ILLUMINA INC Form 10-Q August 03, 2017 UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549 FORM 10-Q þQuarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 For the Quarterly Period Ended July 2, 2017

"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 001-35406
Illumina, Inc.
(Exact name of registrant as specified in its charter)
Delaware 33-0804655
(State or other jurisdiction of (I.R.S. Employer incorporation or organization)
Identification No.)

5200 Illumina Way,
San Diego, CA92122(Address of principal executive offices)(Zip Code)(858) 202-4500

(Registrant's telephone number, including area code)

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 β 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 during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes b No "

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

Large accelerated filer

Accelerated filer

Non-accelerated filer "(Do not check if a smaller reporting company) 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 13a of the Exchange Act. o

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

As of July 28, 2017, there were 146 million shares of the registrant's common stock outstanding.

ILLUMINA, INC. INDEX

	Page
PART I. FINANCIAL INFORMATION	C
Item 1. Financial Statements	<u>3</u>
Condensed Consolidated Balance Sheets	<u>3</u>
Condensed Consolidated Statements of Income	<u>4</u>
Condensed Consolidated Statements of Comprehensive Income	<u>5</u>
Condensed Consolidated Statement of Stockholders' Equity	<u>6</u>
Condensed Consolidated Statements of Cash Flows	<u>7</u>
Notes to Condensed Consolidated Financial Statements	<u>8</u>
Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations	<u>21</u>
Item 3. Quantitative and Qualitative Disclosures About Market Risk	<u>29</u>
Item 4. Controls and Procedures	<u>29</u>
PART II. OTHER INFORMATION	
Item 1. Legal Proceedings	<u>31</u>
Item 1A. Risk Factors	<u>31</u>
Item 2. Unregistered Sales of Equity Securities and Use of Proceeds	<u>31</u>
Item 3. Defaults Upon Senior Securities	<u>31</u>
Item 4. Mine Safety Disclosures	<u>31</u>
Item 5. Other Information	<u>31</u>
Item 6. Exhibits	<u>32</u>
SIGNATURES	<u>33</u>

PART I. FINANCIAL INFORMATION Item 1. Financial Statements.

ILLUMINA, INC.

CONDENSED CONSOLIDATED BALANCE SHEETS (In millions)

	July 2, 2017 (Unaudited)	January 2017	1,
ASSETS			
Current assets:			
Cash and cash equivalents	\$ 1,219	\$ 735	
Short-term investments	674	824	
Accounts receivable, net	372	381	
Inventory	309	300	
Prepaid expenses and other current assets	69	78	
Total current assets	2,643	2,318	
Property and equipment, net	837	713	
Goodwill	771	776	
Intangible assets, net	196	243	
Deferred tax assets	103	123	
Other assets	308	108	
Total assets	\$ 4,858	\$ 4,281	
LIABILITIES AND STOCKHOLDERS'	EQUITY		
Current liabilities:			
Accounts payable	\$ 175	\$138	
Accrued liabilities	378	342	
Build-to-suit lease liability	124	223	
Long-term debt, current portion	5	2	
Total current liabilities	682	705	
Long-term debt	1,169	1,056	
Other long-term liabilities	212	206	
Redeemable noncontrolling interests	80	44	
Stockholders' equity:			
Common stock	2	2	
Additional paid-in capital	2,836	2,733	
Accumulated other comprehensive loss		(1)
Retained earnings	2,025	1,485	
Treasury stock, at cost	(2,148)	(2,022)
Total Illumina stockholders' equity	2,715	2,197	
Noncontrolling interests		73	
Total stockholders' equity	2,715	2,270	
Total liabilities and stockholders' equity	\$ 4,858	\$ 4,281	
Sag accompanying notes to the condensed	consolidated	financial	ote

See accompanying notes to the condensed consolidated financial statements.

ILLUMINA, INC. CONDENSED CONSOLIDATED STATEMENTS OF INCOME (Unaudited) (In millions, except per share amounts)

		Months	Six Months		
	Ended	Inly 2	Ended July 2,	July 3,	
	2017 2,	2016	2017	2016	
Revenue:	2017	2010	2017	2010	
Product revenue	\$543	\$510	\$1,034	\$993	
Service and other revenue	119	90	227	179	
Total revenue	662	600	1,261	1,172	
Cost of revenue:			-,	-,	
Cost of product revenue	168	125	334	250	
Cost of service and other revenue	50	40	104	80	
Amortization of acquired intangible assets	10	11	21	21	
Total cost of revenue	228	176	459	351	
Gross profit	434	424	802	821	
Operating expense:					
Research and development	130	125	275	249	
Selling, general and administrative	169	148	332	298	
Legal contingencies	(8)	(11)		(9)	
Total operating expense	291	262	607	538	
Income from operations	143	162	195	283	
Other income (expense):					
Interest income	5	3	9	5	
Interest expense	(8)	(8)	(16) (16)	
Other income, net	1		457	1	
Total other (expense) income, net		· /	450	(10)	
Income before income taxes	141	157	645	273	
Provision for income taxes	21	41	177	69	
Consolidated net income	120	116	468	204	
Add: Net loss attributable to noncontrolling interests	8	4	27	6	
Net income attributable to Illumina stockholders	\$128	\$120	\$495	\$210	
Net income attributable to Illumina stockholders for earnings per share	\$128	\$122	\$494	\$212	
Earnings per share attributable to Illumina stockholders:					
Basic	\$0.87	\$0.83	\$3.38	\$1.44	
Diluted	\$0.87	\$0.82	\$3.35	\$1.43	
Shares used in computing earnings per common share:					
Basic	146	147	146	147	
Diluted	147	148	147	148	
See accompanying notes to the condensed consolidated financial statem	ents.				

ILLUMINA, INC. CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (Unaudited) (In millions)

	Three Mont Ende	hs	Six M Endeo	Ionths d
	July 2	2,July 3,	July 2	2,July 3,
	2017	2016	2017	2016
Consolidated net income	\$120	\$116	\$468	\$ 204
Unrealized gain on available-for-sale securities, net of deferred tax	1	1	1	2
Total consolidated comprehensive income	121	117	469	206
Add: Comprehensive loss attributable to noncontrolling interests	8	4	27	6
Comprehensive income attributable to Illumina stockholders	\$129	\$ 121	\$496	\$ 212
See accompanying notes to the condensed consolidated financial sta	atemen	ts.		

Table of Contents

ILLUMINA, INC. CONDENSED CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY (Unaudited) (In millions)

(III IIIIIIOIIS)	Illumi	ina Stock	holder	s							
	A	dditional	Accum Other	ulate	ed					Total	
	ConPra	nid nIn	Compr	ehen	s Ræ tained	Treasury	None	conti	roll	istockhol	ders'
	Stock	apital	Loss		Earnings	Stock	Inter	ests		Equity	
Balance as of January 1, 2017	\$2 \$2	2,733	\$ (1)	\$1,485	\$(2,022)	\$ 7.	3		\$ 2,270	
Net income (loss)		_			495	_	(7)	488	
Unrealized gain on available-for-sale securities net of deferred tax	,	_	1		_		_			1	
Issuance of common stock, net of repurchases	— 31	l				(126)				(95)
Share-based compensation	— 89)								89	
Adjustment to the carrying value of redeemable noncontrolling interests	² — (2	.0)			_		_			(20)
Vesting of redeemable equity awards	— (1	1)								(11)
Cumulative-effect adjustment from adoption of ASU 2016-09	— 3				45	_	_			48	
Deconsolidation of GRAIL	— 11	l					(66)	(55)
Balance as of July 2, 2017	\$2 \$2	2,836	\$ —		\$ 2,025	(2,148)	\$ -	_		\$ 2,715	

See accompanying notes to condensed consolidated financial statements.

ILLUMINA, INC. CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited) (In millions)

(In millions)		
	Six M	
	Ended	
	July 2	•
	2017	2016
Cash flows from operating activities:		
Consolidated net income	\$468	\$204
Adjustments to reconcile net income to net cash provided by operating activities:		
Gain on deconsolidation of GRAIL	(453) —
Depreciation expense	52	42
Amortization of intangible assets	24	25
Share-based compensation expense	89	67
Accretion of debt discount	15	15
Deferred income taxes	66	28
Impairment of intangible assets	23	
Other	(5) 3
Changes in operating assets and liabilities:	× ·	,
Accounts receivable	14	13
Inventory	(9) (41)
Prepaid expenses and other current assets	5	5
Other assets	(3) (5)
Accounts payable	(J	8
Accrued liabilities	41	(31)
Other long-term liabilities	19	8
Net cash provided by operating activities	346	341
Cash flows from investing activities:	540	571
Purchases of available-for-sale securities	(86) (303)
Sales of available-for-sale securities	139	335
Maturities of available-for-sale securities	96	113
Net cash paid for acquisitions	90	(10)
Proceeds from sale of GRAIL securities	278	(18)
Deconsolidation of GRAIL cash	(52	` <u> </u>
	-) -
Net purchases of strategic investments	(25) (6)
Purchases of property and equipment	(152) (121)
Net cash provided by investing activities	198	
Cash flows from financing activities:	16	(72)
Payments on financing obligations	(6) (72)
Payments on acquisition related contingent consideration liability	(3) (29)
Proceeds from issuance of debt	5	2
Common stock repurchases	(101) (100)
Taxes paid related to net share settlement of equity awards	(24) (73)
Proceeds from issuance of common stock	31	27
Proceeds from early exercise of equity awards from a subsidiary		5
Contributions from noncontrolling interest owners	36	80
Net cash used in financing activities	(62) (160)
Effect of exchange rate changes on cash and cash equivalents	2	2

Net increase in cash and cash equivalents	484	183
Cash and cash equivalents at beginning of period	735	769
Cash and cash equivalents at end of period	\$1,219	\$952

See accompanying notes to the condensed consolidated financial statements.

Illumina, Inc. Notes to Condensed Consolidated Financial Statements (Unaudited) Unless the context requires otherwise, references in this report to "Illumina," "we," "us," the "Company," and "our" refer to Illumina, Inc. and its consolidated subsidiaries.

1. Basis of Presentation and Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles (GAAP) for interim financial information and the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements. Interim financial results are not necessarily indicative of results anticipated for the full year. These unaudited condensed consolidated financial statements should be read in conjunction with the Company's audited consolidated financial statements and footnotes included in the Company's Annual Report on Form 10-K for the fiscal year ended January 1, 2017, from which the balance sheet information herein was derived. The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, and expense, and related disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

The unaudited condensed consolidated financial statements include the accounts of the Company, its wholly-owned subsidiaries, majority-owned or controlled companies, and variable interest entities (VIEs) for which the Company is the primary beneficiary. All intercompany transactions and balances have been eliminated in consolidation. Effective February 28, 2017, Illumina deconsolidated GRAIL, Inc.'s financial statements. In management's opinion, the accompanying financial statements reflect all adjustments, consisting of normal recurring adjustments, considered necessary for a fair presentation of the results for the interim periods presented.

The Company evaluates its ownership, contractual, and other interests in entities that are not wholly-owned by the Company to determine if these entities are VIEs, and, if so, whether the Company is the primary beneficiary of the VIE. In determining whether the Company is the primary beneficiary of a VIE and is therefore required to consolidate the VIE, the Company applies a qualitative approach that determines whether it has both (1) the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and (2) the obligation to absorb losses of, or the rights to receive benefits from, the VIE that could potentially be significant to that VIE. The Company continuously assesses whether it is the primary beneficiary of a VIE as changes to existing relationships or future transactions may result in the consolidation or deconsolidation, as the case may be, of such VIE. The Company has not provided financial or other support during the periods presented to its VIEs that it was not previously contractually required to provide.

The equity method is used to account for investments in which the Company has the ability to exercise significant influence, but not control, over the investee. Such investments are recorded within other assets, and the share of net income or losses of equity investments is recognized on a one quarter lag in other income, net.

Redeemable Noncontrolling Interests

Noncontrolling interests represent the portion of equity (net assets) in a consolidated entity that is not wholly-owned by the Company that is not attributable, directly or indirectly, to the Company. Noncontrolling interests with embedded contingent redemption features, such as put rights, that are not solely within the Company's control are considered redeemable noncontrolling interests. Redeemable noncontrolling interests are presented outside of

stockholders' equity on the condensed consolidated balance sheets.

Fiscal Year

The Company's fiscal year consists of 52 or 53 weeks ending the Sunday closest to December 31, with quarters of 13 or 14 weeks ending the Sunday closest to March 31, June 30, September 30, and December 31. The three and six months ended July 2, 2017 and July 3, 2016 were both 13 and 26 weeks, respectively.

Reclassifications

Certain prior period amounts have been reclassified to conform to the current period presentation.

Significant Accounting Policies

During the three and six months ended July 2, 2017, there have been no changes to the Company's significant accounting policies as described in the Annual Report on Form 10-K for the fiscal year ended January 1, 2017.

Recently Adopted Accounting Pronouncements

In March 2016, the Financial Accounting Standards Board issued Accounting Standard Update (ASU) 2016-09, Compensation - Stock Compensation (Topic 718), which aims to simplify the accounting for share-based payment transactions, including accounting for income taxes, classification on the statement of cash flows, accounting for forfeitures, and classification of awards as either liabilities or equity. This ASU was effective for the Company beginning in the first quarter of 2017.

Under the ASU, excess tax benefits from share-based payment arrangements are classified as discrete items within the provision for income taxes, rather than recognizing excess tax benefits in additional paid-in capital. Upon adoption in Q1 2017, the Company recorded \$45 million, net, to retained earnings, primarily related to unrealized tax benefits associated with share-based compensation. During the three and six months ended July 2, 2017, excess tax benefits of \$13 million and \$20 million, respectively, were reflected as a component of the provision for income taxes.

In addition, under the ASU, excess income tax benefits from share-based compensation arrangements are classified as cash flow from operations, rather than cash flow from financing activities. The Company has elected to apply the cash flow classification guidance retrospectively and reclassified \$84 million from financing activity to operating activity for the six months ended July 3, 2016.

Recently Issued Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board issued Accounting Standards Update (ASU) 2014-09, Revenue from Contracts with Customers (Topic 606). The new standard is based on the principle that revenue should be recognized in an amount that reflects the consideration to which the entity expects to be entitled in exchange for the transfer of promised goods or services. Since its initial release, the FASB has issued several amendments to the standard, which include clarification of accounting guidance related to identification of performance obligations, intellectual property licenses, and principal vs. agent considerations.

ASU 2014-09 and all subsequent amendments (collectively, the "new standards") will be effective for the Company beginning in the first quarter of 2018 and may be applied using either the full retrospective method, in which case the standard would be applied to each prior reporting period presented, or the modified retrospective method, in which case the cumulative effect of applying the standard would be recognized at the date of initial application.

The Company formed an implementation team in 2016 to oversee adoption of the new standards. While the team's analysis to date suggests the impact of adoption will not have a material impact on the Company's existing revenue accounting policies or financial statements, there are a number of steps in the team's project plan that remain to be completed including: validating our technical evaluations through a review of a sample of contracts, completing our assessment of new revenue disclosures required by the new standards, and evaluating any changes to controls, business processes, and reporting to support the adoption of the new standards. The Company expects to adopt the

new standards using the modified retrospective method with an adjustment to beginning retained earnings for the cumulative effect of the change.

Table of Contents

In January 2016, the Financial Accounting Standards Board issued ASU 2016-01, Financial Instruments - Overall (Subtopic 825-10), which requires equity investments (other than those accounted for under the equity method or those that result in consolidation) to be measured at fair value, with changes in fair value recognized in net income. ASU 2016-01 will be effective for the Company beginning in the first quarter of 2018. The Company anticipates that the adoption of ASU 2016-01 may increase the volatility of other income and expense, net, as a result of the remeasurement of the Company's cost-method investments.

In February 2016, the Financial Accounting Standards Board issued ASU 2016-02, Leases (Topic 842). The new standard requires lessees to recognize most leases on their balance sheets as lease liabilities with corresponding right-of-use assets and eliminates certain real estate-specific provisions. ASU 2016-02 will be effective for the Company beginning in the first quarter of 2019. ASU 2016-02 will be adopted on a modified retrospective transition basis for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. The Company is currently evaluating the impact of ASU 2016-02 on its consolidated financial statements.

In June 2016, the FASB issued ASU 2016-13, Financial Instruments - Credit Losses: Measurement of Credit Losses on Financial Instruments, which amends the impairment model by requiring entities to use a forward-looking approach based on expected losses to estimate credit losses on certain types of financial instruments, including trade receivables and available for sale debt securities. The ASU is effective for the Company beginning in the first quarter of 2020, with early adoption permitted. The Company is currently evaluating the impact of ASU 2016-13 on its consolidated financial statements.

Earnings per Share

Basic earnings per share attributable to Illumina stockholders is computed based on the weighted average number of common shares outstanding during the period. Diluted earnings per share attributable to Illumina stockholders is computed based on the sum of the weighted average number of common shares and potentially dilutive common shares outstanding during the period. Per-share earnings of our VIEs are included in the Company's consolidated basic and diluted earnings per share computations based on the Company's share of the VIEs' securities.

Potentially dilutive common shares consist of shares issuable under convertible senior notes, equity awards, and warrants. Convertible senior notes have a dilutive impact when the average market price of the Company's common stock exceeds the applicable conversion price of the respective notes. Potentially dilutive common shares from equity awards and warrants are determined using the average share price for each period under the treasury stock method. In addition, proceeds from exercise of equity awards and warrants, and the average amount of unrecognized compensation expense for equity awards are assumed to be used to repurchase shares. In loss periods, basic net loss per share and diluted net loss per share are identical because the otherwise dilutive potential common shares become anti-dilutive and are therefore excluded.

The following table presents the calculation of weighted average shares used to calculate basic and diluted earnings per share (in millions):

-

	Three Months Ended	Six Months Ended
	July L uly 3,	July L uly 3,
	20172016	20172016
Weighted average shares outstanding	146 147	146 147

Effect of potentially dilutive common shares from:

Equity awards	1	1	1	1
Weighted average shares used in calculating diluted earnings per share	147	148	147	148
Potentially dilutive shares excluded from calculation due to anti-dilutive effect		1		1

2. Balance Sheet Account Details

Short-Term Investments

The following is a summary of short-term investments (in millions):

		2, 2017				ry 1, 2017	
	Amo	Gross rtized Unreali	zed	Estimated Fair	Amo	Gross ruzed Unrealized	Estimated Fair
	COSt	Losses		Value	Cost	Losses	Value
Available-for-sale securities:							
Debt securities in government sponsored entities	\$30	\$ —		\$ 30	\$34	\$ —	\$ 34
Corporate debt securities	376	(1)	375	478	(2)	476
U.S. Treasury securities	270	(1)	269	316	(2)	314
Total available-for-sale securities	\$676	\$ (2)	\$ 674	\$828	\$ (4)	\$ 824

Realized gains and losses are determined based on the specific identification method and are reported in interest income.

Contractual maturities of available-for-sale debt securities as of July 2, 2017 were as follows (in millions):

	Estimated
	Fair
	Value
Due within one year	\$ 346
After one but within five years	328
Total	\$ 674

The Company has the ability, if necessary, to liquidate any of its cash equivalents and short-term investments in order to meet its liquidity needs in the next 12 months. Accordingly, those investments with contractual maturities greater than one year from the date of purchase nonetheless are classified as short-term on the accompanying condensed consolidated balance sheets.

Strategic Investments

As of July 2, 2017 and January 1, 2017, the aggregate carrying amounts of the Company's cost-method investments in non-publicly traded companies included in other assets were \$249 million and \$57 million, respectively. Revenue recognized from transactions with such companies was \$35 million and \$58 million, respectively, for the three and six months ended July 2, 2017 and \$17 million and \$30 million, respectively, for the three and six months ended July 3, 2016.

The Company's cost-method investments are assessed for impairment quarterly. The Company determines that it is not practicable to estimate the fair value of its cost-method investments on a regular basis and does not reassess the fair value of cost-method investments unless there are identified events or changes in circumstances that may have a significant adverse effect on the fair value of the investments. No material impairment losses were recorded during the three and six months ended July 2, 2017 or July 3, 2016.

The Company invests in a venture capital investment fund (the Fund) with a capital commitment of \$100 million that is callable over ten years. The Company's investment in the Fund is accounted for as an equity method investment. The carrying amounts included in other assets were \$15 million and \$10 million as of July 2, 2017 and January 1, 2017, respectively.

Inventory

Inventory consists of the following (in millions): July 2, January 1, 2017 2017 Raw materials \$ 95 \$ 102 Work in process 168 161 Finished goods 46 37 Total inventory \$ 309 \$ 300

Property and Equipment

Property and equipment, net consists of the following (in millions):

	July 2,	January	1,
	2017	2017	
Leasehold improvements	\$310	\$ 270	
Machinery and equipment	294	274	
Computer hardware and software	178	156	
Furniture and fixtures	26	24	
Building	128	9	
Construction in progress	272	307	
Total property and equipment, gross	1,208	1,040	
Accumulated depreciation	(371)	(327)
Total property and equipment, net	\$837	\$ 713	

Property and equipment, net included accrued expenditures of \$94 million and \$106 million for the six months ended July 2, 2017 and July 3, 2016, respectively, which were excluded from the condensed consolidated statements of cash flows. For the six months ended July 2, 2017 and July 3, 2016, accrued expenditures included \$60 million and \$85 million, respectively, in construction in progress recorded under build-to-suit lease accounting.

Intangible Assets and Goodwill

The Company tests the carrying value of goodwill in accordance with accounting rules on impairment of goodwill, which require the Company to estimate the fair value of the reporting unit annually, or when impairment indicators exist, and compare such amounts to their respective carrying values to determine if an impairment is required. The Company performed its annual assessment for goodwill impairment in the second quarter of 2017, noting no impairment.

Changes to the Company's goodwill balance during the six months ended July 2, 2017 are as follows (in millions):

	Goodw	111
Balance as of January 1, 2017	\$ 776	
GRAIL deconsolidation	(5)
Balance as of July 2, 2017	\$ 771	

The Company regularly performs reviews to determine if any event has occurred that may indicate its identifiable intangible assets are potentially impaired. During the six months ended July 2, 2017, the Company performed a recoverability test when the planned use of a finite-lived acquired intangible asset changed, resulting in an impairment charge of \$18 million recorded in cost of product revenue. Also during the six months ended July 2, 2017, the Company recorded a \$5 million impairment charge of in-process research and development as it was determined the project had no future alternative use.

Derivatives

The Company is exposed to foreign exchange rate risks in the normal course of business. The Company enters into foreign exchange contracts to manage foreign currency risks related to monetary assets and liabilities that are denominated in currencies other than the U.S. dollar. These foreign exchange contracts are carried at fair value in other assets or other liabilities and are not designated as hedging instruments. Changes in the value of the derivative are recognized in other income, net, along with the remeasurement gain or loss on the foreign currency denominated assets or liabilities.

As of July 2, 2017, the Company had foreign exchange forward contracts in place to hedge exposures in the euro, Japanese yen, Australian dollar, and Canadian dollar. As of July 2, 2017 and January 1, 2017, the total notional amounts of outstanding forward contracts in place for foreign currency purchases were \$79 million and \$69 million, respectively.

Accrued Liabilities

Accrued liabilities consist of the following (in millions):						
	July 2,	January 1,				
	2017	2017				
Deferred revenue, current portion	\$ 131	\$ 121				
Accrued compensation expenses	138	112				
Accrued taxes payable	35	32				
Customer deposits	23	20				
Other	51	57				
Total accrued liabilities	\$ 378	\$ 342				

Warranties

The Company generally provides a one-year warranty on instruments. Additionally, the Company provides a warranty on consumables through the expiration date, which generally ranges from six to twelve months after the manufacture date. At the time revenue is recognized, the Company establishes an accrual for estimated warranty expenses based on historical experience as well as anticipated product performance. The Company periodically reviews its warranty reserve for adequacy and adjusts the warranty accrual, if necessary, based on actual experience and estimated costs to be incurred. Warranty expense is recorded as a component of cost of product revenue.

Changes in the Company's reserve for product warranties during the three and six months ended July 2, 2017 and July 3, 2016 are as follows (in millions):

	Three Six Months Ence Ended	
	July 2July 3,	July 2July 3,
	2017 2016	2017 2016
Balance at beginning of period	\$12 \$16	\$13 \$17
Additions charged to cost of product revenue	7 6	11 13
Repairs and replacements	(5)(6)	(10)(14)
Balance at end of period	\$14 \$16	\$14 \$16

Leases

Changes in the Company's facility exit obligation related to its former headquarters lease during the three and six months ended July 2, 2017 and July 3, 2016 are as follows (in millions):

	Three Months Ended	Six Months Ended
	July 2 µly 3,	July 2,July 3,
	20172016	2017 2016
Balance at beginning of period	\$18 \$21	\$19 \$22
Accretion of interest expense	— 1	— 1
Cash payments	— (1)	(1)(2)
Balance at end of period	\$18 \$21	\$18 \$21

On February 22, 2017, the Company entered into a lease agreement for a building under construction in Madison, Wisconsin. Minimum lease payments during the initial 15-year term are estimated to be \$46 million.

Investments in Consolidated Variable Interest Entities

GRAIL, Inc.

In January 2016, the Company obtained a majority equity ownership interest in GRAIL, a company formed with unrelated third party investors to develop a blood test for early-stage cancer detection. The Company determined that GRAIL

was a variable interest entity as the entity lacked sufficient equity to finance its activities without additional support. Additionally, the Company determined that it had (a) control of GRAIL's board of directors, which had unilateral power over the activities that most significantly impacted the economic performance of GRAIL and (b) the obligation to absorb losses of and the right to receive benefits from GRAIL that were potentially significant to GRAIL. As a result, the Company was deemed to be the primary beneficiary of GRAIL and was required to consolidate GRAIL.

In January 2016, GRAIL completed its Series A convertible preferred stock financing, raising \$120 million, of which the Company invested \$40 million. Additionally, the Company and GRAIL executed a long-term supply agreement in which the Company contributed certain perpetual licenses, employees, and discounted supply terms in exchange for 113 million shares of GRAIL's Class B common stock. Such contributions were recorded at their historical basis as they remained within the control of the Company. The \$80 million received by GRAIL from unrelated third party investors upon issuance of its Series A convertible preferred stock was classified as noncontrolling interests in stockholders' equity on the Company's condensed consolidated balance sheet.

In June 2016, GRAIL authorized for issuance 98 million shares of Series A-1 convertible preferred stock, all of which were issued to Illumina in exchange for Illumina's 98 million shares of GRAIL Class B common stock. As a result of the exchange, Illumina recorded a \$10 million deemed dividend, net of tax of \$10 million, through equity, which was eliminated in consolidation.

Deconsolidation of GRAIL, Inc.

The operations of GRAIL from January 2, 2017 up to the date of deconsolidation are included in the accompanying condensed consolidated statements of income for the six months ended July 2, 2017. During this period, the Company absorbed approximately 50% of GRAIL's losses based upon its proportional ownership of GRAIL's common stock.

On February 28, 2017, the Company recorded a pretax gain of \$453 million included in other income, net, of which \$159 million relates to the remeasurement of the Company's retained equity interest to its fair value. The pretax gain on deconsolidation includes (i) the consideration received from GRAIL for its repurchase of a portion of the Company's ownership interest, (ii) the derecognition of the carrying amounts of GRAIL's assets and liabilities, (iii) the derecognition of the noncontrolling interest related to GRAIL, and (iv) the recording of the Company's remaining interest in GRAIL at fair value. This fair value measurement of the Company's remaining interest was derived using the market approach. Significant estimates and assumptions required for this valuation included, but were not limited to, various Black-Scholes option-pricing model assumptions as of the date of deconsolidation and estimated discounts for lack of marketability related to the equity securities. These unobservable inputs, which represent a Level 3 measurement, are supported by little or no market activity and reflect the Company's own assumptions in measuring

fair value.

In connection with the deconsolidation of GRAIL, the parties amended their long-term supply agreement, including the discounted supply terms. The repurchase and supply arrangements, which were entered into concurrently, contain various elements and, as such, are deemed to be an arrangement with multiple deliverables as defined under the respective authoritative accounting guidance. The Company determined that each of the elements, which include the purchase obligation, the purchase right, and services to be provided in accordance with the long-term supply agreement, were at, or approximated, fair value on a standalone basis, and therefore, there was no discount to allocate among the deliverables. As such, none of the deconsolidation gain was allocated to these elements.

Helix Holdings I, LLC

In July 2015, the Company obtained a 50% voting equity ownership interest in Helix Holdings I, LLC (Helix), a limited liability company formed with unrelated third party investors to pursue the development and commercialization of a marketplace for consumer genomics. The Company determined that Helix is a variable interest entity as the holders of the at-risk equity investments as a group lack the power to direct the activities of Helix that most significantly impact Helix's economic performance. Additionally, the Company determined that it has (a) unilateral power over one of the activities that most significantly impacts the economic performance of Helix through its contractual arrangements and no one individual party has unilateral power over the remaining significant activities of Helix and (b) the obligation to absorb losses of and the right to receive benefits from Helix that are potentially significant to Helix. As a result, the Company is deemed to be the primary beneficiary of Helix and is required to consolidate Helix.

As contractually committed, the Company contributed certain perpetual licenses, instruments, intangibles, initial laboratory setup, and discounted supply terms in exchange for voting equity interests in Helix. Such contributions are recorded at their historical basis as they remain within the control of the Company. Helix is financed through cash contributions made by the third party investors in exchange for voting equity interests in Helix.

Certain noncontrolling Helix investors may require the Company to redeem all noncontrolling interests in cash at the then approximate fair market value. Such redemption right is exercisable at the option of certain noncontrolling interest holders after January 1, 2021, provided that a bona fide pursuit of the sale of Helix has occurred and an initial public offering of Helix has not been completed. The fair value of the redeemable noncontrolling interests is considered a Level 3 instrument.

As the contingent redemption is outside of the control of Illumina, the redeemable noncontrolling interests in Helix are classified outside of stockholders' equity on the accompanying condensed consolidated balance sheets. The balance of the redeemable noncontrolling interests is reported at the greater of its carrying value after receiving its allocation of Helix's profits and losses or its estimated redemption value at each reporting date. As of July 2, 2017, the noncontrolling shareholders and Illumina each held 50% of Helix's outstanding voting equity interests.

The assets and liabilities of Helix are not significant to the Company's financial position as of July 2, 2017. Helix has an immaterial impact on the Company's condensed consolidated statements of income and cash flows for the three and six months ended July 2, 2017.

As of July 2, 2017, the accompanying condensed consolidated balance sheet includes \$10 million of cash and cash equivalents attributable to Helix that will be used to settle their respective obligations and will not be available to settle obligations of the Company.

Redeemable Noncontrolling Interests

The activity of the redeemable noncontrolling interests during the six months ended July 2, 2017 is as follows (in millions):

	Redeemable		le
	Noncontrolling		lling
	Inte	erests	
Balance as of January 1, 2017	\$	44	
Amount released from escrow	36		
Vesting of redeemable equity awards	11		
Net loss attributable to noncontrolling interests	(20)

Adjustment up to the redemption value	20		
Deconsolidation of GRAIL	(11)
Balance as of July 2, 2017	\$	80	

3. Fair Value Measurements

The following table presents the Company's hierarchy for assets and liabilities measured at fair value on a recurring basis as of July 2, 2017 and January 1, 2017 (in millions):

	July 2,	2017			Janua	ry 1, 2	017	
	Level	Level	Lev	el Total	Level Level Level To			Total
	1	2	3	Total	1	2	3	Total
Assets:								
Money market funds (cash equivalents)	\$922	\$—	\$	-\$922	\$386	\$—	\$ —	\$386
Debt securities in government-sponsored entities		30		30		34	—	34
Corporate debt securities		375		375		476	—	476
U.S. Treasury securities	269	_		269	314		_	314
Deferred compensation plan assets		33		33		31	_	31
Total assets measured at fair value	\$1,191	\$438	\$	-\$1,629	\$700	\$541	\$ —	\$1,241
Liabilities:								
Acquisition related contingent consideration liabilities	\$—	\$—	\$	_\$	\$—	\$—	\$4	\$4
Deferred compensation liability		31		31		29	_	29
Total liabilities measured at fair value	\$—	\$31	\$	-\$31	\$—	\$29	\$ 4	\$33

The Company holds available-for-sale securities that consist of highly liquid, investment grade debt securities. The Company considers information provided by the Company's investment accounting and reporting service provider in the measurement of fair value of its debt securities. The investment service provider provides valuation information from an industry-recognized valuation service. Such valuations may be based on trade prices in active markets for identical assets or liabilities (Level 1 inputs) or valuation models using inputs that are observable either directly or indirectly (Level 2 inputs), such as quoted prices for similar assets or liabilities, yield curve, volatility factors, credit spreads, default rates, loss severity, current market and contractual prices for the underlying instruments or debt, broker and dealer quotes, as well as other relevant economic measures. The Company's deferred compensation plan assets consist primarily of investments in life insurance contracts carried at cash surrender value, which reflects the net asset value of its holdings, including comparing valuations obtained from its investment service provider to valuations reported by the Company's asset custodians, validation of pricing sources and models, and review of key model inputs if necessary.

4. Debt

Summary of debt obligations

The Company's debt obligations consist of the following (dollars in millions):

	July 2,	January 1	Ι,
	2017	2017	
Principal amount of 2019 Notes outstanding	\$633	\$ 633	
Principal amount of 2021 Notes outstanding	517	517	
Unamortized discount of liability component of convertible senior notes	(90)	(105)
Net carrying amount of liability component of convertible senior notes	1,060	1,045	
Obligations under financing leases	109	9	
Other	5	4	
Less: current portion	(5)	(2)
Long-term debt	\$1,169	\$ 1,056	
Carrying value of equity component of convertible senior notes, net of debt issuance cost	\$161	\$ 161	
Fair value of convertible senior notes outstanding (Level 2)	\$1,200	\$ 1,108	
Weighted-average remaining amortization period of discount on the liability component of	3.2	3.6 years	
convertible senior notes	years	J.0 years	

Convertible Senior Notes

0% Convertible Senior Notes due 2019 (2019 Notes) and 0.5% Convertible Senior Notes due 2021 (2021 Notes)

In June 2014, the Company issued \$633 million aggregate principal amount of 2019 Notes and \$517 million aggregate principal amount of 2021 Notes. The Company used the net proceeds plus cash on hand to repurchase outstanding debt. The 2019 and 2021 Notes mature on June 15, 2019 and June 15, 2021, respectively, and the implied estimated effective rates of the liability components of the Notes were 2.9% and 3.5%, respectively, assuming no conversion.

Both the 2019 and 2021 Notes will be convertible into cash, shares of common stock, or a combination of cash and shares of common stock, at the Company's election, based on an initial conversion rate, subject to adjustment, of 3.9318 shares per \$1,000 principal amount of the notes (which represents an initial conversion price of approximately \$254.34 per share), only in the following circumstances and to the following extent: (1) during the five business-day period after any 10 consecutive trading day period (the measurement period) in which the trading price per 2019 and 2021 Note for each day of such measurement period was less than 98% of the product of the last reported sale price of the Company's common stock and the conversion rate on each such day; (2) during any calendar quarter (and only during that quarter) after the calendar quarter ending September 30, 2014, if the last reported sale price of the Company's common stock for 20 or more trading days in the period of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter; (3) upon the occurrence of specified events described in the indenture for the 2019 and 2021 Notes; and (4) at any time on or after March 15, 2019 for the 2019 Notes, or March 15, 2021 for the 2021 Notes, through the second scheduled trading day immediately preceding the maturity date.

T 1 0

Neither the 2019 nor the 2021 Notes were convertible as of July 2, 2017, and had no dilutive impact during the three and six months ended July 2, 2017. If the 2019 and 2021 Notes were converted as of July 2, 2017, the if-converted value would not exceed the principal amount.

0.25% Convertible Senior Notes due 2016

In 2011, the Company issued \$920 million aggregate principal amount of 0.25% convertible senior notes due 2016 (2016 Notes) with a maturity date of March 15, 2016. The effective rate of the liability component was estimated to be 4.5%. Based upon meeting the stock trading price conversion requirement during the three months ended March 30, 2014, the 2016 Notes became convertible on April 1, 2014 through, and including, March 11, 2016. All notes were converted by March 11, 2016.

Build-to-suit leases

The Company evaluates whether it is the accounting owner of leased assets during the construction period when the Company is involved in the construction of leased assets. Including the Madison lease agreement entered on February 28, 2017, the Company is considered the owner of two construction projects for accounting purposes only under build-to-suit lease accounting due to certain indemnification obligations related to the construction. As of July 2, 2017 and January 1, 2017, the Company has recorded \$124 million and \$223 million, respectively, in project construction costs paid or reimbursed by the landlord as construction in progress and a corresponding build-to-suit lease liability.

During the three months ended July 2, 2017, construction of a build-to-suit property was completed. The Company concluded it did not qualify for "sale-leaseback" treatment and the lease is accounted as a financing obligation. Accordingly, the Company reclassified \$100 million of construction in progress and build-to-suit lease liability to building asset and obligations under financing leases, respectively.

On February 28, 2017, the Company deconsolidated GRAIL, as further described in note "2. Balance Sheet Account Details", and removed \$58 million of construction in progress and the corresponding build-to-suit lease liability.

5. Share-based Compensation Expense

Share-based compensation expense for all stock awards consists of the following (in millions):

	Three Months Ended		Six Months Ended	
	July 2	2July 3,	July 2	2July 3,
	2017	2016	2017	2016
Cost of product revenue	\$3	\$ 2	\$6	\$4
Cost of service and other revenue	1	1	1	1
Research and development	12	10	26	21
Selling, general and administrative	23	19	56	41
Share-based compensation expense before taxes	39	32	89	67
Related income tax benefits	(12)	(8)	(23)	(15)
Share-based compensation expense, net of taxes	\$27	\$ 24	\$66	\$ 52

The assumptions used for the specified reporting periods and the resulting estimates of weighted-average fair value per share for stock purchased under the Employee Stock Purchase Plan (ESPP) during the six months ended July 2, 2017 are as follows:

	Employ Stock Purchas Rights 0.65%	
Risk-free interest rate	-	
Expected volatility	0.83% 44	%
Expected term	0.5 - 1.0	
Expected dividends Weighted-average fair value per share	year 0 \$46.67	%

As of July 2, 2017, approximately \$278 million of unrecognized compensation cost related to stock options, restricted stock, and ESPP shares granted to date is expected to be recognized over a weighted-average period of approximately 2.4 years.

6. Stockholders' Equity

As of July 2, 2017, approximately 6.2 million shares remained available for future grants under the 2015 Stock Plan and the 2005 Solexa Equity Plan.

Restricted Stock

The Company's restricted stock activity and related information for the six months ended July 2, 2017 is as follows (units in thousands):

	Restricted	1 Restricte	^d Performance	Weighte	d-Average	e
	Stock	Stock	Stock Units	Grant-Da	ate Fair V	alue per
	Awards	Units	(PSU)(1)	Share		
	(RSA)	(RSU)	(130)(1)	RSA	RSU	PSU
Outstanding at January 1, 2017	32	2,293	460	\$136.30	\$141.80	\$158.66
Awarded		99	31		\$166.28	\$148.44
Vested	(11)	(204) —	\$179.00	\$104.24	
Cancelled		(123) (36)		\$147.70	\$183.28
Outstanding at July 2, 2017	21	2,065	455	\$114.59	\$146.35	\$156.00

(1)The number of units reflect the estimated number of shares to be issued at the end of the performance period.

Stock Options

The Company's stock option activity under all stock option plans during the six months ended July 2, 2017 is as follows:

	Options (in thousands)	eighted-Average ercise Price
Outstanding at January 1, 2017	1,045	\$ 48.56
Exercised	(347)	\$ 40.57
Outstanding at July 2, 2017	698	\$ 52.54

At July 2, 2017, outstanding options to purchase 0.7 million shares were exercisable with a weighted-average exercise price per share of \$52.54.

Employee Stock Purchase Plan

The price at which common stock is purchased under the ESPP is equal to 85% of the fair market value of the common stock on the first day of the offering period or purchase date, whichever is lower. During the six months ended July 2, 2017, approximately 0.1 million shares were issued under the ESPP. As of July 2, 2017, there were approximately 14.1 million shares available for issuance under the ESPP.

Share Repurchases

On July 28, 2016, the Company's Board of Directors authorized a share repurchase program, which supersedes all prior and available repurchase authorizations, to repurchase \$250 million of outstanding common stock. During the six months ended July 2, 2017, the Company repurchased 0.6 million shares for \$101 million, completing the share repurchase program.

On May 4, 2017, the Company's Board of Directors authorized an additional share repurchase program to repurchase \$250 million of outstanding common stock. The repurchases may be completed under a 10b5-1 plan or at management's discretion. No repurchases were made during the three months ended July 2, 2017, and authorizations to repurchase \$250 million of the Company's common stock remained available as of July 2, 2017.

7. Income Taxes

The Company's effective tax rate may vary from the U.S. federal statutory tax rate due to the change in the mix of earnings in tax jurisdictions with different statutory rates, benefits related to tax credits, and the tax impact of non-deductible expenses and other permanent differences between income before income taxes and taxable income. The effective tax rate for

the three and six months ended July 2, 2017 were 15.2% and 27.4%, respectively. For the three and six months ended July 2, 2017, the variance from the U.S. federal statutory tax rate of 35% was primarily attributable to the mix of earnings in jurisdictions with lower statutory tax rates than the U.S. federal statutory tax rate, such as in Singapore and the United Kingdom, and excess tax benefits related to share-based compensation. In addition, for the six months ended July 2, 2017, the decrease from the federal statutory tax rate was partially offset by the discrete tax impact of \$150 million from the gain on the deconsolidation of GRAIL.

8. Legal Proceedings

The Company is involved in various lawsuits and claims arising in the ordinary course of business, including actions with respect to intellectual property, employment, and contractual matters. In connection with these matters, the Company assesses, on a regular basis, the probability and range of possible loss based on the developments in these matters. A liability is recorded in the financial statements if it is believed to be probable that a loss has been incurred and the amount of the loss can be reasonably estimated. Because litigation is inherently unpredictable and unfavorable results could occur, assessing contingencies is highly subjective and requires judgments about future events. The Company regularly reviews outstanding legal matters to determine the adequacy of the liabilities accrued and related disclosures. The amount of ultimate loss may differ from these estimates. Each matter presents its own unique circumstances, and prior litigation does not necessarily provide a reliable basis on which to predict the outcome, or range of outcomes, in any individual proceeding. Because of the uncertainties related to the occurrence, amount, and range of loss on any pending litigation or claim, the Company is currently unable to predict their ultimate outcome, and, with respect to any pending litigation or claim where no liability has been accrued, to make a meaningful estimate of the reasonably possible loss or range of loss that could result from an unfavorable outcome. In the event that opposing litigants in outstanding litigations or claims ultimately succeed at trial and any subsequent appeals on their claims, any potential loss or charges in excess of any established accruals, individually or in the aggregate, could have a material adverse effect on the Company's business, financial condition, results of operations, and/or cash flows in the period in which the unfavorable outcome occurs or becomes probable, and potentially in future periods.

9. Segment Information

The Company has two reportable segments: Core Illumina and one segment related to the combined activities of the Company's consolidated VIEs, GRAIL and Helix (Consolidated VIEs). Following the GRAIL deconsolidation on February 28, 2017, the Company's Consolidated VIEs no longer include GRAIL. The Company reports segment information based on the management approach. This approach designates the internal reporting used by the Chief Operating Decision Maker ("CODM") for making decisions and assessing performance as the source of the Company's reportable segments. The CODM allocates resources and assesses the performance of each operating segment using information about its revenues and income (losses) from operations. Based on the information used by the CODM, the Company has determined its reportable segments as follows:

Core Illumina:

Core Illumina's products and services serve customers in the research, clinical and applied markets, and enable the adoption of a variety of genomic solutions. Core Illumina includes all operations of the Company, excluding the results of its consolidated VIEs.

Consolidated VIEs:

GRAIL: GRAIL was created to develop a blood test for early-stage cancer detection. GRAIL is currently in the early stages of developing this test and as such, has no revenues to date.

Helix: Helix was established to enable individuals to explore their genetic information by providing affordable sequencing and database services for consumers through third party partners, driving the creation of an ecosystem of consumer applications.

Management evaluates the performance of the Company's operating segments based upon income (loss) from operations. The Company does not allocate expenses between segments. Core Illumina sells products and provides services to GRAIL and Helix in accordance with contractual agreements between the entities.

The following table presents the operating performance of each reportable segment (in millions):

	•••			·
	Three 1	Months	Six Mon	ths
	Ended		Ended	
	July 2,	July 3,	July 2,	July 3,
	2017	2016	2017	2016
Revenues:				
Core Illumina	\$664	\$605	\$1,262	\$1,177
Consolidated VIEs	2		3	
Elimination of intersegment revenues	(4)	(5)	(4)	(5)
Consolidated revenues	\$662	\$600	\$1,261	\$1,172
Operating income (loss):				
Core Illumina	\$160	\$181	\$244	\$311

Core Illumina	\$160	\$181	\$244	\$311	
Consolidated VIEs	(16)	(16)) (50) (25)
Elimination of intersegment earnings	(1)	(3)) 1	(3)
Consolidated operating income	\$143	\$162	\$195	\$283	

The following table presents the total assets of each reportable segment (in millions):

	July 2,	January 1,
	2017	2017
Total assets:		
Core Illumina	\$4,834	\$ 4,167
Consolidated VIEs	37	180
Elimination of intersegment assets	(13)	(66)
Consolidated total assets	\$4,858	\$ 4,281

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

Our Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) will help readers understand our results of operations, financial condition, and cash flow. It is provided in addition to the accompanying condensed consolidated financial statements and notes. This MD&A is organized as follows:

Business Overview and Outlook. High level discussion of our operating results and significant known trends that affect our business.

Results of Operations. Detailed discussion of our revenues and expenses.

Liquidity and Capital Resources. Discussion of key aspects of our statements of cash flows, changes in our financial position, and our financial commitments.

Off-Balance Sheet Arrangements. We have no off-balance sheet arrangements.

Critical Accounting Policies and Estimates. Discussion of significant changes since our most recent Annual Report on Form 10-K we believe are important to understanding the assumptions and judgments underlying our financial statements.

Recent Accounting Pronouncements. Summary of recent accounting pronouncements applicable to our condensed consolidated financial statements.

This MD&A discussion contains forward-looking statements that involve risks and uncertainties. Please see "Consideration Regarding Forward-Looking Statements" at the end of this MD&A section for additional factors relating to such statements. This MD&A should be read in conjunction with our condensed consolidated financial statements and

accompanying notes included in this report and our Annual Report on Form 10-K for the fiscal year ended January 1, 2017. Operating results are not necessarily indicative of results that may occur in future periods.

Business Overview and Outlook

This overview and outlook provides a high level discussion of our operating results and significant known trends that affect our business. We believe that an understanding of these trends is important to understanding our financial results for the periods being reported herein as well as our future financial performance. This summary is not intended to be exhaustive, nor is it intended to be a substitute for the detailed discussion and analysis provided elsewhere in this Quarterly Report on Form 10-Q.

About Illumina

The Company has two reportable segments: Illumina's core operations (Core Illumina) and one segment related to the combined activities of the Company's consolidated VIEs, GRAIL and Helix (Consolidated VIEs). Following the GRAIL deconsolidation on February 28, 2017, the Company's Consolidated VIEs no longer include GRAIL. For information on GRAIL and Helix, refer to notes 2 and 9 of the Notes to the Condensed Consolidated Financial Statements provided in this Quarterly Report on Form 10-Q.

Our focus on innovation has established us as the global leader in sequencing- and array-based technologies for genetic analysis, serving customers in a wide range of markets, enabling the adoption of genomic solutions in research and clinical settings.

Our customers include leading genomic research centers, academic institutions, government laboratories, and hospitals, as well as pharmaceutical, biotechnology, agrigenomics, commercial molecular diagnostic laboratories, and consumer genomics companies.

Our portfolio of integrated systems, consumables, and analysis tools is designed to accelerate and simplify genetic analysis. This portfolio addresses the range of genomic complexity, price points, and throughput, enabling customers to select the best solution for their research or clinical challenge.

Our financial results have been, and will continue to be, impacted by several significant trends, which are described below. While these trends are important to understanding and evaluating our financial results, this discussion should be read in conjunction with our condensed consolidated financial statements and the notes thereto in Item 1, Part I of this report, and the other transactions, events, and trends discussed in "Risk Factors" in Item 1A, Part II of this report and Item 1A of our Annual Report on Form 10-K for the fiscal year ended January 1, 2017.

Next-Generation Sequencing

Next-generation sequencing has become an essential technology in our markets, and our portfolio of sequencing platforms represents a family of systems that are designed to meet the workflow, output, and accuracy demands of a full range of sequencing applications. We believe that the expanding sequencing market, along with an increase in the number of samples available and enhancements in our sequencing portfolio, will continue to drive demand for our next-generation sequencing technologies. As a result, we believe that our sequencing consumables revenue will continue to grow in future periods.

Arrays

As a complement to next-generation sequencing, we believe arrays offer a less expensive, faster, and highly accurate technology for use when genetic content is already known. The information content of arrays is fixed and reproducible, providing a repeatable, standardized technology to read out subsets of nucleotide bases within the overall genome. We believe that our customers, particularly in research, will migrate certain array studies to sequencing. However, we expect that demand from customers in applied markets who require high-throughput, cost-effective screening solutions will provide growth. Demand in the array market has trended toward more focused arrays that can be used on larger numbers of samples, resulting in a lower selling price per sample.

Financial Overview

Consolidated financial highlights for the first half of 2017 include the following:

Net revenue increased 8% during the first half of 2017 to \$1.3 billion compared to \$1.2 billion in the first half of 2016 due to the growth in sales of our sequencing consumables and genotyping services, as well as the launch of our NovaSeq platform, partially offset by lower shipments of our HiSeq instruments. We expect our revenue to continue to increase in 2017.

Gross profit as a percentage of revenue (gross margin) was 63.6% in the first half of 2017 compared to 70.0% in the first half of 2016. The gross margin decrease was driven by a variety of factors, including impairment of an acquired intangible asset, an increase in lower-margin array services mix, inventory reserves related to product transitions, and lower instrument margin from the NovaSeq introduction. Our gross margin in future periods will depend on several factors, including: market conditions that may impact our pricing power; sales mix changes among consumables, instruments, and services; product mix changes between established products and new products in new markets; excess and obsolete inventories; royalties; our cost structure for manufacturing operations relative to volume; and product support obligations.

Income from operations as a percentage of revenue decreased to 15.5% in the first half of 2017 compared to 24.2% in the first half of 2016 primarily due to lower gross margins and the increase in research and development and selling, general and administrative expenses as a percentage of revenue. We expect research and development and selling, general and administrative expenses to continue to grow.

Our effective tax rate was 27.4% in the first half of 2017 compared to 25.3% in the first half of 2016. The variance from the U.S. federal statutory tax rate of 35% was primarily attributable to the mix of earnings in jurisdictions with lower statutory tax rates than the U.S. federal statutory tax rate, such as in Singapore and the United Kingdom, and excess tax benefits related to share-based compensation, partially offset by the discrete tax impact of \$150 million from the gain on the deconsolidation of GRAIL. Our future effective tax rate may vary from the U.S. federal statutory tax rate due to the mix of earnings in tax jurisdictions with different statutory tax rates and the other factors discussed in the risk factor "We are subject to risks related to taxation in multiple jurisdictions" in Part I Item 1A of our Annual Report on Form 10-K for the fiscal year ended January 1, 2017. We anticipate that our effective tax rate will trend lower than the U.S. federal statutory tax rate in the future due to the portion of our earnings that will be subject to lower statutory tax rates.

Cash, cash equivalents, and short-term investments were \$1.9 billion as of July 2, 2017, of which approximately \$799 million was held by our foreign subsidiaries.

Results of Operations

To enhance comparability, the following table sets forth our unaudited condensed consolidated statements of income for the specified reporting periods stated as a percentage of total revenue.

Revenue:				
Product revenue	82.0 %	85.0 %	82.0 %	84.7 %
Service and other revenue	18.0	15.0	18.0	15.3
Total revenue	100.0	100.0	100.0	100.0
Cost of revenue:				
Cost of product revenue	25.4	20.8	26.5	21.3
Cost of service and other revenue	7.6	6.8	8.2	6.9
Amortization of acquired intangible assets	1.5	1.8	1.7	1.8
Total cost of revenue	34.5	29.4	36.4	30.0
Gross profit	65.5	70.6	63.6	70.0
Operating expense:				
Research and development	19.7	20.7	21.8	21.2
$\gamma\gamma$				

Table of Contents

Selling, general and administrative Legal contingencies Total operating expense Income from operations	25.4 (1.2) 43.9 21.6	24.7 (1.8) 43.6 27.0	26.3 	25.4 (0.8) 45.8 24.2
Other income (expense): Interest income	0.8	0.6	0.7	0.4
Interest expense	(1.2)	(1.4)	(1.2)	(1.4)
Other income, net	0.1		36.2	0.1
Total other (expense) income, net	(0.3)	(0.8)	35.7	(0.9)
Income before income taxes	21.3	26.2	51.2	23.3
Provision for income taxes	3.2	6.8	14.1	5.9
Consolidated net income	18.1	19.4	37.1	17.4
Add: Net loss attributable to noncontrolling interests	1.2	0.7	2.2	0.5
Net income attributable to Illumina stockholders Percentages may not recalculate due to rounding	19.3 %	20.1 %	39.3 %	17.9 %

Our fiscal year is the 52 or 53 weeks ending the Sunday closest to December 31, with quarters of 13 or 14 weeks ending the Sunday closest to March 31, June 30, September 30, and December 31. The three and six month periods ended July 2, 2017 and July 3, 2016 were both 13 and 26 weeks, respectively. Revenue

(Dollars in millions)	Q2 2017	Q2 2016	Change	% Change	YTD 2017	YTD 2016	Change	% Cha	inge
Product revenue	\$543	\$510	\$ 33	6 %	\$1,034	\$993	\$ 41	4	%
Service and other revenue	119	90	29	32	227	179	48	27	
Total revenue	\$662	\$600	\$ 62	10 %	\$1,261	\$1,172	\$ 89	8	%

Product revenue consists primarily of revenue from sales of consumables and instruments. Service and other revenue consists primarily of sequencing and genotyping service revenue as well as instrument service contract revenue. Total revenue primarily relates to Core Illumina for all periods presented.

QTD 2017 vs. QTD 2016

Revenue increased \$62 million, or 10%, to \$662 million in Q2 2017 compared to \$600 million in Q2 2016.

Consumables revenue increased \$23 million, or 6%, to \$402 million in Q2 2017 compared to \$379 million in Q2 2016, driven by growth in the sequencing instrument installed base.

Instrument revenue increased \$10 million, or 8%, to \$136 million in Q2 2017 compared to \$126 million in Q2 2016, primarily due to shipments of our NovaSeq instrument introduced in Q1 2017, partially offset by lower shipments of our HiSeq and HiSeq X instruments.

Service and other revenue increased \$29 million, or 32%, to \$119 million in Q2 2017 compared to \$90 million in Q2 2016, driven by revenue from genotyping services and instrument service contracts associated with a larger sequencing installed base.

Table of Contents

YTD 2017 vs. YTD 2016

Revenue increased \$89 million, or 8%, to \$1,261 million in the first half of 2017 compared to \$1,172 million in the first half of 2016.

Consumables revenue increased \$48 million, or 7%, to \$788 million in the first half of 2017 compared to \$740 million in the first half of 2016, driven by growth in the sequencing instrument installed base.

Instrument revenue decreased \$7 million, or 3%, to \$236 million in the first half of 2017 compared to \$243 million in the first half of 2016, primarily due to lower shipments of our HiSeq and HiSeq X instruments, partially offset by shipments of our NovaSeq instrument, which were introduced in Q1 2017.

Service and other revenue increased \$48 million, or 27%, to \$227 million in the first half of 2017 compared to \$179 million in the first half of 2016, driven by revenue from genotyping services and extended instrument service contracts associated with a larger sequencing installed base.

Gross Margin

(Dollars in millions)	Q2	Q2	C	hange	% Change	YTD	YTD	Change	% Change
	2017	2016		•	C C	2017	2016	e	Ū.
Gross profit	\$434	\$424	\$	10	2%	\$802	\$821	\$(19)	(2)%
Gross margin	65.5 %	70.6~%				63.6 %	70.0~%		

QTD 2017 vs. QTD 2016

Gross margin decreased to 65.5% in Q2 2017 from 70.6% in Q2 2016. The gross margin decrease was driven by a variety of factors, including an increase in lower-margin array services mix, inventory reserves related to product transitions, and lower instrument margin from the NovaSeq introduction.

YTD 2017 vs. YTD 2016

Gross margin decreased to 63.6% in the first half of 2017 compared to 70.0% in the first half of 2016. The gross margin decrease was driven by a variety of factors, including an \$18 million impairment of an acquired intangible asset, an increase in lower-margin array services mix, inventory reserves related to product transitions, and lower instrument margin from the NovaSeq introduction.

Operating Expense								
(Dollars in millions)	Q2	Q2	Change	%	YTD	YTD	Change	%
(Dollars in millions)	2017	2016	Change [%] Change		2017	2016	Change	Change
Research and development	\$130	\$125	\$5	4 %	\$275	\$249	\$ 26	10 %
Selling, general and administrative	169	148	21	14	332	298	34	11
Legal contingencies	(8)	(11)	3	(27)		(9)	9	(100)
Total operating expense	\$291	\$262	\$ 29	11 %	\$607	\$538	\$ 69	13 %

QTD 2017 vs. QTD 2016

Research and development (R&D) expense increased by \$5 million, or 4%, in Q2 2017 from Q2 2016. Core Illumina R&D expense increased by \$8 million, or 7%, in Q2 2017 from Q2 2016 primarily due to increased headcount. R&D expense of our Consolidated VIEs decreased \$3 million primarily due to the deconsolidation of GRAIL in Q1 2017, partially offset by higher headcount at Helix.

Selling, general and administrative (SG&A) expense increased by \$21 million, or 14%, in Q2 2017 from Q2 2016. Core Illumina SG&A expense increased by \$21 million, or 15%, in Q2 2017 from Q2 2016 primarily due to increased investment in headcount and facilities to support the continued growth and scale of our operations. SG&A expense of our Consolidated VIEs

remained flat due to increased headcount and marketing expenses related to Helix being offset by the deconsolidation of GRAIL in Q1 2017.

Legal contingencies in Q2 2017 represent amounts related to patent litigation. Legal contingencies in Q2 2016 represent a reversal of previously recorded expense related to the settlement of patent litigation.

YTD 2017 vs. YTD 2016

Research and development expense increased by \$26 million, or 10%, in the first half of 2017 compared to the first half of 2016. Core Illumina R&D expense increased by \$22 million, or 9%, primarily due to increased headcount as we continue to invest in the development of new products as well as enhancements to existing products. R&D expense of our Consolidated VIEs increased \$4 million primarily due to the growth in Helix's operations, partially offset by the deconsolidation of GRAIL in Q1 2017.

Selling, general and administrative expense increased by \$34 million, or 11%, in the first half of 2017 compared to the first half of 2016. Core Illumina SG&A expense increased by \$18 million, or 6%, primarily due to increased headcount and facilities investment to support the continued growth and scale of our operations. SG&A expense of our Consolidated VIEs increased \$16 million due to performance based compensation related to the GRAIL Series B financing as well as increased headcount and marketing expenses related to Helix, partially offset by the deconsolidation of GRAIL in Q1 2017.

Legal contingencies in the first half of 2016 represent a reversal of previously recorded expense related to the settlement of patent litigation.

Other (Expense) Income, Net

(Dollars in millions)	Q2	Q2	Ch	ango	%	YTD	YTD	Change	%	
(Donars in minors)	2017	2016	CII	ange	% Change	2017	2016	Change	Change	
Interest income	\$5	\$3	\$	2	67 %	\$9	\$5	\$4	80 %	0
Interest expense	(8)	(8)	—			(16)	(16)			
Other income, net	1		1		100	457	1	456	45,600	
Total other (expense) income, net	(2)	(5)	\$	3	(60)%	\$450	\$(10)	\$ 460	(4,600)%	6

Other (expense) income, net primarily relates to Core Illumina for all periods presented.

QTD 2017 vs. QTD 2016

Interest income increased in Q2 2017 compared to Q2 2016 as a result of higher yields on our investments and higher savings and money market balances. Interest expense consisted primarily of accretion of discount on our convertible senior notes.

YTD 2017 vs. YTD 2016

Interest income increased in the first half of 2017 compared to the first half of 2016 as a result of higher yields on our investments and higher savings and money market balances. Interest expense consisted primarily of accretion of discount on our convertible senior notes.

Other income, net in the first half of 2017 primarily consists of a \$453 million gain recorded on the deconsolidation of GRAIL. Other income, net in the first half of 2016 primarily consisted of net foreign exchange gains and losses.

Table of Contents

Provision for Income Taxes								
(Dollars in millions)	Q2	Q2	Change	% Change	YTD	YTD	Change	%
(Dollars in millions)	2017	2016	Change	Change	2017	2016	Change	Change
Income before income taxes	\$141	\$157	\$(16)	(10)%	\$645	\$273	\$ 372	136 %
Provision for income taxes	21	41	(20)	(49)	177	69	108	157
Consolidated net income	\$120	\$116	\$4	3 %	\$468	\$204	\$ 264	129 %
Effective tax rate	15.2 %	25.9 %			27.4 %	25.3 %		

QTD 2017 vs. QTD 2016

Our effective tax rate was 15.2% for Q2 2017 compared to 25.9% in Q2 2016. For Q2 2017, the variance from the U.S. federal statutory tax rate of 35% was primarily attributable to the mix of earnings in jurisdictions with lower statutory tax rates than the U.S. federal statutory tax rate, such as in Singapore and the United Kingdom, and excess tax benefits related to share-based compensation. For Q2 2016, the variance from the U.S. federal statutory tax rate of 35% was primarily attributable to the mix of earnings in jurisdictions with lower statutory tax rates than the U.S. federal statutory tax rate of 35% was primarily attributable to the mix of earnings in jurisdictions with lower statutory tax rates than the U.S. federal statutory tax rate of 35% was primarily attributable to the mix of earnings in jurisdictions with lower statutory tax rates than the U.S. federal statutory tax rate, such as in Singapore and the United Kingdom.

YTD 2017 vs. YTD 2016

Our effective tax rate was 27.4% in the first half of 2017 compared to 25.3% for the first half of 2016. For the first half of 2017, the variance from the U.S. federal statutory tax rate of 35% was primarily attributable to the mix of earnings in jurisdictions with lower statutory tax rates than the U.S. federal statutory tax rate, such as in Singapore and the United Kingdom, and excess tax benefits related to share-based compensation, partially offset by the discrete tax impact of \$150 million from the gain on the deconsolidation of GRAIL. For the first half of 2016, the variance from the U.S. federal statutory tax rate was primarily attributable to the mix of earnings in jurisdictions with lower statutory rates than the U.S. federal statutory tax rate was primarily attributable to the mix of earnings in jurisdictions with lower statutory rates than the U.S. federal statutory rate, such as in Singapore and the United Kingdom.

Liquidity and Capital Resources

At July 2, 2017, we had approximately \$1.2 billion in cash and cash equivalents, of which approximately \$562 million was held by our foreign subsidiaries. Cash and cash equivalents increased by \$484 million from January 1, 2017, due to the factors described in the "Cash Flow Summary" below. Our primary source of liquidity, other than our holdings of cash, cash equivalents and investments, has been cash flows from operations. Our ability to generate cash from operations provides us with the financial flexibility we need to meet operating, investing, and financing needs. It is our intention to indefinitely reinvest all current and future foreign earnings in foreign subsidiaries.

Historically, we have liquidated our short-term investments and/or issued debt and equity securities to finance our business needs as a supplement to cash provided by operating activities. As of July 2, 2017, we had \$674 million in short-term investments. Short-term investments held by our foreign subsidiaries as of July 2, 2017 were approximately \$237 million. Our short-term investments include marketable securities consisting of U.S. government-sponsored entities, corporate debt securities, and U.S. Treasury securities.

We anticipate that our current cash, cash equivalents, and short-term investments, together with cash provided by operating activities are sufficient to fund our near term capital and operating needs for at least the next 12 months. Operating needs include the planned costs to operate our business, including amounts required to fund working capital and capital expenditures. Our primary short-term needs for capital, which are subject to change, include: support of commercialization efforts related to our current and future products, including expansion of our direct sales force and field support resources both in the United States and abroad;

acquisitions of equipment and other fixed assets for use in our current and future manufacturing and research and development facilities;

the continued advancement of research and development efforts;

potential strategic acquisitions and investments;

potential early repayment of debt obligations as a result of conversions;

the expansion needs of our facilities, including costs of leasing and building out additional facilities; and repurchases of our outstanding common stock.

Our convertible senior notes due 2019 and 2021 were not convertible as of July 2, 2017.

During the first half of 2017, we used \$101 million to repurchase our outstanding shares, completing the stock repurchase program authorized by our Board of Directors on July 28, 2016. On May 4, 2017, the Board of Directors authorized an additional share repurchase program to repurchase \$250 million of outstanding common stock, which remains outstanding as of July 2, 2017. The repurchases may be completed under a 10b5-1 plan or at management's discretion.

Certain noncontrolling Helix investors may require Illumina to redeem all noncontrolling interests in cash at the then approximate fair market value. Such redemption right is exercisable at the option of certain noncontrolling interest holders after January 1, 2021, provided that a bona fide pursuit of the sale of Helix has occurred and an initial public offering of Helix has not been completed. The fair value of the redeemable noncontrolling interests related to Helix as of July 2, 2017 was \$80 million.

We have \$86 million remaining in our capital commitment to the venture capital investment fund as of July 2, 2017.

We expect that our revenue and the resulting operating income, as well as the status of each of our new product development programs, will significantly impact our cash management decisions.

Our future capital requirements and the adequacy of our available funds will depend on many factors, including: our ability to successfully commercialize and further develop our technologies and create innovative products in our markets;

scientific progress in our research and development programs and the magnitude of those programs; competing technological and market developments; and

the need to enter into collaborations with other companies or acquire other companies or technologies to enhance or complement our product and service offerings.

Cash Flow Summary

(In millions)	YTD YTD
(III IIIIIIOIIS)	2017 2016
Net cash provided by operating activities	\$346 \$341
Net cash provided by investing activities	198 —
Net cash used in financing activities	(62) (160)
Effect of exchange rate changes on cash and cash equivalents	2 2
Net increase in cash and cash equivalents	\$484 \$183

Operating Activities

Net cash provided by operating activities in the first half of 2017 consisted of net income of \$468 million less net adjustments of \$189 million partially offset by net changes in operating assets and liabilities of \$67 million. The primary non-cash adjustments to net income included the gain on deconsolidation of GRAIL of \$453 million, depreciation and amortization expenses of \$76 million, share-based compensation of \$89 million, deferred income tax of \$66 million, impairment of intangible assets of \$23 million, and accretion of debt discount of \$15 million. Cash flow impact from changes in net operating assets and liabilities were driven by increases in accrued liabilities and other long-term liabilities and a decrease in accounts receivable.

Net cash provided by operating activities in the first half of 2016 consisted of net income of \$204 million plus net adjustments of \$180 million partially offset by net changes in operating assets and liabilities of \$43 million. The primary non-cash expenses added back to net income included depreciation and amortization expenses of \$67 million, share-based compensation of \$67 million, deferred income tax of \$28 million, and accretion of debt discount of \$15 million. Cash flow impact from changes in net operating assets included increases in inventory and other assets, and a decrease in accrued liabilities, partially offset by increases in accounts payable and other long-term liabilities, and decreases in accounts receivable and prepaid expenses.

Investing Activities

Net cash provided by investing activities totaled \$198 million for the first half of 2017. We received \$278 million from the sale of a portion of our ownership interest in GRAIL. In connection with the sale, we removed \$52 million in cash from our condensed consolidated balance sheet as a result of the deconsolidation. We purchased \$86 million of available-for-sale securities and \$235 million of our available-for-sale securities matured or were sold during the period. We paid \$25 million for strategic investments and invested \$152 million in capital expenditures primarily associated with our investment in facilities.

Net cash used in investing activities were nominal for the first half of 2016. We purchased \$303 million of available-for-sale securities and \$448 million of our available-for-sale securities matured or were sold during the period. We also paid net cash of \$18 million for acquisitions and invested \$121 million in capital expenditures primarily associated with facilities and the purchase of manufacturing, research, and development equipment.

Financing Activities

Net cash used in financing activities totaled \$62 million for the first half of 2017. We used