retention costs which are accrued ratably over the period through which employees must work to qualify for a payment.
(b) Represents reductions in cost of plans.
(c) Excludes $9 million of charges for fixed asset writedowns and costs associated with environmental remediation at an abandoned facility.

The company expects to pay accrued restructuring costs primarily through 2020.

Note 13. Subsequent Event

Debt Issuances

Early in the second quarter of 2020, the company issued the following senior notes:

(In millions)	Principal Value Issued
1.75% 7-Year Senior Notes, Due 4/15/2027 (euro-denominated)	€ 600
2.375% 12-Year Senior Notes, Due 4/15/2032 (euro-denominated)	€ 600

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

Forward-looking statements, within the meaning of Section 21E of the Securities Exchange Act of 1934 are made throughout this Management's Discussion and Analysis of Financial Condition and Results of Operations. Any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements, including without limitation statements regarding: projections of revenue, expenses, earnings, margins, tax rates, tax provisions, cash flows, pension and benefit obligations and funding requirements, our liquidity position; cost reductions, restructuring activities, new product and service developments, competitive strengths or market position, acquisitions or divestitures; growth, declines and other trends in markets we sell into; new or modified laws, regulations and accounting pronouncements; outstanding claims, legal proceedings, tax audits and assessments and other contingent liabilities; foreign currency exchange rates and fluctuations in those rates; general economic and capital markets conditions; the timing of any of the foregoing; assumptions underlying any of the foregoing; and any other statements that address events or developments that Thermo Fisher intends or believes will or may occur in the future. Without limiting the foregoing, the words "believes," "anticipates," "plans," "expects," "seeks," "estimates," and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements are accompanied by such words. While the company may elect to update forward-looking statements in the future, it specifically disclaims any obligation to do so, even if the company's estimates change, and readers should not rely on those forward-looking statements as representing the company's views as of any date subsequent to the date of the filing of this Quarterly Report.

A number of important factors could cause the results of the company to differ materially from those indicated by such forward-looking statements, including those detailed under the heading "Risk Factors" in Part II, Item 1A of this report on Form 10-Q.

Overview

The company develops, manufactures and sells a broad range of products that are sold worldwide. The company expands the product lines and services it offers by developing and commercializing its own technologies and by making strategic acquisitions of complementary businesses. The company's operations fall into four segments (Note 4): Life Sciences Solutions, Analytical Instruments, Specialty Diagnostics and Laboratory Products and Services.

The company has mobilized to support the global novel strain of coronavirus (COVID-19) response with products and services that help analyze, diagnose and protect from the virus. However, as the pandemic spread from China to countries worldwide, the company saw a significant reduction in customer activity by late March and into the second quarter of 2020 that will materially adversely affect the company's results at least through the second quarter of 2020. The extent and duration of the impacts are uncertain and dependent in part on customers returning to work and economic activity ramping up. The company believes its long-term prospects remain excellent given the attractive markets served, its industry-leading position and proven growth strategy.

Recent and Pending Acquisitions and Divestiture

The company's strategy is to augment internal growth at existing businesses with complementary acquisitions. The company's principal recent and pending acquisitions and divestitures are described below.

On March 3, 2020, the company entered into a purchase agreement to acquire all of the issued and outstanding shares of QIAGEN N.V. at a price of €39.00 per share or approximately $11.5 billion (based on exchange rates at the time of the announcement), which includes the assumption of approximately $1.4 billion of net debt. QIAGEN is a leading provider of life science and molecular diagnostic solutions that will expand the company's capabilities in these fields. QIAGEN reported 2019 revenues of $1.5 billion. The company will commence a tender offer to acquire all of the ordinary shares of QIAGEN. The transaction is expected to close during the first half of 2021, subject to the satisfaction of customary closing conditions including receipt of applicable regulatory approvals, the adoption of certain resolutions relating to the transaction at an Extraordinary General Meeting of QIAGEN's shareholders, and completion of the tender offer.

The company intends to finance the purchase price, including the repayment of indebtedness of QIAGEN, with cash on hand and the net proceeds from issuances of debt. The company is currently evaluating future debt financings and the timing of such transactions is subject to market and other conditions. The company also has available, but does not currently expect to utilize, up to €9.25 billion of committed financing (Note 7).

On April 30, 2019, the company acquired, within the Laboratory Products and Services segment, Brammer Bio for approximately $1.67 billion in cash. Brammer Bio is a leading viral vector contract development and manufacturing organization for gene and cell therapies. The acquisition expands the segment's contract manufacturing capabilities. Brammer Bio reported revenues of approximately $140 million in 2018.

On June 28, 2019, the company sold its Anatomical Pathology business to PHC Holdings Corporation for $1.13 billion, net of cash divested. The business was part of the Specialty Diagnostics segment. Revenues in 2019, through the date of sale, and the full year 2018 of the business sold were approximately $115 million and $238 million, respectively, net of retained sales through the company's healthcare market and research and safety market channel businesses.

Overview of Results of Operations and Liquidity

	Three Months Ended			
(Dollars in millions)	March 28, 2020		March 30, 2019	
Revenues				
Life Sciences Solutions	$ 1,774	28.5 %	$ 1,607	26.2 %
Analytical Instruments	1,101	17.7 %	1,322	21.6 %
Specialty Diagnostics	958	15.4 %	957	15.6 %
Laboratory Products and Services	2,730	43.8 %	2,513	41.0 %
Eliminations	(333)	(5.4)%	(274)	(4.4)%
	$ 6,230	100 %	$ 6,125	100 %

Sales in the first quarter of 2020 were $6.23 billion, an increase of $105 million from 2019. Sales increased $35 million due to acquisitions, net of a divestiture. The unfavorable effects of currency translation resulted in a decrease in revenues of $65 million in the first quarter of 2020. Aside from the effects of acquisitions/divestiture and currency translation, revenues increased $135 million (2%) primarily due to increased demand in the quarter compared to the 2019 quarter. Sales were particularly strong to customers in diagnostic and healthcare markets, driven in part by demand for products supporting those diagnosing and treating the COVID-19 virus, as well as to customers in pharma and biotech end markets. Sales to academic and government customers decreased due primarily to closure of academic labs, initially in China and then globally as the quarter progressed. Sales to customers in industrial markets decreased primarily due to lower demand in China from business slowing and closures related to COVID-19 as well as strong comparative sales in the first quarter of 2019. The first quarter of 2020 had one less selling day than the first quarter of 2019 which reduced revenues by nearly 1%. Sales growth was particularly strong in Europe and, to a lesser extent, North America while sales decreased in the Asia-Pacific region.

In the first quarter of 2020, total company operating income and operating income margin were $906 million and 14.5%, respectively, compared with $920 million and 15.0%, respectively, in 2019. The decrease in operating income was primarily due to strategic growth investments and, to a lesser extent, sales mix and dilution following the June 2019 divestiture of the Anatomical Pathology business. These decreases were offset in part by productivity improvements and profit on higher sales. The company's references to strategic growth investments generally refer to targeted spending for enhancing commercial capabilities, including expansion of geographic sales reach and e-commerce platforms, marketing initiatives, expanded service and operational infrastructure, focused research projects and other expenditures to enhance the customer experience. The company's references throughout this discussion to productivity improvements generally refer to improved cost efficiencies from its Practical Process Improvement (PPI) business system, reduced costs resulting from global sourcing initiatives, a lower cost structure following restructuring actions, including headcount reductions and consolidation of facilities, and low cost region manufacturing. The company has begun implementing additional cost reduction measures in response to impacts of COVID-19 on the business. Productivity improvements are calculated net of inflationary cost increases.

The company's effective tax rate was 4.8% for the first quarter of 2020. The company expects its effective tax rate for all of 2020 will be between 7% and 9% based on currently forecasted rates of profitability in the countries in which the company conducts business and expected generation of foreign tax credits. Due primarily to the non-deductibility of intangible asset amortization for tax purposes, the company's cash payments for income taxes are higher than its income tax expense for

Overview of Results of Operations and Liquidity (continued)

financial reporting purposes and are expected to total $450 to $500 million in 2020. In the first quarter of 2019, the company recorded a $2 million provision for income taxes, net of a $62 million income tax benefit related to a foreign exchange loss for tax purposes on certain intercompany financing arrangements. In addition, the company recorded a net tax benefit of $27 million in the first quarter of 2019, to adjust the impacts of U.S. tax reform based on final regulations issued by the U.S. Treasury in January 2019.

Net income decreased to $788 million in the first quarter of 2020 from $815 million in the first quarter of 2019, primarily due to the increase in income tax provision (discussed above), a decrease in interest income, and the decrease in operating income in the 2020 period (discussed above), offset in part by a decrease in interest expense.

During the first three months of 2020, the company’s cash flow from operations totaled $356 million compared with $649 million for 2019. The decrease primarily resulted from higher investment in working capital in 2020.

As of March 28, 2020, the company’s short-term debt totaled $738 million consisting principally of senior notes due in August 2020. The company has a revolving credit facility with a bank group that provides up to $2.50 billion of unsecured multi-currency revolving credit. If the company borrows under this facility, it intends to leave undrawn an amount equivalent to outstanding commercial paper to provide a source of funds in the event that commercial paper markets are not available. As of March 28, 2020, no borrowings were outstanding under the company’s revolving credit facility, although available capacity was reduced by approximately $71 million as a result of outstanding letters of credit.

The company believes that its existing cash and cash equivalents of $2.98 billion as of March 28, 2020, debt proceeds of $1.3 billion in April 2020 and its future cash flow from operations together with available borrowing capacity under its revolving credit agreement and bridge loan agreement will be sufficient to meet the cash requirements of its existing businesses and funding of the QIAGEN acquisition for the foreseeable future, including at least the next 24 months.

Critical Accounting Policies and Estimates

The company’s discussion and analysis of its financial condition and results of operations is based upon its financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses and related disclosure of contingent liabilities. On an on-going basis, management evaluates its estimates, including those related to intangible assets and goodwill, income taxes and contingencies and litigation. Management believes the most complex and sensitive judgments, because of their significance to the consolidated financial statements, result primarily from the need to make estimates about the effects of matters that are inherently uncertain. Management bases its estimates on historical experience, current market and economic conditions and other assumptions that management believes are reasonable. The results of these estimates form the basis for judgments about the carrying value of assets and liabilities where the values are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. Management’s Discussion and Analysis and Note 1 to the Consolidated Financial Statements of the company’s Form 10-K for 2019, describe the significant accounting estimates and policies used in preparation of the consolidated financial statements. There have been no significant changes in the company's critical accounting policies during the first three months of 2020.

Results of Operations

First Quarter 2020 Compared With First Quarter 2019

(In millions)	Three Months Ended March 28, 2020	March 30, 2019	Total Change	Currency Translation	Acquisitions/ Divestitures	Operations
Revenues						
Life Sciences Solutions	$ 1,774	$ 1,607	$ 167	$ (20)	$ —	$ 187
Analytical Instruments	1,101	1,322	(221)	(14)	—	(207)
Specialty Diagnostics	958	957	1	(9)	(63)	73
Laboratory Products and Services	2,730	2,513	217	(25)	92	150
Eliminations	(333)	(274)	(59)	3	6	(68)
Consolidated Revenues	$ 6,230	$ 6,125	$ 105	$ (65)	$ 35	$ 135

Sales in the first quarter of 2020 were $6.23 billion, an increase of $105 million from the first quarter of 2019. Sales increased $35 million due to acquisitions, net of a divestiture. The unfavorable effects of currency translation resulted in a decrease in revenues of $65 million in 2020. Aside from the effects of acquisitions/divestitures and currency translation, revenues increased $135 million (2%) primarily due to increased demand in the quarter compared to the 2019 quarter. Sales were particularly strong to customers in diagnostic and healthcare markets, driven in part by demand for products supporting those diagnosing and treating the COVID-19 virus, as well as to customers in pharma and biotech end markets. Sales to academic and government customers decreased due primarily to closure of academic labs, initially in China and then globally as the quarter progressed. Sales to customers in industrial markets decreased primarily due to lower demand in China from business slowing and closures related to COVID-19 as well as strong comparative sales in the first quarter of 2019. The first quarter of 2020 had one less selling day than the first quarter of 2019 which reduced revenues by nearly 1%. Sales growth was particularly strong in Europe and, to a lesser extent, North America while sales decreased in the Asia-Pacific region.

In the first quarter of 2020, total company operating income and operating income margin were $906 million and 14.5%, respectively, compared with $920 million and 15.0%, respectively, in 2019. The decrease in operating income was primarily due to strategic growth investments and, to a lesser extent, sales mix and dilution following the June 2019 divestiture of the Anatomical Pathology business. These decreases were offset in part by productivity improvements and profit on higher sales.

In the first quarter of 2020, the company recorded restructuring and other costs, net, of $46 million. The company recorded $2 million of charges to cost of revenues to conform the accounting policies of a recently acquired business to the company's accounting policies. The company also recorded $6 million of charges to selling, general and administrative expenses, principally third-party transaction and integration-related costs for recent and pending acquisitions. In addition, the company recorded $38 million restructuring and other charges, net, primarily for employee severance and other costs associated with facility consolidations in efforts to streamline operations. See Note 12 for restructuring charges expected in future periods.

In the first quarter of 2019, the company recorded restructuring and other income, net, of $28 million, including $6 million of charges to cost of revenues for the sale of inventories revalued at the date of acquisition. The company recorded $11 million of charges to selling, general and administrative expenses, for third-party transaction costs related to recent acquisitions and a divestiture. The company recorded $11 million of cash restructuring costs, including severance and abandoned facilities costs associated with the closure and consolidation of facilities in the U.S. and Europe.

Segment Results

The company's management evaluates segment operating performance using operating income before certain charges/credits to cost of revenues and selling, general and administrative expenses, principally associated with acquisition-related activities; restructuring and other costs/income including costs arising from facility consolidations such as severance and abandoned lease expense and gains and losses from the sale of real estate and product lines; and amortization of acquisition-related intangible assets. The company uses this measure because it helps management understand and evaluate the segments' core operating results and facilitate comparison of performance for determining compensation (Note 4). Accordingly, the following segment data is reported on this basis.

Results of Operations (continued)

(Dollars in millions)	Three Months Ended March 28, 2020	Three Months Ended March 30, 2019	Change
Revenues			
Life Sciences Solutions	$ 1,774	$ 1,607	10 %
Analytical Instruments	1,101	1,322	(17) %
Specialty Diagnostics	958	957	— %
Laboratory Products and Services	2,730	2,513	9 %
Eliminations	(333)	(274)	22 %
Consolidated Revenues	$ 6,230	$ 6,125	2 %
Segment Income			
Life Sciences Solutions	$ 675	$ 561	20 %
Analytical Instruments	171	282	(39) %
Specialty Diagnostics	236	242	(2) %
Laboratory Products and Services	295	285	4 %
Subtotal Reportable Segments	1,377	1,370	1 %
Cost of Revenues Charges, Net	(2)	(6)	
Selling, General and Administrative Charges, Net	(6)	(11)	
Restructuring and Other Costs, Net	(38)	(11)	
Amortization of Acquisition-related Intangible Assets	(425)	(422)	
Consolidated Operating Income	$ 906	$ 920	(2) %
Reportable Segments Operating Income Margin	22.1 %	22.4 %	
Consolidated Operating Income Margin	14.5 %	15.0 %	

Income from the company's reportable segments increased 1% to $1.38 billion in the first quarter of 2020 due primarily to productivity improvements and profit on higher sales, offset in part by strategic growth investments and, to a lesser extent, sales mix.

Life Sciences Solutions

(Dollars in millions)	Three Months Ended March 28, 2020	Three Months Ended March 30, 2019	Change
Revenues	$ 1,774	$ 1,607	10 %
Operating Income Margin	38.0 %	34.9 %	3.1 pt

Sales in the Life Sciences Solutions segment increased $167 million to $1.77 billion in the first quarter of 2020. Sales increased $187 million (12%) due to higher revenues at existing businesses. The unfavorable effects of currency translation resulted in a decrease in revenues of $20 million. The increase in revenue at existing businesses was primarily due to increased

Results of Operations (continued)

demand in each of the segment's principal businesses with particular strength in sales of genetic sciences, driven primarily by products addressing diagnosis of COVID-19 and, to a lesser extent, bioproduction products.

Operating income margin was 38.0% in the first quarter of 2020 compared to 34.9% in the first quarter of 2019. The increase resulted primarily from profit on higher sales, offset in part by strategic growth investments and, to a lesser extent, sales mix.

Analytical Instruments

	Three Months Ended		
(Dollars in millions)	March 28, 2020	March 30, 2019	Change
Revenues	$ 1,101	$ 1,322	(17) %
Operating Income Margin	15.5 %	21.3 %	-5.8 pt

Sales in the Analytical Instruments segment decreased $221 million to $1.10 billion in the first quarter of 2020. Sales decreased $207 million (-16%) due to lower revenues at existing businesses. The unfavorable effects of currency translation resulted in a decrease in revenues of $14 million. The decrease in revenue at existing businesses was primarily the result of reduced demand from industrial customers in China following business slowing and closures due to COVID-19 and strong comparative results in the first quarter of 2019.

Operating income margin was 15.5% in the first quarter of 2020 compared to 21.3% in the first quarter of 2019. The decrease was primarily due to the decrease in sales and, to a lesser extent, sales mix, offset in part by productivity improvements.

Specialty Diagnostics

	Three Months Ended		
(Dollars in millions)	March 28, 2020	March 30, 2019	Change
Revenues	$ 958	$ 957	— %
Operating Income Margin	24.7 %	25.3 %	-0.6 pt

Sales in the Specialty Diagnostics segment increased $1 million to $958 million in the first quarter of 2020. Sales increased $73 million (8%) due to higher revenues at existing businesses. The divestiture of Anatomical Pathology business resulted in a decrease in sales of $63 million. The unfavorable effects of currency translation resulted in a decrease in revenues of $9 million. The increase in revenue at existing businesses was due to higher demand in part driven by products addressing treatment of COVID-19, with particular strength in sales of products sold through the segment's healthcare market channel business, and to a lesser extent, clinical diagnostics and transplant diagnostic products.

Operating income margin was 24.7% in the first quarter of 2020 and 25.3% in the first quarter of 2019. The decrease was primarily due to sales mix, strategic growth investments and dilution from the 2019 divestiture, offset in part by profit on higher sales and productivity improvements.

Results of Operations (continued)

Laboratory Products and Services

(Dollars in millions)	Three Months Ended March 28, 2020	March 30, 2019	Change
Revenues	$ 2,730	$ 2,513	9 %
Operating Income Margin	10.8 %	11.3 %	-0.5 pt

Sales in the Laboratory Products and Services segment increased $217 million to $2.73 billion in the first quarter of 2020. Sales increased $150 million (6%) due to higher revenues at existing businesses and $92 million due to acquisitions. The unfavorable effects of currency translation resulted in a decrease in revenues of $25 million. The increase in revenue at existing businesses was primarily due to increased demand for service offerings of the segment's pharma services business and to a lesser extent, products sold through its research and safety market channel business.

Operating income margin was 10.8% in the first quarter of 2020 and 11.3% in the first quarter of 2019. The decrease was primarily due to sales mix and strategic growth investments, offset in part by profit on higher sales and, to a lesser extent, productivity improvements.

Other Income, Net

The company reported other income, net, of $12 million and $19 million in the first quarter of 2020 and 2019, respectively.

Provision for Income Taxes

The company's effective tax rate was 4.8% for the first quarter of 2020. The company expects its effective tax rate for all of 2020 will be between 7% and 9% based on currently forecasted rates of profitability in the countries in which the company conducts business and expected generation of foreign tax credits. Due primarily to the non-deductibility of intangible asset amortization for tax purposes, the company’s cash payments for income taxes are higher than its income tax expense for financial reporting purposes and are expected to total $450 to $500 million in 2020. In the first quarter of 2019, the company recorded a $2 million provision for income taxes, net of a $62 million income tax benefit related to a foreign exchange loss for tax purposes on certain intercompany financing arrangements. In addition, the company recorded a net tax benefit of $27 million in the first quarter of 2019, to adjust the impacts of U.S. tax reform based on final regulations issued by the U.S. Treasury in January 2019.

The company has operations and a taxable presence in approximately 50 countries outside the U.S. Some of these countries have lower tax rates than the U.S. The company’s ability to obtain a benefit from lower tax rates outside the U.S. is dependent on its relative levels of income in countries outside the U.S. and on the statutory tax rates in those countries. Based on the dispersion of the company’s non-U.S. income tax provision among many countries, the company believes that a change in the statutory tax rate in any individual country is not likely to materially affect the company’s income tax provision or net income, aside from any resulting one-time adjustment to the company’s deferred tax balances to reflect a new rate.

Recent Accounting Pronouncements

A description of recently issued accounting standards is included under the heading “*Recent Accounting Pronouncements*” in Note 1.

Contingent Liabilities

The company is contingently liable with respect to certain legal proceedings and related matters. An unfavorable outcome that differs materially from current accrual estimates, if any, for one or more of the matters described under the headings “*Product Liability, Workers Compensation and Other Personal Injury Matters*” and “*Intellectual Property Matters*” in Note 8 could have a material adverse effect on the company’s financial position as well as its results of operations and cash flows

Liquidity and Capital Resources

Consolidated working capital (current assets less current liabilities) was $7.24 billion at March 28, 2020, compared with $5.70 billion at December 31, 2019. Included in working capital were cash and cash equivalents of $2.98 billion at March 28, 2020 and $2.40 billion at December 31, 2019.

First Three Months of 2020

Cash provided by operating activities was $356 million during the first three months of 2020. Cash provided by income was offset in part by investments in working capital. Increases in accounts receivable and inventories used cash of $218 million and $141 million, respectively, primarily to support growth in sales. Changes in other assets and other liabilities used cash of $443 million primarily due to the timing of payments for incentive compensation and customer billings. Cash payments for income taxes decreased to $100 million during the first three months of 2020, compared with $221 million in the first three months of 2019. The company made cash contributions to its pension and postretirement benefit plans totaling $32 million during the first three months of 2020. Payments for restructuring actions, principally severance costs and expenses of real estate consolidation, used cash of $15 million during the first three months of 2020.

During the first three months of 2020, the company’s investing activities used $260 million of cash, principally for the purchase of property, plant and equipment.

The company’s financing activities provided $619 million of cash during the first three months of 2020. Issuance of senior notes provided cash of $2.19 billion. A net increase in commercial paper obligations provided cash of $61 million. The company’s financing activities also included the repurchase of $1.50 billion of the company's common stock and the payment of $76 million in cash dividends, offset in part by $48 million of net proceeds from employee stock option exercises. On November 8, 2019, the Board of Directors authorized the repurchase of up to $2.50 billion of the company’s common stock. At May 1, 2020, authorization remained for $1.00 billion of future repurchases of the company’s common stock. As discussed in Note 13, early in the second quarter of 2020, the company issued new senior notes for net proceeds of $1.3 billion.

The company's commitments for purchases of property, plant and equipment, contractual obligations and other commercial commitments did not change materially between December 31, 2019 and March 28, 2020 except for the agreement to acquire QIAGEN, discussed in Note 2. The company expects that for all of 2020, expenditures for property, plant and equipment, net of disposals, will be between $900 million and $1.0 billion.

As of March 28, 2020, the company’s short-term debt totaled $738 million consisting principally of senior notes due in August 2020. The company has a revolving credit facility with a bank group that provides up to $2.50 billion of unsecured multi-currency revolving credit. If the company borrows under this facility, it intends to leave undrawn an amount equivalent to outstanding commercial paper to provide a source of funds in the event that commercial paper markets are not available. As of March 28, 2020, no borrowings were outstanding under the company’s revolving credit facility, although available capacity was reduced by approximately $71 million as a result of outstanding letters of credit.

Approximately half of the company’s cash balances and cash flows from operations are from outside the U.S. The company uses its non-U.S. cash for needs outside of the U.S. including acquisitions and repayment of acquisition-related intercompany debt to the U.S. In addition, the company also transfers cash to the U.S. using non-taxable returns of capital as well as dividends where the related U.S. dividend received deduction or foreign tax credit equals any tax cost arising from the dividends. As a result of using such means of transferring cash to the U.S., the company does not expect any material adverse liquidity effects from its significant non-U.S. cash balances for the foreseeable future.

The company believes that its existing cash and cash equivalents of $2.98 billion as of March 28, 2020, debt proceeds of $1.3 billion in April 2020 and its future cash flow from operations together with available borrowing capacity under its revolving credit agreement and bridge loan agreement will be sufficient to meet the cash requirements of its existing businesses and funding of the QIAGEN acquisition for the foreseeable future, including at least the next 24 months.

First Three Months of 2019

Cash provided by operating activities was $649 million during the first three months of 2019. Cash provided by income was offset in part by investments in working capital. Increases in accounts receivable and inventories used cash of $29 million and $140 million, respectively, primarily to support growth in sales. Changes in other assets and other liabilities used cash of $347 million primarily due to the timing of payments for incentive compensation, customer billings and income tax refunds. Cash payments for income taxes totaled $221 million. The company made cash contributions to its pension and postretirement

Liquidity and Capital Resources (continued)

benefit plans totaling $32 million during the first three months of 2019. Payments for restructuring actions, principally severance costs and expenses of real estate consolidation, used cash of $14 million during the first three months of 2019.

During the first three months of 2019, the company's investing activities used $181 million of cash including the purchase of $201 million of property, plant and equipment.

The company's financing activities used $1.43 billion of cash during the first three months of 2019. A net decrease in commercial paper obligations used cash of $687 million. The company's financing activities also included the repurchase of $750 million of the company's common stock and the payment of $68 million in cash dividends, offset in part by $81 million of net proceeds from employee stock option exercises.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

The company's exposure to market risk from changes in interest rates and currency exchange rates has not changed materially from its exposure at year-end 2019.

Item 4. Controls and Procedures

Management's Evaluation of Disclosure Controls and Procedures

The company's management, with the participation of the company's chief executive officer and chief financial officer, has evaluated the effectiveness of the company's disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this report. Based on such evaluation, the company's chief executive officer and chief financial officer concluded that, as of the end of such period, the company's disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

There have been no changes in the company's internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) during the fiscal quarter ended March 28, 2020, that have materially affected or are reasonably likely to materially affect the company's internal control over financial reporting.

PART II OTHER INFORMATION

Item 1. Legal Proceedings

There are various lawsuits and claims against the company involving product liability, intellectual property, employment and commercial issues. See "Note 8 to our Consolidated Financial Statements – Commitments and Contingencies."

Item 1A. Risk Factors

Set forth below are the risks that we believe are material to our investors. This section contains forward-looking statements. You should refer to the explanation of the qualifications and limitations on forward-looking statements beginning on page 25.

We are subject to risks associated with public health crises and epidemics/pandemics, such as the COVID-19 pandemic. Our global operations expose us to risks associated with public health crises and epidemics/pandemics, such as the novel strain of coronavirus (COVID-19) that has spread globally. In recent weeks, the continued spread has led to disruption and volatility in the global capital markets, which increases the cost of, and adversely impacts access to, capital and increases economic uncertainty. It is likely that the pandemic will cause an economic slowdown of potentially extended duration, and it is possible that it could cause a global recession.

COVID-19 is having, and will continue to have, an adverse impact on our operations, supply chains and distribution systems, including as a result of impacts associated with preventive and precautionary measures that we, other businesses and governments are taking. Due to these impacts and measures, we have experienced, and will continue to experience, significant and unpredictable reductions or increases in demand for certain of our products. Many employers in the United States and Europe are requiring their employees to work from home or not go into their offices. If the pandemic continues and conditions worsen, we will experience a decline in sales activities and customer orders, and it remains uncertain what impact these declines will have on future sales and customer orders once conditions begin to improve. In addition to existing travel restrictions, countries may continue to close borders, impose prolonged quarantines, and further restrict travel, which would significantly impact our ability to support our sites and customers in those locations and the ability of our employees to get to their places of work to produce products, or significantly hamper our products from moving through the supply chain. As a result, given the rapid and evolving nature of the virus, COVID-19 will negatively affect our revenue growth, and it is uncertain how materially COVID-19 will affect our global operations generally if these impacts persist or worsen over an extended period of time. Any of these impacts would have an adverse effect on our business, financial condition and results of operations, and at this point, the extent of the impact of COVID-19 remains uncertain.

We must develop new products, adapt to rapid and significant technological change and respond to introductions of new products by competitors to remain competitive. Our growth strategy includes significant investment in and expenditures for product development. We sell our products in several industries that are characterized by rapid and significant technological changes, frequent new product and service introductions and enhancements and evolving industry standards. Competitive factors include technological innovation, price, service and delivery, breadth of product line, customer support, e-business capabilities and the ability to meet the special requirements of customers. Our competitors may adapt more quickly to new technologies and changes in customers' requirements than we can. Without the timely introduction of new products, services and enhancements, our products and services will likely become technologically obsolete over time, in which case our revenue and operating results would suffer.

Many of our existing products and those under development are technologically innovative and require significant planning, design, development and testing at the technological, product and manufacturing-process levels. Our customers use many of our products to develop, test and manufacture their own products. As a result, we must anticipate industry trends and develop products in advance of the commercialization of our customers' products. If we fail to adequately predict our customers' needs and future activities, we may invest heavily in research and development of products and services that do not lead to significant revenue.

It may be difficult for us to implement our strategies for improving internal growth. Our growth depends in part on the growth of the markets which we serve. Any decline or lower than expected growth in our served markets could diminish demand for our products and services, which would adversely affect our results of operations and financial condition. To address this issue, we are pursuing a number of strategies to improve our internal growth, including:

- strengthening our presence in selected geographic markets;

- allocating research and development funding to products with higher growth prospects;
- developing new applications for our technologies;
- expanding our service offerings;
- continuing key customer initiatives;
- combining sales and marketing operations in appropriate markets to compete more effectively;
- finding new markets for our products; and
- continuing the development of commercial tools and infrastructure to increase and support cross-selling opportunities of products and services to take advantage of our depth in product offerings.

We may not be able to successfully implement these strategies, and these strategies may not result in the expected growth of our business.

Our business is affected by general economic conditions and related uncertainties affecting markets in which we operate. Our business is affected by general economic conditions, both inside and outside the U.S. If the global economy and financial markets, or economic conditions in Europe, the U.S. or other key markets, continue to be unstable, it could adversely affect the business, results of operations and financial condition of the company and its customers, distributors, and suppliers, having the effect of

- reducing demand for some of our products;
- increasing the rate of order cancellations or delays;
- increasing the risk of excess and obsolete inventories;
- increasing pressure on the prices for our products and services;
- causing supply interruptions which could disrupt our ability to produce our products; and
- creating longer sales cycles and greater difficulty in collecting sales proceeds.

Our growth would suffer if the markets into which we sell our products and services decline, do not grow as anticipated or experience cyclicality. Our growth depends in part on the growth of the markets which we serve. Any decline or lower than expected growth in our served markets would diminish demand for our products and services, which would adversely affect our financial statements. Certain of our businesses operate in industries that may experience periodic, cyclical downturns.

Demand for some of our products depends on capital spending policies of our customers and on government funding policies. Our customers include pharmaceutical and chemical companies, laboratories, universities, healthcare providers, government agencies and public and private research institutions. Many factors, including public policy spending priorities, available resources and product and economic cycles, have a significant effect on the capital spending policies of these entities.

Spending by some of these customers fluctuates based on budget allocations and the timely passage of the annual federal budget. An impasse in federal government budget decisions could lead to substantial delays or reductions in federal spending.

Economic, political, foreign currency and other risks associated with international sales and operations could adversely affect our results of operations. International markets contribute a substantial portion of our revenues, and we intend to continue expanding our presence in these regions. The exposure to fluctuations in currency exchange rates takes on different forms. International revenues and costs are subject to the risk that fluctuations in exchange rates could adversely affect our reported revenues and profitability when translated into U.S. dollars for financial reporting purposes. These fluctuations could also adversely affect the demand for products and services provided by us. As a multinational corporation, our businesses occasionally invoice third-party customers in currencies other than the one in which they primarily do business (the “functional currency”). Movements in the invoiced currency relative to the functional currency could adversely impact our cash flows and our results of operations. As our international sales grow, exposure to fluctuations in currency exchange rates could have a larger effect on our financial results. In the first three months of 2020, currency translation had an unfavorable effect of $65 million on revenues due to the strengthening of the U.S. dollar relative to other currencies in which the company sells products and services.

Risk Factors (continued)

In addition, many of our employees, contract manufacturers, suppliers, job functions, outsourcing activities and manufacturing facilities are located outside the United States. Accordingly, our future results could be harmed by a variety of factors, including:

- interruption to transportation flows for delivery of parts to us and finished goods to our customers;
- changes in a specific country's or region's political, economic or other conditions;
- changes in diplomatic and trade relationships, including new tariffs, trade protection measures, import or export licensing requirements, trade embargoes and sanctions and other trade barriers;
- tariffs imposed by the U.S. on goods from other countries and tariffs imposed by other countries on U.S. goods, including the tariffs recently adopted by the U.S. government on various imports from China and by the Chinese government on certain U.S. goods;
- the impact of public health epidemics/pandemics on the global economy, such as COVID-19 that has spread globally;
- negative consequences from changes in tax laws;
- difficulty in staffing and managing widespread operations;
- differing labor regulations;
- differing protection of intellectual property;
- unexpected changes in regulatory requirements; and
- geopolitical uncertainty or turmoil, including terrorism and war.

For example, on January 31, 2020, the United Kingdom formally withdrew from the European Union, or EU and entered a transition period during which it will negotiate a trade deal with the EU. This withdrawal has created political and economic uncertainty, particularly in the United Kingdom and the EU, and this uncertainty may last for years. Our business could be affected during this period of uncertainty, and perhaps longer, by the impact of the United Kingdom’s withdrawal from the EU. In addition, our business could be negatively affected by new trade agreements between the United Kingdom and other countries, including the United States, and by the possible imposition of trade or other regulatory barriers in the United Kingdom. These possible negative impacts, and others resulting from the United Kingdom’s withdrawal from the EU, may adversely affect our operating results and our customers’ businesses.

Our inability to protect our intellectual property could have a material adverse effect on our business. In addition, third parties may claim that we infringe their intellectual property, and we could suffer significant litigation or licensing expense as a result. We place considerable emphasis on obtaining patent and trade secret protection for significant new technologies, products and processes because of the length of time and expense associated with bringing new products through the development process and into the marketplace. Our success depends in part on our ability to develop patentable products and obtain and enforce patent protection for our products both in the United States and in other countries. We own numerous U.S. and foreign patents, and we intend to file additional applications, as appropriate, for patents covering our products. Patents may not be issued for any pending or future patent applications owned by or licensed to us, and the claims allowed under any issued patents may not be sufficiently broad to protect our technology. Any issued patents owned by or licensed to us may be challenged, invalidated or circumvented, and the rights under these patents may not provide us with competitive advantages. In addition, competitors may design around our technology or develop competing technologies. Intellectual property rights may also be unavailable or limited in some foreign countries, which could make it easier for competitors to capture increased market position. We could incur substantial costs to defend ourselves in suits brought against us or in suits in which we may assert our patent rights against others. An unfavorable outcome of any such litigation could materially adversely affect our business and results of operations.

We also rely on trade secrets and proprietary know-how with which we seek to protect our products, in part, by confidentiality agreements with our collaborators, employees and consultants. These agreements may be breached and we may not have adequate remedies for any breach. In addition, our trade secrets may otherwise become known or be independently developed by our competitors.

Third parties may assert claims against us to the effect that we are infringing on their intellectual property rights. In the event that a claim relating to intellectual property is asserted against us, or third parties not affiliated with us hold pending or issued patents that relate to our products or technology, we may seek licenses to such intellectual property or challenge those patents. However, we may be unable to obtain these licenses on commercially reasonable terms, if at all, and our challenge of the patents may be unsuccessful. Our failure to obtain the necessary licenses or other rights could prevent the sale, manufacture,

or distribution of our products and, therefore, could have a material adverse effect on our business, financial condition and results of operations.

Changes in governmental regulations may reduce demand for our products or increase our expenses. We compete in many markets in which we and our customers must comply with federal, state, local and international regulations, such as environmental, health and safety and food and drug regulations. We develop, configure and market our products to meet customer needs created by those regulations. Any significant change in regulations could reduce demand for our products or increase our expenses. For example, we manufacture pharmaceuticals and many of our instruments are marketed to the pharmaceutical industry for use in discovering and developing drugs. Changes in the U.S. Food and Drug Administration's regulation of the drug discovery and development process could have an adverse effect on the demand for these products.

Our pharma services offerings are highly complex, and if we are unable to provide quality and timely offerings to our customers, our business could suffer. Our pharma services offerings are highly exacting and complex, due in part to strict quality and regulatory requirements. Our operating results in this business depend on our ability to execute and, when necessary, improve our quality management strategy and systems, and our ability to effectively train and maintain our employee base with respect to quality management. A failure of our quality control systems could result in problems with facility operations or preparation or provision of products. In each case, such problems could arise for a variety of reasons, including equipment malfunction, failure to follow specific protocols and procedures, problems with raw materials or environmental factors and damage to, or loss of, manufacturing operations. Such problems could affect production of a particular batch or series of batches of products, requiring the destruction of such products or a halt of facility production altogether.

In addition, our failure to meet required quality standards may result in our failure to timely deliver products to our customers, which in turn could damage our reputation for quality and service. Any such failure could, among other things, lead to increased costs, lost revenue, reimbursement to customers for lost drug product, registered intermediates, registered starting materials, and active pharmaceutical ingredients, other customer claims, damage to and possibly termination of existing customer relationships, time and expense spent investigating the cause and, depending on the cause, similar losses with respect to other batches or products. Production problems in our drug and biologic manufacturing operations could be particularly significant because the cost of raw materials for such manufacturing is often high. If problems in preparation or manufacture of a product or failures to meet required quality standards for that product are not discovered before such product is released to the market, we may be subject to adverse regulatory actions, including product recalls, product seizures, injunctions to halt manufacture and distribution, restrictions on our operations, civil sanctions, including monetary sanctions, and criminal actions. In addition, such problems or failures could subject us to litigation claims, including claims from our customers for reimbursement for the cost of lost or damaged active pharmaceutical ingredients, the cost of which could be significant.

We are subject to product and other liability risks for which we may not have adequate insurance coverage. We may be named as a defendant in product liability lawsuits, which may allege that products or services we have provided from our pharma services offerings have resulted or could result in an unsafe condition or injury to consumers. Additionally, products currently or previously sold by our environmental and process instruments and radiation measurement and security instruments businesses include fixed and portable instruments used for chemical, radiation and trace explosives detection. These products are used in airports, embassies, cargo facilities, border crossings and other high-threat facilities for the detection and prevention of terrorist acts. If any of these products were to malfunction, it is possible that explosive or radioactive material could fail to be detected by our product, which could lead to product liability claims. There are also many other factors beyond our control that could lead to liability claims, such as the reliability and competence of the customers' operators and the training of such operators.

Any such product liability claims brought against us could be significant and any adverse determination may result in liabilities in excess of our insurance coverage. Although we carry product liability insurance, we cannot be certain that our current insurance will be sufficient to cover these claims or that it can be maintained on acceptable terms, if at all.

Our inability to complete any pending acquisitions or to successfully integrate any new or previous acquisitions could have a material adverse effect on our business. Our business strategy includes the acquisition of technologies and businesses that complement or augment our existing products and services. Certain acquisitions, including the QIAGEN acquisition (Note 2), may be difficult to complete for a number of reasons, including the need for antitrust and/or other regulatory approvals. Any acquisition we may complete may be made at a substantial premium over the fair value of the net identifiable assets of the acquired company. Further, we may not be able to integrate acquired businesses successfully into our existing businesses, make such businesses profitable, or realize anticipated cost savings or synergies, if any, from these acquisitions, which could adversely affect our business.

Moreover, we have acquired many companies and businesses. As a result of these acquisitions, we recorded significant goodwill and indefinite-lived intangible assets (primarily tradenames) on our balance sheet, which amount to approximately

$25.61 billion and $1.25 billion, respectively, as of March 28, 2020. In addition, we have definite-lived intangible assets totaling $12.29 billion as of March 28, 2020. We assess the realizability of goodwill and indefinite-lived intangible assets annually as well as whenever events or changes in circumstances indicate that these assets may be impaired. We assess the realizability of definite-lived intangible assets whenever events or changes in circumstances indicate that these assets may be impaired. These events or circumstances would generally include operating losses or a significant decline in earnings associated with the acquired business or asset. Our ability to realize the value of the goodwill and intangible assets will depend on the future cash flows of these businesses. These cash flows in turn depend in part on how well we have integrated these businesses. If we are not able to realize the value of the goodwill and intangible assets, we may be required to incur material charges relating to the impairment of those assets.

We are subject to laws and regulations governing government contracts, and failure to address these laws and regulations or comply with government contracts could harm our business by leading to a reduction in revenue associated with these customers. We have agreements relating to the sale of our products to government entities and, as a result, we are subject to various statutes and regulations that apply to companies doing business with the government. The laws governing government contracts differ from the laws governing private contracts and government contracts may contain pricing terms and conditions that are not applicable to private contracts. We are also subject to investigation for compliance with the regulations governing government contracts. A failure to comply with these regulations could result in suspension of these contracts, criminal, civil and administrative penalties or debarment.

Because we compete directly with certain of our larger customers and product suppliers, our results of operations could be adversely affected in the short term if these customers or suppliers abruptly discontinue or significantly modify their relationship with us. Our largest customer in the laboratory products business is also a significant competitor. Our business may be harmed in the short term if our competitive relationship in the marketplace with certain of our large customers results in a discontinuation of their purchases from us. In addition, we manufacture products that compete directly with products that we source from third-party suppliers. We also source competitive products from multiple suppliers. Our business could be adversely affected in the short term if any of our large third-party suppliers abruptly discontinues selling products to us.

Because we rely heavily on third-party package-delivery services, a significant disruption in these services or significant increases in prices may disrupt our ability to ship products, increase our costs and lower our profitability. We ship a significant portion of our products to our customers through independent package delivery companies, such as Federal Express in the U.S. and DHL in Europe. We also maintain a small fleet of vehicles dedicated to the delivery of our products and ship our products through other carriers, including national and regional trucking firms, overnight carrier services and the U.S. Postal Service. If one or more of these third-party package-delivery providers were to experience a major work stoppage, preventing our products from being delivered in a timely fashion or causing us to incur additional shipping costs we could not pass on to our customers, our costs could increase and our relationships with certain of our customers could be adversely affected. In addition, if one or more of these third-party package-delivery providers were to increase prices, and we were not able to find comparable alternatives or make adjustments in our delivery network, our profitability could be adversely affected.

We are required to comply with a wide variety of laws and regulations, and are subject to regulation by various federal, state and foreign agencies. We are subject to various local, state, federal, foreign and transnational laws and regulations, which include the operating and security standards of the U.S. Federal Drug Administration (the FDA), the U.S. Drug Enforcement Agency (the DEA), various state boards of pharmacy, state health departments, the U.S. Department of Health and Human Services (the DHHS), the European Medicines Agency (the EMA), in Europe, the EU member states and other comparable agencies and, in the future, any changes to such laws and regulations could adversely affect us. In particular, we are subject to laws and regulations concerning current good manufacturing practices and drug safety. Our subsidiaries may be required to register for permits and/or licenses with, and may be required to comply with the laws and regulations of the DEA, the FDA, the DHHS, foreign agencies including the EMA, and other various state boards of pharmacy, state health departments and/or comparable state agencies as well as certain accrediting bodies depending upon the type of operations and location of product distribution, manufacturing and sale.

The manufacture, distribution and marketing of many of our products and services, including medical devices and pharma services, are subject to extensive ongoing regulation by the FDA, the DEA, the EMA, and other equivalent local, state, federal and non-U.S. regulatory authorities. In addition, we are subject to inspections by these regulatory authorities. Failure by us or by our customers to comply with the requirements of these regulatory authorities, including without limitation, remediating any inspectional observations to the satisfaction of these regulatory authorities, could result in warning letters, product recalls or seizures, monetary sanctions, injunctions to halt manufacture and distribution, restrictions on our operations, civil or criminal sanctions, or withdrawal of existing or denial of pending approvals, including those relating to products or facilities. In addition, such a failure could expose us to contractual or product liability claims, contractual claims from our customers, including

claims for reimbursement for lost or damaged active pharmaceutical ingredients, as well as ongoing remediation and increased compliance costs, any or all of which could be significant. We are the sole manufacturer of a number of pharmaceuticals for many of our customers and a negative regulatory event could impact our customers' ability to provide products to their customers.

We are also subject to a variety of federal, state, local and international laws and regulations that govern, among other things, the handling, transportation and manufacture of substances that could be classified as hazardous, and we are required to comply with various import laws and export control and economic sanctions laws, which may affect our transactions with certain customers. In certain circumstances, export control and economic sanctions regulations may prohibit the export of certain products, services and technologies. In other circumstances, we may be required to obtain an export license before exporting the controlled item. Compliance with the various import laws that apply to our businesses can restrict our access to, and increase the cost of obtaining, certain products and at times can interrupt our supply of imported inventory. Any noncompliance by us with applicable laws and regulations or the failure to maintain, renew or obtain necessary permits and licenses could result in criminal, civil and administrative penalties and could have an adverse effect on our results of operations.

Our reputation, ability to do business and financial statements may be impaired by improper conduct by any of our employees, agents or business partners. We have internal controls and compliance systems to protect the company against acts committed by employees, agents or businesses that we acquire that would violate U.S. and/or non-U.S. laws, including the laws governing payments to government officials, bribery, fraud, kickbacks and false claims, pricing, sales and marketing practices, conflicts of interest, competition, employment practices and workplace behavior, export and import compliance, money laundering and data privacy, but we cannot provide assurance that these controls and systems will prevent every such wrongful act. In particular, the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act and similar anti-bribery laws in other jurisdictions generally prohibit companies and their intermediaries from making improper payments to government officials for the purpose of obtaining or retaining business, and we operate in many parts of the world that have experienced governmental corruption to some degree. Any such improper actions or allegations of such acts could damage our reputation and subject us to civil or criminal investigations in the United States and in other jurisdictions and related shareholder lawsuits, could lead to substantial civil and criminal, monetary and nonmonetary penalties and could cause us to incur significant legal and investigatory fees. In addition, the government may seek to hold us liable for violations committed by companies which we acquire. We also rely on our suppliers to adhere to our supplier standards of conduct, and material violations of such standards of conduct could occur that could have a material effect on our business, reputation and financial statements.

Natural disasters, public health crises, political crises, and other catastrophic events or other events outside of our control may disrupt our facilities or the facilities of third parties on which we depend, and could impact customer spending. We have significant operations in California, near major earthquake faults, which make us susceptible to earthquake risk. An earthquake or other natural disaster such as a fire or hurricane or power shortages or outages could disrupt our operations or impair our critical systems. Any of these disruptions or other events outside of our control, such as strikes or other labor unrest, could have an adverse effect on our results of operations. In addition, if any of our facilities, including our manufacturing or warehouse facilities, or the facilities of our suppliers, third-party service providers, or customers, is affected by natural disasters, such as earthquakes, tsunamis, power shortages or outages, floods or monsoons, public health crises, such as pandemics and epidemics, political crises, such as terrorism, war, political instability or other conflict, or other events outside of our control, such as strikes or other labor unrest, our results of operations could be adversely affected. Moreover, these types of events could negatively impact customer spending in the impacted regions or depending upon the severity, globally, which could also adversely impact our operating results. For example, as described above, the novel coronavirus (COVID-19) that has spread globally has impacted and could have a material adverse effect on our business and results of operations.

Fluctuations in our effective tax rate may adversely affect our results of operations and cash flows. As a global company, we are subject to taxation in numerous countries, states and other jurisdictions. In preparing our financial statements, we record the amount of tax that is payable in each of the countries, states and other jurisdictions in which we operate. Our future effective tax rate, however, may be lower or higher than experienced in the past due to numerous factors, including a change in the mix of our profitability from country to country, changes in accounting for income taxes and recently enacted and future changes in tax laws in jurisdictions in which we operate. Any of these factors could cause us to experience an effective tax rate significantly different from previous periods or our current expectations, which could have an adverse effect on our business, results of operations and cash flows.

We may incur unexpected costs from increases in fuel and raw material prices, which could reduce our earnings and cash flows. Our primary commodity exposures are for fuel, petroleum-based resins and steel. While we may seek to minimize the impact of price increases through higher prices to customers and various cost-saving measures, our earnings and cash flows could be adversely affected in the event these measures are insufficient to cover our costs.

Risk Factors (continued)

Our reliance upon sole or limited sources of supply for certain materials or components could cause production interruptions, delays and inefficiencies. Some of our businesses purchase certain materials from sole or limited source suppliers for reasons of quality assurance, regulatory requirements, cost effectiveness, availability or uniqueness of design. If these or other suppliers encounter financial, operating or other difficulties or if our relationship with them changes, we might not be able to quickly establish or qualify replacement sources of supply. The supply chains for our businesses could also be disrupted by supplier capacity constraints, bankruptcy or exiting of the business for other reasons, decreased availability of key raw materials or commodities and external events such as natural disasters, pandemic health issues, war, terrorist actions, governmental actions and legislative or regulatory changes. Any of these factors could result in production interruptions, delays, extended lead times and inefficiencies.

A significant disruption in, or breach in security of, our information technology systems or violation of data privacy laws could adversely affect our business. As a part of our ongoing effort to upgrade our current information systems, we periodically implement new enterprise resource planning software and other software applications to manage certain of our business operations. As we implement and add functionality, problems could arise that we have not foreseen. Such problems could disrupt our ability to provide quotes, take customer orders and otherwise run our business in a timely manner. When we upgrade or change systems, we may suffer interruptions in service, loss of data or reduced functionality. In addition, if our new systems fail to provide accurate pricing and cost data our results of operations and cash flows could be adversely affected.

We also rely on our information technology systems to process, transmit and store electronic information (including sensitive data such as confidential business information and personally identifiable data relating to employees, customers and other business partners) and to manage or support a variety of critical business processes and activities (such as interacting with suppliers, selling our products and services, fulfilling orders and billing, collecting and making payments, shipping products, providing services and support to customers, tracking customer activity, fulfilling contractual obligations and otherwise conducting business). Our systems may be vulnerable to damage or interruption from natural disasters, power loss, telecommunication failures, terrorist attacks, computer hackers, computer viruses, ransomware, phishing, computer denial-of-service attacks, unauthorized access to customer or employee data or company trade secrets, and other attempts to harm our systems. Certain of our systems are not redundant, and our disaster recovery planning is not sufficient for every eventuality. Despite any precautions we may take, such problems could result in, among other consequences, interruptions in our services, which could harm our reputation and financial results. Any of the cyber-attacks, breaches or other disruptions or damage described above, if significant, could materially interrupt our operations, delay production and shipments, result in theft of our and our customers' intellectual property and trade secrets, damage customer, business partner and employee relationships and our reputation or result in defective products or services, legal claims and proceedings, liability and penalties under privacy laws and increased cost for security and remediation, each of which could adversely affect our business and financial results.

If we are unable to maintain reliable information technology systems and appropriate controls with respect to global data privacy and security requirements and prevent data breaches, we may suffer regulatory consequences in addition to business consequences. As a global organization, we are subject to data privacy and security laws, regulations, and customer-imposed controls in numerous jurisdictions as a result of having access to and processing confidential, personal and/or sensitive data in the course of our business. For example, in the United States, individual states regulate data breach and security requirements and multiple governmental bodies assert authority over aspects of the protection of personal privacy. European laws require us to have an approved legal mechanism to transfer personal data out of Europe, and the EU General Data Protection Regulation imposes significantly stricter requirements in how we collect and process personal data. Several countries, such as China and Russia, have passed laws that require personal data relating to their citizens to be maintained on local servers and impose additional data transfer restrictions. Government enforcement actions can be costly and interrupt the regular operation of our business, and data breaches or violations of data privacy laws can result in fines, reputational damage and civil lawsuits, any of which may adversely affect our business, reputation and financial statements.

We have outstanding debt, and our debt will increase as a result of additional debt we expect to incur to finance the QIAGEN acquisition. Our existing and future indebtedness may restrict our investment opportunities or limit our activities and negatively impact our credit ratings. As of March 28, 2020, we had approximately $19.97 billion in outstanding indebtedness and in April 2020 we issued an additional $1.3 billion of senior notes. In addition, we have availability to borrow under a revolving credit facility that provides for up to $2.50 billion of unsecured multi-currency revolving credit. We expect to incur additional indebtedness to fund a portion of the purchase price of the QIAGEN acquisition. We may also obtain additional long-term debt and lines of credit to meet future financing needs, which would have the effect of increasing our total leverage.

Our leverage could have negative consequences, including increasing our vulnerability to adverse economic and industry conditions, limiting our ability to obtain additional financing and limiting our ability to acquire new products and technologies through strategic acquisitions.

Risk Factors (continued)

Our ability to make scheduled payments, refinance our obligations or obtain additional financing will depend on our future operating performance and on economic, financial, competitive and other factors beyond our control. Our business may not generate sufficient cash flow to meet our obligations. If we are unable to service our debt, refinance our existing debt or obtain additional financing, we may be forced to delay strategic acquisitions, capital expenditures or research and development expenditures.

Additionally, the agreements governing our debt require that we maintain certain financial ratios, and contain affirmative and negative covenants that restrict our activities by, among other limitations, limiting our ability to incur additional indebtedness, merge or consolidate with other entities, make investments, create liens, sell assets and enter into transactions with affiliates. The covenants in our revolving credit facility (the Facility) include a Consolidated Leverage Ratio (total debt-to-Consolidated EBITDA) and a Consolidated Interest Coverage Ratio (Consolidated EBITDA to Consolidated Interest Expense), as such terms are defined in the Facility. Specifically, the company has agreed that, so long as any lender has any commitment under the Facility, any letter of credit is outstanding under the Facility, or any loan or other obligation is outstanding under the Facility, it will maintain a maximum Consolidated Leverage Ratio of 3.5:1.0. The company has also agreed that so long as any lender has any commitment under the Facility or any letter of credit is outstanding under the Facility, or any loan or other obligation is outstanding under the Facility, it will maintain a minimum Consolidated Interest Coverage Ratio of 3.0:1.0 as of the last day of any fiscal quarter.

Our ability to comply with these financial restrictions and covenants is dependent on our future performance, which is subject to prevailing economic conditions and other factors, including factors that are beyond our control such as the impact of public health epidemics/pandemics, foreign exchange rates and interest rates. Our failure to comply with any of these restrictions or covenants may result in an event of default under the applicable debt instrument, which could permit acceleration of the debt under that instrument and require us to prepay that debt before its scheduled due date. Also, an acceleration of the debt under certain of our debt instruments would trigger an event of default under other of our debt instruments.

Regulatory approvals necessary for our acquisition of QIAGEN may not be received, may take longer than expected or may impose conditions that are not presently anticipated or that could have an adverse effect on the combined company following the QIAGEN acquisition. Before the QIAGEN acquisition may be completed, we must obtain certain required regulatory approvals, waivers or consents. These regulators may impose conditions on the completion of the transaction. Such conditions could have the effect of delaying or preventing completion of the transaction, causing us to incur additional costs or limiting the revenues of the combined company following the transaction, any of which might have an adverse effect on the combined company following the transaction.

Combining QIAGEN with us may be more difficult, costly or time consuming than expected and the anticipated benefits and cost savings of the transaction may not be fully realized. The success of the QIAGEN acquisition, including the realization of anticipated benefits and cost savings, will depend, in part, on our ability to successfully combine our and QIAGEN's businesses. The integration may be more difficult, costly or time consuming than expected. It is possible that the integration process could result in the loss of key employees or the disruption of each company's ongoing businesses or that the alignment of standards, controls, procedures and policies may adversely affect the combined company's ability to maintain relationships with clients, customers, suppliers and employees or to fully achieve the anticipated benefits and cost savings of the transaction. The loss of key employees could adversely affect our ability to successfully conduct our business in the markets in which QIAGEN now operates, which could have an adverse effect on our financial results and the price of the notes. Other potential difficulties of combining our and QIAGEN's businesses include unanticipated issues in integrating manufacturing, logistics, information communications and other systems.

If we experience difficulties with the integration process, the anticipated benefits of the QIAGEN acquisition may not be realized fully or at all, or may take longer to realize than expected. Integration efforts between the two companies may also divert management attention and resources. These integration matters could have an adverse effect on each of us and QIAGEN during this transition period and for an undetermined period after completion of the QIAGEN acquisition on the combined company.

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

Issuer Purchases of Equity Securities

A summary of the share repurchase activity for the company's first quarter of 2020 follows:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (1)	Maximum Dollar Amount of Shares That May Yet Be Purchased Under the Plans or Programs (1) (in millions)
Fiscal January (Jan. 1 - Feb. 1)	—		—	$ 2,500
Fiscal February (Feb. 2 - Feb. 29)	4,521,373	$ 331.76	4,521,373	1,000
Fiscal March (Mar. 1 - Mar. 28)	—		—	1,000
Total First Quarter	4,521,373	$ 331.76	4,521,373	$ 1,000

(1) On November 8, 2019, the Board of Directors authorized the repurchase of up to $2.50 billion of the company’s common stock. All of the shares of common stock repurchased by the company during the first quarter of 2020 were purchased under this program.

Item 6. Exhibits

See Exhibit Index on page 44.

SIGNATURES

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

Date: May 1, 2020

THERMO FISHER SCIENTIFIC INC.

/s/ Stephen Williamson

Stephen Williamson

Senior Vice President and Chief Financial Officer

/s/ Peter E. Hornstra

Peter E. Hornstra

Vice President and Chief Accounting Officer

THERMO FISHER SCIENTIFIC INC.
EXHIBIT INDEX

Exhibit Number	Description of Exhibit
2.1	Business Combination Agreement, dated as of March 3, 2020, between Thermo Fisher Scientific Inc. and QIAGEN N.V. (filed as Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed March 9, 2020 [File No. 1-8002] and incorporated in this document by reference).
3.1	Amended and Restated By-Laws of the Registrant, as amended and effective as of March 30, 2020 (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed April 2, 2020 [File No. 1-8002] and incorporated in this document by reference).
4.1	Twentieth Supplemental Indenture, dated as of March 25, 2020 between the Company, as issuer, and The Bank of New York Mellon Trust Company, N.A., as trustee (filed as Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed March 26, 2020 [File No. 1-8002] and incorporated in this document by reference).
4.2	Twenty-First Supplemental Indenture, dated as of April 2, 2020, between the Company, as issuer, and The Bank of New York Mellon Trust Company, N.A., as trustee (filed as Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed April 2, 2020 [File No. 1-8002] and incorporated in this document by reference).
10.1	Bridge Credit Agreement, dated as of April 17, 2020, among Thermo Fisher, each lender from time to time party thereto, and JPMorgan Chase Bank, N.A. (filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed April 23, 2020 [File No. 1-8002] and incorporated in this document by reference).
31.1	Certification of Chief Executive Officer required by Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer required by Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of Chief Executive Officer required by Exchange Act Rules 13a-14(b) and 15d-14(b), as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.**
32.2	Certification of Chief Financial Officer required by Exchange Act Rules 13a-14(b) and 15d-14(b), as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.**
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	XBRL Taxonomy Extension Schema Document.
101.CAL	XBRL Taxonomy Calculation Linkbase Document.
101.DEF	XBRL Taxonomy Definition Linkbase Document.
101.LAB	XBRL Taxonomy Label Linkbase Document.
101.PRE	XBRL Taxonomy Presentation Linkbase Document.
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).
	The Registrant agrees, pursuant to Item 601(b)(4)(iii)(A) of Regulation S-K, to furnish to the Commission, upon request, a copy of each instrument with respect to long-term debt of the Registrant or its consolidated subsidiaries.

* Indicates management contract or compensatory plan, contract or arrangement.
** Certification is not deemed "filed" for purposes of Section 18 of the Exchange Act or otherwise subject to the liability of that section. Such certification is not deemed to be incorporated by reference into any filing under the Securities Act or the Exchange Act except to the extent that the registrant specifically incorporates it by reference.

Exhibit 31.1

THERMO FISHER SCIENTIFIC INC.

CERTIFICATION REQUIRED BY EXCHANGE ACT RULES 13a-14(a) and 15d-14(a),
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Marc N. Casper, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Thermo Fisher Scientific Inc.;

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 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 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: May 1, 2020

/s/ Marc N. Casper

Marc N. Casper
Chairman, President and Chief Executive Officer

Exhibit 31.2

THERMO FISHER SCIENTIFIC INC.

CERTIFICATION REQUIRED BY EXCHANGE ACT RULES 13a-14(a) and 15d-14(a),
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Stephen Williamson, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Thermo Fisher Scientific Inc.;

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 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 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: May 1, 2020

/s/ Stephen Williamson

Stephen Williamson
Senior Vice President and Chief Financial Officer

Exhibit 32.1

THERMO FISHER SCIENTIFIC INC.

CERTIFICATION REQUIRED BY EXCHANGE ACT RULES 13a-14(b) and 15d-14(b),
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Thermo Fisher Scientific Inc. (the "Company") for the period ended March 28, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Marc N. Casper, Chairman, President and Chief Executive Officer of the Company, hereby certifies, pursuant to Securities Exchange Act of 1934 Rules 13a-14(b) and 15d-14(b), that:

(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.

Dated: May 1, 2020

/s/ Marc N. Casper

Marc N. Casper
Chairman, President and Chief Executive Officer

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 Thermo Fisher Scientific Inc. and will be retained by Thermo Fisher Scientific Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.2

THERMO FISHER SCIENTIFIC INC.

CERTIFICATION REQUIRED BY EXCHANGE ACT RULES 13a-14(b) and 15d-14(b),
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Thermo Fisher Scientific Inc. (the "Company") for the period ended March 28, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Stephen Williamson, Senior Vice President and Chief Financial Officer of the Company, hereby certifies, pursuant to Securities Exchange Act of 1934 Rules 13a-14(b) and 15d-14(b), that:

(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.

Dated: May 1, 2020

/s/ Stephen Williamson

Stephen Williamson
Senior Vice President and Chief Financial Officer

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 Thermo Fisher Scientific Inc. and will be retained by Thermo Fisher Scientific Inc. and furnished to the Securities and Exchange Commission or its staff upon request.