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

FORM 10-Q

☒ Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the quarterly period ended October 1, 2022 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
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 (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

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

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

Large accelerated filer ☒	Accelerated filer ☐	Non-accelerated filer ☐
Smaller reporting company ☐	Emerging growth company ☐	

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

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

As of October 1, 2022, the Registrant had 392,195,557 shares of Common Stock outstanding.

THERMO FISHER SCIENTIFIC INC.
QUARTERLY REPORT ON FORM 10-Q
FOR THE QUARTER ENDED OCTOBER 1, 2022
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PART I FINANCIAL INFORMATION

Item 1. Financial Statements

CONDENSED CONSOLIDATED BALANCE SHEET
(Unaudited)

(In millions except share and per share amounts)	October 1, 2022	December 31, 2021
Assets		
Current assets:		
Cash and cash equivalents	$ 2,919	$ 4,477
Accounts receivable, less allowances of $185 and $150	7,671	7,977
Inventories	5,722	5,051
Contract assets, net	1,248	968
Other current assets	1,739	1,640
Total current assets	19,299	20,113
Property, plant and equipment, net	8,628	8,333
Acquisition-related intangible assets, net	17,813	20,113
Other assets	4,308	4,640
Goodwill	40,488	41,924
Total assets	$ 90,536	$ 95,123
Liabilities, redeemable noncontrolling interest and equity		
Current liabilities:		
Short-term obligations and current maturities of long-term obligations	$ 1,010	$ 2,537
Accounts payable	2,471	2,867
Accrued payroll and employee benefits	1,864	2,427
Contract liabilities	2,567	2,655
Other accrued expenses	3,206	2,950
Total current liabilities	11,118	13,436
Deferred income taxes	3,140	3,837
Other long-term liabilities	4,401	4,540
Long-term obligations	28,150	32,333
Redeemable noncontrolling interest	119	122
Equity:		
Thermo Fisher Scientific Inc. shareholders' equity:		
Preferred stock, $100 par value, 50,000 shares authorized; none issued	—	—
Common stock, $1 par value, 1,200,000,000 shares authorized; 440,352,770 and 439,154,741 shares issued	440	439
Capital in excess of par value	16,596	16,174
Retained earnings	40,452	35,431
Treasury stock at cost, 48,157,213 and 44,720,112 shares	(11,011)	(8,922)
Accumulated other comprehensive items	(2,928)	(2,329)
Total Thermo Fisher Scientific Inc. shareholders' equity	43,549	40,793
Noncontrolling interests	59	62
Total equity	43,608	40,855
Total liabilities, redeemable noncontrolling interest and equity	$ 90,536	$ 95,123

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

THERMO FISHER SCIENTIFIC INC.

CONDENSED CONSOLIDATED STATEMENT OF INCOME
(Unaudited)

(In millions except per share amounts)	Three months ended		Nine months ended	
	October 1, 2022	October 2, 2021	October 1, 2022	October 2, 2021
Revenues				
Product revenues	$ 6,583	$ 7,360	$ 21,603	$ 22,430
Service revenues	4,094	1,970	11,862	6,079
Total revenues	10,677	9,330	33,465	28,509
Costs and operating expenses:				
Cost of product revenues	3,494	3,298	10,565	9,977
Cost of service revenues	2,881	1,381	8,535	4,148
Selling, general and administrative expenses	2,208	2,004	6,694	5,729
Research and development expenses	351	351	1,080	1,014
Restructuring and other costs	33	18	59	151
Total costs and operating expenses	8,967	7,052	26,933	21,019
Operating income	1,710	2,278	6,532	7,490
Interest income	68	9	122	32
Interest expense	(173)	(128)	(457)	(375)
Other income/(expense)	(4)	18	(139)	(168)
Income before income taxes	1,601	2,177	6,058	6,979
Provision for income taxes	(31)	(271)	(530)	(906)
Equity in earnings/(losses) of unconsolidated entities	(72)	(3)	(142)	(4)
Net income	1,498	1,903	5,386	6,069
Less: net income attributable to noncontrolling interests and redeemable noncontrolling interest	3	1	12	2
Net income attributable to Thermo Fisher Scientific Inc.	$ 1,495	$ 1,902	$ 5,374	$ 6,067
Earnings per share attributable to Thermo Fisher Scientific Inc.				
Basic	$ 3.82	$ 4.83	$ 13.72	$ 15.41
Diluted	$ 3.79	$ 4.79	$ 13.62	$ 15.29
Weighted average shares				
Basic	392	394	392	394
Diluted	395	397	395	397

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

THERMO FISHER SCIENTIFIC INC.

CONDENSED CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME
(Unaudited)

(In millions)	Three months ended		Nine months ended	
	October 1, 2022	October 2, 2021	October 1, 2022	October 2, 2021
Comprehensive income				
Net income	$ 1,498	$ 1,903	$ 5,386	$ 6,069
Other comprehensive items:				
Currency translation adjustment:				
Currency translation adjustment (net of tax provision (benefit) of $157, $74, $419 and $169)	(216)	(32)	(632)	121
Unrealized gains and losses on hedging instruments:				
Reclassification adjustment for losses included in net income (net of tax benefit of $0, $0, $1 and $5)	1	2	2	16
Pension and other postretirement benefit liability adjustments:				
Pension and other postretirement benefit liability adjustments arising during the period (net of tax (provision) benefit of $(3), $(1), $(6) and $(3))	4	3	13	7
Amortization of net loss included in net periodic pension cost (net of tax benefit of $0, $2, $2 and $4)	4	3	8	9
Total other comprehensive items	(207)	(24)	(609)	153
Comprehensive income	1,291	1,879	4,777	6,222
Less: comprehensive income/(loss) attributable to noncontrolling interests and redeemable noncontrolling interest	—	1	2	2
Comprehensive income attributable to Thermo Fisher Scientific Inc.	$ 1,291	$ 1,878	$ 4,775	$ 6,220

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

CONDENSED CONSOLIDATED STATEMENT OF CASH FLOWS
(Unaudited)

(In millions)	Nine months ended October 1, 2022	Nine months ended October 2, 2021
Operating activities		
Net income	$ 5,386	$ 6,069
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation of property, plant and equipment	730	614
Amortization of acquisition-related intangible assets	1,803	1,295
Change in deferred income taxes	(862)	(455)
Loss on early extinguishment of debt	26	197
Stock-based compensation	232	153
Other non-cash expenses, net	443	192
Changes in assets and liabilities, excluding the effects of acquisitions	(2,091)	(1,210)
Net cash provided by operating activities	5,667	6,855
Investing activities		
Acquisitions, net of cash acquired	(39)	(1,519)
Purchase of property, plant and equipment	(1,693)	(1,692)
Proceeds from sale of property, plant and equipment	18	9
Other investing activities, net	80	(38)
Net cash used in investing activities	(1,634)	(3,240)
Financing activities		
Net proceeds from issuance of debt	—	3,122
Repayment of debt	(375)	(2,803)
Proceeds from issuance of commercial paper	1,231	—
Repayments of commercial paper	(3,690)	—
Purchases of company common stock	(2,000)	(2,000)
Dividends paid	(338)	(292)
Net proceeds from issuance of company common stock under employee stock plans	57	101
Other financing activities, net	(86)	(14)
Net cash used in financing activities	(5,201)	(1,886)
Exchange rate effect on cash	(389)	(17)
(Decrease) increase in cash, cash equivalents and restricted cash	(1,557)	1,712
Cash, cash equivalents and restricted cash at beginning of period	4,491	10,336
Cash, cash equivalents and restricted cash at end of period	$ 2,934	$ 12,048

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

CONDENSED CONSOLIDATED STATEMENT OF REDEEMABLE NONCONTROLLING INTEREST AND EQUITY
(Unaudited)

(In millions)	Redeemable Noncontrolling Interest	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 Thermo Fisher Scientific Inc. Shareholders' Equity	Noncontrolling Interests	Total Equity
						Three months ended October 1, 2022					
Balance at July 2, 2022	$ 117	440	$ 440	$ 16,467	$ 39,074	48	$ (10,964)	$ (2,724)	$ 42,293	$ 61	$ 42,354
Issuance of shares under employees' and directors' stock plans	—	—	—	52	—	—	(47)	—	5	—	5
Stock-based compensation	—	—	—	77	—	—	—	—	77	—	77
Dividends declared ($0.30 per share)	—	—	—	—	(117)	—	—	—	(117)	—	(117)
Net income	5	—	—	—	1,495	—	—	—	1,495	(2)	1,493
Other comprehensive items	(3)	—	—	—	—	—	—	(204)	(204)	—	(204)
Balance at October 1, 2022	$ 119	440	$ 440	$ 16,596	$ 40,452	48	$ (11,011)	$ (2,928)	$ 43,549	$ 59	$ 43,608
						Three months ended October 2, 2021					
Balance at July 3, 2021	$ —	438	$ 438	$ 15,826	$ 32,076	45	$ (8,856)	$ (2,630)	$ 36,854	$ 47	$ 36,901
Issuance of shares under employees' and directors' stock plans	—	1	1	83	—	—	(55)	—	29	—	29
Stock-based compensation	—	—	—	51	—	—	—	—	51	—	51
Dividends declared ($0.26 per share)	—	—	—	—	(102)	—	—	—	(102)	—	(102)
Net income	—	—	—	—	1,902	—	—	—	1,902	1	1,903
Other comprehensive items	—	—	—	—	—	—	—	(24)	(24)	—	(24)
Contributions from (distributions to) noncontrolling interests	—	—	—	—	—	—	—	—	—	(1)	(1)
Balance at October 2, 2021	$ —	439	$ 439	$ 15,960	$ 33,876	45	$ (8,911)	$ (2,654)	$ 38,710	$ 47	$ 38,757

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

CONDENSED CONSOLIDATED STATEMENT OF REDEEMABLE NONCONTROLLING INTEREST AND EQUITY (Continued)
(Unaudited)

(In millions)	Redeemable Noncontrolling Interest	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 Thermo Fisher Scientific Inc. Shareholders' Equity	Noncontrolling Interests	Total Equity
						Nine months ended October 1, 2022					
Balance at December 31, 2021	$ 122	439	$ 439	$ 16,174	$ 35,431	45	$ (8,922)	$ (2,329)	$ 40,793	$ 62	$ 40,855
Issuance of shares under employees' and directors' stock plans	—	1	1	190	—	—	(89)	—	102	—	102
Stock-based compensation	—	—	—	232	—	—	—	—	232	—	232
Purchases of company common stock	—	—	—	—	—	3	(2,000)	—	(2,000)	—	(2,000)
Dividends declared ($0.90 per share)	—	—	—	—	(353)	—	—	—	(353)	—	(353)
Net income	14	—	—	—	5,374	—	—	—	5,374	(2)	5,372
Other comprehensive items	(10)	—	—	—	—	—	—	(599)	(599)	—	(599)
Contributions from (distributions to) noncontrolling interests	(7)	—	—	—	—	—	—	—	—	(1)	(1)
Balance at October 1, 2022	$ 119	440	$ 440	$ 16,596	$ 40,452	48	$ (11,011)	$ (2,928)	$ 43,549	$ 59	$ 43,608
						Nine months ended October 2, 2021					
Balance at December 31, 2020	$ —	437	$ 437	$ 15,579	$ 28,116	40	$ (6,818)	$ (2,807)	$ 34,507	$ 10	$ 34,517
Issuance of shares under employees' and directors' stock plans	—	2	2	228	—	1	(93)	—	137	—	137
Stock-based compensation	—	—	—	153	—	—	—	—	153	—	153
Purchases of company common stock	—	—	—	—	—	4	(2,000)	—	(2,000)	—	(2,000)
Dividends declared ($0.78 per share)	—	—	—	—	(307)	—	—	—	(307)	—	(307)
Net income	—	—	—	—	6,067	—	—	—	6,067	2	6,069
Other comprehensive items	—	—	—	—	—	—	—	153	153	—	153
Contributions from (distributions to) noncontrolling interests	—	—	—	—	—	—	—	—	—	35	35
Balance at October 2, 2021	$ —	439	$ 439	$ 15,960	$ 33,876	45	$ (8,911)	$ (2,654)	$ 38,710	$ 47	$ 38,757

The accompanying notes are an integral part of these condensed 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, increase laboratory productivity, and improve patient health through diagnostics and the development and manufacture of life-changing therapies. Markets served include pharmaceutical and biotech, academic and government, industrial and applied, as well as healthcare and diagnostics.

Interim Financial Statements

The interim condensed 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 October 1, 2022, the results of operations for the three- and nine-month periods ended October 1, 2022 and October 2, 2021, and the cash flows for the nine-month periods ended October 1, 2022 and October 2, 2021. Interim results are not necessarily indicative of results for a full year.

The condensed consolidated balance sheet presented as of December 31, 2021 has been derived from the audited consolidated financial statements as of that date. The condensed 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 condensed consolidated financial statements and notes included in this report should be read in conjunction with the 2021 financial statements and notes included in the company's Annual Report on Form 10-K filed with the Securities and Exchange Commission (SEC). Certain reclassifications of prior year amounts have been made to conform to the current year presentation.

Note 1 to the consolidated financial statements for 2021 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 nine months ended October 1, 2022.

Inventories

The components of inventories are as follows:

(In millions)	October 1, 2022	December 31, 2021
Raw materials	$ 2,405	$ 1,922
Work in process	677	676
Finished goods	2,640	2,453
Inventories	$ 5,722	$ 5,051

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. The negative impacts associated with the ongoing COVID-19 global pandemic significantly lessened in 2021 and 2022. The extent and duration of negative impacts in the future, which may include inflationary pressures and supply chain disruptions, are uncertain and may require changes to estimates. Actual results could differ from those estimates.

Recent Accounting Pronouncements

In November 2021, the FASB issued new guidance to require entities to disclose information about certain types of government assistance they receive, including cash grants and tax credits. Among other things, the new guidance requires expanded disclosure regarding the qualitative and quantitative characteristics of the nature, amount, timing, and significant terms and conditions of transactions with a government arising from a grant or other forms of assistance accounted for under a contribution model. The company will adopt this guidance in the fourth quarter of 2022 using a prospective method. The adoption of this guidance is not expected to have a material impact on the company's disclosures; however, the impact in future periods will be dependent on the extent of transactions of this nature entered into by the company.

In September 2022, the FASB issued new guidance to require entities to disclose information about supplier finance programs. Among other things, the new guidance requires expanded disclosure about key program terms, payment terms, and amounts outstanding for obligations under these programs for each period presented. The company will adopt some aspects of this guidance in 2023 using a retrospective method and other aspects in 2024 using a prospective method. The adoption of this guidance is not expected to have a material impact on the company's disclosures; however, the impact in future periods will be dependent on the extent of arrangements of this nature entered into by the company.

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 and the benefits that will be gained from the assembled workforces. 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 services; and use of the commercial infrastructure of the acquired businesses to cost-effectively expand sales of company products and services.

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.

Pending Acquisition

The company has entered into an agreement to acquire The Binding Site Group for £2.25 billion, payable as €2.59 billion in cash. The Binding Site Group provides specialty diagnostic assays and instruments to improve the diagnosis and management of blood cancers and immune system disorders. The transaction is subject to customary closing conditions, including regulatory approvals. Upon completion, The Binding Site Group will become part of the Specialty Diagnostics segment.

2022

In 2022, the company acquired, within the Analytical Instruments segment, a U.S.-based developer of Fourier-transform infrared gas analysis technologies.

2021

The preliminary allocations of the purchase price for the acquisitions of PPD, Inc. and PeproTech, Inc. were based on estimates of the fair values of the net assets acquired and are subject to adjustment upon finalization, largely with respect to acquired intangible assets, lease assets and liabilities, and the related deferred taxes. Measurements of these items inherently require significant estimates and assumptions. During the first nine months of 2022, the company adjusted the preliminary allocations of PPD and PeproTech, which among others increased goodwill ($122 million) and other liabilities assumed ($35 million), and decreased definite-lived intangible assets ($43 million), property, plant and equipment ($39 million), other current assets ($38 million), contract liabilities ($29 million), equity method investments ($23 million), and the fair value of assumed contingent consideration ($18 million). The adjustments to depreciation and amortization expenses recorded during the first nine months of 2022 were not material.

Note 3. Revenues and Contract-related Balances

Disaggregated Revenues

Revenues by type are as follows:

	Three months ended		Nine months ended	
(In millions)	October 1, 2022	October 2, 2021	October 1, 2022	October 2, 2021
Revenues				
Consumables	$ 4,651	$ 5,544	$ 15,754	$ 16,880
Instruments	1,932	1,816	5,849	5,550
Services	4,094	1,970	11,862	6,079
Consolidated revenues	$ 10,677	$ 9,330	$ 33,465	$ 28,509

Revenues by geographic region based on customer location are as follows:

	Three months ended		Nine months ended	
(In millions)	October 1, 2022	October 2, 2021	October 1, 2022	October 2, 2021
Revenues				
North America	$ 5,962	$ 4,662	$ 18,317	$ 14,292
Europe	2,406	2,557	8,007	8,037
Asia-Pacific	1,971	1,836	6,077	5,294
Other regions	338	275	1,064	886
Consolidated revenues	$ 10,677	$ 9,330	$ 33,465	$ 28,509

Each reportable segment earns revenues from consumables, instruments and services in North America, Europe, Asia-Pacific and other regions. See Note 4 for revenues 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 October 1, 2022 was $26.61 billion. The company will recognize revenues for these performance obligations as they are satisfied, approximately 57% of which is expected to occur within the next twelve months. Amounts expected to occur thereafter generally relate to contract manufacturing, clinical research and extended warranty service agreements, which typically have durations of three to five years.

Contract-related Balances

Noncurrent contract assets and noncurrent contract liabilities are included within other assets and other long-term liabilities in the accompanying balance sheet, respectively. Contract asset and liability balances are as follows:

(In millions)	October 1, 2022	December 31, 2021
Current contract assets, net	$ 1,248	$ 968
Noncurrent contract assets, net	9	9
Current contract liabilities	2,567	2,655
Noncurrent contract liabilities	1,200	1,238

In the three and nine months ended October 1, 2022, the company recognized revenues of $0.34 billion and $2.33 billion, respectively, that were included in the contract liabilities balance at December 31, 2021. In the three and nine months ended October 2, 2021, the company recognized revenues of $0.17 billion and $1.10 billion, respectively, that were included in the contract liabilities balance at December 31, 2020.

Note 4. Business Segment and Geographical Information

Business Segment Information

(In millions)	Three months ended October 1, 2022	Three months ended October 2, 2021	Nine months ended October 1, 2022	Nine months ended October 2, 2021
Revenues				
Life Sciences Solutions	$ 2,962	$ 3,721	$ 10,485	$ 11,481
Analytical Instruments	1,621	1,476	4,746	4,344
Specialty Diagnostics	1,065	1,362	3,648	4,212
Laboratory Products and Biopharma Services	5,585	3,487	16,564	10,667
Eliminations	(556)	(716)	(1,978)	(2,195)
Consolidated revenues	10,677	9,330	33,465	28,509
Segment Income				
Life Sciences Solutions	1,039	1,821	4,542	5,818
Analytical Instruments	386	264	1,031	816
Specialty Diagnostics	220	310	816	983
Laboratory Products and Biopharma Services	725	383	2,036	1,360
Subtotal reportable segments	2,370	2,778	8,425	8,977
Cost of revenues adjustments	(22)	—	(41)	(8)
Selling, general and administrative expenses adjustments	(11)	(59)	10	(33)
Restructuring and other costs	(33)	(18)	(59)	(151)
Amortization of acquisition-related intangible assets	(594)	(423)	(1,803)	(1,295)
Consolidated operating income	1,710	2,278	6,532	7,490
Interest income	68	9	122	32
Interest expense	(173)	(128)	(457)	(375)
Other income/(expense)	(4)	18	(139)	(168)
Consolidated income before taxes	$ 1,601	$ 2,177	$ 6,058	$ 6,979

Cost of revenues adjustments included in the above table consist of charges for the sale of inventories revalued at the date of acquisition and inventory write-downs associated with large-scale abandonments of product lines. Selling, general and administrative expenses adjustments included in the above table consist of third-party transaction/integration costs related to recent acquisitions, charges/credits for changes in estimates of contingent acquisition consideration, and charges associated with product liability litigation.

Geographical Information

Revenues by country based on customer location are as follows:

(In millions)	Three months ended October 1, 2022	Three months ended October 2, 2021	Nine months ended October 1, 2022	Nine months ended October 2, 2021
Revenues				
United States	$ 5,787	$ 4,495	$ 17,730	$ 13,742
China	954	885	2,865	2,454
Other	3,936	3,950	12,870	12,313
Consolidated revenues	$ 10,677	$ 9,330	$ 33,465	$ 28,509

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:

	Nine months ended	
(In millions)	October 1, 2022	October 2, 2021
Statutory federal income tax rate	21 %	21 %
Provision for income taxes at statutory rate	$ 1,272	$ 1,466
Increases (decreases) resulting from:		
Foreign rate differential	(285)	(159)
Income tax credits	(118)	(205)
Global intangible low-taxed income	126	45
Foreign-derived intangible income	(102)	(114)
Excess tax benefits from stock options and restricted stock units	(63)	(96)
Provision for (reversal of) tax reserves, net	(543)	22
Intra-entity transfers	(18)	(258)
Valuation allowances	240	18
Withholding taxes	48	106
Tax return reassessments and settlements	(94)	1
State income taxes, net of federal tax	133	115
Other, net	(66)	(35)
Provision for income taxes	$ 530	$ 906

During the third quarter of 2022, the company settled an IRS audit relating to the 2017 and 2018 tax years. The company recorded a $208 million net tax benefit primarily from this settlement and related impacts, which resulted in a decrease in the company's unrecognized tax benefits of $658 million. The company recorded $49 million of charges for expired tax credits and other related components of the settlement. The company recorded a charge of $395 million to establish a valuation allowance against certain U.S. foreign tax credits which the company believes will more likely than not expire unutilized. The company also recorded $101 million of additional net unrecognized tax benefit liabilities related to other tax audits.

The company has operations and a taxable presence in approximately 70 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 October 1, 2022 the company had $0.56 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)	2022
Balance at beginning of year	$ 1,124
Additions for tax positions of current year	104
Additions for tax positions of prior years	24
Reductions for tax positions of prior years	(659)
Closure of tax years	(2)
Settlements	(32)
Balance at end of period	$ 559

Note 6. Earnings per Share

	Three months ended		Nine months ended	
(In millions except per share amounts)	October 1, 2022	October 2, 2021	October 1, 2022	October 2, 2021
Net income attributable to Thermo Fisher Scientific Inc.	$ 1,495	$ 1,902	$ 5,374	$ 6,067
Basic weighted average shares	392	394	392	394
Plus effect of: stock options and restricted stock units	3	3	3	3
Diluted weighted average shares	395	397	395	397
Basic earnings per share	$ 3.82	$ 4.83	$ 13.72	$ 15.41
Diluted earnings per share	$ 3.79	$ 4.79	$ 13.62	$ 15.29
Antidilutive stock options excluded from diluted weighted average shares	2	—	2	1

Note 7. Debt and Other Financing Arrangements

(Dollars in millions)	Effective interest rate at October 1, 2022	October 1, 2022	December 31, 2021
Commercial Paper		$ —	$ 2,522
Floating Rate (SOFR + 0.35%) 1.5-Year Senior Notes, Due 4/18/2023		1,000	1,000
Floating Rate (SOFR + 0.39%) 2-Year Senior Notes, Due 10/18/2023		500	500
0.797% 2-Year Senior Notes, Due 10/18/2023	1.04 %	1,350	1,350
Floating Rate (EURIBOR + 0.20%) 2-Year Senior Notes Due 11/18/2023 (euro-denominated)	0.39 %	1,666	1,933
0.000% 2-Year Senior Notes Due 11/18/2023 (euro-denominated)	0.05 %	540	625
0.75% 8-Year Senior Notes, Due 9/12/2024 (euro-denominated)	0.92 %	980	1,137
1.215% 3-Year Senior Notes, Due 10/18/2024	1.42 %	2,500	2,500
Floating Rate (SOFR + 0.53%) 3-Year Senior Notes, Due 10/18/2024		500	500
0.125% 5.5-Year Senior Notes, Due 3/1/2025 (euro-denominated)	0.39 %	784	910
2.00% 10-Year Senior Notes, Due 4/15/2025 (euro-denominated)	2.09 %	627	728
0.000% 4-Year Senior Notes, Due 11/18/2025 (euro-denominated)	0.13 %	540	625
3.65% 10-Year Senior Notes, Due 12/15/2025		—	350
1.40% 8.5-Year Senior Notes, Due 1/23/2026 (euro-denominated)	1.52 %	686	796
1.45% 10-Year Senior Notes, Due 3/16/2027 (euro-denominated)	1.64 %	490	568
1.75% 7-Year Senior Notes, Due 4/15/2027 (euro-denominated)	1.95 %	588	682
0.50% 8.5-Year Senior Notes, Due 3/1/2028 (euro-denominated)	0.76 %	784	910
1.375% 12-Year Senior Notes, Due 9/12/2028 (euro-denominated)	1.46 %	588	682
1.75% 7-Year Senior Notes, Due 10/15/2028	1.89 %	700	700
1.95% 12-Year Senior Notes, Due 7/24/2029 (euro-denominated)	2.07 %	686	796
2.60% 10-Year Senior Notes, Due 10/1/2029	2.74 %	900	900
0.80% 9-Year Senior Notes, Due 10/18/2030 (euro-denominated)	0.87 %	1,715	1,990
0.875% 12-Year Senior Notes, Due 10/1/2031 (euro-denominated)	1.12 %	882	1,023
2.00% 10-Year Senior Notes, Due 10/15/2031	2.23 %	1,200	1,200
2.375% 12-Year Senior Notes, Due 4/15/2032 (euro-denominated)	2.53 %	588	682
1.125% 12-Year Senior Notes, Due 10/18/2033 (euro-denominated)	1.19 %	1,470	1,706
2.875% 20-Year Senior Notes, Due 7/24/2037 (euro-denominated)	2.94 %	686	796

(Dollars in millions)	Effective interest rate at October 1, 2022	October 1, 2022	December 31, 2021
1.50% 20-Year Senior Notes, Due 10/1/2039 (euro-denominated)	1.73 %	882	1,023
2.80% 20-Year Senior Notes, Due 10/15/2041	2.90 %	1,200	1,200
1.625% 20-Year Senior Notes, Due 10/18/2041 (euro-denominated)	1.75 %	1,225	1,421
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)	1.97 %	980	1,137
2.00% 30-Year Senior Notes, Due 10/18/2051 (euro-denominated)	2.06 %	735	853
Other		72	76
Total borrowings at par value		29,194	34,971
Unamortized discount		(101)	(117)
Unamortized debt issuance costs		(152)	(184)
Total borrowings at carrying value		28,941	34,670
Finance lease liabilities		219	200
Less: Short-term obligations and current maturities		1,010	2,537
Long-term obligations		$ 28,150	$ 32,333

SOFR - Secured Overnight Financing Rate
EURIBOR - Euro Interbank Offered Rate

The effective interest rates for the fixed-rate debt include the stated interest on the notes, the accretion of any discounts/premiums and the amortization of any debt issuance costs.

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

Credit Facilities

The company has a revolving credit facility (the Facility) with a bank group that provides for up to $5.00 billion of unsecured multi-currency revolving credit. The Facility expires on January 7, 2027. The revolving credit agreement calls for interest at either a Term SOFR, 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 the Facility include a Consolidated Net Interest Coverage Ratio (Consolidated EBITDA to Consolidated Net 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 minimum Consolidated Net Interest Coverage Ratio of 3.5:1.0 as of the last day of any fiscal quarter. As of October 1, 2022, no borrowings were outstanding under the Facility, although available capacity was reduced by immaterial 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 October 1, 2022, there were no outstanding borrowings under these programs.

Senior Notes

Interest is payable quarterly on the floating rate senior notes, annually on the euro-denominated fixed rate senior notes and semi-annually on all other senior notes. Each of the fixed rate senior notes may be redeemed at a redemption price of 100% of the principal amount plus a specified make-whole premium and accrued interest. Except for the euro-denominated floating rate senior notes, which may not be redeemed early, the floating rate senior notes may be redeemed in whole or in part on or after their applicable call dates at a redemption price of 100% of the principal amount plus 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. The company was in compliance with all covenants at October 1, 2022.

In the first quarter of 2022, the company redeemed all of its 3.650% Senior Notes due 2025. In connection with the redemption, the company incurred $26 million of losses on the early extinguishment of debt included in other income/(expense) on the accompanying statement of income.

Thermo Fisher Scientific (Finance I) B.V. (Thermo Fisher International), a wholly-owned finance subsidiary of the company, issued each of the Floating Rate Senior Notes due 2023, the 0.00% Senior Notes due 2023, the 0.00% Senior Notes due 2025, the 0.80% Senior Notes due 2030, the 1.125% Senior Notes due 2033, the 1.625% Senior Notes due 2041, and the 2.00% Senior Notes due 2051 included in the table above (collectively, the "Euronotes") in registered public offerings. The company has fully and unconditionally guaranteed all of Thermo Fisher International's obligations under the Euronotes and all of Thermo Fisher International's other debt securities, and no other subsidiary of the company will guarantee these obligations. Thermo Fisher International is a "finance subsidiary" as defined in Rule 13-01(a)(4)(vi) of the Exchange Act, with no assets or operations other than those related to the issuance, administration and repayment of the Euronotes and other debt securities issued by Thermo Fisher International from time to time. The financial condition, results of operations and cash flows of Thermo Fisher International are consolidated in the financial statements of the company.

October 2022 Debt Issuances

In the fourth quarter of 2022, the company issued the following senior notes:

(In millions)		Principal Value Issued
0.853% 3-Year Senior Notes, Due 10/20/2025 (yen-denominated)	¥	22,300
1.054% 5-Year Senior Notes, Due 10/20/2027 (yen-denominated)	¥	28,900
1.279% 7-Year Senior Notes, Due 10/19/2029 (yen-denominated)	¥	4,700
1.490% 10-Year Senior Notes, Due 10/20/2032 (yen-denominated)	¥	6,300
2.069% 20-Year Senior Notes, Due 10/20/2042 (yen-denominated)	¥	14,600
2.382% 30-Year Senior Notes, Due 10/18/2052 (yen-denominated)	¥	33,300

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. At October 1, 2022, there have been no material changes to the accruals for pending environmental-related matters disclosed in the company's 2021 financial statements and notes included in the company's Annual Report on Form 10-K. 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 and cash flows.

Litigation and Related Contingencies

The company is involved in various disputes, governmental and/or regulatory inspections, inquiries, investigations and proceedings, and litigation matters that arise from time to time in the ordinary course of business. The disputes and litigation matters include product liability, intellectual property, employment and commercial issues. 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 in the company's 2021 financial statements and notes included in the company's Annual Report on Form 10-K, 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

The company is involved in various proceedings and litigation that arise from time to time in connection with product liability, workers compensation and other personal injury matters. At October 1, 2022, there have been no material changes to the accruals for pending product liability, workers compensation, and other personal injury matters disclosed in the company's 2021 financial statements and notes included in the company's Annual Report on Form 10-K. Although the company believes that the amounts accrued and estimated insurance 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, which could have a material adverse effect on the company's results of operations, financial position, and cash flows. 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.

Note 9. Comprehensive Income and Shareholders' Equity

Comprehensive Income (Loss)

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, 2021	$ (2,065)	$ (35)	$ (229)	$ (2,329)
Other comprehensive items before reclassifications	(632)	—	13	(619)
Amounts reclassified from accumulated other comprehensive items	10	2	8	20
Net other comprehensive items	(622)	2	21	(599)
Balance at October 1, 2022	$ (2,687)	$ (33)	$ (208)	$ (2,928)

Shareholders' Equity

In the fourth quarter of 2022, the company repurchased $1.00 billion of the company's common stock (2.0 million shares).

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:

(In millions)	October 1, 2022	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Assets				
Cash equivalents	$ 1,395	$ 1,395	$ —	$ —
Investments	48	48	—	—
Warrants	12	—	12	—
Insurance contracts	152	—	152	—
Derivative contracts	167	—	167	—
Total assets	$ 1,774	$ 1,443	$ 331	$ —
Liabilities				
Derivative contracts	$ 2	$ —	$ 2	$ —
Contingent consideration	168	—	—	168
Total liabilities	$ 170	$ —	$ 2	$ 168

(In millions)	December 31, 2021	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Assets				
Cash equivalents	$ 2,210	$ 2,210	$ —	$ —
Investments	298	298	—	—
Warrants	15	—	15	—
Insurance contracts	181	—	181	—
Derivative contracts	36	—	36	—
Total assets	$ 2,740	$ 2,508	$ 232	$ —
Liabilities				
Derivative contracts	$ 1	$ —	$ 1	$ —
Contingent consideration	317	—	—	317
Total liabilities	$ 318	$ —	$ 1	$ 317

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 initially measures the fair value of acquisition-related contingent consideration based on amounts expected to be transferred (probability-weighted) discounted to present value. Changes to the fair value of contingent consideration are recorded in selling, general and administrative expense.

In the three and nine months ended October 1, 2022, the company recorded $13 million and $136 million, respectively, of net losses on investments which are included in other income/(expense) in the accompanying statement of income. In the three and nine months ended October 2, 2021, the company recorded $25 million and $23 million, respectively, of net gains on investments which are included in other income/(expense) in the accompanying statement of income.

The following table provides a rollforward of the fair value, as determined by level 3 inputs (such as likelihood of achieving production or revenue milestones, as well as changes in the fair values of the investments underlying a recapitalization investment portfolio), of the contingent consideration.

	Three months ended		Nine months ended	
(In millions)	October 1, 2022	October 2, 2021	October 1, 2022	October 2, 2021
Contingent consideration				
Beginning balance	$ 216	$ 149	$ 317	$ 70
Acquisitions (including assumed balances)	—	—	(18)	179
Payments	(32)	(1)	(64)	(43)
Changes in fair value included in earnings	(16)	23	(67)	(35)
Ending balance	$ 168	$ 171	$ 168	$ 171

Derivative Contracts

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

(In millions)	October 1, 2022	December 31, 2021
Notional amount		
Cross-currency interest rate swaps - designated as net investment hedges	$ 900	$ 900
Currency exchange contracts	1,676	2,149

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

	Fair value – assets		Fair value – liabilities	
(In millions)	October 1, 2022	December 31, 2021	October 1, 2022	December 31, 2021
Derivatives designated as hedging instruments				
Cross-currency interest rate swaps (a)	$ 145	$ 25	$ —	$ —
Derivatives not designated as hedging instruments				
Currency exchange contracts (b)	22	11	2	1
Total derivatives	$ 167	$ 36	$ 2	$ 1

(a) The fair value of the cross-currency interest rate swaps is included in the accompanying 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 accompanying balance sheet under the captions other current assets or other accrued expenses.

	Gain (loss) recognized			
	Three months ended		Nine months ended	
(In millions)	October 1, 2022	October 2, 2021	October 1, 2022	October 2, 2021
Fair value hedging relationships				
Interest rate swaps				
Hedged long-term obligations - included in other income/(expense)	$ —	$ —	$ —	$ 25
Derivatives designated as hedging instruments - included in other income/(expense)	—	—	—	(3)
Derivatives designated as cash flow hedges				
Interest rate swaps				
Amount reclassified from accumulated other comprehensive items to other income/(expense)	(1)	(2)	(3)	(21)

	Gain (loss) recognized			
	Three months ended		Nine months ended	
(In millions)	October 1, 2022	October 2, 2021	October 1, 2022	October 2, 2021
Financial instruments designated as net investment hedges				
Foreign currency-denominated debt and other payables				
Included in currency translation adjustment within other comprehensive items	658	297	1,691	673
Cross-currency interest rate swaps				
Included in currency translation adjustment within other comprehensive items	46	20	120	52
Included in other income/(expense)	6	2	12	6
Derivatives not designated as hedging instruments				
Currency exchange contracts				
Included in cost of product revenues	3	7	15	8
Included in other income/(expense)	20	(8)	32	147

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

The company uses foreign currency-denominated debt, certain foreign-denominated payables, and cross-currency interest rate swaps to partially hedge its net investments in foreign operations against adverse movements in exchange rates. A portion of the company's euro-denominated senior notes, certain foreign-denominated payables, and 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 certain foreign-denominated payables, 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.

See Note 1 to the consolidated financial statements for 2021 included in the company's Annual Report on Form 10-K for additional information on the company's risk management objectives and strategies.

Fair Value of Other Financial Instruments

The carrying value and fair value of the company's debt instruments are as follows:

	October 1, 2022		December 31, 2021	
(In millions)	Carrying value	Fair value	Carrying value	Fair value
Senior notes	$ 28,869	$ 25,036	$ 32,072	$ 33,449
Commercial paper	—	—	2,522	2,522
Other	72	72	76	76
	$ 28,941	$ 25,108	$ 34,670	$ 36,047

The fair value of debt instruments 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

(In millions)	Nine months ended October 1, 2022	Nine months ended October 2, 2021
Non-cash investing and financing activities		
Acquired but unpaid property, plant and equipment	$ 213	$ 257
Fair value of acquisition contingent consideration	—	179
Declared but unpaid dividends	119	104
Issuance of stock upon vesting of restricted stock units	225	237

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

(In millions)	October 1, 2022	December 31, 2021
Cash and cash equivalents	$ 2,919	$ 4,477
Restricted cash included in other current assets	14	13
Restricted cash included in other assets	1	1
Cash, cash equivalents and restricted cash	$ 2,934	$ 4,491

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

In the first nine months of 2022, restructuring and other costs primarily included impairment of long-lived assets and continuing charges for headcount reductions and facility consolidations in an effort to streamline operations. In 2022, severance actions associated with facility consolidations and cost reduction measures affected approximately 0.5% of the company's workforce.

As of November 4, 2022, the company has identified restructuring actions that will result in additional charges of approximately $85 million, primarily in 2022 and 2023, and expects to identify additional actions in future periods which will be recorded when specified criteria are met, such as communication of benefit arrangements or when the costs have been incurred.

Restructuring and other costs by segment are as follows:

(In millions)	Three months ended October 1, 2022	Nine months ended October 1, 2022
Life Sciences Solutions	$ 5	$ 11
Analytical Instruments	2	6
Specialty Diagnostics	19	22
Laboratory Products and Biopharma Services	7	20
	$ 33	$ 59

The following table summarizes the changes in the company's accrued restructuring balance, which is included in other accrued expenses in the accompanying balance sheet. Other amounts reported as restructuring and other costs in the accompanying statement of income have been summarized in the notes to the table.

(In millions)	Total (a)
Balance at December 31, 2021	$ 17
Net restructuring charges incurred in 2022 (b)	31
Payments	(30)
Currency translation	(1)
Balance at October 1, 2022	$ 17

(a) The movements in the restructuring liability principally consist of severance and other costs such as 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) Excludes $28 million of net non-cash charges, primarily charges for impairment of long-lived assets.

The company expects to pay accrued restructuring costs primarily through 2022.

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 (the Exchange Act), 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 revenues, expenses, earnings, margins, tax rates, tax provisions, cash flows, pension and benefit obligations and funding requirements, and 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; the expected impact of the COVID-19 pandemic on the company's business; 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 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 caption "Risk Factors" in the company's Annual Report on Form 10-K for the year ended December 31, 2021 (which is on file with the SEC). Important factors that could cause actual results to differ materially from those indicated by forward-looking statements include risks and uncertainties relating to: the duration and severity of the COVID-19 pandemic; the need to develop new products and adapt to significant technological change; implementation of strategies for improving growth; general economic conditions and related uncertainties; dependence on customers' capital spending policies and government funding policies; the effect of economic and political conditions and exchange rate fluctuations on international operations; use and protection of intellectual property; the effect of changes in governmental regulations; any natural disaster, public health crisis or other catastrophic event; and the effect of laws and regulations governing government contracts, as well as the possibility that expected benefits related to recent or pending acquisitions may not materialize as expected.

The company refers to various amounts or measures not prepared in accordance with generally accepted accounting principles (non-GAAP measures). These non-GAAP measures are further described and reconciled to their most directly comparable amount or measure under the section "Non-GAAP Measures" later in this "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Overview

Thermo Fisher Scientific Inc. enables customers to make the world healthier, cleaner and safer by helping them accelerate life sciences research, solve complex analytical challenges, increase laboratory productivity, and improve patient health through diagnostics and the development and manufacture of life-changing therapies. Markets served include pharmaceutical and biotech, academic and government, industrial and applied, as well as healthcare and diagnostics. The company's operations fall into four segments (Note 4): Life Sciences Solutions, Analytical Instruments, Specialty Diagnostics and Laboratory Products and Biopharma Services.

Consolidated Results

(Dollars in millions except per share amounts)	Three months ended October 1, 2022	Three months ended October 2, 2021	Change	Nine months ended October 1, 2022	Nine months ended October 2, 2021	Change
Revenues	$ 10,677	$ 9,330	14 %	$ 33,465	$ 28,509	17 %
GAAP operating income	1,710	2,278	(25) %	6,532	7,490	(13) %
GAAP operating income margin	16.0 %	24.4 %	(8.4) pt	19.5 %	26.3 %	(6.8) pt
Adjusted operating income *(non-GAAP measure)*	2,370	2,778	(15) %	8,425	8,977	(6) %
Adjusted operating income margin *(non-GAAP measure)*	22.2 %	29.8 %	(7.6) pt	25.2 %	31.5 %	(6.3) pt
GAAP diluted earnings per share attributable to Thermo Fisher Scientific Inc.	3.79	4.79	(21) %	13.62	15.29	(11) %
Adjusted earnings per share *(non-GAAP measure)*	5.08	5.77	(12) %	17.84	18.58	(4) %

Organic Revenue Growth

	Three months ended October 1, 2022	Nine months ended October 1, 2022
Revenue growth	14 %	17 %
Impact of acquisitions	20 %	19 %
Impact of currency translation	(5)%	(3)%
Organic revenue growth* *(non-GAAP measure)*	(1)%	1 %

* Results may not sum due to rounding

Since 2020, the Life Sciences Solutions and Specialty Diagnostics segments as well as the laboratory products business have supported COVID-19 diagnostic testing, scaling and evolving their molecular diagnostics solutions and plastic consumables businesses to respond to the ongoing COVID-19 pandemic. The biosciences and bioproduction businesses have expanded their capacity to meet the needs of pharma and biotech customers as they have expanded their own production volumes to meet global vaccine manufacturing requirements. Additionally, our pharma services business has provided our pharma and biotech customers with the services they needed to develop and produce vaccines and therapies globally. While these positive impacts are expected to continue through 2022, the duration and extent of future revenues from such sales are uncertain and dependent primarily on customer testing as well as therapy and vaccine demand. Sales of products related to COVID-19 testing were $0.44 billion and $1.57 billion in the third quarter of 2022 and 2021, respectively, and $2.75 billion and $5.44 billion in the first nine months of 2022 and 2021, respectively.

During the third quarter and first nine months of 2022, demand from pharma and biotech customers was very strong, driven by our unique value proposition and trusted partner status. We saw growth in the academic and government market as we remain well positioned to meet customer needs. The industrial and applied market was strong, driven by robust demand for our analytical instruments. The diagnostics and healthcare market declined due to decreased demand for COVID-19 testing products. During the third quarter and first nine months of 2022, strong sales growth in North America and the Asia Pacific region, including China, was partially offset by a decline in COVID-19 testing demand. In Europe, sales declined during the third quarter and first nine months of 2022 due to lower COVID-19 testing demand. Contributions to organic revenue during the third quarter and first nine months of 2022 were driven by the Laboratory Products and Biopharma Services and Analytical Instruments segments, as offset by the Life Sciences Solutions and Specialty Diagnostics segments.

The company continues to execute its proven growth strategy which consists of three pillars:

- Developing high-impact, innovative new products,
- Leveraging our scale in high-growth and emerging markets, and
- Delivering a unique value proposition to our customers.

GAAP operating income margin and adjusted operating income margin decreased in the third quarter and first nine months of 2022 due primarily to lower COVID-19 testing volumes, continued strategic growth investments, and the expected impact of incorporating recent acquisitions. This was partially offset by strong pricing realization across all segments to address higher inflation while also driving strong productivity. GAAP operating income margin in 2022 was also impacted by higher amortization expense as a result of 2021 acquisitions.

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, research and development projects and other expenditures to enhance the customer experience, as well as incentive compensation and recognition for employees. The company's references throughout this discussion to productivity improvements generally refer to improved cost efficiencies from its Practical Process Improvement (PPI) business system including reduced costs resulting from implementing continuous improvement methodologies, global sourcing initiatives, a lower cost structure following restructuring actions, including headcount reductions and consolidation of facilities, and low cost region manufacturing.

Notable Recent Acquisitions

On January 15, 2021, the company acquired, within the Laboratory Products and Biopharma Services segment, the Belgium-based European viral vector manufacturing business of Groupe Novasep SAS for $0.83 billion in net cash consideration. The European viral vector manufacturing business provides manufacturing services for vaccines and therapies to biotechnology companies and large biopharma customers. The acquisition expands the segment's capabilities for cell and gene vaccines and therapies.

On February 25, 2021, the company acquired, within the Life Sciences Solutions segment, Mesa Biotech, Inc., a U.S.-based molecular diagnostic company, for $0.41 billion in net cash consideration and contingent consideration with an initial fair value of $0.06 billion due upon the completion of certain milestones. Mesa Biotech has developed and commercialized a PCR based rapid point-of-care testing platform available for detecting infectious diseases including COVID-19. The acquisition enables the company to accelerate the availability of reliable and accurate advanced molecular diagnostics at the point of care.

On September 30, 2021, the company assumed operating responsibility, within the Laboratory Products and Biopharma Services segment, of a new state-of-the-art biologics manufacturing facility in Lengnau, Switzerland from CSL Limited to perform pharma services for CSL with capacity to serve other customers as well. The company expects to make fixed lease payments aggregating to $0.56 billion (excluding renewals) from 2021 to 2041, with additional amounts dependent on the extent of revenues from customers of the facility other than CSL.

On December 8, 2021, the company acquired, within the Laboratory Products and Biopharma Services segment, PPD, Inc., a U.S.-based global provider of clinical research services to the pharma and biotech industry, for $15.99 billion in net cash consideration and $0.04 billion of equity awards exchanged. The addition of PPD's clinical research services enhances our offering to biotech and pharma customers by enabling them to accelerate innovation and increase their productivity within the drug development process. In 2020, PPD generated revenues of $4.68 billion.

On December 30, 2021, the company acquired, within the Life Sciences Solutions segment, PeproTech, Inc., a U.S. based developer and manufacturer of recombinant proteins, for $1.86 billion in net cash consideration. PeproTech provides bioscience reagents known as recombinant proteins, including cytokines and growth factors. The acquisition expands the segment's bioscience offerings.

Segment Results

The company's management evaluates segment operating performance using operating income before certain charges/credits as defined in Note 4 to the Consolidated Financial Statements of the company's Annual Report on Form 10-K for 2021. Accordingly, the following segment data are reported on this basis.

	Three months ended		Nine months ended	
(Dollars in millions)	October 1, 2022	October 2, 2021	October 1, 2022	October 2, 2021
Revenues				
Life Sciences Solutions	$ 2,962	$ 3,721	$ 10,485	$ 11,481
Analytical Instruments	1,621	1,476	4,746	4,344
Specialty Diagnostics	1,065	1,362	3,648	4,212
Laboratory Products and Biopharma Services	5,585	3,487	16,564	10,667
Eliminations	(556)	(716)	(1,978)	(2,195)
Consolidated revenues	$ 10,677	$ 9,330	$ 33,465	$ 28,509

Life Sciences Solutions

	Three months ended					
(Dollars in millions)	October 1, 2022	October 2, 2021	Total Change	Currency Translation	Acquisitions/ Divestitures	Organic* *(non-GAAP measure)*
Revenues	$ 2,962	$ 3,721	(20)%	(4)%	1 %	(17)%
Segment income	1,039	1,821	(43)%			
Segment income margin	35.1 %	48.9 %	-13.8 pt			

The decrease in organic revenues in the third quarter of 2022 was primarily due to lower revenue in the genetic sciences business, driven by moderation in testing demand to diagnose COVID-19, partially offset by very strong growth in the bioproduction business. The decrease in segment income margin resulted primarily from unfavorable business mix and strategic growth investments, partially offset by productivity improvements.

	Nine months ended					
(Dollars in millions)	October 1, 2022	October 2, 2021	Total Change	Currency Translation	Acquisitions/ Divestitures	Organic* *(non-GAAP measure)*
Revenues	$ 10,485	$ 11,481	(9)%	(3)%	2 %	(7)%
Segment income	4,542	5,818	(22)%			
Segment income margin	43.3 %	50.7 %	-7.4 pt			

The decrease in organic revenues in the first nine months of 2022 was primarily due to lower revenue in the genetic sciences business, driven by moderation in testing demand to diagnose COVID-19, partially offset by very strong growth in the bioproduction business. The decrease in segment income margin resulted primarily from business mix and strategic growth investments, partially offset by productivity improvements.

Analytical Instruments

	Three months ended					
(Dollars in millions)	October 1, 2022	October 2, 2021	Total Change	Currency Translation	Acquisitions/ Divestitures	Organic* *(non-GAAP measure)*
Revenues	$ 1,621	$ 1,476	10 %	(6)%	— %	16 %
Segment income	386	264	47 %			
Segment income margin	23.8 %	17.8 %	6.0 pt			

The increase in organic revenues in the third quarter of 2022 was driven by increased demand across each of the segment's businesses, with particular strength in the chromatography and mass spectrometry and electron microscopy businesses. The increase in segment income margin resulted primarily from profit on higher sales, favorable business mix, and productivity improvements, offset in part by strategic growth investments.

	Nine months ended					
(Dollars in millions)	October 1, 2022	October 2, 2021	Total Change	Currency Translation	Acquisitions/ Divestitures	Organic* *(non-GAAP measure)*
Revenues	$ 4,746	$ 4,344	9 %	(4)%	— %	13 %
Segment income	1,031	816	26 %			
Segment income margin	21.7 %	18.8 %	2.9 pt			

The increase in organic revenues in the first nine months of 2022 was due to increased demand across all the segment's businesses, with particular strength in the electron microscopy and chromatography and mass spectrometry businesses. The increase in segment income margin resulted primarily from profit on higher sales, productivity improvements and business mix, offset in part by strategic growth investments.

Specialty Diagnostics

	Three months ended					
(Dollars in millions)	October 1, 2022	October 2, 2021	Total Change	Currency Translation	Acquisitions/ Divestitures	Organic* *(non-GAAP measure)*
Revenues	$ 1,065	$ 1,362	(22)%	(3)%	— %	(19)%
Segment income	220	310	(29)%			
Segment income margin	20.6 %	22.7 %	-2.1 pt			

The decrease in organic revenues in the third quarter of 2022 was due to decreased demand, primarily driven by products addressing diagnosis of COVID-19, partially offset by growth in the transplant diagnostics and immunodiagnostics businesses. The impact of lower COVID-19 testing volume on segment income margin was partially offset by positive business mix and productivity improvements. Segment income margin in the third quarter of 2021 was also impacted by a $13 million credit to cost of product revenue as a result of changing the method of accounting for inventories.

	Nine months ended					
(Dollars in millions)	October 1, 2022	October 2, 2021	Total Change	Currency Translation	Acquisitions/ Divestitures	Organic* *(non-GAAP measure)*
Revenues	$ 3,648	$ 4,212	(13)%	(3)%	— %	(11)%
Segment income	816	983	(17)%			
Segment income margin	22.4 %	23.3 %	-0.9 pt			

The decrease in organic revenues in the first nine months of 2022 was due to decreased demand, primarily driven by products addressing diagnosis of COVID-19, partially offset by growth in the immunodiagnostics and transplant diagnostics businesses. The decrease in segment income margin was primarily due to lower COVID-19 testing volume, largely offset by productivity improvements and positive business mix. Segment income margin in the first nine months of 2021 was also impacted by a $13 million credit to cost of product revenue as a result of changing the method of accounting for inventories.

Laboratory Products and Biopharma Services

	Three months ended					
(Dollars in millions)	October 1, 2022	October 2, 2021	Total Change	Currency Translation	Acquisitions/ Divestitures	Organic* *(non-GAAP measure)*
Revenues	$ 5,585	$ 3,487	60 %	(5)%	53 %	12 %
Segment income	725	383	89 %			
Segment income margin	13.0 %	11.0 %	2.0 pt			

The increase in organic revenues in the third quarter of 2022 was primarily due to higher sales across each of the segment's businesses, with particular strength in the pharma services business and research and safety market channel. The acquisition of PPD, the company's clinical research business, contributed $1.82 billion of revenue during the third quarter of 2022. The increase in segment income margin was primarily due to favorable business mix, productivity improvements, and the benefit of recent acquisitions, partially offset by strategic growth investments. Segment income margin in the third quarter of 2021 was also impacted by a $20 million credit to cost of product revenue as a result of changing the method of accounting for inventories.

	Nine months ended					
(Dollars in millions)	October 1, 2022	October 2, 2021	Total Change	Currency Translation	Acquisitions/ Divestitures	Organic* *(non-GAAP measure)*
Revenues	$ 16,564	$ 10,667	55 %	(3)%	49 %	9 %
Segment income	2,036	1,360	50 %			
Segment income margin	12.3 %	12.8 %	-0.5 pt			

The increase in organic revenues in the first nine months of 2022 was primarily due to higher sales across each of the segment's businesses, with particular strength in the research and safety market channel and pharma services business. The acquisition of PPD, the company's clinical research business, contributed $5.20 billion of revenue during the first nine months of 2022. The decrease in segment income margin was primarily due to strategic growth investments and business mix, offset in part by the benefit of recent acquisitions. Segment income margin in the first nine months of 2021 was also impacted by a $20 million credit to cost of product revenue as a result of changing the method of accounting for inventories.

* Results may not sum due to rounding

Non-operating Items

(Dollars in millions)	Three months ended		Nine months ended	
	October 1, 2022	October 2, 2021	October 1, 2022	October 2, 2021
Net interest expense	$ 105	$ 119	$ 335	$ 343
GAAP other income/(expense)	(4)	18	(139)	(168)
Adjusted other income/(expense) *(non-GAAP measure)*	10	13	24	32
GAAP tax rate	1.9 %	12.4 %	8.8 %	13.0 %
Adjusted tax rate *(non-GAAP measure)*	11.8 %	14.2 %	13.1 %	14.9 %

Net interest expense (interest expense less interest income) decreased due primarily to lower average interest rates on debt and higher average interest rates on cash balances, partially offset by the increase in debt to finance the acquisition of PPD and for general corporate purposes. See additional discussion under the caption “Liquidity and Capital Resources” below.

GAAP other income/(expense) and adjusted other income/(expense) includes currency transaction gains, losses on non-operating monetary assets and liabilities, and net periodic pension benefit cost/income, excluding the service cost component. GAAP other income/(expense) in the third quarter and first nine months of 2022 also includes $12 million and $135 million, respectively, of net losses on investments. GAAP other income/(expense) in the third quarter and first nine months of 2021 also includes $25 million and $23 million, respectively, of net gains on investments. In the first nine months of 2022 and 2021 GAAP other income/(expense) also includes $26 million and $197 million, respectively, of losses on the early extinguishment of debt (Note 7).

The company’s GAAP and adjusted tax rates decreased in 2022 compared to 2021 primarily due to releases of valuation allowances of $189 million in the first nine months of 2022 in jurisdictions where the deferred tax assets are now expected to be realized. The company’s 2022 GAAP tax rate was also impacted by changes in tax rates and higher amortization expense as a result of 2021 acquisitions, as well as a net benefit of $208 million resulting from tax audit settlements in the third quarter of 2022 (see Note 5). During the third quarter and first nine months of 2021 the company recorded income tax benefits on intra-entity transactions of $96 million and $258 million, respectively.

The effective tax rates in both 2022 and 2021 were also affected by relatively significant earnings in lower tax jurisdictions. 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 approximately $1.35 billion in 2022.

The company expects its GAAP effective tax rate in 2022 will be between 8% and 10% based on currently forecasted rates of profitability in the countries in which the company conducts business and expected generation of foreign tax credits. The effective tax rate can vary significantly from period to period as a result of discrete income tax factors and events. The company expects its adjusted tax rate will be between 13% and 13.5% in 2022.

The company has operations and a taxable presence in approximately 70 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.

Liquidity and Capital Resources

The company’s proven growth strategy has enabled it to generate free cash flow as well as access the capital markets. The company deploys its capital primarily via mergers and acquisitions and secondarily via share buybacks and dividends.

(In millions)	October 1, 2022	December 31, 2021
Cash and cash equivalents	$ 2,919	$ 4,477
Total debt	29,160	34,870

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, capacity expansion, and repayment of third-party foreign debt by foreign subsidiaries. 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 and its future cash flow from operations together with available borrowing capacity under its revolving credit agreement will be sufficient to meet the cash requirements of its existing businesses for the foreseeable future, including at least the next 24 months.

As of October 1, 2022, the company's short-term debt totaled $1.01 billion. The company has a revolving credit facility with a bank group that provides up to $5.00 billion of unsecured multi-currency revolving credit (Note 7). 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 October 1, 2022, no borrowings were outstanding under the company's revolving credit facility, although available capacity was reduced by immaterial outstanding letters of credit.

	Nine months ended	
(In millions)	October 1, 2022	October 2, 2021
Net cash provided by operating activities	$ 5,667	$ 6,855
Net cash used in investing activities	(1,634)	(3,240)
Net cash used in financing activities	(5,201)	(1,886)
Free cash flow *(non-GAAP measure)*	3,992	5,172

Operating Activities

During the first nine months of 2022, cash provided by income was offset in part by investments in working capital. An increase in inventories used cash of $1.12 billion, primarily to support growth in sales. Changes in other assets and other liabilities used cash of $0.73 billion primarily due to the timing of payments for compensation. Cash payments for income taxes were $1.05 billion during the first nine months of 2022.

During the first nine months of 2021, cash provided by income was offset in part by investments in working capital. An increase in inventories used cash of $0.92 billion, primarily to support growth in sales. Changes in other assets and other liabilities used cash of $0.58 billion primarily due to the timing of payments for compensation and income taxes. Cash payments for income taxes were $1.56 billion during the first nine months of 2021.

Investing Activities

During the first nine months of 2022, acquisitions used cash of $0.04 billion. The company's investing activities also included the purchase of $1.69 billion of property, plant and equipment for capacity and capability investments.

During the first nine months of 2021, acquisitions used cash of $1.52 billion. The company's investing activities also included the purchase of $1.69 billion of property, plant and equipment for capacity and capability investments.

Financing Activities

During the first nine months of 2022, repayment of senior notes and net commercial paper activity used cash of $0.38 billion and $2.46 billion, respectively. The company's financing activities also included the repurchase of $2.00 billion of the company's common stock (3.3 million shares) and the payment of $0.34 billion in cash dividends. On September 23, 2021, the Board of Directors authorized the repurchase of up to $3.00 billion of the company's common stock. In the fourth quarter of 2022, the company repurchased $1.00 billion of the company's common stock (2.0 million shares), depleting the 2021 authorization. As discussed in Note 7, in October 2022 the company issued senior notes for net proceeds of $735 million.

During the first nine months of 2021 repayment of senior notes used cash of $2.80 billion. Issuance of debt provided $3.12 billion of cash. The company's financing activities also included the repurchase of $2.00 billion of the company's common stock (4.1 million shares) and the payment of $0.29 billion in cash dividends.

The company's commitments for purchases of property, plant and equipment, contractual obligations and other commercial commitments did not change materially subsequent to December 31, 2021, except for the agreement to acquire The Binding Site Group. The company expects that for all of 2022, expenditures for property, plant and equipment, net of disposals, will be between $2.3 and $2.5 billion.

Non-GAAP Measures

In addition to the financial measures prepared in accordance with generally accepted accounting principles (GAAP), we use certain non-GAAP financial measures such as organic revenue growth, which is reported revenue growth, excluding the impacts of revenues from acquired/divested businesses and the effects of currency translation. We report organic revenue growth because Thermo Fisher management believes that in order to understand the company's short-term and long-term financial trends, investors may wish to consider the impact of acquisitions/divestitures and foreign currency translation on revenues. Thermo Fisher management uses organic revenue growth to forecast and evaluate the operational performance of the company as well as to compare revenues of current periods to prior periods.

We report adjusted operating income, adjusted operating income margin, adjusted other income/(expense), adjusted tax rate, and adjusted EPS. We believe that the use of these non-GAAP financial measures, in addition to GAAP financial measures, helps investors to gain a better understanding of our core operating results and future prospects, consistent with how management measures and forecasts the company's core operating performance, especially when comparing such results to previous periods, forecasts, and to the performance of our competitors. Such measures are also used by management in their financial and operating decision-making and for compensation purposes. To calculate these measures we exclude, as applicable:

- Certain acquisition-related costs, including charges for the sale of inventories revalued at the date of acquisition, significant transaction/acquisition-related costs, including changes in estimates of contingent acquisition-related consideration, and other costs associated with obtaining short-term financing commitments for pending/recent acquisitions. We exclude these costs because we do not believe they are indicative of our normal operating costs.
- Costs/income associated with restructuring activities and large-scale abandonments of product lines, such as reducing overhead and consolidating facilities. We exclude these costs because we believe that the costs related to restructuring activities and large-scale abandonment of product lines are not indicative of our normal operating costs.
- Equity in earnings/losses of unconsolidated entities; impairments of long-lived assets; and certain other gains and losses that are either isolated or cannot be expected to occur again with any predictability, including gains/losses on investments, the sale of businesses, product lines, and real estate, significant litigation-related matters, curtailments/settlements of pension plans, and the early retirement of debt. We exclude these items because they are outside of our normal operations and/or, in certain cases, are difficult to forecast accurately for future periods.
- The expense associated with the amortization of acquisition-related intangible assets because a significant portion of the purchase price for acquisitions may be allocated to intangible assets that have lives of up to 20 years. Exclusion of the amortization expense allows comparisons of operating results that are consistent over time for both our newly acquired and long-held businesses and with both acquisitive and non-acquisitive peer companies.
- The tax impacts of the above items and the impact of significant tax audits or events (such as changes in deferred taxes from enacted tax rate/law changes), the latter of which we exclude because they are outside of our normal operations and difficult to forecast accurately for future periods.

We report free cash flow, which is operating cash flow excluding net capital expenditures, to provide a view of the continuing operations' ability to generate cash for use in acquisitions and other investing and financing activities. The company also uses this measure as an indication of the strength of the company. Free cash flow is not a measure of cash available for discretionary expenditures since we have certain non-discretionary obligations such as debt service that are not deducted from the measure.

The non-GAAP financial measures of the company's results of operations and cash flows included in this Form 10-Q are not meant to be considered superior to or a substitute for the company's results of operations prepared in accordance with GAAP. Reconciliations of such non-GAAP financial measures to the most directly comparable GAAP financial measures are set forth within the "Overview" and "Results of Operations" sections and below.

(Dollars in millions except per share amounts)	Three months ended October 1, 2022	Three months ended October 2, 2021	Nine months ended October 1, 2022	Nine months ended October 2, 2021
Reconciliation of adjusted operating income				
GAAP operating income	$ 1,710	$ 2,278	$ 6,532	$ 7,490
Cost of revenues adjustments (a)	22	—	41	8
Selling, general and administrative expenses adjustments (b)	11	59	(10)	33
Restructuring and other costs (c)	33	18	59	151
Amortization of acquisition-related intangible assets	594	423	1,803	1,295
Adjusted operating income *(non-GAAP measure)*	$ 2,370	$ 2,778	$ 8,425	$ 8,977
Reconciliation of adjusted operating income margin				
GAAP operating income margin	16.0 %	24.4 %	19.5 %	26.3 %
Cost of revenues adjustments (a)	0.2 %	0.0 %	0.1 %	0.0 %
Selling, general and administrative expenses adjustments (b)	0.1 %	0.6 %	0.0 %	0.1 %
Restructuring and other costs (c)	0.3 %	0.2 %	0.2 %	0.5 %
Amortization of acquisition-related intangible assets	5.6 %	4.6 %	5.4 %	4.6 %
Adjusted operating income margin *(non-GAAP measure)*	22.2 %	29.8 %	25.2 %	31.5 %
Reconciliation of adjusted other income/(expense)				
GAAP other income/(expense)	$ (4)	$ 18	$ (139)	$ (168)
Adjustments (d)	14	(5)	163	200
Adjusted other income/(expense) *(non-GAAP measure)*	$ 10	$ 13	$ 24	$ 32
Reconciliation of adjusted tax rate				
GAAP tax rate	1.9 %	12.4 %	8.8 %	13.0 %
Adjustments (e)	9.9 %	1.8 %	4.3 %	1.9 %
Adjusted tax rate *(non-GAAP measure)*	11.8 %	14.2 %	13.1 %	14.9 %
Reconciliation of adjusted earnings per share				
GAAP diluted earnings per share (EPS) attributable to Thermo Fisher Scientific Inc.	$ 3.79	$ 4.79	$ 13.62	$ 15.29
Cost of revenues adjustments (a)	0.06	—	0.11	0.02
Selling, general and administrative expenses adjustments (b)	0.03	0.15	(0.02)	0.08
Restructuring and other costs (c)	0.08	0.04	0.15	0.38
Amortization of acquisition-related intangible assets	1.50	1.06	4.56	3.26
Other income/expense adjustments (d)	0.04	(0.01)	0.41	0.50
Provision for income taxes adjustments (e)	(0.60)	(0.27)	(1.35)	(0.96)
Equity in earnings/losses of unconsolidated entities	0.18	0.01	0.36	0.01
Adjusted EPS *(non-GAAP measure)*	$ 5.08	$ 5.77	$ 17.84	$ 18.58
Reconciliation of free cash flow				
GAAP net cash provided by operating activities	$ 1,937	$ 2,650	$ 5,667	$ 6,855
Purchases of property, plant and equipment	(547)	(524)	(1,693)	(1,692)
Proceeds from sale of property, plant and equipment	4	4	18	9
Free cash flow *(non-GAAP measure)*	$ 1,394	$ 2,130	$ 3,992	$ 5,172

(a) Adjusted results in 2022 and 2021 exclude charges for the sale of inventories revalued at the date of acquisition. Adjusted results in the third quarter of 2022 also exclude $22 million of charges for inventory write-downs associated with large-scale abandonment of product lines.

(b) Adjusted results exclude certain third-party expenses, principally transaction/integration costs related to recent acquisitions, charges/credits for changes in estimates of contingent acquisition consideration and charges associated with product liability litigation.

(c) Adjusted results exclude restructuring and other costs consisting principally of severance, impairment of long-lived assets, abandoned facility and other expenses of headcount reductions within several businesses and real estate consolidations. Adjusted results in the third quarter of 2021 also exclude $4 million of credits for the settlement of environmental-related matters, offset in part by $3 million of net charges for pre-acquisition related matters. Adjusted results in the first nine months of 2021 also exclude $13 million of charges for compensation due to employees at recently acquired businesses at the date of acquisition and $110 million of charges for impairment of acquired technology.

(d) Adjusted results exclude net gains/losses on investments. Adjusted results in the first nine months of 2022 and 2021 also exclude $26 million and $197 million, respectively, of losses on the early extinguishment of debt. Adjusted results in the third quarter of and first nine months of 2021 also exclude $20 million and $26 million, respectively, of amortization of bridge loan commitment fees related to a pending acquisition.

(e) Adjusted provision for income taxes in 2022 and 2021 excludes incremental tax impacts for the reconciling items between GAAP and adjusted net income, incremental tax impacts as a result of tax rate/law changes and the tax impacts from audit settlements (including a $658 million benefit from an audit settlement in the third quarter of 2022). Adjusted results in the third quarter of 2022 also exclude a $423 million charge for the impact of deferred tax realizability assessments as a result of audit settlements.

Critical Accounting Policies and Estimates

Management's Discussion and Analysis and Note 1 to the Consolidated Financial Statements of the company's Annual Report on Form 10-K for 2021 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 nine months of 2022.

Recent Accounting Pronouncements

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

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 discussed in the company's Annual Report on Form 10-K for the year ended December 31, 2021.

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. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. 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 October 1, 2022, 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 Condensed Consolidated Financial Statements under the heading "*Commitments and Contingencies*."

Item 1A. Risk Factors

The risks that we believe are material to our investors are discussed in the company's Annual Report on Form 10-K for the year ended December 31, 2021 under the caption "Risk Factors," which is on file with the SEC.

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

Issuer Purchases of Equity Securities

There was no share repurchase activity for the company's third quarter of 2022. On September 23, 2021, the Board of Directors authorized the repurchase of up to $3.00 billion of the company's common stock. In the fourth quarter of 2022, the company repurchased $1.00 billion of the company's common stock (2.0 million shares), depleting the 2021 authorization.

Item 6. Exhibits

Exhibit Number	Description of Exhibit
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.

** 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.

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: November 4, 2022

THERMO FISHER SCIENTIFIC INC.

/s/ Stephen Williamson

Stephen Williamson
Senior Vice President and Chief Financial Officer

/s/ Joseph R. Holmes

Joseph R. Holmes
Vice President and Chief Accounting Officer

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: November 4, 2022

/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: November 4, 2022

/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 October 1, 2022 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: November 4, 2022

/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 October 1, 2022 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: November 4, 2022

/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.