Following are the financial statements for **Thermo Fisher Scientific ("Thermo Fisher")** for the fiscal year ended December 31, 2017. Please note that the financial statements have been modified. Lots of information has been redacted, as it is not relevant to your exam. In addition, we have modified some of the information to make your exam easier.

We strongly recommend that as you prepare for the exam you only refer to these modified financials. The information that has been redacted will not be helpful to you, and will potentially cause you to make errors on the final.

This document is 22 pages long.

Please note that TAs and professors are not allowed to answer questions on these financial statements.

THERMO FISHER SCIENTIFIC INC.

CONSOLIDATED BALANCE SHEET

(In millions except share and per share amounts)	December 31, 2017	December 31, 2016
Assets		
Current Assets:		
Cash and cash equivalents	$ 1,335	$ 786
Accounts receivable, less allowances of $109 and $77	3,879	3,049
Inventories	2,971	2,213
Refundable income taxes	432	378
Other current assets	804	595
Total current assets	9,421	7,021
Property, Plant and Equipment, Net	4,047	2,578
Acquisition-related Intangible Assets, Net	16,684	13,969
Other Assets	1,227	1,012
Goodwill	25,290	21,328
Total Assets	$ 56,669	$ 45,908
Liabilities and Shareholders' Equity		
Current Liabilities:		
Short-term obligations and current maturities of long-term obligations	$ 2,135	$ 1,255
Accounts payable	1,428	926
Accrued payroll and employee benefits	918	709
Deferred revenue	719	486
Other accrued expenses	1,848	1,490
Total current liabilities	7,048	4,866
Deferred Income Taxes	2,766	2,557
Other Long-term Liabilities	2,569	1,573
Long-term Obligations	18,873	15,372
Commitments and Contingencies (Note 10)		
Shareholders' Equity:		
Preferred stock, $100 par value, 50,000 shares authorized; none issued		
Common stock, $1 par value, 1,200,000,000 shares authorized; 428,327,873 and 415,138,564 shares issued	428	415
Capital in excess of par value	14,177	12,140
Retained earnings	15,914	13,927
Treasury stock at cost, 27,013,311 and 21,690,679 shares	(3,103)	(2,306)
Accumulated other comprehensive items	(2,003)	(2,636)
Total shareholders' equity	25,413	21,540
Total Liabilities and Shareholders' Equity	$ 56,669	$ 45,908

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

THERMO FISHER SCIENTIFIC INC.

CONSOLIDATED STATEMENT OF INCOME

(In millions except per share amounts)	Year Ended December 31, 2017	December 31, 2016	December 31, 2015
Revenues			
Product revenues	$ 17,374	$ 15,712	$ 14,668
Service revenues	3,544	2,562	2,297
Total revenues	20,918	18,274	16,965
Costs and Operating Expenses:			
Cost of product revenues	8,976	8,214	7,584
Cost of service revenues	2,497	1,691	1,625
Selling, general and administrative expenses	5,492	4,976	4,612
Research and development expenses	888	755	692
Restructuring and other costs, net	97	189	116
Total costs and operating expenses	17,950	15,825	14,629
Operating Income	2,968	2,449	2,336
Other Expense, Net	(539)	(425)	(400)
Income from Continuing Operations Before Income Taxes	2,429	2,024	1,936
(Provision for) Benefit from Income Taxes	(201)	1	44
Income from Continuing Operations	2,228	2,025	1,980
Loss from Discontinued Operations (net of income tax benefit of $2, $2 and $3)	(3)	(3)	(5)
Net Income	$ 2,225	$ 2,022	$ 1,975
Earnings per Share from Continuing Operations			
Basic	$ 5.65	$ 5.13	$ 4.97
Diluted	$ 5.60	$ 5.10	$ 4.93
Earnings per Share			
Basic	$ 5.64	$ 5.12	$ 4.96
Diluted	$ 5.59	$ 5.09	$ 4.92
Weighted Average Shares			
Basic	395	395	399
Diluted	398	397	402
Cash Dividends Declared per Common Share	$ 0.60	$ 0.60	$ 0.60

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

THERMO FISHER SCIENTIFIC INC.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

(In millions)	Year Ended December 31, 2017	December 31, 2016	December 31, 2015
Comprehensive Income			
Net Income	$ 2,225	$ 2,022	$ 1,975
Other Comprehensive Items:			
Currency translation adjustment (net of tax benefit of $145, $0 and $0)	588	(566)	(706)
Unrealized gains and losses on available-for-sale investments:			
Unrealized holding (losses) gains arising during the period (net of tax (benefit) provision of $0, $0 and $0)	(1)	(2)	1
Reclassification adjustment for (gains) losses included in net income (net of tax (provision) benefit of ($1), $0 and $0)	(1)	1	—
Unrealized gains and losses on hedging instruments:			
Unrealized losses on hedging instruments (net of tax benefit of $0, $22 and $6)	—	(37)	(9)
Reclassification adjustment for losses included in net income (net of tax benefit of $5, $4 and $2)	7	6	3
Pension and other postretirement benefit liability adjustments:			
Pension and other postretirement benefit liability adjustments arising during the period (net of tax provision (benefit) of $7, ($17) and ($5))	23	(47)	(9)
Amortization of net loss and prior service benefit included in net periodic pension cost (net of tax benefit of $5, $2 and $3)	17	6	8
Total other comprehensive items	633	(639)	(712)
Comprehensive Income	$ 2,858	$ 1,383	$ 1,263

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

THERMO FISHER SCIENTIFIC INC.

CONSOLIDATED STATEMENT OF CASH FLOWS

(In millions)	Year Ended December 31, 2017	December 31, 2016	December 31, 2015
Operating Activities			
Net income	$ 2,225	$ 2,022	$ 1,975
Loss from discontinued operations	3	3	5
Income from continuing operations	2,228	2,025	1,980
Adjustments to reconcile income from continuing operations to net cash provided by operating activities:			
Depreciation and amortization	2,033	1,758	1,688
Change in deferred income taxes	(1,098)	(620)	(525)
Non-cash stock-based compensation	159	133	125
Non-cash charges for sale of inventories revalued at the date of acquisition	87	75	7
Other non-cash expenses, net	103	67	61
Changes in assets and liabilities, excluding the effects of acquisitions and dispositions:			
Accounts receivable	(362)	(352)	(149)
Inventories	(81)	98	(141)
Other assets	(153)	(153)	(254)
Accounts payable	274	56	(3)
Other liabilities	1,016	216	200
Contributions to retirement plans	(200)	(43)	(38)
Net cash provided by continuing operations	4,006	3,260	2,951
Net cash used in discontinued operations	(1)	(2)	(9)
Net cash provided by operating activities	4,005	3,258	2,942
Investing Activities			
Acquisitions, net of cash acquired	(7,226)	(5,178)	(695)
Purchase of property, plant and equipment	(508)	(444)	(423)
Proceeds from sale of property, plant and equipment	7	26	18
Proceeds from sale of investments	22	81	12
Other investing activities, net	(24)	(5)	(5)
Net cash used in investing activities	$ (7,729)	$ (5,520)	$ (1,093)

THERMO FISHER SCIENTIFIC INC.

CONSOLIDATED STATEMENT OF CASH FLOWS (Continued)

(In millions)	Year Ended December 31, 2017	December 31, 2016	December 31, 2015
Financing Activities			
Net proceeds from issuance of debt	$ 6,459	$ 7,604	$ 1,798
Repayment of debt	(3,299)	(4,334)	(3,789)
Proceeds from issuance of commercial paper	8,380	9,182	7,934
Repayments of commercial paper	(8,514)	(8,278)	(7,885)
Purchases of company common stock	(750)	(1,250)	(500)
Dividends paid	(237)	(238)	(241)
Net proceeds from issuance of company common stock	1,690	—	—
Net proceeds from issuance of company common stock under employee stock plans	128	87	72
Other financing activities, net	(3)	(14)	(6)
Net cash provided by (used in) financing activities	3,854	2,759	(2,617)
Exchange Rate Effect on Cash	420	(152)	(130)
Increase (Decrease) in Cash, Cash Equivalents and Restricted Cash	550	345	(898)
Cash, Cash Equivalents and Restricted Cash at Beginning of Period	811	466	1,364
Cash, Cash Equivalents and Restricted Cash at End of Period	$ 1,361	$ 811	$ 466

See Note 13 for supplemental cash flow information.

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

THERMO FISHER SCIENTIFIC INC.

CONSOLIDATED STATEMENT OF SHAREHOLDERS' EQUITY

(In millions)	Common Stock Shares	Common Stock Amount	Capital in Excess of Par Value	Retained Earnings	Treasury Stock Shares	Treasury Stock Amount	Accumulated Other Comprehensive Items	Total Shareholders' Equity
Balance at December 31, 2014	408	$ 408	$ 11,474	$ 10,407	8	$ (456)	$ (1,285)	$ 20,548
Issuance of shares under employees' and directors' stock plans	4	4	139	—	—	(52)	—	91
Stock-based compensation	—	—	125	—	—	—	—	125
Tax benefit related to employees' and directors' stock plans	—	—	63	—	—	—	—	63
Purchases of company common stock	—	—	—	—	4	(500)	—	(500)
Dividends declared	—	—	—	(240)	—	—	—	(240)
Net income	—	—	—	1,975	—	—	—	1,975
Other comprehensive items	—	—	—	—	—	—	(712)	(712)
Balance at December 31, 2015	412	412	11,801	12,142	12	(1,008)	(1,997)	21,350
Issuance of shares under employees' and directors' stock plans	3	3	153	—	1	(48)	—	108
Stock-based compensation	—	—	133	—	—	—	—	133
Tax benefit related to employees' and directors' stock plans	—	—	53	—	—	—	—	53
Purchases of company common stock	—	—	—	—	9	(1,250)	—	(1,250)
Dividends declared	—	—	—	(237)	—	—	—	(237)
Net income	—	—	—	2,022	—	—	—	2,022
Other comprehensive items	—	—	—	—	—	—	(639)	(639)
Balance at December 31, 2016	415	415	12,140	13,927	22	(2,306)	(2,636)	21,540
Issuance of shares under employees' and directors' stock plans	3	3	196	—	—	(47)	—	152
Issuance of shares	10	10	1,680	—	—	—	—	1,690
Stock-based compensation	—	—	159	—	—	—	—	159
Purchases of company common stock	—	—	—	—	5	(750)	—	(750)
Dividends declared	—	—	—	(238)	—	—	—	(238)
Net income	—	—	—	2,225	—	—	—	2,225
Other comprehensive items	—	—	—	—	—	—	633	633
Other	—	—	2	—	—	—	—	2
Balance at December 31, 2017	428	$ 428	$ 14,177	$ 15,914	27	$ (3,103)	$ (2,003)	$ 25,413

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

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

Nature of Operations

Thermo Fisher Scientific Inc. (the company or Thermo Fisher) enables customers to make the world healthier, cleaner and safer by providing analytical instruments, equipment, reagents and consumables, software and services for research, manufacturing, analysis, discovery and diagnostics. Markets served include pharmaceutical and biotech, academic and government, industrial and applied, as well as healthcare and diagnostics.

Principles of Consolidation

The accompanying financial statements include the accounts of the company and its wholly and majority-owned subsidiaries. All material intercompany accounts and transactions have been eliminated. The company accounts for investments in businesses using the equity method when it has significant influence but not control (generally between 20% and 50% ownership) and is not the primary beneficiary.

Revenue Recognition and Accounts Receivable

Revenue is recognized after all significant obligations have been met, collectability is probable and title has passed, which typically occurs upon shipment or delivery or completion of services. If customer-specific acceptance criteria exist, the company recognizes revenue after demonstrating adherence to the acceptance criteria. The company recognizes revenue and related costs for arrangements with multiple deliverables, such as equipment and installation, as each element is delivered or completed based upon its relative fair value. When a portion of the customer's payment is not due until installation or other deliverable occurs, the company defers that portion of the revenue until completion of installation or transfer of the deliverable. Provisions for discounts, warranties, rebates to customers, returns and other adjustments are provided for in the period the related sales are recorded. Sales taxes, value-added taxes and certain excise taxes collected from customers and remitted to governmental authorities are accounted for on a net basis and therefore are excluded from revenue.

Service revenues represent the company's service offerings including clinical trial logistics, drug development and manufacturing, asset management, diagnostic testing, training, service contracts, and field service including related time and materials. Service revenues are recognized as the service is performed. Revenues for service contracts are recognized ratably over the contract period.

The company records shipping and handling charges billed to customers in net sales and records shipping and handling costs in cost of product revenues for all periods presented.

Accounts receivable are recorded at the invoiced amount and do not bear interest. The company maintains allowances for doubtful accounts for estimated losses resulting from the inability of its customers to pay amounts due. The allowance for doubtful accounts is the company's best estimate of the amount of probable credit losses in existing accounts receivable. The company determines the allowance based on the age of the receivable, the creditworthiness of the customer and any other information that is relevant to the judgment. Account balances are charged off against the allowance when the company believes it is probable the receivable will not be recovered. The company does not have any off-balance-sheet credit exposure related to customers.

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

	Year Ended December 31,		
(In millions)	2017	2016	2015
Beginning Balance	$ 77	$ 70	$ 74
Provision charged to expense	32	16	5
Accounts written off	(10)	(9)	(4)
Acquisitions, currency translation and other	10	—	(5)
Ending Balance	$ 109	$ 77	$ 70

Deferred revenue in the accompanying balance sheet consists primarily of unearned revenue on service contracts, which is recognized ratably over the terms of the contracts. The majority of the deferred revenue in the accompanying 2017 balance sheet will be recognized within one year.

Research and Development

The company conducts research and development activities to increase its depth of capabilities in technologies, software and services. Research and development costs include employee compensation and benefits, consultants, facilities related costs, material costs, depreciation and travel. Research and development costs are expensed as incurred.

Income Taxes

The company recognizes deferred income taxes based on the expected future tax consequences of differences between the financial statement basis and the tax basis of assets and liabilities, calculated using enacted tax rates in effect for the year in which the differences are expected to be reflected in the tax return.

The financial statements reflect expected future tax consequences of uncertain tax positions that the company has taken or expects to take on a tax return presuming the taxing authorities' full knowledge of the positions and all relevant facts, but without discounting for the time value of money (Note 7).

Earnings per Share

Basic earnings per share has been computed by dividing net income by the weighted average number of shares outstanding during the year. Except where the result would be antidilutive to income from continuing operations, diluted earnings per share has been computed using the treasury stock method for outstanding stock options and restricted units, as well as their related income tax effects.

Cash and Cash Equivalents

Cash equivalents consists principally of money market funds, commercial paper and other marketable securities purchased with an original maturity of three months or less. These investments are carried at cost, which approximates market value.

Inventories

Inventories are valued at the lower of cost or net realizable value, cost being determined principally by the first-in, first-out (FIFO) method with certain of the company's businesses utilizing the last-in, first-out (LIFO) method. The company periodically reviews quantities of inventories on hand and compares these amounts to the expected use of each product or product line. In addition, the company has certain inventory that is subject to fluctuating market pricing. The company assesses the carrying value of this inventory based on a lower of cost or net realizable value analysis. The company records a charge to cost of sales for the amount required to reduce the carrying value of inventory to net realizable value. Costs associated with the procurement of inventories, such as inbound freight charges, purchasing and receiving costs, and internal transfer costs, are included in cost of revenues in the accompanying statement of income. The components of inventories are as follows:

(In millions)	December 31, 2017	December 31, 2016
Raw Materials	$ 708	$ 466
Work in Process	505	328
Finished Goods	1,758	1,419
Inventories	$ 2,971	$ 2,213

The value of inventories maintained using the LIFO method was $219 million and $207 million at December 31, 2017 and 2016, respectively, which was below estimated replacement cost by $31 million and $28 million, respectively.

Property, Plant and Equipment

Property, plant and equipment are recorded at cost. The costs of additions and improvements are capitalized, while maintenance and repairs are charged to expense as incurred. The company provides for depreciation and amortization using the straight-line method over the estimated useful lives of the property as follows: buildings and improvements, 25 to 40 years ; machinery and equipment (including software), 3 to 10 years ; and leasehold improvements, the shorter of the term of the lease or the life of the asset. When assets are retired or otherwise disposed of, the assets and related accumulated depreciation are eliminated from the accounts and the resulting gain or loss is reflected in the accompanying statement of income. Property, plant and equipment consists of the following:

(In millions)	December 31, 2017	December 31, 2016
Land	$ 401	$ 306
Buildings and Improvements	1,662	1,154
Machinery, Equipment and Leasehold Improvements	4,276	2,956
Property, Plant and Equipment, at Cost	6,339	4,416
Less: Accumulated Depreciation and Amortization	2,292	1,838
Property, Plant and Equipment, Net	$ 4,047	$ 2,578

Depreciation and amortization expense of property, plant and equipment was $439 million, $380 million and $373 million in 2017, 2016 and 2015, respectively.

Acquisition-related Intangible Assets

Acquisition-related intangible assets include the costs of acquired customer relationships, product technology, tradenames and other specifically identifiable intangible assets, and are being amortized using the straight-line method over their estimated useful lives, which range from 3 to 20 years. In addition, the company has tradenames and in-process research and development that have indefinite lives and which are not amortized. The company reviews intangible assets for impairment when indication of potential impairment exists, such as a significant reduction in cash flows associated with the assets. Intangible assets with indefinite lives are reviewed for impairment annually or whenever events or changes in circumstances indicate they may be impaired. Acquisition-related intangible assets are as follows:

	Balance at December 31, 2017			Balance at December 31, 2016		
(In millions)	Gross	Accumulated Amortization	Net	Gross	Accumulated Amortization	Net
Definite Lived:						
Customer relationships	$ 17,356	$ (5,902)	$ 11,454	$ 13,167	$ (4,821)	$ 8,346
Product technology	6,046	(2,811)	3,235	5,680	(2,204)	3,476
Tradenames	1,538	(817)	721	1,452	(646)	806
Other	34	(34)	—	33	(33)	—
	24,974	(9,564)	15,410	20,332	(7,704)	12,628
Indefinite Lived:						
Tradenames	1,235	—	1,235	1,235	—	1,235
In-process research and development	39	—	39	106	—	106
	1,274	—	1,274	1,341	—	1,341
Acquisition-related Intangible Assets	$ 26,248	$ (9,564)	$ 16,684	$ 21,673	$ (7,704)	$ 13,969

The estimated future amortization expense of acquisition-related intangible assets with definite lives is as follows:

(In millions)	
2018	$ 1,705
2019	1,698
2020	1,609
2021	1,510
2022	1,383
2023 and Thereafter	7,505
Estimated Future Amortization Expense of Definite-lived Intangible Assets	$ 15,410

Amortization of acquisition-related intangible assets was $1.59 billion, $1.38 billion and $1.31 billion in 2017, 2016 and 2015, respectively.

Other Assets

Other assets in the accompanying balance sheet include deferred tax assets, cash surrender value of life insurance, insurance recovery receivables related to product liability matters, pension assets, cost-method and available-for-sale investments, notes receivable, restricted cash and other assets.

Goodwill

The company assesses goodwill for impairment annually and whenever events occur or circumstances change that would more-likely-than-not reduce the fair value of a reporting unit below its carrying amount. Such events or circumstances generally include the occurrence of operating losses or a significant decline in earnings associated with one or more of the company's reporting units. The company is permitted to first assess qualitative factors to determine whether the goodwill impairment test is necessary. If the qualitative assessment results in a determination that the fair value of a reporting unit is more-likely-than-not less than its carrying amount, the company performs the goodwill impairment test. The company may bypass the qualitative assessment for the reporting unit in any period and proceed directly to the goodwill impairment test. The company estimates the fair value of its reporting units by using forecasts of discounted future cash flows and peer market multiples. The company would record an impairment charge based on the excess of a reporting unit's carrying amount over its fair value. Prior to the annual impairment test in the fourth quarter of 2017 and adoption of new guidance discussed elsewhere in Note 1, if an impairment had been indicated, any excess of the carrying value over the implied fair value of goodwill would have been recorded as an operating loss. The company determined that no impairments existed in 2017, 2016 or 2015.

The changes in the carrying amount of goodwill by segment are as follows:

(In millions)	Life Sciences Solutions	Analytical Instruments	Specialty Diagnostics	Laboratory Products and Services	Total
Balance at December 31, 2015	$ 7,617	$ 2,703	$ 3,771	$ 4,737	$ 18,828
Acquisitions	619	2,059	1	14	2,693
Finalization of purchase price allocations for 2015 acquisitions	—	—	—	7	7
Currency translation	(3)	(80)	(108)	(31)	(222)
Other	13	4	(5)	10	22
Balance at December 31, 2016	8,246	4,686	3,659	4,737	21,328
Acquisitions	136	99	27	3,256	3,518
Finalization of purchase price allocations for 2016 acquisitions	(4)	68	—	(1)	63
Currency translation	14	174	171	25	384
Other	(1)	—	(1)	(1)	(3)
Balance at December 31, 2017	$ 8,391	$ 5,027	$ 3,856	$ 8,016	$ 25,290

Recent Accounting Pronouncements

In March 2016, the FASB issued new guidance which affects the accounting for stock-based co mpensatio n. The new guidance simplifies the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. The company adopted this guidance on January 1, 2017 and applied the changes to the statement of cash flows retrospectively. Adoption of this guidance decreased the company's tax provision in 2017 by $65 million and increased diluted earnings per share for the same period by $0.16. The impact in future periods will be dependent upon changes in the company's stock price, the volume of employee stock option exercises and the timing of service- and performance-based restricted unit vesting.

In February 2016, the FASB issued new guidance which requires lessees to record most leases on their balance sheets as lease liabilities, initially measured at the present value of the future lease payments, with corresponding right-of-use assets. The new guidance also sets forth new disclosure requirements related to leases. The company plans to adopt the guidance in 2019 using a modified retrospective method. The company is currently evaluating the impact this guidance will have on its consolidated financial statements, however, assets and liabilities will increase upon adoption for right-of-use assets and lease liabilities. The company’s future commitments under lease obligations are summarized in Note 10.

In January 2016, the FASB issued new guidance which affects the accounting for equity investments, financial liabilities under the fair value option, and the presentation and disclosure requirements for financial instruments. This guidance retains the current accounting for classifying and measuring investments in debt securities and loans, but requires equity investments to be measured at fair value with subsequent changes recognized in net income, except for those accounted for under the equity method or requiring consolidation. The guidance also changes the accounting for investments without a readily determinable fair value and that do not qualify for the practical expedient permitted by the guidance to estimate fair value. A policy election can be made for these investments whereby estimated fair value may be measured at cost and adjusted in subsequent periods for any impairment or changes in observable prices of identical or similar investments. The guidance is effective for the company in 2018. The adoption of this guidance is not expected to have a material impact on the company’s consolidated financial statements.

In May 2014, the FASB issued new revenue recognition guidance which provides a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and will supersede most current revenue recognition guidance. The new standard also requires significantly expanded disclosures regarding the qualitative and quantitative information of an entity's nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. During 2016 and 2017, the FASB issued additional guidance and clarification, including the elimination of certain SEC Staff Guidance. The guidance is effective for the company in 2018. The company has elected to adopt this guidance through application of the modified retrospective method.

The company substantially completed its analysis of the impact of the new guidance in 2017. Applying the new guidance to the majority of the company’s revenue arrangements based on its most commonly used customer terms and conditions and routine sales transactions, which generally consist of a single performance obligation to transfer promised goods or services, does not have a material impact to the company’s consolidated financial statements. While the timing of revenue recognition for some of the company’s other sales transactions has been affected by the new guidance, the impact is not expected to be material. The impact of recording the cumulative effect of the change in the accounting guidance in the company's balance sheet in the first quarter of 2018 is expected to be less than 1% of total assets, total liabilities, and total shareholders’ equity.

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, due to expectations of the synergies that will be realized by combining the businesses. These synergies include the elimination of redundant facilities, functions and staffing; use of the company’s existing commercial infrastructure to expand sales of the acquired businesses’ products; and use of the commercial infrastructure of the acquired businesses to cost-effectively expand sales of company products.

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

2017

On August 29, 2017, the company acquired, within the Laboratory Products and Services segment, all of the issued and outstanding shares of Patheon N.V., a leading global provider of high-quality drug development and delivery solutions to the pharmaceutical and biopharma sectors, for $35.00 per share in cash, or $7.36 billion. Patheon provides comprehensive, integrated and highly customizable solutions as well as the expertise to help biopharmaceutical companies of all sizes satisfy complex development and manufacturing needs. The acquisition provided entry into the pharmaceutical contract development and manufacturing organization market and added a complementary service to the company's existing pharmaceutical services portfolio. Patheon's revenues totaled $1.87 billion for the year ended October 31, 2016. The purchase price exceeded the fair market value of the identifiable net assets and, accordingly, $3.26 billion was allocated to goodwill, $125 million of which is tax deductible.

On March 2, 2017, the company acquired, within the Analytical Instruments segment, Core Informatics, a North America-based provider of cloud-based platforms supporting scientific data management, for a total purchase price of $94 million, net of cash acquired. The acquisition enhanced the company's existing informatics solutions. Revenues of Core Informatics were approximately $10 million in 2016. The purchase price exceeded the fair market value of the identifiable net assets and, accordingly, $63 million was allocated to goodwill, $50 million of which is tax deductible.

On February 14, 2017, the company acquired, within the Life Sciences Solutions segment, Finesse Solutions, Inc., a North America-based developer of scalable control automation systems and software for bioproduction, for a total purchase price of $221 million, net of cash acquired. The acquisition expanded the company's bioproduction offerings. Revenues of Finesse Solutions were approximately $50 million in 2016. The purchase price exceeded the fair market value of the identifiable net assets and, accordingly, $136 million was allocated to goodwill, none of which is tax deductible.

In addition, in 2017 the company acquired, within the Specialty Diagnostics segment, a North America-based molecular diagnostics company offering qPCR tests to the transplant community and, within the Analytical Instruments segment, a provider of desktop scanning electron microscopy solutions and a manufacturer of volatile organic compound monitoring instruments and integrated systems, for an aggregate purchase price of $110 million.

The components of the purchase price and net assets acquired for 2017 acquisitions are as follows:

(In millions)	Patheon	Core Informatics	Finesse Solutions	Other	Total
Purchase Price					
Cash paid	$ 7,405	$ 95	$ 223	$ 97	$ 7,276
Debt assumed	—	—	—	—	488
Fair value of contingent consideration	—	9	—	8	17
Fair value of equity awards exchanged	—	—	—	—	6
Fair value of previously held interest	—	—	—	11	11
Purchase price payable	—	—	—	7	57
Cash acquired	(47)	(10)	(2)	(13)	(72)
	$ 7,358	$ 94	$ 221	$ 110	$ 7,783
Net Assets Acquired					
Current assets	$ 1,046	$ 2	$ 17	$ 20	$ 1,085
Property, plant and equipment	1,288	—	1	3	1,292
Intangible assets:					
Customer relationships	3,784	6	68	16	3,708
Product technology	—	29	32	35	96
Tradenames and other	—	3	2	—	117
Other intangible assets:					
In-process research and development	—	—	2	—	2
Goodwill	3,255	63	136	64	3,518
Other assets	—	—	—	—	54
Deferred tax liabilities	(1,091)	(4)	(22)	(14)	(1,131)
Other liabilities assumed	(924)	(5)	(15)	(14)	(958)
	$ 7,358	$ 94	$ 221	$ 110	$ 7,783

The weighted-average amortization periods for definite-lived intangible assets acquired in 2017 are 17 years for customer relationships, 9 years for product technology and 4 years for tradenames and other. The weighted average amortization period for all definite-lived intangible assets acquired in 2017 is 16 years.

Note 4. Other Expense, Net

The components of other expense, net, in the accompanying statement of income are as follows:

(In millions)	2017	2016	2015
Interest Income	$ 81	$ 48	$ 31
Interest Expense	(592)	(469)	(415)
Other Items, Net	(28)	(4)	(16)
Other Expense, Net	$ (539)	$ (425)	$ (400)

Note 7. Income Taxes

The components of income from continuing operations before provision for income taxes are as follows:

(In millions)	2017	2016	2015
U.S.	$ 655	$ 493	$ 851
Non-U.S.	1,774	1,531	1,085
Income from Continuing Operations	$ 2,429	$ 2,024	$ 1,936

The components of the provision for income taxes of continuing operations are as follows:

(In millions)	2017	2016	2015
Current Income Tax Provision			
Federal	$ 1,259	$ 280	$ 184
Non-U.S.	576	349	363
State	62	9	9
	1,897	638	556
Deferred Income Tax Provision (Benefit)			
Federal	$ (1,437)	$ (510)	$ (297)
Non-U.S.	(271)	(104)	(288)
State	12	(25)	(15)
	(1,696)	(639)	(600)
Provision for (benefit from) income taxes	$ 201	$ (1)	$ (44)

The company generally receives a tax deduction upon the exercise of non-qualified stock options by employees, or the vesting of restricted stock units held by employees, for the difference between the exercise price and the market price of the underlying common stock on the date of exercise. Prior to 2017, the amount of the tax deduction in excess of compensation cost recognized was allocated to capital in excess of par value. Beginning in 2017, these excess tax benefits reduce the tax provision as described in Note 1. In 2017, the company's tax provision was reduced by $65 million of such benefits. In 2016 and 2015, $53 million and $63 million, respectively, of such benefits were allocated to capital in excess of par value.

On December 22, 2017, the Tax Cuts and Jobs Act of 2017 was enacted. The Tax Act includes significant changes to existing U.S. tax laws that affect the company, including a reduction of the U.S. corporate income tax rate from 35% to 21% beginning in 2018 and creation of a territorial tax system with a one-time transition tax on deemed repatriated earnings and profits of foreign subsidiaries (transition tax). The company recognized a net charge for certain aspects of the Tax Act in its 2017 financial statements for which the accounting is provisional, but reasonable estimates could be determined.

The company recognized a $1.25 billion income tax charge for the year ended December 31, 2017, related to the transition tax. The company also remeasured its net U.S. deferred tax balances affected by the Tax Act’s reduction in the U.S. corporate income tax rate, which resulted in a $1.06 billion income tax benefit for the year ended December 31, 2017. Although the net $204 million charge represents what the company believes is a reasonable estimate of the impact of the Tax Act, the components of the net charge are provisional and may change. For example, these estimates may be impacted by the need for further analysis and future clarification and guidance regarding available tax accounting methods and elections, earnings and profits computations and state tax conformity to federal tax changes.

The provision for income taxes in the accompanying statement of income differs from the provision calculated by applying the statutory federal income tax rate of 35% to income from continuing operations before provision for income taxes due to the following:

(In millions)	2017	2016	2015
Provision for Income Taxes at Statutory Rate	$ 850	$ 708	$ 678
Increases (Decreases) Resulting From:			
Foreign rate differential	(380)	(322)	(275)
Foreign exchange loss on inter-company debt refinancing	(237)	—	—
Income tax credits	(273)	(318)	(316)
Manufacturing deduction	(42)	(38)	(38)
Withholding taxes	55	—	—
Singapore tax holiday	(25)	(23)	(21)
Impact of change in tax laws and apportionment on deferred taxes	(1,121)	2	(38)
Transition tax	1,250	—	—
Provision of tax reserves, net	99	12	18
Excess tax benefits from stock options and restricted stock units	(65)	—	—
Tax return reassessments and settlements	8	(41)	(54)
Other, net	82	19	2
Provision for (benefit from) income taxes	$ 201	$ (1)	$ (44)

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

The foreign tax credits discussed below are the result of foreign earnings and profits remitted or deemed remitted to the U.S. during the reporting year and the U.S. treatment of taxes paid in the foreign jurisdictions in the years those profits were originally earned.

In 2017, the company continued to implement tax planning initiatives related to non U.S. subsidiaries. These non-U.S. subsidiaries incurred foreign tax obligations, and made cash and deemed distributions to the company’s U.S. operations which resulted in no net tax cost. As a result of these distributions, the company benefitted from U.S. foreign tax credits of $86 million, offset in part by additional U.S. income taxes of $53 million on the related foreign income (which reduced the benefit from the foreign rate differential in 2017). The company also implemented foreign tax credit planning in Sweden which resulted in $20 million of foreign tax credits, with no related incremental U.S. income tax expense.

The company has significant activities in Singapore and has received considerable tax incentives. The local taxing authority granted the company pioneer company status which provides an incentive encouraging companies to undertake activities that have the effect of promoting economic or technological development in Singapore. This incentive equates to a tax exemption on earnings associated with most of the company’s manufacturing activities in Singapore and continues through December 31, 2026. In 2017, 2016 and 2015, the impact of this tax holiday decreased the annual effective tax rates by 1.0 percentage points, 1.1 percentage points and 1.1 percentage points, respectively, and increased diluted earnings per share by approximately $0.06, $0.06 and $0.05, respectively. In connection with the March 2017 extension of this agreement until 2026, the company recorded a benefit in Q1 2017 of approximately $65 million ($0.16 per diluted share) for the effect on deferred tax balances of the extended tax holiday.

Net deferred tax asset (liability) in the accompanying balance sheet consists of the following:

(In millions)	2017	2016
Deferred Tax Asset (Liability)		
Depreciation and amortization	$ (3,957)	$ (4,219)
Net operating loss and credit carryforwards	1,150	1,453
Reserves and accruals	139	192
Accrued compensation	265	372
Foreign undistributed earnings	—	(156)
Inventory basis difference	81	110
Other capitalized costs	61	84
Unrealized losses on hedging instruments	125	36
Other, net	126	66
Deferred tax assets (liabilities), net before valuation allowance	(2,010)	(2,062)
Less: Valuation allowance	256	113
Deferred tax assets (liabilities), net	$ (2,266)	$ (2,175)

The company estimates the degree to which tax assets and loss and credit carryforwards will result in a benefit based on expected profitability by tax jurisdiction and provides a valuation allowance for tax assets and loss and credit carryforwards that it believes will more likely than not expire unutilized. At December 31, 2017, all of the company's valuation allowance relates to deferred tax assets, primarily net operating losses, for which any subsequently recognized tax benefits will reduce income tax expense.

At December 31, 2017, the company had federal, state and non-U.S. net operating loss carryforwards of $195 million, $1.86 billion and $4.09 billion, respectively. Use of the carryforwards is limited based on the future income of certain subsidiaries. The federal and state net operating loss carryforwards expire in the years 2018 through 2037. Of the non-U.S. net operating loss carryforwards, $1.43 billion expire in the years 2018 through 2037, and the remainder do not expire.

The company operates in various jurisdictions around the world. A provision has not been made for certain U.S. state income taxes or additional non-U.S. taxes on $13.21 billion of undistributed earnings of international subsidiaries that could be subject to taxation if remitted to the U.S. because such amounts are intended to be reinvested outside the United States indefinitely. It is not practicable to estimate the unrecognized tax liability due to i) the extent of uncertainty as to which remittance structure would be used (among several possibilities) should a decision be made to repatriate; and ii) the implications of indirect taxes, including withholding taxes that could potentially be required depending on the repatriation structure.

Note 9. Debt and Other Financing Arrangements

(Dollars in millions)	Effective Interest Rate at December 31, 2017	December 31, 2017	December 31, 2016
Commercial Paper	(0.26)%	$ 960	$ 953
Term Loan		—	825
1.85% 5-Year Senior Notes, Due 1/15/2018		—	500
Floating Rate 2-Year Senior Notes, Due 8/9/2018 (euro-denominated)	0.37 %	721	631
2.15% 3-Year Senior Notes, Due 12/14/2018	2.35 %	450	450
2.40% 5-Year Senior Notes, Due 2/1/2019	2.59 %	900	900
Floating Rate 2-Year Senior Notes, Due 7/24/2019 (euro-denominated)	0.10 %	600	—
6.00% 10-Year Senior Notes, Due 3/1/2020	2.97 %	750	750
4.70% 10-Year Senior Notes, Due 5/1/2020	4.23 %	300	300
1.50% 5-Year Senior Notes, Due 12/1/2020 (euro-denominated)	1.62 %	510	447
5.00% 10-Year Senior Notes, Due 1/15/2021	3.24 %	400	400
4.50% 10-Year Senior Notes, Due 3/1/2021	5.37 %	1,000	1,000
3.60% 10-Year Senior Notes, Due 8/15/2021	5.19 %	1,100	1,100
3.30% 7-Year Senior Notes, Due 2/15/2022	3.43 %	800	800
2.15% 7-Year Senior Notes, Due 7/21/2022 (euro-denominated)	2.28 %	600	526
3.15% 10-Year Senior Notes, Due 1/15/2023	3.31 %	800	800
3.00% 7-Year Senior Notes, Due 4/15/2023	5.42 %	1,000	1,000
4.15% 10-Year Senior Notes, Due 2/1/2024	4.16 %	1,000	1,000
0.75% 8-Year Senior Notes, Due 9/12/2024 (euro-denominated)	0.95 %	1,201	1,052
2.00% 10-Year Senior Notes, Due 4/15/2025 (euro-denominated)	2.10 %	768	673
3.65% 10-Year Senior Notes, Due 12/15/2025	3.77 %	350	350
1.40% 8.5-Year Senior Notes, Due 1/23/2026 (euro-denominated)	1.53 %	840	—
2.95% 10-Year Senior Notes, Due 9/19/2026	3.19 %	1,200	1,200
1.45% 10-Year Senior Notes, Due 3/16/2027 (euro-denominated)	1.66 %	600	—
3.20% 10-Year Senior Notes, Due 8/15/2027	3.39 %	750	—
1.375% 12-Year Senior Notes, Due 9/12/2028 (euro-denominated)	1.46 %	721	631
1.95% 12-Year Senior Notes, Due 7/24/2029 (euro-denominated)	2.08 %	840	—
2.875% 20-Year Senior Notes, Due 7/24/2037 (euro-denominated)	2.94 %	840	—
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	—
Other		24	13
Total Borrowings at Par Value		21,175	16,701
Fair Value Hedge Accounting Adjustments		(70)	(50)
Unamortized (Discount) Premium, Net		(2)	52
Unamortized Debt Issuance Costs		(95)	(76)
Total Borrowings at Carrying Value		21,008	16,627
Less: Short-term Obligations and Current Maturities		2,135	1,255
Long-term Obligations		$ 18,873	$ 15,372

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

See Note 12 for fair value information pertaining to the company's long-term obligations.

As of December 31, 2017, the annual repayment requirements for debt obligations are as follows:

(In millions)		
2018	$	2,135
2019		1,505
2020		1,564
2021		2,503
2022		1,403
2023 and Thereafter		12,065
	$	21,175

As of December 31, 2017 and 2016, short-term obligations and current maturities of long-term obligations in the accompanying balance sheet included $960 million and $953 million, respectively, of commercial paper, short-term bank borrowings and borrowings under lines of credit of certain of the company's subsidiaries. The weighted average interest rate for short-term borrowings was (0.26)% and 0.15% at December 31, 2017 and 2016, respectively. In addition to available borrowings under the company's revolving credit agreements, discussed below, the company had unused lines of credit of $73 million as of December 31, 2017. These unused lines of credit generally provide for short-term unsecured borrowings at various interest rates.

Note 10. Commitments and Contingencies

Operating Leases

The company leases certain logistics, office, and manufacturing facilities. Income from continuing operations includes expense from operating leases of $198 million, $182 million and $181 million in 2017, 2016 and 2015, respectively. The following is a summary of annual future minimum lease and rental commitments under noncancelable operating leases as of December 31, 2017:

(In millions)		
2018	$	200
2019		200
2020		200
2021		200
2022		200
2023 and Thereafter		1,000
	$	2,000

Note 11. Comprehensive Income and Shareholders' Equity

Comprehensive Income (Loss)

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

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

(In millions)	Currency Translation Adjustment	Unrealized Gains (Losses) on Available-for-Sale Investments	Unrealized Losses on Hedging Instruments	Pension and Other Postretirement Benefit Liability Adjustment	Total
Balance at December 31, 2016	(2,343)	1	(57)	(237)	(2,636)
Other comprehensive income (loss) before reclassifications	588	(1)	—	23	610
Amounts reclassified from accumulated other comprehensive items	—	(1)	7	17	23
Net other comprehensive items	588	(2)	7	40	633
Balance at December 31, 2017	(1,755)	(1)	(50)	(197)	(2,003)

Shareholders' Equity

At December 31, 2017, the company had reserved 30 million unissued shares of its common stock for possible issuance under stock-based compensation plans.

Note 12. Fair Value Measurements and Fair Value of Financial Instruments

Fair Value Measurements

The company uses the market approach technique to value its financial instruments and there were no changes in valuation techniques during 2017. The company's financial assets and liabilities carried at fair value are primarily comprised of insurance contracts, investments in money market funds, derivative contracts, mutual funds holding publicly traded securities and other investments in unit trusts held as assets to satisfy outstanding deferred compensation and retirement liabilities; and acquisition-related contingent consideration.

The fair value accounting guidance requires that assets and liabilities carried at fair value be classified and disclosed in one of the following three categories:

Level 1: Quoted market prices in active markets for identical assets or liabilities that the company has the ability to access.

Level 2: Observable market based inputs or unobservable inputs that are corroborated by market data such as quoted prices, interest rates and yield curves.

Level 3: Inputs are unobservable data points that are not corroborated by market data.

The following tables present information about the company's financial assets and liabilities measured at fair value on a recurring basis as of December 31, 2017:

(In millions)	December 31, 2017	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets				
Cash equivalents	$ 22	$ 22	$ —	$ —
Bank time deposits	2	2	—	—
Investments in mutual funds and other similar instruments	13	13	—	—
Warrants	2	—	2	—
Insurance contracts	116	—	116	—
Derivative contracts	10	—	10	—
Total Assets	$ 165	$ 37	$ 128	$ —
Liabilities				
Derivative contracts	$ 139	$ —	$ 139	$ —
Contingent consideration	35	—	—	35
Total Liabilities	$ 174	$ —	$ 139	$ 35

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

Fair Value of Other Financial Instruments

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

	December 31, 2017		December 31, 2016	
(In millions)	Carrying Value	Fair Value	Carrying Value	Fair Value
Notes Receivable	$ 89	$ 93	$ 56	$ 59
Debt Obligations:				
Senior notes	$ 20,024	$ 20,639	$ 14,838	$ 15,184
Term loan	—	—	823	825
Commercial paper	960	960	953	953
Other	24	24	13	13
	$ 21,008	$ 21,623	$ 16,627	$ 16,975

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

Note 13. Supplemental Cash Flow Information

(In millions)	2017	2016	2015
Cash Paid For:			
Interest	$ 533	$ 458	$ 438
Income Taxes	$ 479	$ 663	$ 477
Non-cash Activities			
Declared but unpaid dividends	$ 61	$ 60	$ 61
Issuance of stock upon vesting of restricted stock units	$ 125	$ 127	$ 131
Fair value of investments contributed to defined benefit plans	$ —	$ 16	$ —

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

(In millions)	December 31, 2017	December 31, 2016
Cash and Cash Equivalents	$ 1,335	$ 786
Restricted Cash Included in Other Current Assets	24	18
Restricted Cash Included in Other Assets	2	7
Cash, Cash Equivalents and Restricted Cash	$ 1,361	$ 811

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