AGILENT TECHNOLOGIES INC
Form 10-Q
March 05, 2019
Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM 10-Q

(MARK ONE)
x QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934.
FOR THE QUARTERLY PERIOD ENDED JANUARY 31, 2019
OR
¨ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934.
FOR THE TRANSITION PERIOD FROM TO
COMMISSION FILE NUMBER: 001-15405
AGILENT TECHNOLOGIES, INC.
(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

DELAWARE	77-0518772
(State or other jurisdiction of incorporation or organization)	(IRS employer Identification no.)

5301 STEVENS CREEK BLVD.,	
SANTA CLARA, CALIFORNIA	95051
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: (408) 345-8886
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 x No ¨
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes x 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 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 x	Accelerated filer ¨
Non-accelerated filer ¨	Smaller reporting company ¨
(do not check if a 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 x

Indicate the number of shares outstanding of each of the issuer’s classes of common stock, as of the latest practicable date.

CLASS	OUTSTANDING AT FEBRUARY 27, 2019
COMMON STOCK, $0.01 PAR VALUE	317,515,869

Table of Contents

AGILENT TECHNOLOGIES, INC.
TABLE OF CONTENTS

Table of Contents

PART I — FINANCIAL INFORMATION

ITEM 1. CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

AGILENT TECHNOLOGIES, INC.
CONDENSED CONSOLIDATED STATEMENT OF OPERATIONS
(in millions, except per share amounts)
(Unaudited)

	Three Months Ended January 31,	
	2019	2018
Net revenue:		
Products	$980	$930
Services and other	304	281
Total net revenue	1,284	1,211
Costs and expenses:		
Cost of products	414	386
Cost of services and other	163	155
Total costs	577	541
Research and development	102	94
Selling, general and administrative	355	347
Total costs and expenses	1,034	982
Income from operations	250	229
Interest income	10	9
Interest expense	(18)	(20)
Other income (expense), net	6	15
Income before taxes	248	233
Provision (benefit) for income taxes	(256)	553
Net income (loss)	$504	$(320)
Net income (loss) per share:		
Basic	$1.58	$(0.99)
Diluted	$1.57	$(0.99)
Weighted average shares used in computing net income (loss) per share:		
Basic	318	323
Diluted	322	323

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

Table of Contents

AGILENT TECHNOLOGIES, INC.
CONDENSED CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (LOSS)
(in millions)
(Unaudited)

	Three Months Ended January 31,	
	2019	2018
Net income (loss)	$504	$(320)
Other comprehensive income (loss):		
Unrealized loss on derivative instruments, net of tax benefit of $(2) and $(3)	(4)	(7)
Amounts reclassified into earnings related to derivative instruments, net of tax benefit of $(1) and $0	(4)	—
Foreign currency translation, net of tax benefit of $(9) and $0	38	79
Net defined benefit pension cost and post retirement plan costs:		
Change in actuarial net loss, net of tax expense of $4 and $2	6	6
Change in net prior service benefit, net of tax benefit of $0 and $(1)	(2)	(1)
Other comprehensive income	34	77
Total comprehensive income (loss)	$538	$(243)

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

Table of Contents

AGILENT TECHNOLOGIES, INC.
CONDENSED CONSOLIDATED BALANCE SHEET
(in millions, except par value and share amounts)
(Unaudited)

	January 31, 2019	October 31, 2018
ASSETS		
Current assets:		
Cash and cash equivalents	$ 2,057	$ 2,247
Accounts receivable, net	833	776
Inventory	653	638
Other current assets	169	187
Total current assets	3,712	3,848
Property, plant and equipment, net	829	822
Goodwill	3,133	2,973
Other intangible assets, net	566	491
Long-term investments	77	68
Other assets	635	339
Total assets	$ 8,952	$ 8,541
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	$ 315	$ 340
Employee compensation and benefits	237	304
Deferred revenue	346	324
Other accrued liabilities	197	203
Total current liabilities	1,095	1,171
Long-term debt	1,798	1,799
Retirement and post-retirement benefits	238	239
Other long-term liabilities	785	761
Total liabilities	3,916	3,970
Commitments and contingencies (Note 12)		
Total equity:		
Stockholders' equity:		
Preferred stock; $0.01 par value; 125 million shares authorized; none issued and outstanding	—	—
Common stock; $0.01 par value; 2 billion shares authorized; 318 million shares at January 31, 2019 and 318 million shares at October 31, 2018 issued	3	3
Additional paid-in-capital	5,324	5,308
Retained earnings (accumulated deficit)	90	(336)
Accumulated other comprehensive loss	(381)	(408)
Total stockholders' equity	5,036	4,567
Non-controlling interest	—	4
Total equity	5,036	4,571
Total liabilities and equity	$ 8,952	$ 8,541

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

Table of Contents

AGILENT TECHNOLOGIES, INC.
CONDENSED CONSOLIDATED STATEMENT OF CASH FLOWS
(in millions)
(Unaudited)

	Three Months Ended January 31,	
	2019	2018
Net income (loss)	$504	$(320)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:		
Depreciation and amortization	54	51
Share-based compensation	24	31
Deferred taxes	(281)	(6)
Excess and obsolete inventory related charges	4	5
Other non-cash expense, net	3	1
Changes in assets and liabilities:		
Accounts receivable	(22)	(5)
Inventory	(12)	(34)
Accounts payable	(16)	(3)
Employee compensation and benefits	(71)	(62)
Change in assets and liabilities due to Tax Act	—	533
Other assets and liabilities	26	24
Net cash provided by operating activities	213	215
Cash flows from investing activities:		
Investments in property, plant and equipment	(39)	(60)
Payment to acquire fair value investments	(2)	(1)
Payment in exchange for convertible note	(1)	—
Acquisitions of businesses and intangible assets, net of cash acquired	(248)	(6)
Net cash used in investing activities	(290)	(67)
Cash flows from financing activities:		
Issuance of common stock under employee stock plans	22	25
Payment of taxes related to net share settlement of equity awards	(13)	(28)
Payment of dividends	(52)	(48)
Purchase of non-controlling interest	(4)	—
Proceeds from revolving credit facility	—	274
Repayment of debt and revolving credit facility	—	(139)
Treasury stock repurchases	(75)	(47)
Net cash provided by (used in) financing activities	(122)	37
Effect of exchange rate movements	9	25
Net increase (decrease) in cash, cash equivalents and restricted cash	(190)	210
Cash, cash equivalents and restricted cash at beginning of period	2,254	2,686
Cash, cash equivalents and restricted cash at end of period	$2,064	$2,896

Supplemental cash flow information:		
Income tax paid, net	$21	$32
Interest payments	$25	$29
Non-cash changes in investments in property, plant and equipment - increase (decrease)	$(13)	$(12)

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

Table of Contents

AGILENT TECHNOLOGIES, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)

1. OVERVIEW, BASIS OF PRESENTATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Overview. Agilent Technologies, Inc. ("we", "Agilent" or the "company"), incorporated in Delaware in May 1999, is a global leader in life sciences, diagnostics and applied chemical markets, providing application focused solutions that include instruments, software, services and consumables for the entire laboratory workflow.

Our fiscal year-end is October 31, and our fiscal quarters end on January 31, April 30 and July 31. Unless otherwise stated, these dates refer to our fiscal year and fiscal quarters.

Basis of Presentation. We have prepared the accompanying financial data for the three months ended January 31, 2019 and 2018 pursuant to the rules and regulations of the Securities and Exchange Commission (“SEC”). Certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles (“GAAP”) in the U.S. have been condensed or omitted pursuant to such rules and regulations. The October 31, 2018 condensed balance sheet data was derived from audited financial statements but does not include all the disclosures required in audited financial statements by U.S. GAAP. The accompanying financial data and information should be read in conjunction with our Annual Report on Form 10-K for the fiscal year ended October 31, 2018.

In the opinion of management, the accompanying condensed consolidated financial statements contain all normal and recurring adjustments necessary for a fair statement of our condensed consolidated balance sheet as of January 31, 2019 and October 31, 2018, condensed consolidated statement of comprehensive income (loss) for the three months ended January 31, 2019 and 2018, condensed consolidated statement of operations for the three months ended January 31, 2019 and 2018, and condensed consolidated statement of cash flows for the three months ended January 31, 2019 and 2018.

Use of Estimates. The preparation of condensed consolidated financial statements in accordance with GAAP in the U.S. requires management to make estimates and assumptions that affect the amounts reported in our condensed consolidated financial statements and accompanying notes. Management bases its estimates on historical experience and various other assumptions believed to be reasonable. Although these estimates are based on management’s best knowledge of current events and actions that may impact the company in the future, actual results may be different from the estimates. Our critical accounting policies are those that affect our financial statements materially and involve difficult, subjective or complex judgments by management. Those policies are revenue recognition, inventory valuation, share-based compensation, retirement and post-retirement benefit plan assumptions, goodwill and purchased intangible assets and accounting for income taxes.

Fair Value of Financial Instruments. The carrying values of certain of our financial instruments including cash and cash equivalents, accounts receivable, accounts payable, accrued compensation and other accrued liabilities approximate fair value because of their short maturities. The fair value of long-term equity investments which are readily determinable, and which are not accounted under the equity method are reported at fair value using quoted market prices for those securities when available with gains and losses included in net income. The fair value of long-term equity investments which are not readily determinable, and which are not accounted under the equity method are reported at cost with adjustments for observable changes in prices or impairments included in net income. The fair value of our senior notes, calculated from quoted prices which are primarily Level 1 inputs under the accounting guidance fair value hierarchy, exceeds the carrying value by approximately $4 million and is lower than the carrying value by approximately $15 million as of January 31, 2019 and October 31, 2018, respectively. The change in the fair value over carrying value in the three months ended January 31, 2019 is primarily due to fluctuations in market interest rates. The fair value of foreign currency contracts used for hedging purposes is estimated internally by using inputs tied to active markets. These inputs, for example, interest rate yield curves, foreign exchange rates, and forward and spot prices for currencies are observable in the market or can be corroborated by observable market data for substantially the full term of the assets or liabilities. See also Note 9, "Fair Value Measurements" for additional information on the fair value of financial instruments.

Revenue Recognition.   We enter into agreements to sell products (hardware and/or software), services and other arrangements (multiple element arrangements) that include combinations of products and services.

We derive revenue primarily from the sale of analytical and diagnostics products and services. A performance obligation is a promise in a contract to transfer a distinct product or service to a customer and is the unit of account under Accounting Standard Codification Topic 606, Revenue from Contracts with Customers (“ASC 606’’). See also Note 2, "New Accounting Pronouncements" and Note 3, "Revenue" for additional information on revenue recognition.

Revenue is recognized when control of the promised products or services is transferred to our customers and the performance obligation is fulfilled in an amount that reflects the consideration that we expect to be entitled to in exchange for those products or services, the transaction price. For equipment, consumables, and most software licenses sold by us, control transfers to the customer at a point in time. We use present right to payment, legal title, physical possession of the asset, and risks and rewards of ownership as indicators to determine the transfer of control to the customer. Where acceptance is not a formality, the customer must have documented their acceptance of the product or service. For products that include installation, if the installation meets the criteria to be considered a separate performance obligation, product revenue is recognized when control has passed to the customer, and recognition of installation revenue occurs once completed. Product revenue, including sales to resellers and distributors is reduced for provisions for warranties, returns, and other adjustments in the period the related sales are recorded.

Revenue from services includes extended warranty, customer and software support including: Software as a Service ("SaaS"), post contract support (PCS), consulting including companion diagnostics, and training and education. Instrument service contracts and software maintenance contracts are typically annual contracts, which are billed at the beginning of the contract or maintenance period. These contracts are recognized on a straight-line basis to revenue over the service period, as a time-based measure of progress best reflects our performance in satisfying this obligation. There are no deferred costs associated with the service contract, as the cost of the service is recorded when the service is performed. Service calls are recognized to revenue at the time a service is performed.

We have sales from standalone software. These arrangements typically include software licenses and maintenance contracts, both of which we have determined are distinct performance obligations. We determine the amount of the transaction price to allocate to the license and maintenance contract based on the relative standalone selling price of each performance obligation. Software license revenue is recognized at the point in time when control has been transferred to the customer. The revenue allocated to the software maintenance contract is recognized on a straight-line basis over the maintenance period, which is the contractual term of the contract, as a time-based measure of progress best reflects our performance in satisfying this obligation. Unspecified rights to software upgrades are typically sold as part of the maintenance contract on a when-and-if-available basis.

Our multiple-element arrangements are generally comprised of a combination of instruments, installation or other start-up services, and/or software, and/or support or services. Hardware and software elements are typically delivered at the same time and revenue is recognized when control passes to the customer. Service revenue is deferred and recognized over the contractual period or as services are rendered and accepted by the customer. Our arrangements generally do not include any provisions for cancellation, termination, or refunds that would significantly impact recognized revenue.

For contracts with multiple performance obligations, we allocate the consideration to which we expect to be entitled to each performance obligation based on relative standalone selling prices and recognize the related revenue when or as control of each individual performance obligation is transferred to customers. We estimate the standalone selling price by calculating the average historical selling price of our products and services per country for each performance obligation. Stand-alone selling prices (SSP) are determined at contract inception for each distinct good or service in the contract and then we allocate the transaction price in proportion to those standalone selling prices by performance obligations.

Certain of our revenue relate to lease arrangements. Standalone lease arrangements are outside the scope of ASC 606 and are therefore accounted for in accordance with ASC 840, Leases. Each of these contracts is evaluated as a lease arrangement, either as an operating lease or a sales-type capital lease using the current lease classification guidance.

2. NEW ACCOUNTING PRONOUNCEMENTS

Accounting Pronouncements Not Yet Adopted

There were no changes to the new accounting pronouncements not yet adopted as described in our Annual Report on Form 10-K for the fiscal year ended October 31, 2018 except for the following:

In February 2016, the Financial Accounting Standards Board ("FASB") issued guidance which amends the existing accounting standards for leases. Consistent with existing guidance, the recognition, measurement, and presentation of expenses and cash flows arising from a lease by a lessee primarily will depend on its classification. Under the new guidance, a lessee will be required to recognize right-of-use assets and lease liabilities on the balance sheet. In July 2018, the FASB clarified two requirements in the new leases standard. The FASB decided to provide another transition method by allowing companies to initially apply the new leases standard at the adoption date and recognize a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. In addition, the FASB decided to provide lessors with a practical expedient to not separate nonlease components from the associated lease component, similar to the expedient provided for lessees. In December 2018, the

FASB update clarified application of Accounting Standard Codification ("ASC") 842, Leases. The new guidance is effective for us beginning November 1, 2019, and for interim periods within that year. Early adoption is permitted, and we will be required to adopt using a modified retrospective approach. We are evaluating the impact of this guidance on our consolidated financial statements and disclosures.

Recently Adopted Accounting Pronouncements

In May 2014, the FASB issued new revenue recognition guidance, ASC Topic 606, 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 objective of the new revenue standard is to significantly enhance comparability and clarify principles of revenue recognition practices across entities, industries, jurisdictions and capital markets. Under the new guidance, there are specific criteria to determine if a performance obligation should be recognized over time or at a point in time.

On November 1, 2018, we adopted ASC 606 using the modified retrospective approach only to contracts not completed as of this date. Results for reporting periods after November 1, 2018 are presented under ASC 606, while prior period amounts were not adjusted and continue to be reported in accordance with ASC Topic 605, Revenue Recognition.

We recorded a net increase to beginning retained earnings of $23 million as of November 1, 2018 due to the cumulative impact of adopting ASC 606. The impact to beginning retained earnings is primarily due to an increase in contract assets (unbilled accounts receivable), a reduction in inventory and a reduction in contract liabilities (deferred revenue). The net increase in retained earnings and resulting changes in assets and liabilities was mainly driven by the change in timing of the recognition of revenue from the fulfillment of separate performance obligations as control transfers to the customer.

Had we continued to use the revenue recognition guidance in effect prior to 2018, no material changes would have resulted to the consolidated statements of income, comprehensive income, or cash flows for the three months ended January 31, 2019. Refer to Note 1, for a description of the company’s revenue recognition policies and Note 3, "Revenue" for the disclosures required by the standards.

As of November 1, 2018, we elected to early adopt new accounting guidance which amends reporting comprehensive income to allow a reclassification from accumulated other comprehensive income ("AOCI") to retained earnings for the deferred taxes previously recorded in AOCI that exceed the current federal tax rate of 21 percent resulting from the enacted corporate tax rate in the Tax Act. The adoption of this guidance resulted in a reclassification of $7 million from AOCI to beginning retained earnings on our condensed consolidated balance sheet.

As of November 1, 2018, we adopted new accounting guidance which eliminates the exception in ASC 740, Income Taxes against immediate recognition of income tax consequences of intra-entity transfers of assets other than inventory. The amendment in this update should be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of period of adoption. We recorded a net decrease in beginning retained earnings of $2 million as of November 1, 2018 due to removing unamortized tax expense previously deferred.

As of November 1, 2018, we adopted new accounting guidance which addresses certain aspects of recognition, measurement, presentation and disclosure of financial instruments and also the related guidance which addresses technical corrections and improvements to this guidance. The guidance requires entities to measure equity investments that do not result in consolidation and are not accounted for under the equity method at fair value and recognize any changes in fair value in net income. The total impact of adoption to our condensed consolidated balance sheet was an increase of $7 million to long-term investments and a net increase of $5 million to beginning retained earnings.

AGILENT TECHNOLOGIES, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) - (Continued)

The following table summarizes the impacts of recently adopted accounting pronouncements on our condensed consolidated balance sheet as of November 1, 2018:

	October 31, 2018	Impact of Adopting New				November 1, 2018
	As Reported	Revenue Recognition Guidance	Tax Effects on Items in AOCI Guidance	Intra-Entity Tax Guidance	Investments Valuation Guidance	As Adopted
	(in millions)					
ASSETS						
Current assets:						
Cash and cash equivalents	$2,247	$—	$ —	$ —	$ —	$ 2,247
Accounts receivable, net	776	24	—	—	—	800
Inventory	638	(10)	—	—	—	628
Other current assets	187	3	—	—	—	190
Total current assets	3,848	17	—	—	—	3,865
Property, plant and equipment, net	822	—	—	—	—	822
Goodwill	2,973	—	—	—	—	2,973
Other intangible assets, net	491	—	—	—	—	491
Long-term investments	68	—	—	—	7	75
Other assets	339	(3)	—	(2)	(2)	332
Total assets	$8,541	$14	$ —	$ (2)	$ 5	$ 8,558
LIABILITIES AND EQUITY						
Current liabilities:						
Accounts payable	$340	$—	$ —	$ —	$ —	$ 340
Employee compensation and benefits	304	—	—	—	—	304
Deferred revenue	324	(11)	—	—	—	313
Other accrued liabilities	203	—	—	—	—	203
Total current liabilities	1,171	(11)	—	—	—	1,160
Long-term debt	1,799	—	—	—	—	1,799
Retirement and post-retirement benefits	239	—	—	—	—	239
Other long-term liabilities	761	2	—	—	—	763
Total liabilities	3,970	(9)	—	—	—	3,961
Total equity:						
Stockholders’ equity:						
Preferred stock; $0.01 par value; 125 million shares authorized; none issued and outstanding	—	—	—	—	—	—
Common stock; $0.01 par value; 2 billion shares authorized; 318 million shares at October 31, 2018 issued	3	—	—	—	—	3
Additional paid-in-capital	5,308	—	—	—	—	5,308
Accumulated deficit	(336)	23	7	(2)	5	(303)
Accumulated other comprehensive loss	(408)	—	(7)	—	—	(415)
Total stockholders' equity	4,567	23	—	(2)	5	4,593

Non-controlling interest	4	—	—	—	—	4
Total equity	4,571	23	—	(2)	5	4,597
Total liabilities and equity	$ 8,541	$ 14	$ —	$ (2)	$ 5	$ 8,558

10

AGILENT TECHNOLOGIES, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) - (Continued)

As of November 1, 2018, we adopted new accounting guidance which requires amounts generally described as restricted cash and restricted cash equivalents to be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. A reconciliation of cash, cash equivalents and restricted cash to the condensed consolidated balance sheet follows:

	January 31, 2019	October 31, 2018
	(in millions)	
Cash and cash equivalents	$2,057	$ 2,247
Restricted cash included in other assets	7	7
Total cash, cash equivalents and restricted cash	$2,064	$ 2,254

As of November 1, 2018, we adopted new accounting guidance which requires employers that present a measure of operating income in their statements of operations to include only the service cost component of net periodic postretirement benefit cost in operating expenses. The service cost component of net periodic pension and postretirement benefit cost should be presented in the same operating expense line items as other employee compensation costs arising from services rendered during the period. The other components of net periodic pension and postretirement benefit costs, including interest costs, expected return on assets, amortization of prior service cost/credit and actuarial gains/losses, and settlement and curtailment effects, are to be included separately and outside of any subtotal of operating income. The adoption of this guidance resulted in a reclassification of approximately $3 million and $10 million of income from our income from operations to other income (expense) on our consolidated statement of operations in the three months ended January 31, 2019 and 2018, respectively. As adoption is required to be on a retrospective basis, we have recast our historical condensed consolidated statements of operations and segment information to conform to current year presentation.

Other amendments to GAAP in the U.S. that have been issued by the FASB or other standards-setting bodies that do not require adoption until a future date are not expected to have a material impact on our consolidated financial statements upon adoption.

3. REVENUE

The following table presents the company’s segment revenue disaggregated by geographical region and the company’s total revenue disaggregated by end markets and by revenue type (in millions):

	Three Months Ended January 31, 2019			
	Life Sciences and Applied Markets	Diagnostics and Genomics	Agilent CrossLab	Total
	(in millions)			
Revenue by Region				
Americas	$168	$ 109	$ 156	$433
Europe	164	91	128	383
Asia Pacific	275	35	158	468
Total	$607	$ 235	$ 442	$1,284

Revenue by End Markets	
Pharmaceutical and Biotechnology	$391
Chemical and Energy	308
Diagnostics and Clinical	187
Food	129
Academia and Government	116
Environmental and Forensics	153
Total	$1,284
Revenue by Type	
Instrumentation	$567
Non-instrumentation and other	717
Total	$1,284

AGILENT TECHNOLOGIES, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) - (Continued)

Revenue by region is based on the ship to location of the customer. Revenue by end market is determined by the market indicator of the customer and by customer type. Instrumentation revenue includes sales from instruments, remarketed instruments and third-party products. Non-instrumentation and other revenue includes sales from contract and per incident services, our companion diagnostics and our nucleic acid solutions businesses as well as sales from spare parts, consumables, reagents, vacuum pumps, subscriptions, software licenses and associated services.

Contract Balances

Contract Assets

Contract assets (unbilled accounts receivable) primarily relate to the company's right to consideration for work completed but not billed at the reporting date. The unbilled receivables are reclassified to trade receivables when billed to customers. Contracts assets are generally classified as current assets and are included in "Accounts receivable, net" in the condensed consolidated balance sheet.

The balance of contract assets as of January 31, 2019 and as of the date of adoption of ASC 606 were $80 million and $57 million, respectively. The increase in unbilled receivables during the three months ended January 31, 2019 is a result of recognition of revenue upon the transfer of the control to the customer. In some instances transfer of control is prior to invoicing the customers and excluding amounts transferred to trade receivables during the period amounted to $23 million.

Contract Liabilities

The following table provides information about contract liabilities (deferred revenue) and the significant changes in the balances during the three months ended January 31, 2019:

	Contract Liabilities (in millions)
Ending balance as of October 31, 2018	$ 367
Impact of adoption of new revenue recognition guidance	(11)
Net revenue deferred in the period	148
Revenue recognized that was included in the contract liability balance at the beginning of the period	(125)
Change in deferrals from customer cash advances, net of revenue recognized	8
Contract liabilities acquired in business combinations	2
Currency translation and other adjustments	4
Ending balance as of January 31, 2019	$ 393

Contract liabilities primarily relate to multiple element arrangements for which billing has occurred but transfer of control of all elements to the customer has either partially or not occurred at the balance sheet date. This includes cash received from customers for products and related installation and services in advance of the transfer of control. Contract liabilities are classified as either current in deferred revenue or long-term in other long-term liabilities in the condensed consolidated balance sheet based on the timing of when we expect to complete our performance obligation.

Contract Costs

Incremental costs of obtaining a contract with a customer are recognized as an asset if it expects the benefit of those costs to be longer than one year. We have determined that certain sales incentive programs meet the requirements to be capitalized. The change in total capitalized costs to obtain a contract was immaterial during the period and are included in other current and long-term assets on the condensed consolidated balance sheet. We have applied the practical expedient to expense costs as incurred for costs to obtain a contract with a customer when the amortization period would have been one year or less. These costs include the company's internal sales force compensation program, as we have determined that annual compensation is commensurate with annual sales activities.

AGILENT TECHNOLOGIES, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) - (Continued)

Transaction Price Allocated to the Remaining Performance Obligations

We have applied the practical expedient in ASC 606-10-50-14 and have not disclosed information about transaction price allocated to remaining performance obligations that have original expected durations of one year or less.

The estimated revenue expected to be recognized for remaining performance obligations that have an original term of more than one year, as of January 31, 2019, was $166 million, the majority is expected to be recognized over the next 12 months. Remaining performance obligations primarily include extended warranty, customer manufacturing contracts, and software maintenance contracts and revenue associated with lease arrangements.

4. SHARE-BASED COMPENSATION

Agilent accounts for share-based awards in accordance with the provisions of the authoritative accounting guidance which requires the measurement and recognition of compensation expense for all share-based payment awards made to our employees and directors including restricted stock units, employee stock purchases made under our employee stock purchase plan (“ESPP”) and performance share awards granted to selected members of our senior management under the long-term performance plan (“LTPP”) based on estimated fair values.

Participants in the LTPP are entitled to receive shares of the company's stock after the end of a three-year period, if specified performance targets are met. Certain LTPP awards are generally designed to meet the criteria of a performance award with the performance metrics and peer group comparison based on the Total Stockholders’ Return (“TSR”) set at the beginning of the performance period. Effective November 1, 2015, the Compensation Committee of the Board of Directors approved another type of performance stock award, for the company's executive officers and other key employees. Participants in this program are also entitled to receive shares of the company's stock after the end of a three-year period, if specified performance targets over the three-year period are met. The performance target for grants made beginning 2017 and later were based on Earnings Per Share ("EPS"). The performance targets for the LTPP-EPS grants for year 2 and year 3 of the performance period are set in the first quarter of year 2 and year 3, respectively. All LTPP awards granted after November 1, 2015, are subject to a one-year post-vest holding period.

The final LTPP award may vary from zero to 200 percent of the target award. The maximum award value for awards granted in 2017 cannot exceed 300 percent of the grant date target value. We consider the dilutive impact of these programs in our diluted net income per share calculation only to the extent that the performance conditions are expected to be met. Restricted stock units generally vest, with some exceptions, at a rate of 25 percent per year over a period of four years from the date of grant.

The impact on our results for share-based compensation was as follows:

	Three Months Ended January 31,	
	2019	2018
	(in millions)	
Cost of products and services	$ 5	$ 7
Research and development	2	3
Selling, general and administrative	17	21

Total share-based compensation expense	$ 24	$ 31

At January 31, 2019 and October 31, 2018, there was no share-based compensation capitalized within inventory.

The following assumptions were used to estimate the fair value of awards granted.

	Three Months Ended January 31,	
	2019	2018
LTPP:		
Volatility of Agilent shares	22%	21%
Volatility of selected peer-company shares	15%-66%	14%-66%
Pair-wise correlation with selected peers	30%	32%
Post-vest holding restriction discount for all executive awards	5.0%	4.8%

Shares granted under the LTPP (TSR) were valued using a Monte Carlo simulations model. The Monte Carlo simulation fair value model requires the use of highly subjective and complex assumptions, including the price volatility of the underlying stock. For the volatility of our LTPP (TSR) grants, we used our own historical stock price volatility.

The ESPP allows eligible employees to purchase shares of our common stock at 85 percent of the price at purchase and uses the purchase date to establish the fair market value.

The estimated fair value of restricted stock units and LTPP (EPS) awards is determined based on the market price of Agilent's common stock on the date of grant adjusted for expected dividend yield. The compensation cost for LTPP (EPS) reflects the cost of awards that are probable to vest at the end of the performance period.

All awards granted in 2016 and thereafter to our senior management employees have a one-year post-vest holding restriction. The estimated discount associated with post-vest holding restrictions is calculated using the Finnerty model (see table above). The model calculates the potential lost value if the employee were able to sell the shares during the lack of marketability period, instead of being required to hold the shares. The model used the same historical stock price volatility and dividend yield assumption used for the Monte Carlo simulations model and an expected dividend yield to compute the discount.

5. INCOME TAXES

For the three months ended January 31, 2019, the company's income tax benefit was $256 million with an effective tax rate of (103.2) percent. For the three months ended January 31, 2019, our effective tax rate and the resulting provision for income taxes were significantly impacted by the discrete benefit of $299 million related to the restructuring and extension of the company's tax incentive in Singapore. The income taxes for the three months ended January 31, 2019 also includes the excess tax benefits of $4 million from stock-based compensation.

We completed a restructuring of our operations in Singapore in December 2018 which extended and modified the company's tax incentive until 2027. The restructuring along with the application of the new accounting rules under ASU 2016-16, intra-entity transfer of assets on November 1, 2018, resulted in a $299 million tax benefit in the first quarter of fiscal year 2019.

For the three months ended January 31, 2018, the company's income tax expense was $553 million with an effective tax rate of 237.3 percent. The effective tax rate and the provision for income taxes were significantly impacted by a discrete charge of $533 million related to the enactment of the U.S. Tax Cuts and Jobs Act ("the Tax Act"). The income taxes provision for the three months ended January 31, 2018 also includes the excess tax benefits of $11 million from stock based compensation.

2017 U.S. Tax Reform - Tax Cuts and Jobs Act

On December 22, 2017, the Tax Act was enacted into law. The Tax Act enacted significant changes affecting our fiscal year 2018, including, but not limited to, (1) reducing the U.S. federal corporate tax rate and (2) imposing a one-time transition tax on certain unrepatriated earnings of foreign subsidiaries that had not been previously taxed in the U.S.

The Tax Act also establishes new tax provisions affecting our fiscal year 2019, including, but not limited to, (1) creating a new provision designed to tax global intangible low-tax income (“GILTI”); (2) generally eliminating U.S. federal taxes on dividends from foreign subsidiaries; (3) eliminating the corporate alternative minimum tax (“AMT”); (4) creating the base erosion anti-abuse tax (“BEAT”); (5) establishing a deduction for foreign derived intangible income ("FDII"); (6) repealing the domestic production activity deduction; and (7) establishing new limitations on deductible interest expense and certain executive compensation.

AGILENT TECHNOLOGIES, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) - (Continued)

GILTI: The Tax Act subjects a U.S. corporation to tax on its GILTI. U.S. GAAP allows companies to make an accounting policy election to either (1) treat taxes due on future GILTI inclusions in the U.S. taxable income as a current-period expense when incurred (“period cost method”) or (2) factoring such amounts into a company’s measurement of its deferred taxes (“deferred method”). We have completed our analysis and elected to treat GILTI as a “current period cost”.

In the U.S., tax years remain open back to the year 2015 for federal income tax purposes and the year 2000 for significant states. In other major jurisdictions where the company conducts business, the tax years generally remain open back to the year 2001. There were no substantial changes from our 2018 Annual Report on Form 10-K to the status of the open tax years in the first three months of fiscal year 2019.

It is reasonably possible there could be significant changes to our unrecognized tax benefits in the next twelve months due to either the expiration of a statute of limitation or a tax audit settlement. Given the number of years and numerous matters that remain subject to examination in various tax jurisdictions, management is unable to estimate the range of possible changes to the balance of our unrecognized tax benefits. The company will continue to assess the impact of the further guidance from federal and state tax authorities on its business and consolidated financial statements. Any future adjustments will be recognized as discrete income tax expense or benefit in the period the adjustments are determined.

6. NET INCOME PER SHARE

The following is a reconciliation of the numerator and denominator of the basic and diluted net income per share computations for the periods presented below:

	Three Months Ended January 31,	
	2019	2018
	(in millions)	
Numerator:		
Net income (loss)	$504	$(320)
Denominator:		
Basic weighted-average shares	318	323
Potential common shares— stock options and other employee stock plans	4	—
Diluted weighted-average shares	322	323

The dilutive effect of share-based awards is reflected in diluted net income per share by application of the treasury stock method, which includes consideration of unamortized share-based compensation expense and the dilutive effect of in-the-money options and non-vested restricted stock units. Under the treasury stock method, the amount the employee must pay for exercising stock options and unamortized share-based compensation expense collectively are assumed proceeds to be used to repurchase hypothetical shares. An increase in the fair market value of the company's common stock can result in a greater dilutive effect from potentially dilutive awards.

We exclude stock options with exercise prices greater than the average market price of our common stock from the calculation of diluted earnings per share because their effect would be anti-dilutive. In addition, we exclude from the calculation of diluted earnings per share stock options, ESPP, LTPP and restricted stock awards whose combined exercise price and unamortized fair value were greater than the average market price of our common stock because their effect would also be anti-dilutive.

For the three months ended January 31, 2019, no potential common shares were excluded from the calculation of diluted earnings per share. For the three months ended January 31, 2018, the diluted net loss per share is the same as basic net loss per share as the effects of all 6.7 million potential common shares outstanding would be anti-dilutive.

AGILENT TECHNOLOGIES, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) - (Continued)

7. INVENTORY

	January 31, 2019	October 31, 2018
	(in millions)	
Finished goods	$ 396	$ 386
Purchased parts and fabricated assemblies	257	252
Inventory	$ 653	$ 638

8. GOODWILL AND OTHER INTANGIBLE ASSETS

The following table presents goodwill balances and the movements for each of our reportable segments during the three months ended January 31, 2019:

	Life Sciences and Applied Markets	Diagnostics and Genomics	Agilent CrossLab	Total
	(in millions)			
Goodwill as of October 31, 2018	$ 803	$ 1,607	$ 563	$ 2,973
Foreign currency translation impact	3	2	2	7
Goodwill arising from acquisitions	153	—	—	153
Goodwill as of January 31, 2019	$ 959	$ 1,609	$ 565	$ 3,133

The components of other intangible assets as of January 31, 2019 and October 31, 2018 are shown in the table below:

	Purchased Other Intangible Assets		
	Gross Carrying Amount	Accumulated Amortization	Net Book Value
	(in millions)		
As of October 31, 2018			
Purchased technology	$ 947	$ 683	$ 264
Trademark/Tradename	151	88	63
Customer relationships	107	63	44
Third-party technology and licenses	28	19	9
Total amortizable intangible assets	1,233	853	380
In-Process R&D	111	—	111
Total	$ 1,344	$ 853	$ 491
As of January 31, 2019			
Purchased technology	$ 1,028	$ 703	$ 325
Trademark/Tradename	153	92	61
Customer relationships	128	67	61
Third-party technology and licenses	28	20	8
Total amortizable intangible assets	1,337	882	455
In-Process R&D	111	—	111

Total	$ 1,448	$ 882	$ 566

On November 14, 2018, we acquired 100 percent of the stock of ACEA Biosciences ("ACEA"), a developer of cell analysis tools, for approximately $250 million in cash. The financial results of ACEA have been included within our financial results from the date of the close. The purchase accounting for this acquisition is substantially complete and will be finalized during 2019, as we assess the tax impact and finalize the intangibles valuation of the acquisition.

In general, for United States Federal Tax Purposes, goodwill from asset purchases is deductible, however any goodwill created as part of a stock acquisition is not deductible.

During the three months ended January 31, 2019, we recorded additions to goodwill of $153 million and additions to other intangible assets of $102 million related to the ACEA acquisition. During the three months ended January 31, 2019, other intangible assets, net increased $2 million due to the impact of foreign exchange translation.

Each quarter we review the events and circumstances to determine if impairment of indefinite-lived intangible assets and goodwill is indicated. There were no indicators of impairments of indefinite-lived intangible assets or goodwill during the three months ended January 31, 2019 and 2018, respectively.

Amortization expense of intangible assets was $29 million and $26 million for the three months ended January 31, 2019 and 2018, respectively.

Future amortization expense related to existing finite-lived purchased intangible assets for the remainder of fiscal year 2019 and for each of the five succeeding fiscal years and thereafter is estimated below:

Estimated future amortization expense:	
(in millions)	
Remainder of 2019	$80
2020	$95
2021	$81
2022	$65
2023	$55
2024	$46
Thereafter	$33

9. FAIR VALUE MEASUREMENTS

The authoritative guidance defines fair value as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities required or permitted to be recorded at fair value, we consider the principal or most advantageous market and assumptions that market participants would use when pricing the asset or liability.

Fair Value Hierarchy

The guidance establishes a fair value hierarchy that prioritizes the use of inputs used in valuation techniques into three levels. A financial instrument’s categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement. There are three levels of inputs that may be used to measure fair value:

Level 1- applies to assets or liabilities for which there are quoted prices in active markets for identical assets or liabilities.

Level 2- applies to assets or liabilities for which there are inputs other than quoted prices included within level 1 that are observable, either directly or indirectly, for the asset or liability such as: quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in less active markets; or other inputs that can be derived principally from, or corroborated by, observable market data.

Level 3- applies to assets or liabilities for which there are unobservable inputs to the valuation methodology that are significant to the measurement of the fair value of the assets or liabilities.

AGILENT TECHNOLOGIES, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) - (Continued)

Financial Assets and Liabilities Measured at Fair Value on a Recurring Basis

Financial assets and liabilities measured at fair value on a recurring basis as of January 31, 2019 were as follows:

		Fair Value Measurement at January 31, 2019 Using		
	January 31, 2019	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	(in millions)			
Assets:				
Short-term				
Cash equivalents (money market funds)	$973	$973	$ —	$ —
Derivative instruments (foreign exchange contracts)	4	—	4	—
Long-term				
Trading securities	30	30	—	—
Other investments	22	—	22	—
Total assets measured at fair value	$1,029	$1,003	$ 26	$ —
Liabilities:				
Short-term				
Derivative instruments (foreign exchange contracts)	$6	$—	$ 6	$ —
Long-term				
Deferred compensation liability	30	—	30	—
Total liabilities measured at fair value	$36	$—	$ 36	$ —

Financial assets and liabilities measured at fair value on a recurring basis as of October 31, 2018 were as follows:

		Fair Value Measurement at October 31, 2018 Using		
	October 31, 2018	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	(in millions)			
Assets:				
Short-term				
Cash equivalents (money market funds)	$1,355	$1,355	$ —	$ —
Derivative instruments (foreign exchange contracts)	16	—	16	—
Long-term				
Trading securities	30	30	—	—
Total assets measured at fair value	$1,401	$1,385	$ 16	$ —
Liabilities:				
Short-term				

Derivative instruments (foreign exchange contracts)	$5	$—	$ 5	$ —
Long-term				
Deferred compensation liability	30	—	30	—
Total liabilities measured at fair value	$35	$—	$ 35	$ —

Our money market funds and trading securities are generally valued using quoted market prices and therefore are classified within level 1 of the fair value hierarchy. Our derivative financial instruments are classified within level 2, as there is not an active market for each hedge contract, but the inputs used to calculate the value of the instruments are tied to active markets. Our deferred compensation liability is classified as level 2 because, although the values are not directly based on quoted market prices, the inputs used in the calculations are observable. Other investments as of January 31, 2019 represent shares we own in a special fund that targets underlying investments of approximately 40 percent in debt securities and 60 percent in equity securities. It has been classified as level 2 because, although the shares of the fund are not traded on any active stock exchange, each of the individual underlying securities are and hence we have a readily determinable value for the underlying securities, from which we are able to determine the fair market value for the special fund itself.

Trading securities, which is comprised of mutual funds, bonds and other similar instruments, other investments and deferred compensation liability are reported at fair value, with gains or losses resulting from changes in fair value recognized currently in net income. Certain derivative instruments are reported at fair value, with unrealized gains and losses, net of tax, included in accumulated other comprehensive loss within stockholders' equity. Realized gains and losses from the sale of these instruments are recorded in net income.

Impairment of Investments. There were no impairments of investments for the three months ended January 31, 2019 and 2018.

Assets and Liabilities Measured at Fair Value on a Non-Recurring Basis

For the three months ended January 31, 2019 and 2018, there were no impairments of long-lived assets held and used or long-lived assets held for sale. For the three months ended January 31, 2019, there was no impairment or material change in fair value of non-marketable securities. As of January 31, 2019 and October 31, 2018, the carrying amount of non-marketable equity securities without readily determinable fair values was $25 million and $23 million, respectively.

Fair values for the non-marketable securities included in long-term investments on the condensed consolidated balance sheet were measured using level 3 inputs because they are primarily equity stock issued by private companies without quoted market prices. To estimate the fair value of our non-marketable securities, we use the measurement alternative to record these investments at cost and to adjust for impairments and observable price changes (orderly transactions for the identical or a similar security from the same issuer) as and when it occurs.

10. DERIVATIVES

We are exposed to foreign currency exchange rate fluctuations and interest rate changes in the normal course of our business. As part of our risk management strategy, we use derivative instruments, primarily forward contracts, purchased options to hedge economic and/or accounting exposures resulting from changes in foreign currency exchange rates.

Fair Value Hedges

We are exposed to interest rate risk due to the mismatch between the interest expense we pay on our loans at fixed rates and the variable rates of interest we receive from cash, cash equivalents and other short-term investments. We have issued long-term debt in U.S. dollars at fixed interest rates based on the market conditions at the time of financing. The fair value of our fixed rate debt changes when the underlying market rates of interest change, and, in the past, we have used interest rate swaps to change our fixed interest rate payments to U.S. dollar LIBOR-based variable interest expense to match the floating interest income from our cash, cash equivalents and other short-term investments. As of January 31, 2019, all interest rate swap contracts had either been terminated or had expired.

On August 9, 2011, we terminated five interest rate swap contracts related to our 2020 senior notes that represented the notional amount of $500 million. The remaining gain to be amortized at January 31, 2019 was $6 million. All deferred gains from terminated interest rate swaps are being amortized over the remaining life of the 2020 senior notes.

Cash Flow Hedges

We enter into foreign exchange contracts to hedge our forecasted operational cash flow exposures resulting from changes in foreign currency exchange rates. These foreign exchange contracts, carried at fair value, have maturities between one and twelve months. These derivative instruments are designated and qualify as cash flow hedges under the criteria prescribed in the authoritative guidance and are assessed for effectiveness against the underlying exposure every reporting period. For open contracts as of January 31, 2019 and entered into prior to November 1, 2018, changes in the time value of the foreign exchange contract are excluded from the assessment of hedge effectiveness and are recognized in cost of sales each period. For open contracts as of January 31, 2019 and entered into on or after November 1, 2018, changes in the time value of the foreign exchange contract are excluded from the assessment of hedge effectiveness and are recognized in cost of sales over the life of the foreign exchange contract. The changes in fair value of the effective portion of the derivative instrument are recognized in accumulated other comprehensive income (loss). Amounts associated with cash flow hedges are reclassified to cost of sales in the condensed consolidated statement of operations when the forecasted transaction occurs. If it becomes probable that the forecasted transaction will not occur, the hedge relationship will be de-designated and amounts accumulated in other comprehensive income (loss) will be reclassified to other income (expense) in the current period. Changes in the fair value of the ineffective portion of derivative instruments are recognized in other income (expense) in the condensed consolidated statement of operations in the current period. We record the premium paid (time value) of an option on the date of purchase as an asset. For options designated as cash flow hedges, changes in the time value are excluded from the assessment of hedge effectiveness and are recognized in cost of sales over the life of the option contract. For the three months ended January 31, 2019 and 2018 ineffectiveness and gains and losses recognized in other income (expense) due to de-designation of cash flow hedge contracts were not significant.

In July 2012, Agilent executed treasury lock agreements for $400 million in connection with future interest payments to be made on our 2022 senior notes issued on September 10, 2012. We designated the treasury lock as a cash flow hedge. The treasury lock contracts were terminated on September 10, 2012 and we recognized a deferred gain in accumulated other comprehensive income which is being amortized to interest expense over the life of the 2022 senior notes. The remaining gain to be amortized related to the treasury lock agreements at January 31, 2019 was $1 million.

In February 2016, Agilent executed three forward-starting pay fixed/receive variable interest rate swaps for the notional amount of $300 million in connection with future interest payments to be made on our 2026 senior notes issued on September 15, 2016. These derivative instruments were designated and qualified as cash flow hedges under the criteria prescribed in the authoritative guidance. The swap arrangements were terminated on September 15, 2016 with a payment of $10 million and we recognized this as a deferred loss in accumulated other comprehensive income which is being amortized to interest expense over the life of the 2026 senior notes. The remaining loss to be amortized related to the interest rate swap agreements at January 31, 2019 was $7 million.

Other Hedges

Additionally, we enter into foreign exchange contracts to hedge monetary assets and liabilities that are denominated in currencies other than the functional currency of our subsidiaries. These foreign exchange contracts are carried at fair value and do not qualify for hedge accounting treatment and are not designated as hedging instruments. Changes in value of the derivative instruments are recognized in other income (expense) in the condensed consolidated statement of operations, in the current period, along with the offsetting foreign currency gain or loss on the underlying assets or liabilities.

Our use of derivative instruments exposes us to credit risk to the extent that the counterparties may be unable to meet the terms of the agreement. We do, however, seek to mitigate such risks by limiting our counterparties to major financial institutions which are selected based on their credit ratings and other factors. We have established policies and procedures for mitigating credit risk that include establishing counterparty credit limits, monitoring credit exposures, and continually assessing the creditworthiness of counterparties.

A number of our derivative agreements contain threshold limits to the net liability position with counterparties and are dependent on our corporate credit rating determined by the major credit rating agencies. The counterparties to the derivative instruments may request collateralization, in accordance with derivative agreements, on derivative instruments in net liability positions.

The aggregate fair value of all derivative instruments with credit-risk-related contingent features that were in a net liability position as of January 31, 2019, was $3 million. The credit-risk-related contingent features underlying these agreements had not been triggered as of January 31, 2019.

20

AGILENT TECHNOLOGIES, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) - (Continued)

There were 207 foreign exchange forward contracts open as of January 31, 2019 and designated as cash flow hedges. There were 169 foreign exchange forward contracts open as of January 31, 2019 not designated as hedging instruments. The aggregated notional amounts by currency and designation as of January 31, 2019 were as follows:

Currency	Derivatives Designated as Cash Flow Hedges Forward Contracts USD Buy/(Sell)	Derivatives Not Designated as Hedging Instruments Forward Contracts USD Buy/(Sell)
	(in millions)	
Euro	$ (48)	$ 40
British Pound	(57)	5
Canadian Dollar	(34)	8
Australian Dollar	4	4
Malaysian Ringgit	—	(5)
Japanese Yen	(92)	11
Danish Krone	—	7
Korean Won	(39)	(36)
Singapore Dollar	14	2
Swiss Franc	—	(9)
Chinese Yuan Renminbi	(44)	(46)
Polish Zloty	—	(3)
Swedish Krona	—	(9)
Other	—	(23)
Totals	$ (296)	$ (54)

Derivative instruments are subject to master netting arrangements and are disclosed gross in the balance sheet in accordance with the authoritative guidance. The gross fair values and balance sheet location of derivative instruments held in the consolidated balance sheet as of January 31, 2019 and October 31, 2018 were as follows:

Fair Values of Derivative Instruments

Asset Derivatives			Liability Derivatives		
	Fair Value			Fair Value	
Balance Sheet Location	January 31, 2019	October 31, 2018	Balance Sheet Location	January 31, 2019	October 31, 2018
(in millions)					
Derivatives designated as hedging instruments:					
Cash flow hedges					
Foreign exchange contracts					
Other current assets	$ 3	$ 11	Other accrued liabilities	$ 4	$ 1
Derivatives not designated as hedging instruments:					
Foreign exchange contracts					

Other current assets	$ 1	$ 5	Other accrued liabilities	$ 2	$ 4
Total derivatives	$ 4	$ 16		$ 6	$ 5

AGILENT TECHNOLOGIES, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) - (Continued)

The effect of derivative instruments for foreign exchange contracts designated as hedging instruments and not designated as hedging instruments in our consolidated statement of operations were as follows:

	Three Months Ended January 31,	
	2019	2018
	(in millions)	
Derivatives designated as hedging instruments:		
Cash Flow Hedges		
Foreign exchange contracts:		
Loss recognized in accumulated other comprehensive income (loss)	$(6)	$(10)
Gain reclassified from accumulated other comprehensive income (loss) into cost of sales	$5	$—
Gain on time value of forward contracts recorded in cost of sales	$1	$—
Derivatives not designated as hedging instruments:		
Gain (loss) recognized in other income (expense)	$(3)	$6

At January 31, 2019, the estimated amount of existing net gain that is expected to be reclassified from accumulated other comprehensive loss to cost of sales within the next twelve months is $1 million.

11. RETIREMENT PLANS AND POST RETIREMENT PENSION PLANS

Components of net periodic costs. For the three months ended January 31, 2019 and 2018, our net pension and post retirement benefit costs were comprised of the following:

	Three Months Ended January 31,					
	U.S. Pension Plans		Non-U.S. Pension Plans		U.S. Post Retirement Benefit Plans	
	2019	2018	2019	2018	2019	2018
	(in millions)					
Service cost—benefits earned during the period	$—	$—	$6	$6	$ —	$ —
Interest cost on benefit obligation	5	4	3	3	—	1
Expected return on plan assets	(7)	(7)	(11)	(11)	(1)	(2)
Amortization:						
Actuarial losses	—	—	9	7	1	2
Prior service credits	—	—	—	—	(2)	(2)
Total net plan costs	$(2)	$(3)	$7	$5	$ (2)	$ (1)
Settlements gains	$—	$—	$—	$(5)	$ —	$ —

We made no contributions to our U.S. defined benefit plans during the three months ended January 31, 2019. We contributed $6 million to our non-U.S. defined benefit plans during the three months ended January 31, 2019.

We made no contributions to our U.S. defined benefit plans during the three months ended January 31, 2018. We contributed $6 million to our non-U.S. defined benefit plans during the three months ended January 31, 2018.

We do not expect to contribute to our U.S. defined benefit plans during the remainder of 2019 and we expect to contribute $19 million to our non-U.S. defined benefit plans during the remainder of 2019.

Japanese Welfare Pension Insurance Law. In Japan, Agilent has employees' pension fund plans, which are defined benefit pension plans established under the Japanese Welfare Pension Insurance Law (JWPIL). The plans are composed of (a) a substitutional portion based on the pay-related part of the old-age pension benefits prescribed by JWPIL (similar to social security benefits in the United States) and (b) a corporate portion based on a contributory defined benefit pension arrangement established at the discretion of the company. During the three months ended January 31, 2017, Agilent received government approval and returned the substitutional portion of Japan's pension plan to the Japanese government, as allowed by the JWPIL. The initial transfer resulted in a net gain of $32 million. In the first quarter of fiscal year 2018, after the Japanese government’s final review of our initial payment, we received a refund of $5 million which was recorded as a settlement gain.

AGILENT TECHNOLOGIES, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) - (Continued)

12. WARRANTIES AND CONTINGENCIES

Warranties

We accrue for standard warranty costs based on historical trends in warranty charges as a percentage of net product shipments. The accrual is reviewed regularly and periodically adjusted to reflect changes in warranty cost estimates. Estimated warranty charges are recorded within cost of products at the time products are sold. The standard warranty accrual balances are held in other accrued and other long-term liabilities on our condensed consolidated balance sheet. Our standard warranty terms typically extend to one year from the date of delivery, depending on the product.

A summary of the standard warranty accrual activity is shown in the table below:

	Three Months Ended January 31,	
	2019	2018
	(in millions)	
Beginning balance as of November 1,	$ 35	$ 34
Accruals for warranties including change in estimate	13	11
Settlements made during the period	(16)	(12)
Ending balance as of January 31,	$ 32	$ 33
Accruals for warranties due within one year	$ 32	$ 33
Accruals for warranties due after one year	—	—
Ending balance as of January 31,	$ 32	$ 33

Contingencies

We are involved in lawsuits, claims, investigations and proceedings, including, but not limited to, intellectual property, commercial, real estate, environmental and employment matters, which arise in the ordinary course of business. There are no matters pending that we currently believe are probable and reasonably possible of having a material impact to our business, consolidated financial condition, results of operations or cash flows.

13. SHORT-TERM DEBT

Credit Facilities

On September 15, 2014, Agilent entered into a credit agreement with a group of financial institutions which provides for a $400 million five-year unsecured credit facility that will expire on September 15, 2019. On June 9, 2015, the commitments under the existing credit facility were increased by $300 million and on July 14, 2017, the commitments under the existing credit facility were increased by an additional $300 million so that the aggregate commitments under the facility now total $1 billion. As of January 31, 2019, the company had no borrowings outstanding under the credit facility. We were in compliance with the covenants for the credit facility during the three months ended January 31, 2019.

23

AGILENT TECHNOLOGIES, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) - (Continued)

14. LONG-TERM DEBT

Senior Notes

The following table summarizes the company's long-term senior notes and the related interest rate swaps:

	January 31, 2019			October 31, 2018		
	Amortized Principal	Swap	Total	Amortized Principal	Swap	Total
	(in millions)					
2020 Senior Notes	499	6	505	499	7	506
2022 Senior Notes	399	—	399	399	—	399
2023 Senior Notes	597	—	597	597	—	597