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

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended September 30, 2016

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: 000-32651

Nasdaq, Inc.
(Exact name of registrant as specified in its charter)

Delaware **(State or Other Jurisdiction of Incorporation or Organization)**	**52-1165937** **(I.R.S. Employer Identification No.)**
One Liberty Plaza, New York, New York **(Address of Principal Executive Offices)**	**10006** **(Zip Code)**

+1 212 401 8700
(Registrant's telephone number, including area code)

No changes
(Former name, former address and former fiscal year, if changed since last report)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically 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 ☒ 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	☐

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

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 November 1, 2016
Common Stock, $.01 par value per share	165,202,937 shares

Nasdaq, Inc.

Form 10-Q
For the Quarterly Period Ended September 30, 2016

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Throughout this Form 10-Q, unless otherwise specified:

- "Nasdaq," "we," "us" and "our" refer to Nasdaq, Inc.
- "The NASDAQ Stock Market" and "NASDAQ" refer to the registered national securities exchange operated by The NASDAQ Stock Market LLC.
- "Nasdaq Nordic" refers to collectively, Nasdaq Clearing AB, Nasdaq Stockholm AB, Nasdaq Copenhagen A/S, Nasdaq Helsinki Ltd, and Nasdaq Iceland hf.
- "Nasdaq Baltic" refers to collectively, Nasdaq Tallinn AS, Nasdaq Riga, AS, and AB Nasdaq Vilnius.
- "Nasdaq Clearing" refers to the clearing operations conducted by Nasdaq Clearing AB.

* * * * * *

The following is a non-exclusive list of registered trademarks, registered service marks, or trademarks or service marks of Nasdaq or its subsidiaries, in the United States and/or other countries or jurisdictions:

@TRADE®, ACES®, AT-TRADE®, AGGREGATION, TRANSPARENCY, CONTROL®, AUTO WORKUP®, AXE®, BOARDVANTAGE®, BWISE®, BWISE BUSINESS IN CONTROL®, BWISE RAPID DEPLOYMENT SOLUTION®, BX VENTURE MARKET®, CANADIAN DIVIDEND ACHIEVERS®, CCBN®, CCN®, CCNMATTHEWS®, CLICK XT®, CONDICO®, CYBER SECURITY®, D.A.L.I.®, DATAXPRESS®, DEFENSE OF INTERNATIONAL MARKETS AND EXCHANGES SYMPOSIUM®, DIMES®, DIRECTORS DESK®, DIRECTORSDESK®, DIVIDEND ACHIEVERS®, DORSEY WRIGHT®, DREAM IT. DO IT.®, DWA MATRIX®, DWA®, DX®, E-SPEED®, EQQQ®, ESPEED & KATAKANA®, ESPEED®, ESPEEDOMETER®, EXACTEQUITY®, EXIGO®, FINQLOUD REGULATORY RECORDS RETENTION®, FINQLOUD®, FIRST NORTH®, FONDSBØRSEN®, FTEN®, GENIUM®, GIDS®, GLOBE NEWSWIRE®, GO! POWERED BY MARKETWIRE®, HACK®, IGNITE YOUR AMBITION®, INET®, INVESTOR WORLD®, IPOWORLD®, ISE BIG DATA®, ISE MOBILE PAYMENTS®, ISSUERWORLD®, ITCH®, LIQUIDITYXPRESS®, LONGITUDE®, MARKET INTELLIGENCE DESK®, MARKET LINQUIDITY®, MARKET MECHANICS®, MARKETSITE®, MARKETWIRE BEYOND WORDS®, MARKETWIRE RESONATE®, MARKETWIRE®, MARKETWIRE GO! ®, MARKETWIRED RESONATE®, MARKETWIRED®, MICROMARKET®, MW®, MW MARKET WIRED®, MW MARKETWIRED THE POWER OF INFLUENCE®, MY CCBN®, MYMEDIAINFO®, N LOGO (BLACK AND WHITE)®, N LOGO (BLUE ON WHITE)(STYLIZED "N" IN RIBBON FORM)®, N NASDAQ LOGO (BLACK AND WHITE)®, N NASDAQ LOGO (BLUE AND SILVER)®, N NASDAQ LOGO (BLUE ON WHITE)®, NASDAQ®, NASDAQ (IN CHINESE)®, NASDAQ (IN KATAKANA)®, NASDAQ 100 INDEX®, NASDAQ BIOTECHNOLOGY INDEX®, NASDAQ CANADA COMPOSITE INDEX®, NASDAQ CANADA INDEX®, NASDAQ CANADA®, NASDAQ CAPITAL MARKET®, NASDAQ COMPOSITE INDEX®, NASDAQ COMPOSITE®, NASDAQ COMPUTER INDEX®, NASDAQ DIVIDEND ACHIEVERS®, NASDAQ DUBAI®, NASDAQ EUROPE COMPOSITE INDEX®, NASDAQ EUROPE®, NASDAQ FINANCIAL-100 INDEX®, NASDAQ FX®, NASDAQ GLOBAL MARKET®, NASDAQ GLOBAL SELECT MARKET®, NASDAQ INDUSTRIAL INDEX®, NASDAQ INTERACT®, NASDAQ INTERNET INDEX®, NASDAQ IQ FUND®, NASDAQ JAPAN (IN ENGLISH)®, NASDAQ JAPAN (IN KATAKANA)®, NASDAQ JAPAN®, NASDAQ MARKET ANALYTIX®, NASDAQ MARKET CENTER®, NASDAQ MARKET FORCES®, NASDAQ MARKET VELOCITY®, NASDAQ MARKETSITE®, NASDAQ MAX®, NASDAQ MAX MARKET ANALYTIX®, NASDAQ NATIONAL MARKET®, NASDAQ OMX®, NASDAQ OMX ALPHA INDEXES®, NASDAQ OMX GREEN ECONOMY INDEX®, NASDAQ OMX NORDIC®, NASDAQ PRIVATE MARKET®, NASDAQ Q-50 INDEX®, NASDAQ TELECOMMUNICATIONS INDEX®, NASDAQ TOTALVIEW®, NASDAQ TRADER®, NASDAQ TRANSPORTATION INDEX®, NASDAQ US ALL MARKET®, NASDAQ VOLATILITY GUARD®, NASDAQ WORKSTATION®, NASDAQ WORKSTATION II®, NASDAQ WORLD (IN KATAKANA)®, NASDAQ WORLD®, NASDAQ-100®, NASDAQ-100 (IN KATAKANA)®, NASDAQ-100 EUROPEAN FUND®, NASDAQ-100 EUROPEAN TRACKER®, NASDAQ-100 EUROPEAN TRACKER FUND®, NASDAQ-100 INDEX®, NASDAQ-100 INDEX (IN KATAKANA)®, NASDAQ-100 INDEX EUROPEAN TRACKER FUND®, NASDAQ-100 INDEX TRACKING STOCK®, NASDAQ-FINANCIAL®, NDX®, NEWS RELEASE EXPRESS®, NFX WORLD CURRENCY FUTURES®, NLX®, NOIS®, NORDIX®, OM®, OMX®, OMX COPENHAGEN 20®, OMX HELSINKI 25®, OMX STIBOR FUTURE®, OMX STOCKHOLM 30®, OMX TECHNOLOGY®, OMXH25®, OMXS30®, OMXS3FUT®, ON THE WIRE®, OTW®, OVERUNDER®, PHILADELPHIA STOCK EXCHANGE®, PHLX®, PHLX XL®, PIXL®, PRECISE TRADE®, PRF®, Q THE NEXT GREAT THING®, QQQ®, QTARGET®, QVIEW®, R3®, RE-THINK®, RISKWAY®, RISKWRAPPER®, RISKXPOSURE®, RX®, S.A.X.E.S®, SDW (SYSTEM DEVELOPMENT WORKBENCH)®, SECONDMARKET®, SECONDMARKET ECOYSYSTEM®, SIDECAR®, SIGNALXPRESS SX®, SMARTS®, SMARTSONLINE®, STINA®, STRUCTURED LIQUIDITY PROGRAM®, THE NASDAQ STOCK MARKET®, THE STOCK MARKET FOR THE NEXT 100 YEARS®, TOTAL EQUITY SOLUTION®, TRADEGUARD®, TX®, ULL®, ULTRA LOW LATENCY®, ULTRAFEED®, VX PROXY®, WIZER®, XDE®, XO DORSEY WRIGHT & ASSOCIATES®, ÖVERUNDER®

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All other trademarks and service marks used herein are the property of their respective owners.

* * * * * *

This Quarterly Report on Form 10-Q includes market share and industry data that we obtained from industry publications and surveys, reports of governmental agencies and internal company surveys. Industry publications and surveys generally state that the information they contain has been obtained from sources believed to be reliable, but we cannot assure you that this information is accurate or complete. We have not independently verified any of the data from third-party sources nor have we ascertained the underlying economic assumptions relied upon therein. Statements as to our market position are based on the most currently available market data. For market comparison purposes, The NASDAQ Stock Market data in this Quarterly Report on Form 10-Q for initial public offerings, or IPOs, is based on data generated internally by us, which includes best efforts underwritings; therefore, the data may not be comparable to other publicly-available IPO data. Data in this Quarterly Report on Form 10-Q for new listings of equity securities on The NASDAQ Stock Market is based on data generated internally by us, which includes best efforts underwritings, issuers that switched from other listing venues, closed-end funds and exchange traded products, or ETPs. Data in this Quarterly Report on Form 10-Q for IPOs and new listings of equity securities on the Nasdaq Nordic and Nasdaq Baltic exchanges also is based on data generated internally by us. IPOs and new listings data is presented as of period end. While we are not aware of any misstatements regarding industry data presented herein, our estimates involve risks and uncertainties and are subject to change based on various factors. We refer you to the “Risk Factors” section in this Quarterly Report on Form 10-Q for the quarter ended September 30, 2016, the “Risk Factors” section in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2016 that was filed with the U.S. Securities and Exchange Commission, or SEC, on August 3, 2016, the “Risk Factors” section in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2016 that was filed with the SEC on May 5, 2016 and the “Risk Factors” section in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015 that was filed with the SEC on February 26, 2016.

* * * * * *

Nasdaq intends to use its website, ir.nasdaq.com, as a means for disclosing material non-public information and for complying with SEC Regulation FD and other disclosure obligations. These disclosures will be included on Nasdaq’s website under “Investor Relations.”

Forward-Looking Statements

The SEC encourages companies to disclose forward-looking information so that investors can better understand a company's future prospects and make informed investment decisions. This Quarterly Report on Form 10-Q contains these types of statements. Words such as "may," "will," "could," "should," "anticipates," "estimates," "expects," "projects," "intends," "plans," "believes" and words or terms of similar substance used in connection with any discussion of future expectations as to industry and regulatory developments or business initiatives and strategies, future operating results or financial performance, and other future developments identify forward-looking statements. These include, among others, statements relating to:

- *our 2016 outlook;*
- *the scope, nature or impact of acquisitions, divestitures, investments or other transactional activities;*
- *the integration of acquired businesses, including accounting decisions relating thereto;*
- *the effective dates for, and expected benefits of, ongoing initiatives, including acquisitions and other strategic, restructuring, technology, de-leveraging and capital return initiatives;*
- *our products, order backlog and services;*
- *the impact of pricing changes;*
- *tax matters;*
- *the cost and availability of liquidity; and*
- *any litigation or regulatory or government investigation or action to which we are or could become a party.*

Forward-looking statements involve risks and uncertainties. Factors that could cause actual results to differ materially from those contemplated by the forward-looking statements include, among others, the following:

- *our operating results may be lower than expected;*
- *loss of significant trading and clearing volume, market share, listed companies or other customers;*
- *economic, political and market conditions and fluctuations, including interest rate and foreign currency risk, inherent in U.S. and international operations;*
- *government and industry regulation;*
- *our ability to keep up with rapid technological advances and adequately address cybersecurity risks;*
- *the performance and reliability of our technology and technology of third parties;*
- *our ability to successfully integrate acquired businesses, including the fact that such integration may be more difficult, time consuming or costly than expected, and our ability to realize synergies from business combinations and acquisitions;*
- *our ability to continue to generate cash and manage our indebtedness; and*
- *adverse changes that may occur in the securities markets generally.*

Most of these factors are difficult to predict accurately and are generally beyond our control. You should consider the uncertainty and any risk related to forward-looking statements that we make. These risk factors are discussed under the caption "Part II. Item 1A. Risk Factors," in this Quarterly Report on Form 10-Q for the quarter ended September 30, 2016, our Quarterly Report on Form 10-Q for the quarter ended June 30, 2016 that was filed with the SEC on August 3, 2016, our Quarterly Report on Form 10-Q for the quarter ended March 31, 2016 that was filed with the SEC on May 5, 2016 and more fully described in the "Risk Factors" section in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015 that was filed with the SEC on February 26, 2016. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this report. You should carefully read this entire Quarterly Report on Form 10-Q, including "Part 1. Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations," and the condensed consolidated financial statements and the related notes. Except as required by the federal securities laws, we undertake no obligation to update any forward-looking statement, release publicly any revisions to any forward-looking statements or report the occurrence of unanticipated events. For any forward-looking statements contained in any document, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995.

PART 1—FINANCIAL INFORMATION
Item 1. Financial Statements.
Nasdaq, Inc.

Condensed Consolidated Balance Sheets
(in millions, except share and par value amounts)

	September 30, 2016	December 31, 2015
	(unaudited)	
Assets		
Current assets:		
Cash and cash equivalents	$ 257	$ 301
Restricted cash	19	56
Financial investments, at fair value	238	201
Receivables, net	349	316
Default funds and margin deposits	3,323	2,228
Other current assets	160	158
Total current assets	4,346	3,260
Property and equipment, net	342	323
Deferred tax assets	768	643
Goodwill	6,206	5,395
Intangible assets, net	2,740	1,959
Other non-current assets	406	281
Total assets	$ 14,808	$ 11,861
Liabilities		
Current liabilities:		
Accounts payable and accrued expenses	$ 159	$ 158
Section 31 fees payable to SEC	27	98
Accrued personnel costs	175	171
Deferred revenue	216	127
Other current liabilities	134	138
Default funds and margin deposits	3,323	2,228
Current portion of debt obligations	20	-
Total current liabilities	4,054	2,920
Debt obligations	3,689	2,364
Deferred tax liabilities	980	626
Non-current deferred revenue	191	200
Other non-current liabilities	140	142
Total liabilities	9,054	6,252
Commitments and contingencies		
Equity		
Nasdaq stockholders' equity:		
Common stock, $0.01 par value, 300,000,000 shares authorized, shares issued: 169,018,836 at September 30, 2016 and 167,241,734 at December 31, 2015; shares outstanding: 165,198,693 at September 30, 2016 and 164,324,270 at December 31, 2015	2	2
Additional paid-in capital	3,046	3,011
Common stock in treasury, at cost: 3,820,143 shares at September 30, 2016 and 2,917,464 shares at December 31, 2015	(169)	(111)
Accumulated other comprehensive loss	(882)	(864)
Retained earnings	3,757	3,571
Total Nasdaq stockholders' equity	5,754	5,609
Total liabilities and equity	$ 14,808	$ 11,861

See accompanying notes to condensed consolidated financial statements.

Nasdaq, Inc.

Condensed Consolidated Statements of Income
(Unaudited)
(in millions, except per share amounts)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Revenues:				
Market Services	$ 557	$ 542	$ 1,661	$ 1,561
Listing Services	68	66	202	196
Information Services	137	132	405	385
Technology Solutions	167	131	464	396
Total revenues	929	871	2,732	2,538
Transaction-based expenses:				
Transaction rebates	(265)	(256)	(804)	(733)
Brokerage, clearance and exchange fees	(79)	(86)	(250)	(251)
Revenues less transaction-based expenses	585	529	1,678	1,554
Operating expenses:				
Compensation and benefits	168	150	484	441
Marketing and advertising	8	6	22	20
Depreciation and amortization	46	34	125	102
Professional and contract services	40	33	111	108
Computer operations and data communications	28	23	80	81
Occupancy	23	22	62	63
Regulatory	8	7	21	20
Merger and strategic initiatives	12	4	56	7
General, administrative and other	19	11	50	77
Restructuring charges	-	8	41	160
Total operating expenses	352	298	1,052	1,079
Operating income	233	231	626	475
Interest income	1	1	4	3
Interest expense	(37)	(28)	(98)	(83)
Other investment income	-	-	3	-
Net income from unconsolidated investees	2	2	6	16
Income before income taxes	199	206	541	411
Income tax provision	68	68	208	132
Net income	131	138	333	279
Net loss attributable to noncontrolling interests	-	-	-	1
Net income attributable to Nasdaq	$ 131	$ 138	$ 333	$ 280
Per share information:				
Basic earnings per share	$ 0.79	$ 0.83	$ 2.02	$ 1.66
Diluted earnings per share	$ 0.77	$ 0.80	$ 1.97	$ 1.63
Cash dividends declared per common share	$ 0.32	$ 0.25	$ 0.89	$ 0.65

See accompanying notes to condensed consolidated financial statements.

Nasdaq, Inc.

Condensed Consolidated Statements of Comprehensive Income
(Unaudited)
(in millions)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Net income	$ 131	$ 138	$ 333	$ 279
Other comprehensive loss:				
Foreign currency translation losses:				
Net foreign currency translation losses	(45)	(68)	(34)	(256)
Income tax benefit	23	26	16	91
Total other comprehensive loss, net of tax	(22)	(42)	(18)	(165)
Comprehensive income	109	96	315	114
Comprehensive loss attributable to noncontrolling interests	-	-	-	1
Comprehensive income attributable to Nasdaq	$ 109	$ 96	$ 315	$ 115

See accompanying notes to condensed consolidated financial statements.

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Nasdaq, Inc.

Condensed Consolidated Statements of Cash Flows
(Unaudited)
(in millions)

	Nine Months Ended September 30,	
	2016	**2015**
Cash flows from operating activities:		
Net income	$ 333	$ 279
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	125	102
Share-based compensation	55	49
Excess tax benefits related to share-based payments	(38)	(16)
Deferred income taxes	(10)	(61)
Non-cash restructuring charges	8	134
Net income from unconsolidated investees	(6)	(16)
Other reconciling items included in net income	5	9
Net change in operating assets and liabilities, net of effects of acquisitions:		
Receivables, net	53	96
Other assets	35	-
Accounts payable and accrued expenses	(3)	(21)
Section 31 fees payable to SEC	(77)	(99)
Accrued personnel costs	(8)	(18)
Deferred revenue	46	(3)
Other liabilities	(65)	37
Net cash provided by operating activities	453	472
Cash flows from investing activities:		
Purchases of trading securities	(376)	(265)
Proceeds from sales and redemptions of trading securities	328	236
Purchases of available-for-sale investment securities	(7)	(26)
Proceeds from maturities of available-for-sale investment securities	19	29
Capital contribution in equity method investment	-	(30)
Acquisition of businesses, net of cash and cash equivalents acquired	(1,460)	(226)
Purchases of property and equipment	(85)	(91)
Other investment activities	(10)	(9)
Net cash used in investing activities	(1,591)	(382)
Cash flows from financing activities:		
Payments of debt obligations	(1,118)	(176)
Proceeds from utilization of credit commitment	878	366
Proceeds from issuances of senior unsecured notes and term loan facility	1,558	-
Cash paid for repurchase of common stock	(100)	(310)
Cash dividends	(147)	(108)
Proceeds received from employee stock activity	42	19
Payments related to employee shares withheld for taxes	(58)	(28)
Excess tax benefits related to share-based payments	38	16
Other financing activities	-	
Net cash provided by (used in) financing activities	1,093	(221)
Effect of exchange rate changes on cash and cash equivalents	1	(6)
Net decrease in cash and cash equivalents	(44)	(137)
Cash and cash equivalents at beginning of period	301	427
Cash and cash equivalents at end of period	$ 257	$ 290
Supplemental Disclosure Cash Flow Information		
Cash paid for:		
Interest	$ 96	$ 91
Income taxes, net of refund	$ 167	$ 146

See accompanying notes to condensed consolidated financial statements.

Nasdaq, Inc.

Notes to Condensed Consolidated Financial Statements (unaudited)

1. Organization and Nature of Operations

Nasdaq, Inc. is a leading provider of trading, clearing, exchange technology, regulatory, securities listing, information and public company services across six continents. Our global offerings are diverse and include trading and clearing across multiple asset classes, trade management services, data products, financial indexes, capital formation solutions, corporate solutions and market technology products and services. Our technology powers markets across the globe, supporting equity derivative trading, clearing and settlement, cash equity trading, fixed income trading and many other functions.

We manage, operate and provide our products and services in four business segments: Market Services, Listing Services, Information Services and Technology Solutions.

Market Services

Our Market Services segment includes our equity derivative trading and clearing, cash equity trading, fixed income and commodities trading and clearing, or FICC, and trade management services businesses. Our FICC business was formerly referred to as fixed income, currency and commodities trading and clearing, and our trade management services business was formerly referred to as access and broker services. We operate multiple exchanges and other marketplace facilities across several asset classes, including derivatives, commodities, cash equity, debt, structured products and ETPs. In addition, in some countries where we operate exchanges, we also provide broker services, clearing, settlement and central depository services. Our transaction-based platforms provide market participants with the ability to access, process, display and integrate orders and quotes. The platforms allow the routing and execution of buy and sell orders as well as the reporting of transactions, providing fee-based revenues.

Through our acquisition of U.S. Exchange Holdings, Inc. and its subsidiaries, or ISE, an operator of three electronic options exchanges, we now operate six electronic options exchanges and three cash equity exchanges in the U.S. See “Acquisition of International Securities Exchange,” of Note 4, “Acquisitions,” for further discussion of the ISE acquisition. The NASDAQ Stock Market, the largest of our cash equities exchanges, is the largest single venue of liquidity for trading U.S.-listed cash equities. We also operate a leading electronic platform for trading of U.S. Treasuries and Nasdaq Futures, Inc., or NFX, a U.S. based energy derivatives market which offers cash settled energy derivatives based on key energy benchmarks including oil, natural gas and U.S. power.

Through our acquisition of Chi-X Canada ATS Limited, or Chi-X Canada, in February 2016, we also operate two Canadian markets for the trading of Canadian-listed securities. Effective June 1, 2016, we changed the name of Chi-X Canada to Nasdaq CXC Limited, or Nasdaq CXC. See “Acquisition of Nasdaq CXC,” of Note 4, “Acquisitions,” for further discussion of this acquisition.

In Europe, we operate exchanges in Stockholm (Sweden), Copenhagen (Denmark), Helsinki (Finland), and Reykjavik (Iceland), as well as the clearing operations of Nasdaq Clearing. We also operate exchanges in Tallinn (Estonia), Riga (Latvia) and Vilnius (Lithuania) as Nasdaq Baltic. Collectively, Nasdaq Nordic and Nasdaq Baltic offer trading in cash equities and depository receipts, warrants, convertibles, rights, fund units and exchange traded funds as well as trading and clearing of derivatives and clearing of resale and repurchase agreements. Through Nasdaq First North, our Nordic and Baltic operations also offer alternative marketplaces for smaller companies.

In addition, Nasdaq Commodities operates a power derivatives exchange regulated in Norway and a European carbon exchange. In the U.K., we operate Nasdaq NLX, a London-based multilateral trading venue that offers a range of both short-term interest rate and long-term interest rate euro- and sterling-based listed derivative products.

Through our Trade Management Services business, we provide market participants with a wide variety of alternatives for connecting to and accessing our markets via a number of different protocols used for quoting, order entry, trade reporting, DROP functionality and connectivity to various data feeds. We also provide co-location services to market participants, whereby firms may lease cabinet space and power to house their own equipment and servers within our data center. Our broker services operations offer technology and customized securities administration solutions to financial participants in the Nordic market.

Listing Services

Our Listing Services segment includes our U.S. and European Listing Services businesses. We operate a variety of listing platforms around the world to provide multiple global capital raising solutions for private and public companies. Our main listing markets are The NASDAQ Stock Market and the Nasdaq Nordic and Nasdaq Baltic exchanges. Our Listing Services segment also includes The NASDAQ Private Market, LLC, or NPM, and SecondMarket Solutions, Inc., or SecondMarket, which provide services for private growth companies.

As of September 30, 2016, The NASDAQ Stock Market was home to 2,872 listed companies with a combined market capitalization of approximately $8.8 trillion, and in Europe, the Nasdaq Nordic and Nasdaq Baltic exchanges, together with Nasdaq First North, were home to 875 listed companies with a combined market capitalization of approximately $1.3 trillion.

Information Services

Our Information Services segment includes our Data Products and our Index Licensing and Services businesses. Our Data Products business sells and distributes historical and real-time quote and trade information to market participants and data distributors. Our data products enhance transparency of the market activity within the exchanges that we operate and provide critical information to professional and non-professional investors globally.

Our Index Licensing and Services business develops and licenses Nasdaq branded indexes, associated derivatives, and financial products and also provides custom calculation services for third-party clients. As of September 30, 2016, we had 289 ETPs licensed to Nasdaq's indexes which had over $118 billion of assets under management, or AUM.

Technology Solutions

Our Technology Solutions segment includes our Corporate Solutions and Market Technology businesses.

Our Corporate Solutions business serves corporate clients, including companies listed on our exchanges. We help organizations manage the two-way flow of information with their key constituents, including their board members and investors, and with clients and the public through our suite of advanced technology, analytics, and consultative services. Our Corporate Solutions business primarily offers products to serve the following key areas: investor relations, public relations, multimedia solutions, and governance. We currently have approximately 18,000 Corporate Solutions clients.

Our Market Technology business is a leading global technology solutions provider and partner to exchanges, clearing organizations, central securities depositories, regulators, banks, brokers and corporate businesses. Our Market Technology business is the sales channel for our complete global offering to other marketplaces.

Market Technology provides technology solutions for trading, clearing, settlement, surveillance and information dissemination to markets with wide-ranging requirements, from the leading markets in the U.S., Europe, and Asia to emerging markets in the Middle East, Latin America, and Africa. Our marketplace solutions can handle a wide array of assets including cash equities, equity derivatives, currencies, various interest-bearing securities, commodities, and energy products, and are currently powering more than 70 marketplaces in 50 countries. Market Technology also provides market surveillance services to broker-dealer firms worldwide, as well as enterprise governance, risk management, and compliance software solutions.

2. Basis of Presentation and Principles of Consolidation

The condensed consolidated financial statements are prepared in accordance with U.S. generally accepted accounting principles, or U.S. GAAP. The condensed consolidated financial statements include the accounts of Nasdaq, its wholly-owned subsidiaries and other entities in which Nasdaq has a controlling financial interest. When we do not have a controlling interest in an entity but exercise significant influence over the entity's operating and financial policies, such investment is accounted for under the equity method of accounting. We recognize our share of earnings or losses of an equity method investee based on our ownership percentage. As permitted under U.S. GAAP, for certain equity method investments for which financial information is not sufficiently timely for us to apply the equity method of accounting currently, we record our share of the earnings or losses of the investee from the most recently available financial statements on a lag. See "Equity Method Investments," of Note 6, "Investments," for further discussion of our equity method investments.

The accompanying condensed consolidated financial statements reflect all adjustments which are, in the opinion of management, necessary for a fair statement of the results for the interim periods presented. These adjustments are of a normal recurring nature. All significant intercompany accounts and transactions have been eliminated in consolidation.

As permitted under U.S. GAAP, certain footnotes or other financial information can be condensed or omitted in the interim condensed consolidated financial statements. The information included in this Quarterly Report on Form 10-Q should be read in conjunction with the consolidated financial statements and accompanying notes included in Nasdaq's Annual Report on Form 10-K for the fiscal year ended December 31, 2015.

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

The preparation of condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts and the disclosure of contingent amounts in the condensed consolidated financial statements and accompanying notes. Actual results could differ from those estimates.

We have evaluated subsequent events through the issuance date of this Quarterly Report on Form 10-Q.

Tax Matters

We use the asset and liability method to determine income taxes on all transactions recorded in the condensed consolidated financial statements. Deferred tax assets and liabilities are determined based on differences between the financial statement carrying amounts and the tax basis of existing assets and liabilities (i.e., temporary differences) and are measured at the enacted rates that will

be in effect when these differences are realized. If necessary, a valuation allowance is established to reduce deferred tax assets to the amount that is more likely than not to be realized.

In order to recognize and measure our unrecognized tax benefits, management determines whether a tax position is more likely than not to be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. Once it is determined that a position meets the recognition thresholds, the position is measured to determine the amount of benefit to be recognized in the condensed consolidated financial statements. Interest and/or penalties related to income tax matters are recognized in income tax expense.

Nasdaq's income tax provision was $68 million in the third quarter of 2016 and $208 million in the first nine months of 2016 compared with $68 million in the third quarter of 2015 and $132 million in the first nine months of 2015. The overall effective tax rate was 34.2% in the third quarter of 2016 and 38.4% in the first nine months of 2016 compared with 33.0% in the third quarter of 2015 and 32.1% in the first nine months of 2015. The higher effective tax rate in the third quarter and first nine months of 2016 when compared with the same periods in 2015 is primarily due to an unfavorable ruling from the Finnish Supreme Administrative Court. See below for further discussion. The effective tax rate may vary from period to period depending on, among other factors, the geographic and business mix of earnings and losses. These same and other factors, including history of pre-tax earnings and losses, are taken into account in assessing the ability to realize deferred tax assets.

Nasdaq and its eligible subsidiaries file a consolidated U.S. federal income tax return and applicable state and local income tax returns and non-U.S. income tax returns. Federal income tax returns for the years 2011 through 2015 are subject to examination by the Internal Revenue Service. Several state tax returns are currently under examination by the respective tax authorities for the years 2005 through 2014 and we are subject to examination for the year 2015. Non-U.S. tax returns are subject to examination by the respective tax authorities for the years 2008 through 2015. Although the results of such examinations may have an impact on our unrecognized tax benefits, we do not anticipate that such impact will be material to our consolidated financial position or results of operations. In addition, we anticipate that the amount of unrecognized tax benefits at September 30, 2016 will significantly decrease in the next twelve months as we expect to settle certain tax audits.

In the fourth quarter of 2010, we received an appeal from the Finnish Tax Authority challenging certain interest expense deductions claimed by Nasdaq in Finland for the year 2008. The appeal also demanded certain penalties be paid with regard to the company's tax return filing position. In October 2012, the Finnish Appeals Board disagreed with the company's tax return filing position for years 2009 through 2011, even though the tax return position with respect to this deduction was previously reviewed and approved by the Finnish Tax Authority. In June 2014, the Finnish Administrative Court also disagreed with the company's tax return filing position for these years. We appealed this ruling to the Finnish Supreme Administrative Court. Through March 31, 2016, we recorded tax benefits of $30 million associated with this filing position. We paid $41 million to the Finnish tax authorities, which includes $11 million in interest and penalties. In May 2016, we received an unfavorable ruling from the Finnish Supreme Administrative Court, in which the Court disagreed with our position. As such, in the second quarter of 2016 we recorded tax expense of $28 million, or $0.17 per diluted share. This expense reflects the reversal of previously recorded Finnish tax benefits, and related interest and penalties, of $38 million through the first quarter of 2016, net of a related U.S. tax benefit of $10 million. The tax expense recorded reflects the impact of foreign currency translation. We expect to record future quarterly net tax expense of approximately $1 million as a result of this ruling.

From 2009 through 2012, we recorded tax benefits associated with certain interest expense incurred in Sweden. Our position is supported by a 2011 ruling we received from the Swedish Supreme Administrative Court. However, under new legislation effective January 1, 2013, limitations are imposed on certain forms of interest expense. Because this legislation is unclear with regard to our ability to continue to claim such interest deductions, Nasdaq filed an application for an advance tax ruling with the Swedish Tax Council for Advance Tax Rulings. In June 2014, we received an unfavorable ruling from the Swedish Tax Council for Advance Tax Rulings. We appealed this ruling to the Swedish Supreme Administrative Court; however the Swedish Supreme Administrative Court denied our request for a ruling based on procedural requirements. In the third quarter of 2015, we received a notice from the Swedish Tax Agency that interest deductions for the year 2013 have been disallowed. In October 2016, we received a notice from the Swedish Tax Agency that interest deductions for the year 2014 have been disallowed. We will appeal to the Swedish Lower Administrative Court and continue to expect a favorable decision. Since January 1, 2013, we have recorded tax benefits of $48 million associated with this matter. We continue to pay all assessments from the Swedish Tax Agency while this matter is pending. If the Swedish Courts agree with our position we will receive a refund of all paid assessments; if the Swedish Courts disagree with our position, we will record tax expense of $39 million, or $0.23 per diluted share, which is gross of any related U.S. tax benefits and reflects the impact of foreign currency translation, and we will pay any associated tax for which we have not been assessed by the Swedish Tax Agency. We expect to record recurring quarterly tax benefits of $1 million to $2 million with respect to this matter for the foreseeable future.

Other Tax Matter

In December 2012, the Swedish Tax Agency approved our 2010 amended value added tax, or VAT, tax return and we received a cash refund for the amount claimed. In 2013, we filed amended VAT tax returns for 2011 and 2012, utilizing the same approach which was approved for the 2010 filing. We also utilized this approach in our 2013 and 2014 filings. However, even though the VAT return position was previously reviewed and approved by the Swedish Tax Agency, the Swedish Tax Agency challenged our

approach. The revised position of the Swedish Tax Agency was upheld by the Lower Administrative Court during the first quarter of 2015. As a result, in the first quarter of 2015, we reversed the previously recorded benefit of $12 million, based on the court decision. The decision of the Lower Administrative Court was upheld by the Court of Appeals in April 2016. We have appealed this ruling to the Supreme Administrative Court.

Recently Adopted Accounting Pronouncements

Accounting Standard	Description	Effective Date	Effect on the Financial Statements or Other Significant Matters
Income Taxes In November 2015, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, 2015-17, "Balance Sheet Classification of Deferred Taxes."	This ASU eliminates the current requirement to present deferred tax liabilities and assets as current and non-current in a classified balance sheet. Instead, Nasdaq is required to classify all deferred tax liabilities and assets as non-current.	In the first quarter of 2016, we elected to early adopt this guidance retrospectively for all periods presented in the Condensed Consolidated Balance Sheets.	The adoption of this guidance resulted in the reclassification of current deferred tax assets of $24 million to non-current deferred tax assets and current deferred tax liabilities of $24 million to non-current deferred tax liabilities for the year ended December 31, 2015. This new standard is a change in balance sheet presentation only.
Business Combinations In September 2015, the FASB issued ASU 2015-16, "Simplifying the Accounting for Measurement-Period Adjustments."	This ASU eliminates the requirement that an acquirer in a business combination account for measurement-period adjustments retrospectively. This guidance requires the acquirer to recognize adjustments to provisional amounts identified during the measurement period in the reporting period in which the adjustment amounts are determined. In addition, the amendments in this guidance require an entity to present separately on the face of the income statement or disclose in the notes the portion of the amount recorded in current-period earnings by line item that would have been recorded in previous reporting periods if the adjustment to the provisional amounts had been recognized as of the acquisition date.	We adopted this new standard on January 1, 2016.	None.

Recently Announced Accounting Pronouncements

Accounting Standard	Description	Effective Date	Effect on the Financial Statements or Other Significant Matters
Statement of Cash Flows In August 2016, the FASB issued ASU 2016-15, "Classification of Certain Cash Receipts and Cash Payments."	This ASU addresses how certain cash receipts and cash payments are presented and classified in the statement of cash flows with the objective of reducing existing diversity in practice with respect to these items. These items include debt prepayments or debt extinguishment costs, payments of contingent consideration after a business combination, and distributions from equity method investees, among others.	January 1, 2018, with early adoption permitted.	The new standard will require adoption on a retrospective basis unless it is impracticable to apply, in which case we would be required to apply the amendments prospectively as of the earliest date practicable. We do not anticipate a material impact on our consolidated financial statements at the time of adoption of this new standard.

Financial Instruments – Credit Losses In June 2016, the FASB issued ASU 2016-13, “Measurement of Credit Losses on Financial Instruments.”	This ASU changes the impairment model for certain financial instruments. The new model is a forward looking expected loss model and will apply to financial assets subject to credit losses and measured at amortized cost and certain off-balance sheet credit exposures. This includes loans, held-to-maturity debt securities, loan commitments, financial guarantees and net investments in leases, as well as trade receivables. For available-for-sale debt securities with unrealized losses, credit losses will be measured in a manner similar to today, except that the losses will be recognized as allowances rather than reductions in the amortized cost of the securities.	January 1, 2020, with early adoption as of January 1, 2019 permitted.	We are currently assessing the impact that this standard will have on our consolidated financial statements.
Compensation – Stock Compensation In March 2016, the FASB issued ASU 2016-09, “Improvements to Employee Share-Based Payment Accounting.”	This ASU involves several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. This new guidance will require all income tax effects of awards to be recognized as income tax expense or benefit in the income statement when the awards vest or are settled, as opposed to additional paid-in-capital where it is currently recorded. This guidance will impact the calculation of our total diluted share count for the earnings per share calculation, as calculated under the treasury stock method. It also will allow an employer to repurchase more of an employee’s shares than it can today for tax withholding purposes without triggering liability accounting. All tax-related cash flows resulting from share-based payments are to be reported as operating activities on the statement of cash flows. In regards to forfeitures, Nasdaq can make a policy election to either estimate the number of awards that are expected to vest or account for forfeitures as they occur.	January 1, 2017, with early adoption permitted.	We are currently assessing the impact that this standard will have on our consolidated financial statements.
Leases In February 2016, the FASB issued ASU 2016-02, “Leases.”	Under this ASU, at the commencement date, lessees will be required to recognize a lease liability, which is a lessee’s obligation to make lease payments arising from a lease, measured on a discounted basis; and a right-of-use asset, which is an asset that represents the lessee’s right to use, or control the use of, a specified asset for the lease term. This guidance is not applicable for leases with a term of 12 months or less. Lessor accounting is largely unchanged.	January 1, 2019, with early adoption permitted.	We are currently assessing the impact that this standard will have on our consolidated financial statements.
Financial Instruments – Overall In January 2016, the FASB issued ASU 2016-01, “Recognition and Measurement of Financial Assets and Financial Liabilities.”	This ASU requires that most equity investments be measured at fair value, with subsequent changes in fair value recognized in net income. Under this new guidance, Nasdaq will no longer be able to recognize unrealized holding gains and losses on equity securities classified today as available-for-sale in accumulated other comprehensive income within stockholders’ equity. This new standard does not change the guidance for classifying and measuring investments in debt securities and loans. This new guidance also impacts financial liabilities accounted for under the fair value option and affects the presentation and disclosure requirements for financial assets and liabilities.	January 1, 2018. Early adoption is not permitted.	We do not anticipate a material impact on our consolidated financial statements at the time of adoption of this new standard.

Revenue From Contracts With Customers In May 2014, the FASB issued ASU 2014-09, "Revenue from Contracts with Customers (Topic 606)," which supersedes the revenue recognition guidance in Accounting Standards Codification, "Revenue Recognition."	The new revenue recognition standard sets forth a five-step revenue recognition model to determine when and how revenue is recognized. The core principle of the guidance is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration it expects to receive in exchange for those goods or services. The standard also requires more detailed disclosures. The standard provides alternative methods of initial adoption. On July 9, 2015, the FASB approved the deferral of the effective date of the new revenue recognition standard by one year.	January 1, 2018, with early adoption permitted.	We are currently assessing the impact that this standard will have on our consolidated financial statements, and have not yet selected a transition approach.

3. Restructuring Charges

2015 Restructuring Plan

During the first quarter of 2015, we performed a comprehensive review of our processes, businesses and systems in a company-wide effort to improve performance, cut costs, and reduce spending. As part of our 2015 restructuring plan, we recognized net restructuring charges totaling $8 million for the three months ended September 30, 2015, $41 million for the nine months ended September 30, 2016 and $160 million for the nine months ended September 30, 2015.

In June 2016, we completed our 2015 restructuring plan and recognized total net pre-tax charges of $214 million for the period March 2015 through June 2016. Total net pre-tax charges were attributed to the rebranding of our trade name for $119 million, severance charges of $47 million, asset impairments of $26 million, other charges of $21 million, and facilities related costs of $1 million. Through this initiative, we expect to generate annualized pre-tax savings of $36 million. Restructuring charges are recorded on restructuring plans that have been committed to by management and are, in part, based upon management's best estimates of future events. Changes to the estimates may require future adjustments to the restructuring reserve.

The following table presents a summary of the 2015 restructuring plan charges in the Condensed Consolidated Statements of Income:

	Three Months Ended September 30,	Nine Months Ended September 30,	
	2015	2016	2015
	(in millions)	(in millions)	
Rebranding of trade name	$ -	$ -	$ 119
Severance	2	22	23
Facilities-related	4	1	(3)
Asset impairments	-	8	15
Other	2	10	6
Total restructuring charges	$ 8	$ 41	$ 160

Rebranding of Trade Name

In connection with our global rebranding initiative, we decided to change our company name from The NASDAQ OMX Group, Inc. to Nasdaq, Inc., which became effective in the third quarter of 2015. In connection with this action, we decided to discontinue the

use of the OMX trade name and recorded a pre-tax, non-cash impairment charge of $119 million in March 2015 because we no longer attribute any material value to the trade name. The impairment charge did not impact the company's consolidated cash flows, liquidity, or capital resources.

Severance

Severance, which includes other termination benefits and other associated costs in the table above related to workforce reductions of 4 positions across our organization for the three months ended September 30, 2015, 201 positions for the nine months ended September 30, 2016, and 224 positions for the nine months ended September 30, 2015. In addition to reducing our workforce, we have relocated certain functions to lower cost locations and expect to continue hiring in these lower cost locations to support the business.

Facilities-related

The facilities-related charges in the table above primarily pertained to the consolidation of leased facilities. The credit of $3 million for the nine months ended September 30, 2015 primarily pertained to the release of a previously recorded sublease loss reserve for part of the space we lease in New York, New York. In June 2015, as part of our real estate reorganization plans, management decided to occupy this space. Based on management's decision, we released the sublease loss reserve recorded for this space which totaled $10 million.

Asset Impairments

Asset impairment charges of $8 million for the nine months ended September 30, 2016 and $15 million for the nine months ended September 30, 2015 primarily related to fixed assets and capitalized software that were retired during the respective period.

Other

Other charges in the table above primarily related to consultant costs, marketing costs associated with rebranding of the Nasdaq trade name, computer operation costs associated with the replacement of outdated technology, and various other miscellaneous costs.

Restructuring Reserve

The following table presents the changes in the restructuring reserve during the nine months ended September 30, 2016:

	Balance at December 31, 2015	Expense Incurred	Cash Payments	Balance at September 30, 2016
		(in millions)		
Severance	$ 12	$ 22	$ (15)	$ 19

As of September 30, 2016, the majority of the restructuring reserve is included in other current liabilities in the Condensed Consolidated Balance Sheets and will be paid during the next twelve months.

4. Acquisitions

2016 Acquisitions

We completed the following acquisitions in the first nine months of 2016. Financial results of each transaction are included in our Condensed Consolidated Statements of Income from the date of each acquisition.

	Purchase Consideration	Total Net Assets (Liabilities) Acquired	Acquired Intangible Assets	Goodwill
		(in millions)		
ISE	$ 1,070	$ (102)	$ 623	$ 549
Boardvantage	242	(17)	111	148
Marketwired	111	(6)	31	86
Nasdaq CXC	116	(14)	76	54

The amounts in the table above represent the preliminary allocation of the purchase price and are subject to revision during the remainder of the measurement period, a period not to exceed 12 months from the acquisition date. Adjustments to the provisional values during the measurement period will be recorded in the reporting period in which the adjustment amounts are determined. Changes to amounts recorded as assets and liabilities may result in a corresponding adjustment to goodwill. In the second quarter of 2016, we recorded a measurement period adjustment of $5 million to the estimated fair value of deferred tax liabilities related to our acquisition of Marketwired. The adjustment was made to reflect a revised assessment of deferred tax liabilities following the receipt of

new information. The adjustment resulted in a decrease to both net liabilities acquired and goodwill and is reflected in the above table. The measurement period adjustment was recorded as a revision in our second quarter 2016 Condensed Consolidated Balance Sheets. The adjustment did not result in an impact to our Condensed Consolidated Statements of Income.

Acquisition of International Securities Exchange

On June 30, 2016, we acquired ISE for $1,070 million. The acquisition of ISE, an operator of three electronic options exchanges, is expected to allow us to improve efficiencies for clients, broaden our technology offering, and provide the capability within the equity options industry to further innovate. We acquired net assets, at fair value, totaling $83 million and recorded a deferred tax liability of $266 million and a deferred tax asset of $81 million related to differences in the U.S. GAAP and tax basis of our investment in ISE, resulting in total net liabilities acquired of $102 million. ISE is part of our Market Services, Information Services and Technology Solutions segments.

In May 2016, we issued €600 million aggregate principal amount of 1.75% senior unsecured notes and in June 2016, we issued $500 million aggregate principal amount of 3.85% senior unsecured notes to fund this acquisition. See “1.75% Senior Unsecured Notes,” and “3.85% Senior Unsecured Notes,” of Note 8, “Debt Obligations,” for further discussion.

Intangible Assets

The following table presents the details of the ISE acquired intangible assets. All acquired intangible assets with finite lives are amortized using the straight-line method.

Intangible assets:		Value (in millions)	Estimated Average Remaining Useful Life (in years)
Exchange registrations	$	467	Indefinite
Customer relationships		148	13
Trade name		8	Indefinite
Total intangible assets	$	623	

Exchange Registrations

The exchange registrations represent licenses that provide ISE with the ability to operate its option exchanges. Nasdaq views these intangible assets as a perpetual license to operate the exchanges so long as ISE meets its regulatory requirements. Nasdaq selected a variation of the income approach called the Greenfield Approach to value the exchange registrations. The Greenfield Approach refers to a discounted cash flow analysis that assumes the buyer is building the exchange from a start-up business to a normalized level of operations as of the acquisition date. This discounted cash flow model considers the required resources and eventual returns from the build-out of operational exchanges and the acquisition of customers, once the exchange registrations are obtained. The advantage of this approach is that it reflects the actual expectations that will arise from an investment in the registrations and it directly values the registrations. The Greenfield Approach relies on assumptions regarding projected revenues, margins, capital expenditures, depreciation, and working capital during the two year pre-trade phase, the 10 year ramp-up period, as well as the terminal period.

A discount rate of 8.6% was utilized, which reflects the amount of risk associated with the hypothetical cash flows for the exchange registrations relative to the overall business. In developing a discount rate for the exchange registrations, we estimated a weighted average cost of capital for the overall business and we employed this rate when discounting the cash flows. The resulting discounted cash flows were then tax-effected at the applicable statutory rate.

Customer Relationships

Customer relationships represent the non-contractual and contractual relationships that ISE has with its customers. Customer relationships were valued using the income approach, specifically an excess earnings method. The excess earnings method examines the economic returns contributed by the identified tangible and intangible assets of a company, and then isolates the excess return that is attributable to the intangible asset being valued.

A discount rate of 9.1% was utilized, which reflects the amount of risk associated with the hypothetical cash flows for the customer relationships relative to the overall business. In developing a discount rate for the customer relationships, we estimated a weighted average cost of capital for the overall business and we employed this rate when discounting the cash flows. The resulting discounted cash flows were then tax-effected at the applicable statutory rate.

Based on the historical behavior of the customers and a parallel analysis of the customers using the excess earnings method, we estimated the remaining useful life for the acquired customer relationships to be 13 years.

Acquisition of Boardvantage, Inc.

In May 2016, we acquired Boardvantage for $242 million ($197 million in cash paid plus $45 million in working capital adjustments, which primarily includes cash acquired). With Boardvantage, we acquired a leading provider of collaboration and meeting productivity tools for boards of directors and executive leadership teams. This acquisition expanded our Corporate Solutions governance business within our Technology Solutions segment where it will be integrated with the Directors Desk business. We acquired net assets, at fair value, totaling $28 million and recorded a deferred tax liability of $46 million and a deferred tax asset of $1 million related to differences in the U.S. GAAP and tax basis of our investment in Boardvantage, resulting in total net liabilities acquired of $17 million.

Nasdaq borrowed $197 million under the revolving credit commitment of our 2014 Credit Facility, as defined in Note 8, "Debt Obligations," to fund this acquisition.

Intangible Assets

The following table presents the details of the Boardvantage acquired intangible assets. These assets are amortized using the straight-line method.

Intangible assets:	Value (in millions)	Estimated Average Remaining Useful Life (in years)
Customer relationships	$ 103	14 years
Technology	6	5 years
Trade name	2	1 year
Total intangible assets	$ 111	

Customer Relationships

Customer relationships represent the non-contractual and contractual relationships that Boardvantage has with its customers and represented the primary intangible asset in this transaction. Customer relationships were valued using the income approach, specifically an excess earnings method. The excess earnings method examines the economic returns contributed by the identified tangible and intangible assets of a company, and then isolates the excess return that is attributable to the intangible asset being valued.

A discount rate of 15.5% was utilized, which reflects the amount of risk associated with the hypothetical cash flows for the customer relationships relative to the overall business. In developing a discount rate for the customer relationships, we estimated a weighted average cost of capital for the overall business and we employed this rate when discounting the cash flows. The resulting discounted cash flows were then tax-effected at the applicable statutory rate.

Based on the historical behavior of the customers and a parallel analysis of the customers using the excess earnings method, we estimated the remaining useful life for the acquired customer relationships to be 14 years.

Acquisition of Marketwired

In February 2016, we acquired Marketwired for $111 million ($109 million in cash paid plus $2 million in working capital adjustments). Marketwired is a global newswire operator and press release distributor. This acquisition expanded Nasdaq's position as a leading global corporate solutions provider and Marketwired is being integrated with our public relations business. We acquired net liabilities, at fair value, totaling $1 million and recorded a deferred tax liability of $10 million related to differences in the U.S. GAAP and tax basis of our investment in Marketwired, resulting in total net liabilities acquired of $11 million. In the second quarter of 2016, we recorded a measurement period adjustment of $5 million to the estimated fair value of deferred tax liabilities to reflect a revised assessment following the receipt of new information. The adjustment resulted in a decrease to both net liabilities acquired and goodwill. The measurement period adjustment was recorded as a revision in our second quarter 2016 Condensed Consolidated Balance Sheets. The adjustment did not result in an impact to our Condensed Consolidated Statements of Income. Marketwired is part of our Corporate Solutions business within our Technology Solutions segment.

Nasdaq borrowed $109 million under the revolving credit commitment of our 2014 Credit Facility, as defined in Note 8, "Debt Obligations," to fund this acquisition.

Intangible Assets

The following table presents the details of the Marketwired acquired intangible assets. These assets are amortized using the straight-line method.

Intangible assets:	Value (in millions)	Estimated Average Remaining Useful Life (in years)

Customer relationships	$ 29	6 years
Trade name	2	2 years
Total intangible assets	$ 31	

Customer Relationships

Customer relationships represent the non-contractual and contractual relationships that Marketwired has with its customers and represented the primary intangible asset in this transaction. The Marketwired customer relationships were valued using the income approach, specifically an excess earnings method. The excess earnings method examines the economic returns contributed by the identified tangible and intangible assets of a company, and then isolates the excess return that is attributable to the intangible asset being valued.

A discount rate of 16.4% was utilized, which reflects the amount of risk associated with the hypothetical cash flows for the customer relationships relative to the overall business. In developing a discount rate for the customer relationships, we estimated a weighted average cost of capital for the overall business and we employed this rate when discounting the cash flows. The resulting discounted cash flows were then tax-effected at the applicable statutory rate, and a discounted tax amortization benefit was added to the fair value of the assets under the assumption that the customer relationships would be amortized for tax purposes over a period of 15 years.

Based on the historical behavior of the customers and a parallel analysis of the customers using the excess earnings method, we estimated the remaining useful life for the acquired customer relationships to be 6 years.

Acquisition of Nasdaq CXC

In February 2016, we acquired Nasdaq CXC for $116 million ($115 million in cash paid plus $1 million in working capital adjustments). With this acquisition, Nasdaq offers two Canadian markets for the trading of Canadian-listed securities. This acquisition expanded Nasdaq's cash equity trading business in North America. We acquired net assets, at fair value, totaling $6 million and recorded a deferred tax liability of $20 million related to differences in the U.S. GAAP and tax basis of our investment in Nasdaq CXC, resulting in total net liabilities acquired of $14 million. Nasdaq CXC is part of our Market Services segment and our Data Products business within our Information Services segment.

Nasdaq used cash on hand and borrowed $55 million under the revolving credit commitment of our 2014 Credit Facility, as defined in Note 8, "Debt Obligations," to fund this acquisition.

Intangible Assets

The following table presents the details of the Nasdaq CXC acquired intangible asset. This asset is amortized using the straight-line method.

Intangible asset:	Value (in millions)	Estimated Average Remaining Useful Life (in years)
Customer relationships	$ 76	17 years

Customer Relationships

Customer relationships represent the non-contractual and contractual relationships that Nasdaq CXC has with its customers and represented the primary intangible asset in this transaction. Customer relationships were valued individually for each of Nasdaq CXC's businesses using the income approach, specifically an excess earnings method. The excess earnings method examines the economic returns contributed by the identified tangible and intangible assets of a company, and then isolates the excess return that is attributable to the intangible asset being valued.

A discount rate of 10.3% was utilized, which reflects the amount of risk associated with the hypothetical cash flows for the customer relationships relative to the overall business. In developing a discount rate for the customer relationships, we estimated a weighted average cost of capital for the overall business and we employed this rate when discounting the cash flows. The resulting discounted cash flows were then tax-effected at the applicable statutory rate, and a discounted tax amortization benefit was added to the fair value of the assets under the assumption that the customer relationships would be amortized for tax purposes over a period of 15 years.

Based on the historical behavior of the customers and a parallel analysis of the customers using the excess earnings method, we estimated the remaining useful life for the acquired customer relationships to be 17 years.

2015 Acquisitions

We completed the following acquisitions in 2015. Financial results are included in our Condensed Consolidated Statements of Income from the date of each acquisition.

	Purchase Consideration	Total Net Assets (Liabilities) Acquired	Acquired Intangible Assets	Goodwill
		(in millions)		
Dorsey, Wright & Associates, LLC	$ 226	$ (26)	$ 141	$ 111

The amounts in the table above represent the preliminary allocation of the purchase price and were subject to revision during the measurement period, a period not to exceed 12 months from the acquisition date. We finalized the allocation of the purchase price for the above acquisition in January 2016. There were no adjustments to the provisional values during the 12 month measurement period.

Acquisition of Dorsey, Wright & Associates, LLC

On January 30, 2015, we completed the acquisition of Dorsey, Wright & Associates, LLC, or DWA, for $226 million ($225 million cash paid plus $1 million in working capital adjustments). DWA is a market leader in data analytics, passive indexing and smart beta strategies. We acquired net assets, at fair value, totaling $8 million and recorded a deferred tax liability of $34 million related to differences in the U.S. GAAP and tax basis of our investment in DWA, resulting in total net liabilities acquired of $26 million. DWA is part of our Data Products and Index Licensing and Services businesses within our Information Services segment.

Nasdaq used cash on hand and borrowed $100 million under the revolving credit commitment of our 2014 Credit Facility, as defined in Note 8, "Debt Obligations," to fund this acquisition.

Intangible Assets

The following table presents the details of the DWA acquired intangible assets. All acquired intangible assets with finite lives are amortized using the straight-line method.

	Value	Estimated Average Remaining Useful Life
Intangible assets:	(in millions)	(in years)
Trade name	$ 108	Indefinite
Customer relationships	29	15 years
Technology	4	5 years
Total intangible assets	$ 141	

Trade Name

The DWA trade name is recognized in the industry and carries a reputation for quality. As such, DWA's reputation and positive recognition embodied in the trade name is a valuable asset to Nasdaq. The trade name was considered the primary asset acquired in this transaction. In valuing the acquired trade name, we used the income approach, specifically the excess earnings method. The excess earnings method examines the economic returns contributed by the identified tangible and intangible assets of a company, and then isolates the excess return that is attributable to the intangible asset being valued.

A discount rate of 17.0% was utilized, which reflects the amount of risk associated with the hypothetical cash flows generated by the DWA trade name in the future. In developing a discount rate for the trade name, we estimated a weighted average cost of capital for the overall business and we employed this rate when discounting the cash flows. The resulting discounted cash flows were then tax-effected at the applicable statutory rate, and a discounted tax amortization benefit was added to the fair value of the asset under the assumption that the trade name would be amortized for tax purposes over a period of 15 years.

We estimated the useful life of the trade name to be indefinite. The useful life was based on several factors including the number of years the name has been in service, its popularity within the industry, and our intention to continue its use in the branding of products.

Customer Relationships

Customer relationships represent the non-contractual and contractual relationships that DWA has with its customers. The DWA customer relationships were valued individually for each of DWA's businesses using the income approach, specifically the with-and-without method. The with-and-without method is commonly used when the cash flows of a business can be estimated with and without the asset in place. The premise associated with this valuation technique is that the value of an asset is represented by the differences in the subject business' cash flows under scenarios where (a) the asset is present and is used in operations (with); and (b) the asset is absent and not used in operations (without). Cash flow differentials are then discounted to present value to arrive at an estimate of fair value for the asset.

We estimated that without current customer relationships, it would take approximately 3-6 years, depending on the business, for the customer base to grow to 100% of current projected revenues. We also made estimates related to compensation levels and other expenses such as sales and marketing that would be incurred as the business was ramped up through the year in which the customer base would be expected to reach the level that currently exists.

A discount rate of 17.5% was utilized, which reflects the amount of risk associated with the hypothetical cash flows generated by the customer relationships in the future. The resulting discounted cash flows were then tax-effected at the applicable statutory rate, and a discounted tax amortization benefit was added to the fair value of the asset under the assumption that the customer relationships would be amortized for tax purposes over a period of 15 years.

Based on the historical behavior of the customers and a parallel analysis of the customers using the excess earnings method, we estimated the remaining useful life for the acquired customer relationships to be 15 years.

Acquisition of Full Ownership of The NASDAQ Private Market, LLC and Acquisition of SecondMarket

In October 2015, we acquired full ownership of NPM following the acquisition of the minority stake that was previously held by a third party. In addition, through NPM, we acquired SecondMarket, a recognized innovator in facilitating liquidity for private company securities. The additional ownership interest in NPM and SecondMarket were purchased for an immaterial amount. NPM and SecondMarket are part of our Listing Services segment.

Pro Forma Results and Acquisition-related Costs

Pro forma financial results for the acquisitions completed in 2016 and 2015 have not been presented since the acquisitions, both individually and in the aggregate for each year, were not material to our financial results.

Acquisition-related costs for the transactions described above were expensed as incurred and are included in merger and strategic initiatives expense in the Condensed Consolidated Statements of Income.

5. Goodwill and Acquired Intangible Assets

Goodwill

The following table presents the changes in goodwill by business segment during the nine months ended September 30, 2016:

	Market Services	Listing Services	Information Services	Technology Solutions	Total
			(in millions)		
Balance at December 31, 2015	$ 2,941	$ 112	$ 1,823	$ 519	$ 5,395
Goodwill acquired	549	-	54	234 [1]	837
Foreign currency translation adjustment	(5)	(2)	(14)	(5)	(26)
Balance at September 30, 2016	$ 3,485	$ 110	$ 1,863	$ 748	$ 6,206

[1] Includes a $5 million measurement period adjustment related to our acquisition of Marketwired. See “Acquisition of Marketwired,” of Note 4, “Acquisitions,” for further discussion.

The goodwill acquired for Market Services and Information Services shown above relates to our acquisitions of ISE and Nasdaq CXC, and the goodwill acquired for Technology Solutions shown above relates to our acquisitions of Boardvantage and Marketwired. See “2016 Acquisitions,” of Note 4, “Acquisitions,” for further discussion.

As of September 30, 2016, the amount of goodwill that is expected to be deductible for tax purposes in future periods is $860 million, of which $533 million is related to our acquisition of certain assets and assumption of certain liabilities of the eSpeed business, or eSpeed, $242 million is related to our acquisition of the Investor Relations, Public Relations and Multimedia Solutions businesses of Thomson Reuters, and $85 million is related to other acquisitions.

Goodwill represents the excess of the purchase price over the value assigned to the net tangible and identifiable intangible assets of a business acquired. Goodwill is allocated to our reporting units based on the assignment of the fair values of each reporting unit of the acquired company. We test goodwill for impairment at the reporting unit level annually, or in interim periods if certain events occur indicating that the carrying amount may be impaired, such as changes in the business climate, poor indicators of operating performance or the sale or disposition of a significant portion of a reporting unit. There was no impairment of goodwill for the nine months ended September 30, 2016 and 2015; however, events such as economic weakness or unexpected significant declines in operating results of a reporting unit may result in goodwill impairment charges in the future.

Acquired Intangible Assets

The following table presents details of our total acquired intangible assets, both finite- and indefinite-lived:

	September 30, 2016				December 31, 2015			
	Gross Amount	Accumulated Amortization	Net Amount	Weighted-Average Useful Life	Gross Amount	Accumulated Amortization	Net Amount	Weighted-Average Useful Life
		(in millions)		(in years)		(in millions)		(in years)
Finite-Lived Intangible Assets								
Technology	$ 38	$ (22)	$ 16	5	$ 39	$ (23)	$ 16	5
Customer relationships	1,394	(442)	952	18	1,038	(387)	651	20
Other	7	(5)	2	6	5	(4)	1	9
Foreign currency translation adjustment	(131)	46	(85)		(138)	43	(95)	
Total finite-lived intangible assets	$ 1,308	$ (423)	$ 885		$ 944	$ (371)	$ 573	
Indefinite-Lived Intangible Assets								
Exchange and clearing registrations	$ 1,257	$ -	$ 1,257		$ 790	$ -	$ 790	
Trade names	708	-	708		700	-	700	
Licenses	52	-	52		51	-	51	
Foreign currency translation adjustment	(162)	-	(162)		(155)	-	(155)	
Total indefinite-lived intangible assets	$ 1,855	$ -	$ 1,855		$ 1,386	$ -	$ 1,386	
Total intangible assets	$ 3,163	$ (423)	$ 2,740		$ 2,330	$ (371)	$ 1,959	

Amortization expense for purchased finite-lived intangible assets was $23 million for the three months ended September 30, 2016, $15 million for the three months ended September 30, 2015, $59 million for the nine months ended September 30, 2016 and $46 million for the nine months ended September 30, 2015.

The estimated future amortization expense (excluding the impact of foreign currency translation adjustments of $85 million as of September 30, 2016) of acquired finite-lived intangible assets as of September 30, 2016 is as follows:

	(in millions)
2016[1]	$ 25
2017	94
2018	90
2019	76
2020	75
2021 and thereafter	610
Total	$ 970

(1) Represents the estimated amortization expense to be recognized for the remaining three months of 2016.

6. Investments

Trading Securities

Trading securities, which are included in financial investments, at fair value in the Condensed Consolidated Balance Sheets, were $238 million as of September 30, 2016 and $189 million as of December 31, 2015. These securities are primarily comprised of highly rated European government debt securities, of which $183 million as of September 30, 2016 and $166 million as of December 31, 2015, are assets utilized to meet regulatory capital requirements primarily for our clearing operations at Nasdaq Clearing.

Available-for-Sale Investment Securities

Available-for-sale investment securities, which are included in financial investments, at fair value in the Condensed Consolidated Balance Sheets, were $12 million as of December 31, 2015. These securities are primarily comprised of short-term commercial paper. As of December 31, 2015, the cumulative unrealized gains and losses on these securities were immaterial.

Equity Method Investments

The carrying amounts of our equity method investments totaled $135 million as of September 30, 2016 and $72 million as of December 31, 2015 and are included in other non-current assets in the Condensed Consolidated Balance Sheets. Our equity method investments primarily included equity interests in The Options Clearing Corporation, or OCC, EuroCCP N.V. and The Order Machine, or TOM. The increase in our equity method investments as of September 30, 2016 compared with December 31, 2015 is primarily due to the inclusion of an additional 20.0% ownership interest in OCC, which we acquired in connection with our acquisition of ISE on June 30, 2016, bringing our total ownership interest in OCC to 40.0% as of September 30, 2016.

Net income recognized from our equity interest in the earnings and losses of these equity method investments was $2 million for both the three months ended September 30, 2016 and September 30, 2015, $6 million for the nine months ended September 30, 2016, and $16 million for the nine months ended September 30, 2015. The decrease in the first nine months of 2016 compared with the same period in 2015 is primarily due to income recognized from our equity method investment in OCC in 2015. We were not able to determine what our share of OCC's income was for the year ended December 31, 2014 until the first quarter of 2015, when OCC's financial statements were made available to us. As a result, we recorded other income of $13 million in March 2015 relating to our share of OCC's income for the year ended December 31, 2014. This income is included in net income from unconsolidated investees in the Condensed Consolidated Statements of Income for the nine months ended September 30, 2015.

Cost Method Investments

The carrying amount of our cost method investments totaled $147 million as of September 30, 2016 and $132 million as of December 31, 2015 and is included in other non-current assets in the Condensed Consolidated Balance Sheets. Our cost method investments primarily represent our 5% ownership interest in Borsa Istanbul and our 5% ownership interest in LCH.Clearnet Group Limited, or LCH.

The Borsa Istanbul shares, which were issued to us in the first quarter of 2014, are part of the consideration to be received under a market technology agreement. This investment has a cost basis of $75 million which is guaranteed to us via a put option negotiated as part of the market technology agreement.

7. Deferred Revenue

Deferred revenue represents consideration received that is yet to be recognized as revenue. The changes in our deferred revenue during the nine months ended September 30, 2016 and 2015 are reflected in the following table:

	Initial Listing Revenues	Listing of Additional Shares Revenues	Annual Renewal and Other Revenues	Technology Solutions Revenues[2]	Total
			(in millions)		
Balance at January 1, 2016	$ 59	$ 53	$ 16	$ 199	$ 327
Additions[1]	9	10	327	384	730
Amortization[1]	(13)	(22)	(275)	(343)	(653)
Translation adjustment	-	-	-	3	3
Balance at September 30, 2016	$ 55	$ 41	$ 68	$ 243	$ 407
Balance at January 1, 2015	$ 54	$ 78	$ 13	$ 247	$ 392
Additions[1]	15	8	244	324	591
Amortization[1]	(12)	(27)	(190)	(364)	(593)
Translation adjustment	-	-	(2)	(13)	(15)
Balance at September 30, 2015	$ 57	$ 59	$ 65	$ 194	$ 375

[1] The additions and amortization for initial listing revenues, listing of additional shares revenues and annual renewal and other revenues primarily reflect revenues from our U.S. Listing Services business.

[2] Technology solutions deferred revenue primarily includes revenues from our corporate solutions subscription-based contracts, which are primarily billed quarterly in advance, and our market technology client contracts where customization and significant modifications to the software are made to meet the needs of our customers. For our market technology contracts, total revenues, as well as costs incurred, are deferred until significant modifications are completed and delivered. Once delivered, deferred revenue and the related deferred costs are recognized over the post-contract support period. For these market technology contracts, we have included the deferral of costs in other current assets and other non-current assets in the Condensed Consolidated Balance Sheets.

At September 30, 2016, we estimate that our deferred revenue, which is primarily listing services and technology solutions revenues, will be recognized in the following years:

	Initial Listing Revenues	Listing of Additional Shares Revenues	Annual Renewal and Other Revenues	Technology Solutions Revenues[2]	Total
			(in millions)		
Fiscal year ended:					

2016[1]	$ 4	$ 6	$ 65	$ 46	$ 121
2017	15	20	3	75	113
2018	14	10	-	41	65
2019	11	4	-	37	52
2020	7	1	-	33	41
2021 and thereafter	4	-	-	11	15
	$ 55	$ 41	$ 68	$ 243	$ 407

[1] Represents deferred revenue that is anticipated to be recognized over the remaining three months of 2016.

[2] Technology solutions deferred revenue primarily includes corporate solutions and market technology deferred revenue. The timing of recognition of our deferred technology solutions revenues is primarily dependent upon the completion of customization and any significant modifications made pursuant to existing market technology contracts. As such, as it relates to market technology revenues, the timing represents our best estimate.

8. Debt Obligations

The following table presents the changes in the carrying amount of our debt obligations during the nine months ended September 30, 2016:

	December 31, 2015	Additions	Payments, Accretion and Other	September 30, 2016
		(in millions)		
5.55% senior unsecured notes due January 15, 2020 [1]	$ 597	$ -	$ 1	$ 598
5.25% senior unsecured notes due January 16, 2018 [1]	368	-	1	369
3.875% senior unsecured notes due June 7, 2021 [1]	646	-	24	670
4.25% senior unsecured notes due June 1, 2024 [1]	495	-	-	495
1.75% senior unsecured notes due May 19, 2023 [1]	-	664	1	665
3.85% senior unsecured notes due June 30, 2026 [1]	-	495	-	495
$400 million senior unsecured term loan facility due November 25, 2019 (average interest rate of 1.97% for the period March 17, 2016 through September 30, 2016) [2]	-	399	-	399
$750 million revolving credit commitment due November 25, 2019 (average interest rate of 1.63% for the period January 1, 2016 through September 30, 2016) [2]	258	878	(1,118)	18
Total debt obligations	2,364	2,436	(1,091)	3,709
Less current portion	-	(20)	-	(20)
Total long-term debt obligations	$ 2,364	$ 2,416	$ (1,091)	$ 3,689

[1] See “Senior Unsecured Notes” below for further discussion.
[2] See “2016 Credit Facility” and “2014 Credit Facility” below for further discussion.

Senior Unsecured Notes

Our senior unsecured notes were issued at a discount. As a result of the discount, the proceeds received from the issuance were less than the aggregate principal amount. As of September 30, 2016, the amounts in the table above reflect the aggregate principal amount, less the unamortized debt discount and the unamortized debt issuance costs which are being accreted through interest expense over the life of the applicable note. Our senior unsecured notes are general unsecured obligations of ours and rank equally with all of our existing and future unsubordinated obligations and they are not guaranteed by any of our subsidiaries. The senior unsecured notes were issued under indentures that, among other things, limit our ability to consolidate, merge or sell all or substantially all of our assets, create liens, and enter into sale and leaseback transactions.

5.55% Senior Unsecured Notes

In January 2010, Nasdaq issued $600 million aggregate principal amount of 5.55% senior unsecured notes due January 15, 2020, or the 2020 Notes. The 2020 Notes pay interest semiannually at a rate of 5.55% per annum until January 15, 2020.

5.25% Senior Unsecured Notes

In December 2010, Nasdaq issued $370 million aggregate principal amount of 5.25% senior unsecured notes due January 16, 2018, or the 2018 Notes. The 2018 Notes pay interest semiannually at a rate of 5.25% per annum until January 16, 2018 and such rate may vary with Nasdaq’s debt rating up to a rate not to exceed 7.25%. Upon a change of control triggering event (as defined in the

indenture), the terms require us to repurchase all or part of each holder's notes for cash equal to 101% of the aggregate principal amount purchased plus accrued and unpaid interest, if any.

3.875% Senior Unsecured Notes

In June 2013, Nasdaq issued €600 million aggregate principal amount of 3.875% senior unsecured notes due June 7, 2021, or the 2021 Notes. The 2021 Notes pay interest annually at a rate of 3.875% per annum until June 7, 2021 and such rate may vary with Nasdaq's debt rating up to a rate not to exceed 5.875%. Upon a change of control triggering event (as defined in the indenture), the terms require us to repurchase all or part of each holder's notes for cash equal to 101% of the aggregate principal amount purchased plus accrued and unpaid interest, if any.

The 2021 Notes have been designated as a hedge of our net investment in certain foreign subsidiaries to mitigate the foreign exchange rate risk associated with certain investments in these subsidiaries. The increase in the carrying amount of $24 million noted in the "Payments, Accretion and Other" column in the table above primarily reflects the translation of the 2021 Notes into U.S. dollars and is recorded in accumulated other comprehensive loss within stockholders' equity in the Condensed Consolidated Balance Sheets as of September 30, 2016.

4.25% Senior Unsecured Notes

In May 2014, Nasdaq issued $500 million aggregate principal amount of 4.25% senior unsecured notes due June 1, 2024, or the 2024 Notes. The 2024 Notes pay interest semiannually at a rate of 4.25% per annum until June 1, 2024 and such rate may vary with Nasdaq's debt rating up to a rate not to exceed 6.25%. Upon a change of control triggering event (as defined in the indenture), the terms require us to repurchase all or part of each holder's notes for cash equal to 101% of the aggregate principal amount purchased plus accrued and unpaid interest, if any.

1.75% Senior Unsecured Notes

In May 2016, Nasdaq issued €600 million aggregate principal amount of 1.75% senior unsecured notes due May 19, 2023, or the 2023 Notes. We used the net proceeds from the 2023 Notes and the 2026 Notes, as defined below, to fund our acquisition of ISE. See "Acquisition of International Securities Exchange," of Note 4, "Acquisitions," for further discussion of the ISE acquisition.

The 2023 Notes pay interest annually at a rate of 1.75% per annum until May 19, 2023 and such rate may vary with Nasdaq's debt rating up to a rate not to exceed 3.75%. Upon a change of control triggering event (as defined in the indenture), the terms require us to repurchase all or part of each holder's notes for cash equal to 101% of the aggregate principal amount purchased plus accrued and unpaid interest, if any.

The 2023 Notes have been designated as a hedge of our net investment in certain foreign subsidiaries to mitigate the foreign exchange rate risk associated with certain investments in these subsidiaries. The increase in the carrying amount of $1 million noted in the "Payments, Accretion and Other" column in the table above reflects the translation of the 2023 Notes into U.S. dollars and is recorded in accumulated other comprehensive loss within stockholders' equity in the Condensed Consolidated Balance Sheets as of September 30, 2016.

3.85% Senior Unsecured Notes

In June 2016, Nasdaq issued $500 million aggregate principal amount of 3.85% senior unsecured notes due June 30, 2026, or the 2026 Notes. We used the net proceeds from the 2023 Notes and the 2026 Notes to fund our acquisition of ISE. See "Acquisition of International Securities Exchange," of Note 4, "Acquisitions," for further discussion of the ISE acquisition.

The 2026 Notes pay interest semiannually at a rate of 3.85% per annum until June 30, 2026 and such rate may vary with Nasdaq's debt rating up to a rate not to exceed 5.85%. Upon a change of control triggering event (as defined in the indenture), the terms require us to repurchase all or part of each holder's notes for cash equal to 101% of the aggregate principal amount purchased plus accrued and unpaid interest, if any.

Credit Facilities

As of September 30, 2016, the amounts in the table above reflect the aggregate principal amount, less the unamortized debt issuance costs which are being accreted through interest expense over the life of the applicable credit facility. Nasdaq is permitted to repay borrowings under our credit facilities at any time in whole or in part, without penalty. We are also required to repay loans outstanding under our credit facilities with net cash proceeds from sales of property and assets of Nasdaq and its subsidiaries (excluding inventory sales and other sales in the ordinary course of business) and casualty and condemnation proceeds, in each case subject to specified exceptions and thresholds.

2016 Credit Facility

In March 2016, Nasdaq entered into a credit agreement which provides for a $400 million senior unsecured term loan facility which matures on November 25, 2019, or the 2016 Credit Facility. In March 2016, loans in an aggregate principal amount of $400

million were drawn under the 2016 Credit Facility and the net proceeds were used to partially repay amounts outstanding under the revolving credit commitment of the 2014 Credit Facility, as discussed and defined below.

Loans under the 2016 Credit Facility pay interest monthly at a variable interest rate based on either the London Interbank Offered Rate, or LIBOR, or the base rate (or other applicable rate with respect to non-dollar borrowings), plus an applicable margin that varies with Nasdaq's debt rating. Under the 2016 Credit Facility, we are required to make quarterly principal payments beginning in March 2018 equal to 2.50% of the aggregate original principal amounts borrowed with the remaining amounts due at maturity.

The credit agreement contains financial and operating covenants. Financial covenants include a minimum interest expense coverage ratio and a maximum leverage ratio. Operating covenants include, among other things, limitations on Nasdaq's ability to incur additional indebtedness, grant liens on assets, enter into affiliate transactions, disposition of assets by Nasdaq and pay dividends.

2014 Credit Facility

In November 2014, Nasdaq entered into a $750 million senior unsecured five-year credit facility which matures on November 25, 2019, or the 2014 Credit Facility. The 2014 Credit Facility consists of a $750 million revolving credit commitment (with sublimits for non-dollar borrowings, swingline borrowings and letters of credit). During the first nine months of 2016, we borrowed $878 million under the revolving credit commitment of the 2014 Credit Facility, of which $361 million was used to partially fund our acquisitions of Nasdaq CXC, Marketwired and Boardvantage, and $517 million was used for general corporate purposes. See "2016 Acquisitions," of Note 4, "Acquisitions," for further discussion of the Nasdaq CXC, Marketwired and Boardvantage acquisitions. During the first nine months of 2016, we used the net proceeds from our 2016 Credit Facility and cash on hand to repay $1,118 million under the revolving credit commitment of the 2014 Credit Facility.

The loans under the 2014 Credit Facility have a variable interest rate based on either the LIBOR or the base rate (as defined in the credit agreement) (or other applicable rate with respect to non-dollar borrowings), plus an applicable margin that varies with Nasdaq's debt rating.

The 2014 Credit Facility contains financial and operating covenants. Financial covenants include an interest expense coverage ratio and a maximum leverage ratio. Operating covenants include limitations on Nasdaq's ability to incur additional indebtedness, grant liens on assets, enter into affiliate transactions and pay dividends. Our 2014 Credit Facility allows us to pay cash dividends on our common stock. The 2014 Credit Facility also contains customary affirmative covenants, including access to financial statements, notice of defaults and certain other material events, maintenance of business and insurance, and events of default, including cross-defaults to our material indebtedness.

Other Credit Facilities

In addition to the revolving credit commitment under our 2014 Credit Facility discussed above, we have credit facilities related to our Nasdaq Clearing operations in order to provide further liquidity. Credit facilities, which are available in multiple currencies, totaled $181 million at September 30, 2016 and $202 million at December 31, 2015 in available liquidity, none of which was utilized.

Debt Covenants

At September 30, 2016, we were in compliance with the covenants of all of our debt obligations.

9. Employee Benefits

U.S. Defined-Benefit Pension and Supplemental Executive Retirement Plans

We maintain non-contributory, defined-benefit pension plans, non-qualified supplemental executive retirement plans, or SERPs, for certain senior executives and post-retirement benefit plans for eligible employees in the U.S., collectively referred to as the Nasdaq Benefit Plans.

Our pension plans and SERPs are frozen. Future service and salary for all participants do not count toward an accrual of benefits under the pension plans and SERPs. As such, net periodic benefit cost was immaterial for both the three and nine months ended September 30, 2016 and 2015.

Non-U.S. Benefit Plans

Most employees outside the U.S. are covered by local retirement plans or by applicable social laws. Benefits under social laws are generally expensed in the periods in which the costs are incurred. These costs are included in compensation and benefits expense in the Condensed Consolidated Statements of Income and were $4 million for both the three months ended September 30, 2016 and 2015 and $13 million for both the nine months ended September 30, 2016 and 2015.

U.S. Defined Contribution Savings Plan

We sponsor a voluntary defined contribution savings plan for U.S. employees. Employees are immediately eligible to make contributions to the plan and are also eligible for an employer contribution match at an amount equal to 100.0% of the first 6.0% of

eligible employee contributions. Savings plan expense is included in compensation and benefits expense in the Condensed Consolidated Statements of Income and was $3 million for both the three months ended September 30, 2016 and 2015 and $8 million for both the nine months ended September 30, 2016 and 2015.

Employee Stock Purchase Plan

We have an employee stock purchase plan, or ESPP, under which approximately 2.4 million shares of our common stock have been reserved for future issuance as of September 30, 2016.

Our ESPP allows eligible U.S. and non-U.S. employees to purchase a limited number of shares of our common stock at six-month intervals, called offering periods, at 85.0% of the lower of the fair market value on the first or the last day of each offering period. The 15.0% discount given to our employees is included in compensation and benefits expense in the Condensed Consolidated Statements of Income and was $1 million for both the three months ended September 30, 2016 and 2015 and $3 million for both the nine months ended September 30, 2016 and 2015.

10. Share-Based Compensation

We have a share-based compensation program that provides our board of directors broad discretion in creating employee equity incentives. Share-based awards, or equity awards, granted under this program include stock options, restricted stock (consisting of restricted stock units), and performance share units, or PSUs. Grants of equity awards are designed to reward employees for their long-term contributions and provide incentives for them to remain with us. For accounting purposes, we consider PSUs to be a form of restricted stock.

Restricted stock is generally time-based and vests over two to five-year periods beginning on the date of the grant. Stock options are also generally time-based and expire ten years from the grant date. Stock option and restricted stock awards granted prior to 2014 generally included performance-based accelerated vesting features based on achievement of specific levels of corporate performance. If Nasdaq exceeded the applicable performance parameters, the grants vest on the third anniversary of the grant date, if Nasdaq met the applicable performance parameters, the grants vest on the fourth anniversary of the grant date, and if Nasdaq did not meet the applicable performance parameters, the grants vest on the fifth anniversary of the grant date. Beginning in 2014, restricted stock awards granted vest 25% on the second anniversary of the grant date, 25% on the third anniversary of the grant date, and 50% on the fourth anniversary of the grant date. The grant date fair value of restricted stock awards is based on the closing price at the date of grant less the present value of future cash dividends.

PSUs are based on performance measures that impact the amount of shares that each recipient will receive upon vesting. PSUs are granted at the fair market value of our stock on the grant date and compensation cost is recognized over the performance period. For each grant of PSUs, an employee may receive from 0% to 150% of the target amount granted, depending on the achievement of performance measures. We report the target number of PSUs granted, unless we have determined that it is more likely than not, based on the actual achievement of performance measures, that an employee will receive a different amount of shares underlying the PSUs, in which case we report the amount of shares the employee is likely to receive.

We also have a performance-based long-term incentive program for our chief executive officer, presidents, executive vice presidents and senior vice presidents that focuses on total shareholder return, or TSR. This program represents 100% of our chief executive officer's, presidents' and executive vice presidents' long-term stock-based compensation and 50% of our senior vice presidents' long-term stock-based compensation. Under the program, each individual receives PSUs with a three-year cumulative performance period that vest at the end of the performance period. Performance will be determined by comparing Nasdaq's TSR to two peer groups, each weighted 50%. The first peer group consists of exchange companies, and the second peer group consists of all companies in the Standard & Poor's 500 Index. Nasdaq's relative performance ranking against each of these groups will determine the final number of shares delivered to each individual under the program. The payout under this program will be between 0% and 200% of the number of PSUs granted and will be determined by Nasdaq's overall performance against both peer groups. However, if Nasdaq's TSR is negative for the three-year performance period, regardless of TSR ranking, the payout will not exceed 100% of the number of PSUs granted. We estimate the fair value of PSU's granted under the TSR program using the Monte Carlo simulation model, as these awards contain a market condition. The following weighted-average assumptions were used to determine the weighted-average fair values of the PSU awards granted under the TSR program during the nine months ended September 30, 2016 and 2015:

	Nine Months Ended September 30,	
	2016	2015
Weighted-average risk free interest rate	0.84%	0.81%
Expected volatility[1]	21.0%	21.5%
Weighted-average grant date share price	$ 66.36	$ 50.93
Weighted-average fair value at grant date	$ 93.25	$ 63.99

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(1) We use historic volatility for PSU awards issued under the TSR program, as implied volatility data could not be obtained for all the companies in the peer groups used for relative performance measurement within the TSR program.

In addition, the annual dividend assumption utilized in the Monte Carlo simulation model is based on Nasdaq's dividend yield at the date of the grant.

Summary of 2016 Equity Awards

In March 2016, we granted restricted stock to most active employees. During the first nine months of 2016, certain officers received grants of 510,486 PSUs. Of these PSUs granted, 355,426 units are subject to the performance measures and vesting schedules of the TSR program as discussed above, and the remaining 155,060 units are subject to a one-year performance period and generally vest ratably on an annual basis from December 31, 2017 through December 31, 2019. See "Summary of Restricted Stock and PSU Activity" below for further discussion.

During 2015, certain grants of PSUs with a one-year performance period exceeded the applicable performance parameters. As a result, an additional 87,582 units were considered granted in the first quarter of 2016.

Certain grants of PSUs that were issued in 2013 under the TSR program with a three-year performance period exceeded the applicable performance parameters. As a result, an additional 406,075 units were considered granted in the first quarter of 2016.

See "Summary of Restricted Stock and PSU Activity" below for further discussion.

Common Shares Available Under Our Equity Plan

As of September 30, 2016, we had approximately 6.4 million shares of common stock authorized for future issuance under Nasdaq's Equity Incentive Plan.

Summary of Share-Based Compensation Expense

The following table shows the total share-based compensation expense resulting from equity awards and the 15.0% discount for the ESPP for the three and nine months ended September 30, 2016 and 2015 in the Condensed Consolidated Statements of Income:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
	(in millions)		(in millions)	
Share-based compensation expense before income taxes	$ 19	$ 17	$ 55	$ 49
Income tax benefit	(8)	(7)	(23)	(20)
Share-based compensation expense after income taxes	$ 11	$ 10	$ 32	$ 29

Summary of Restricted Stock and PSU Activity

The following table summarizes our restricted stock and PSU activity for the nine months ended September 30, 2016:

	Restricted Stock		PSUs	
	Number of Awards	Weighted-Average Grant Date Fair Value	Number of Awards	Weighted-Average Grant Date Fair Value
Unvested balances at January 1, 2016	3,343,738	$ 35.36	1,863,685	$ 47.57
Granted	697,279 (1)	62.91	1,004,143 (2)	64.82
Vested	(1,229,562)	27.83	(888,718)	43.81
Forfeited	(225,961)	42.66	(44,609)	50.38
Unvested balances at September 30, 2016	2,585,494	$ 45.73	1,934,501	$ 58.23

(1) Primarily reflects our company-wide equity grant issued in March 2016, as discussed above.
(2) PSUs granted in 2016 reflect awards issued to certain officers, as described above.

At September 30, 2016, $110 million of total unrecognized compensation cost related to restricted stock and PSUs is expected to be recognized over a weighted-average period of 1.6 years.

Summary of Stock Option Activity

The following table summarizes our stock option activity for the nine months ended September 30, 2016:

	Number of Stock Options[(1)]	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value
			(in years)	(in millions)

Outstanding at January 1, 2016	2,626,487	$ 27.74	2.63	$ 80
Exercised	(1,051,828)	33.77		
Outstanding at September 30, 2016	1,574,659	$ 23.72	2.61	$ 69
Exercisable at September 30, 2016	1,574,659	$ 23.72	2.61	$ 69

[(1)] No stock option awards were granted during the nine months ended September 30, 2016. All stock options were vested in 2014.

We received net cash proceeds of $14 million from the exercise of 424,361 stock options during the three months ended September 30, 2016 and received net cash proceeds of $36 million from the exercise of 1,051,828 stock options during the nine months ended September 30, 2016. We received net cash proceeds of $2 million from the exercise of 59,141 stock options during the three months ended September 30, 2015 and received net cash proceeds of $13 million from the exercise of 492,345 stock options during the nine months ended September 30, 2015. We present excess tax benefits from the exercise of stock options, if any, as financing cash flows.

The aggregate intrinsic value in the above table represents the total pre-tax intrinsic value (i.e., the difference between our closing stock price on September 30, 2016 of $67.54 and the exercise price, times the number of shares) based on stock options with an exercise price less than Nasdaq's closing price of $67.54 as of September 30, 2016, which would have been received by the option holders had the option holders exercised their stock options on that date. This amount can change based on the fair market value of our common stock. The total number of in-the-money stock options exercisable as of September 30, 2016 was 1.6 million.

As of September 30, 2015, 2.8 million outstanding stock options were exercisable and the weighted-average exercise price was $27.79.

The total pre-tax intrinsic value of stock options exercised was $14 million for the three months ended September 30, 2016, $1 million for the three months ended September 30, 2015, $36 million for the nine months ended September 30, 2016 and $12 million for the nine months ended September 30, 2015.

11. Nasdaq Stockholders' Equity

Common Stock

At September 30, 2016, 300,000,000 shares of our common stock were authorized, 169,018,836 shares were issued and 165,198,693 shares were outstanding. The holders of common stock are entitled to one vote per share, except that our certificate of incorporation limits the ability of any person to vote in excess of 5.0% of the then-outstanding shares of Nasdaq common stock.

Common Stock in Treasury, at Cost

We account for the purchase of treasury stock under the cost method with the shares of stock repurchased reflected as a reduction to Nasdaq stockholders' equity and included in common stock in treasury, at cost in the Condensed Consolidated Balance Sheets. Most shares repurchased under our share repurchase program are retired and cancelled, and the remaining shares are available for general corporate purposes. When treasury shares are reissued, they are recorded at the average cost of the treasury shares acquired. We held 3,820,143 shares of common stock in treasury as of September 30, 2016 and 2,917,464 shares as of December 31, 2015.

Share Repurchase Program

In the fourth quarter of 2014, our board of directors authorized the repurchase of up to $500 million of our outstanding common stock and in the first quarter of 2016, our board of directors authorized the repurchase of an additional $370 million of our outstanding common stock under our share repurchase program.

These purchases may be made from time to time at prevailing market prices in open market purchases, privately-negotiated transactions, block purchase techniques or otherwise, as determined by our management. The purchases are primarily funded from existing cash balances. The share repurchase program may be suspended, modified or discontinued at any time.

During the first nine months of 2016, we repurchased 1,547,778 shares of our common stock at an average price of $64.42, for an aggregate purchase price of $100 million. As discussed above in "Common Stock in Treasury, at Cost," most shares repurchased under the share repurchase program are retired and cancelled, and the remaining shares are available for general corporate purposes. As of September 30, 2016, the remaining amount authorized for share repurchases under the program was $429 million.

Other Repurchases of Common Stock

During the nine months ended September 30, 2016, we repurchased 902,679 shares of our common stock in settlement of employee tax withholding obligations due upon the vesting of restricted stock.

Preferred Stock

Our certificate of incorporation authorizes the issuance of 30,000,000 shares of preferred stock, par value $0.01 per share, issuable from time to time in one or more series. At September 30, 2016 and December 31, 2015, no shares of preferred stock were issued or outstanding.

Cash Dividends on Common Stock

During the nine months ended September 30, 2016, our board of directors declared the following cash dividends:

Declaration Date	Dividend Per Common Share	Record Date	Total Amount[(1)]	Payment Date
			(in millions)	
January 27, 2016	$ 0.25	March 14, 2016	$ 41	March 28, 2016
March 28, 2016	$ 0.32	June 10, 2016	$ 53	June 24, 2016
July 26, 2016	$ 0.32	September 16, 2016	$ 53	September 30, 2016

[(1)] These amounts were recorded in retained earnings in the Condensed Consolidated Balance Sheets at September 30, 2016.

In October 2016, the board of directors declared a regular quarterly cash dividend of $0.32 per share on our outstanding common stock. The dividend is payable on December 30, 2016 to shareholders of record at the close of business on December 16, 2016. The estimated amount of this dividend is $53 million. The dividends declared in March 2016, July 2016 and October 2016 of $0.32 per share on our outstanding common stock reflect a 28% increase from our prior year's quarterly cash dividends of $0.25. Future declarations of quarterly dividends and the establishment of future record and payment dates are subject to approval by the board of directors.

12. Earnings Per Share

The following table sets forth the computation of basic and diluted earnings per share:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
	(in millions, except share and per share amounts)			
Numerator:				
Net income attributable to common shareholders	$ 131	$ 138	$ 333	$ 280
Denominator:				
Weighted-average common shares outstanding for basic earnings per share	165,606,199	166,903,697	164,971,288	168,203,316
Weighted-average effect of dilutive securities:				
Employee equity awards	2,898,633	3,556,065	3,355,780	3,514,960
Contingent issuance of common stock[(1)]	992,247	992,247	333,163	334,384
Weighted-average common shares outstanding for diluted earnings per share	169,497,079	171,452,009	168,660,231	172,052,660
Basic and diluted earnings per share:				
Basic earnings per share	$ 0.79	$ 0.83	$ 2.02	$ 1.66
Diluted earnings per share	$ 0.77	$ 0.80	$ 1.97	$ 1.63

[(1)]See "Non-Cash Contingent Consideration," of Note 15, "Commitments, Contingencies and Guarantees," for further discussion.

Stock options to purchase 1,574,659 shares of common stock and 4,519,995 shares of restricted stock and PSUs were outstanding at September 30, 2016. For the three months ended September 30, 2016, we included all of the outstanding stock options and 4,135,696 shares of restricted stock and PSUs in the computation of diluted earnings per share, on a weighted-average basis, as their inclusion was dilutive. For the nine months ended September 30, 2016, we included all of the outstanding stock options and 3,864,478 shares of restricted stock and PSUs in the computation of diluted earnings per share, on a weighted-average basis, as their inclusion was dilutive. The remaining shares of restricted stock and PSUs are antidilutive, and as such, they were properly excluded.

Stock options to purchase 2,821,712 shares of common stock and 5,507,394 shares of restricted stock and PSUs were outstanding at September 30, 2015. For the three months ended September 30, 2015, we included all of the outstanding stock options and 5,496,526 shares of restricted stock and PSUs in the computation of diluted earnings per share, on a weighted-average basis, as their inclusion was dilutive. For the nine months ended September 30, 2015, we included all of the outstanding stock options and

5,086,010 shares of restricted stock and PSUs in the computation of diluted earnings per share, on a weighted-average basis, as their inclusion was dilutive. The remaining shares of restricted stock and PSUs are antidilutive, and as such, they were properly excluded.

13. Fair Value of Financial Instruments

The fair value of our financial instruments are measured based on a three-level hierarchy:

- Level 1—Quoted prices for identical instruments in active markets.
- Level 2—Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations whose inputs are observable or whose significant value drivers are observable.
- Level 3—Instruments whose significant value drivers are unobservable.

This hierarchy requires the use of observable market data when available.

The following table presents for each of the above hierarchy levels, our financial assets and liabilities that are measured at fair value on a recurring basis as of September 30, 2016 and December 31, 2015.

	September 30, 2016			
	Total	Level 1	Level 2	Level 3
	(in millions)			
Financial Assets Measured at Fair Value on a Recurring Basis				
Financial investments, at fair value[1]	$ 238	$ 238	$ -	$ -
Default fund and margin deposit investments[2]	1,865	1,324	541	-
Total	$ 2,103	$ 1,562	$ 541	$ -

	December 31, 2015			
	Total	Level 1	Level 2	Level 3
	(in millions)			
Financial Assets Measured at Fair Value on a Recurring Basis				
Financial investments, at fair value[1]	$ 201	$ 189	$ 12	$ -
Default fund and margin deposit investments[2]	1,556	1,253	303	-
Total	$ 1,757	$ 1,442	$ 315	$ -

[1] As of September 30, 2016 and December 31, 2015, Level 1 financial investments, at fair value were primarily comprised of trading securities, mainly highly rated European government debt securities. Of these securities, $183 million as of September 30, 2016 and $166 million as of December 31, 2015 are assets utilized to meet regulatory capital requirements, primarily for the clearing operations at Nasdaq Clearing. As of December 31, 2015, Level 2 financial investments, at fair value were primarily comprised of available-for-sale investment securities in short-term commercial paper.

[2] Default fund and margin deposit investments include cash contributions invested by Nasdaq Clearing, in accordance with its investment policy, either in highly rated European, and to a lesser extent, U.S. government debt securities, time deposits or reverse repurchase agreements with highly rated government debt securities as collateral. Of the total balance of $3,323 million recorded in the Condensed Consolidated Balance Sheets as of September 30, 2016, $541 million of cash contributions have been invested in reverse repurchase agreements and $1,324 million of cash contributions have been invested in highly rated European, and to a lesser extent, U.S. government debt securities. The remainder of this balance is held in cash. Of the total balance of $2,228 million recorded in the Condensed Consolidated Balance Sheets as of December 31, 2015, $303 million of cash contributions have been invested in reverse repurchase agreements and $1,253 million of cash contributions have been invested in highly rated European, and to a lesser extent, U.S. government debt securities. The remainder of this balance is held in cash. See Note 14, “Clearing Operations,” for further discussion of default fund contributions and margin deposits.

There were no transfers between Level 1 and Level 2 of the fair value hierarchy as of September 30, 2016 and December 31, 2015.

Financial Instruments Not Measured at Fair Value on a Recurring Basis

Some of our financial instruments are not measured at fair value on a recurring basis but are recorded at amounts that approximate fair value due to their liquid or short-term nature. Such financial assets and financial liabilities include: cash and cash equivalents, restricted cash, receivables, net, certain other current assets, accounts payable and accrued expenses, Section 31 fees payable to SEC, accrued personnel costs, and certain other current liabilities.

In addition, our investments in OCC, EuroCCP N.V. and TOM are accounted for under the equity method of accounting and our investments in Borsa Istanbul and LCH are carried at cost. See "Equity Method Investments," and "Cost Method Investments," of Note 6, "Investments," for further discussion.

We also consider our debt obligations to be financial instruments. The fair value of our debt, utilizing discounted cash flow analyses for our floating rate debt and prevailing market rates for our fixed rate debt, was $4.0 billion at September 30, 2016 and $2.5 billion at December 31, 2015. The discounted cash flow analyses are based on borrowing rates currently available to us for debt with similar terms and maturities. Our fixed rate and our floating rate debt is categorized as Level 2 in the fair value hierarchy. For further discussion of our debt obligations, see Note 8, "Debt Obligations."

14. Clearing Operations

Nasdaq Clearing

Nasdaq Clearing is authorized and supervised under the European Market Infrastructure Regulation as a multi-asset clearinghouse by the Swedish Financial Supervisory Authority, or SFSA, and is authorized to conduct clearing operations in Norway by the Norwegian Ministry of Finance. The clearinghouse acts as the central counterparty, or CCP, for exchange and over-the-counter, or OTC, trades in equity derivatives, fixed income derivatives, resale and repurchase contracts, power derivatives, emission allowance derivatives, freight and fuel oil derivatives, iron ore derivatives and seafood derivatives.

Through our clearing operations in the financial markets, which include the resale and repurchase market, the commodities markets, and the seafood market, Nasdaq Clearing is the legal counterparty for, and guarantees the fulfillment of, each contract cleared. These contracts are not used by Nasdaq Clearing for the purpose of trading on its own behalf. As the legal counterparty of each transaction, Nasdaq Clearing bears the counterparty risk between the purchaser and seller in the contract. In its guarantor role, Nasdaq Clearing has precisely equal and offsetting claims to and from clearing members on opposite sides of each contract, standing as the CCP on every contract cleared. In accordance with the rules and regulations of Nasdaq Clearing, clearing members' open positions are aggregated to create a single portfolio for which default fund and margin collateral requirements are calculated. See "Default Fund Contributions and Margin Deposits" below for further discussion of Nasdaq Clearing's default fund and margin requirements.

Nasdaq Clearing maintains four member sponsored default funds: one related to financial markets, one related to commodities markets, one related to the seafood market, and a mutualized fund. Under this structure, Nasdaq Clearing and its clearing members must contribute to the total regulatory capital related to the clearing operations of Nasdaq Clearing. This structure applies an initial separation of default fund contributions for the financial, commodities and seafood markets in order to create a buffer for each market's counterparty risks. Simultaneously, a mutualized default fund provides capital efficiencies to Nasdaq Clearing's members with regard to total regulatory capital required. See "Default Fund Contributions" below for further discussion of Nasdaq Clearing's default fund. Power of assessment and a liability waterfall also have been implemented. See "Power of Assessment" and "Liability Waterfall" below for further discussion. These requirements ensure the alignment of risk between Nasdaq Clearing and its clearing members.

Default Fund Contributions and Margin Deposits

As of September 30, 2016, clearing member default fund contributions and margin deposits were as follows:

	September 30, 2016		
	Cash Contributions[1]	Non-Cash Contributions	Total Contributions
		(in millions)	
Default fund contributions[2]	$ 312	$ 109	$ 421
Margin deposits	3,011	3,597	6,608
Total	$ 3,323	$ 3,706	$ 7,029

[1] As of September 30, 2016, in accordance with its investment policy, Nasdaq Clearing has invested cash contributions of $541 million in reverse repurchase agreements and $1,324 million in highly rated European, and to a lesser extent, U.S. government debt securities. The remainder of this balance is held in cash.

[2] As of September 30, 2016, of the total contributions of $421 million, Nasdaq Clearing can utilize $332 million as capital resources in the event of a counterparty default. The remaining balance of $89 million pertains to member posted surplus balances.

Default Fund Contributions

Contributions made to the default funds are proportional to the exposures of each clearing member. When a clearing member is active in more than one market, contributions must be made to all markets' default funds in which the member is active. Clearing members' eligible contributions may include cash and non-cash contributions. Cash contributions received are held in cash or invested by Nasdaq Clearing, in accordance with its investment policy, either in highly rated government debt securities, time deposits or

reverse repurchase agreements with highly rated government debt securities as collateral. Nasdaq Clearing maintains and manages all cash deposits related to margin collateral. All risks and rewards of collateral ownership, including interest, belong to Nasdaq Clearing. Clearing members' cash contributions are included in default funds and margin deposits in the Condensed Consolidated Balance Sheets as both a current asset and a current liability. Non-cash contributions include highly rated government debt securities that must meet specific criteria approved by Nasdaq Clearing. Non-cash contributions are pledged assets that are not recorded in the Condensed Consolidated Balance Sheets as Nasdaq Clearing does not take legal ownership of these assets and the risks and rewards remain with the clearing members. These balances may fluctuate over time due to changes in the amount of deposits required and whether members choose to provide cash or non-cash contributions. Assets pledged are held at a nominee account in Nasdaq Clearing's name for the benefit of the clearing members and are immediately accessible by Nasdaq Clearing in the event of a default. In addition to clearing members' required contributions to the default funds, Nasdaq Clearing is also required to contribute capital to the default funds and overall regulatory capital as specified under its clearinghouse rules. As of September 30, 2016, Nasdaq Clearing committed capital totaling $142 million to the member sponsored default funds and overall regulatory capital, in the form of government debt securities, which are recorded as financial investments, at fair value in the Condensed Consolidated Balance Sheets. The combined regulatory capital of the clearing members and Nasdaq Clearing will serve to secure the obligations of a clearing member and may be used to cover losses sustained by a clearing member in the event of a default.

Margin Deposits

Nasdaq Clearing requires all clearing members to provide collateral, which may consist of cash and non-cash contributions, to guarantee performance on the clearing members' open positions, or initial margin. In addition, clearing members must also provide collateral to cover the daily margin call if needed. See "Default Fund Contributions" above for further discussion of cash and non-cash contributions.

Nasdaq Clearing maintains and manages all cash deposits related to margin collateral. All risks and rewards of collateral ownership, including interest, belong to Nasdaq Clearing. These cash deposits are recorded in default funds and margin deposits in the Condensed Consolidated Balance Sheets as both a current asset and current liability. Pledged margin collateral is not recorded in our Condensed Consolidated Balance Sheets as all risks and rewards of collateral ownership, including interest, belong to the counterparty. Assets pledged are held at a nominee account in Nasdaq Clearing's name for the benefit of the clearing members and are immediately accessible by Nasdaq Clearing in the event of a default.

Nasdaq Clearing marks to market all outstanding contracts and requires payment from clearing members whose positions have lost value. The mark-to-market process helps identify any clearing members that may not be able to satisfy their financial obligations in a timely manner allowing Nasdaq Clearing the ability to mitigate the risk of a clearing member defaulting due to exceptionally large losses. In the event of a default, Nasdaq Clearing can access the defaulting member's margin deposits to cover the defaulting member's losses.

Regulatory Capital and Risk Management Calculations

Nasdaq Clearing manages risk through a comprehensive counterparty risk management framework, which is comprised of policies, procedures, standards and financial resources. The level of regulatory capital is determined in accordance with Nasdaq Clearing's regulatory capital policy, as approved by the SFSA. Regulatory capital calculations are continuously updated through a proprietary capital-at-risk calculation model that establishes the appropriate level of capital.

As mentioned above, Nasdaq Clearing is the legal counterparty for each contract traded and thereby guarantees the fulfillment of each contract. Nasdaq Clearing accounts for this guarantee as a performance guarantee. We determine the fair value of the performance guarantee by considering daily settlement of contracts and other margining and default fund requirements, the risk management program, historical evidence of default payments, and the estimated probability of potential default payouts. The calculation is determined using proprietary risk management software that simulates gains and losses based on historical market prices, extreme but plausible market scenarios, volatility and other factors present at that point in time for those particular unsettled contracts. Based on this analysis, the estimated liability was nominal and no liability was recorded as of September 30, 2016.

The market value of derivative contracts outstanding prior to netting was as follows:

	September 30, 2016
	(in millions)
Commodity and seafood options, futures and forwards[(1)(2)(3)]	$ 904
Fixed-income options and futures[(1)(2)]	988
Stock options and futures[(1)(2)]	192
Index options and futures[(1)(2)]	140
Total	$ 2,224

(1) We determined the fair value of our option contracts using standard valuation models that were based on market-based observable inputs including implied volatility, interest rates and the spot price of the underlying instrument.

(2) We determined the fair value of our futures contracts based upon quoted market prices and average quoted market yields.

[3]We determined the fair value of our forward contracts using standard valuation models that were based on market-based observable inputs including LIBOR rates and the spot price of the underlying instrument.

The total number of derivative contracts cleared through Nasdaq Clearing for the nine months ended September 30, 2016 and 2015 was as follows:

	September 30, 2016	September 30, 2015
Commodity and seafood options, futures and forwards[1]	2,548,090	2,371,252
Fixed-income options and futures	10,656,778	14,739,280
Stock options and futures	22,012,777	25,106,934
Index options and futures	38,389,146	37,273,603
Total	73,606,791	79,491,069

[1]The total volume in cleared power related to commodity contracts was 1,197 Terawatt hours (TWh) for the nine months ended September 30, 2016 and 1,077 TWh for the nine months ended September 30, 2015.

The outstanding contract value of resale and repurchase agreements was $6.3 billion as of September 30, 2016 and $5.9 billion as of September 30, 2015. The total number of resale and repurchase contracts cleared was 6,027,419 for the nine months ended September 30, 2016 and was 5,899,287 for the nine months ended September 30, 2015.

Power of Assessment

To further strengthen the contingent financial resources of the clearinghouse, Nasdaq Clearing has power of assessment that provides the ability to collect additional funds from its clearing members to cover a defaulting member's remaining obligations up to the limits established under the terms of the clearinghouse rules. The power of assessment corresponds to 100.0% of the clearing member's aggregate contribution to the financial, commodities, and seafood markets' default funds.

Liability Waterfall

The liability waterfall is the priority order in which the capital resources would be utilized in the event of a default where the defaulting clearing member's collateral would not be sufficient to cover the cost to settle its portfolio. If a default occurs and the defaulting clearing member's collateral, including cash deposits and pledged assets, is depleted, then capital is utilized in the following amount and order:

- junior capital contributed by Nasdaq Clearing, which totaled $19 million at September 30, 2016;
- a loss sharing pool related only to the financial market that is contributed to by clearing members and only applies if the defaulting member's portfolio includes interest rate swap products;
- specific market default fund where the loss occurred (i.e., the financial, commodities, or seafood market), which includes capital contributions of both the clearing members and Nasdaq Clearing on a pro-rata basis;
- senior capital contributed to each specific market by Nasdaq Clearing, calculated in accordance with clearinghouse rules, which totaled $52 million at September 30, 2016; and
- mutualized default fund, which includes capital contributions of both the clearing members and Nasdaq Clearing on a pro-rata basis.

If additional funds are needed after utilization of the mutualized default fund, then Nasdaq Clearing will utilize its power of assessment and additional capital contributions will be required by non-defaulting members up to the limits established under the terms of the clearinghouse rules.

15. Commitments, Contingencies and Guarantees

Guarantees Issued and Credit Facilities Available

In addition to the default fund contributions and margin collateral pledged by clearing members discussed in Note 14, "Clearing Operations," we have obtained financial guarantees and credit facilities which are guaranteed by us through counter indemnities, to provide further liquidity related to our clearing businesses. Financial guarantees issued to us totaled $14 million at September 30, 2016 and $13 million at December 31, 2015. As discussed in "Other Credit Facilities," of Note 8, "Debt Obligations," at September 30, 2016, credit facilities, which are available in multiple currencies, totaled $181 million in available liquidity, none of which was utilized. At December 31, 2015, credit facilities, which are available in multiple currencies, totaled $202 million in available liquidity, none of which was utilized.

Execution Access, LLC is an introducing broker which operates the eSpeed trading platform for U.S. Treasury securities. Execution Access has a clearing arrangement with Cantor Fitzgerald & Co. As of September 30, 2016, we have contributed $19 million of clearing deposits to Cantor Fitzgerald in connection with this clearing arrangement. These deposits are recorded in other current assets in our Condensed Consolidated Balance Sheets. Some of the trading activity in Execution Access is cleared by Cantor

Fitzgerald through the Fixed Income Clearing Corporation. Execution Access assumes the counterparty risk of clients that do not clear through the Fixed Income Clearing Corporation. Counterparty risk of clients exists for Execution Access between the trade date and the settlement date of the individual transactions, which is one business day. All of Execution Access' obligations under the clearing arrangement with Cantor Fitzgerald are guaranteed by Nasdaq. Counterparties that do not clear through the Fixed Income Clearing Corporation are subject to a credit due diligence process and may be required to post collateral, provide principal letters, or provide other forms of credit enhancement to Execution Access for the purpose of mitigating counterparty risk.

We believe that the potential for us to be required to make payments under these arrangements is mitigated through the pledged collateral and our risk management policies. Accordingly, no contingent liability is recorded in the Condensed Consolidated Balance Sheets for these arrangements.

Lease Commitments

We lease some of our office space and equipment under non-cancelable operating leases with third parties and sublease office space to third parties. Some of our lease agreements contain renewal options and escalation clauses based on increases in property taxes and building operating costs.

Other Guarantees

We have provided other guarantees of $3 million as of September 30, 2016 and $11 million at December 31, 2015. These guarantees are primarily related to obligations for our rental and leasing contracts as well as performance guarantees on certain market technology contracts related to the delivery of software technology and support services. We have received financial guarantees from various financial institutions to support the above guarantees.

We have provided a guarantee related to lease obligations for The Nasdaq Entrepreneurial Center Inc., or the Entrepreneurial Center. The Entrepreneurial Center is a not-for-profit organization designed to convene, connect and engage aspiring and current entrepreneurs. This entity is not included in the condensed consolidated financial statements of Nasdaq.

We believe that the potential for us to be required to make payments under these arrangements is unlikely. Accordingly, no contingent liability is recorded in the Condensed Consolidated Balance Sheets for the above guarantees.

Non-Cash Contingent Consideration

As part of the eSpeed purchase price consideration, we have agreed to future annual issuances of 992,247 shares of Nasdaq common stock which approximated certain tax benefits associated with the transaction. Such contingent future issuances of Nasdaq common stock will be paid ratably through 2027 if Nasdaq's total gross revenues equal or exceed $25 million in each such year. The contingent future issuances of Nasdaq common stock are subject to anti-dilution protections and acceleration upon certain events.

Escrow Agreements

In connection with prior acquisitions, we entered into escrow agreements to secure the payment of post-closing adjustments and to ensure other closing conditions. At September 30, 2016, these escrow agreements provide for future payment of $32 million and are included in other current liabilities in the Condensed Consolidated Balance Sheets.

Routing Brokerage Activities

One of our broker-dealer subsidiaries, Nasdaq Execution Services, LLC provides a guarantee to securities clearinghouses and exchanges under its standard membership agreements, which require members to guarantee the performance of other members. If a member becomes unable to satisfy its obligations to a clearinghouse or exchange, other members would be required to meet its shortfalls. To mitigate these performance risks, the exchanges and clearinghouses often require members to post collateral, as well as meet certain minimum financial standards. Nasdaq Execution Services' maximum potential liability under these arrangements cannot be quantified. However, we believe that the potential for Nasdaq Execution Services to be required to make payments under these arrangements is unlikely. Accordingly, no contingent liability is recorded in the Condensed Consolidated Balance Sheets for these arrangements.

Litigation

As previously disclosed, we were named as a defendant in a putative class action, Rabin v. NASDAQ OMX PHLX LLC, et al., No. 15-551 (E.D. Pa.), filed in 2015 in the United States District Court for the Eastern District of Pennsylvania. On April 21, 2016, the court entered an order granting our motion to dismiss the complaint. The plaintiff appealed the dismissal to the Court of Appeals for the Third Circuit on May 18, 2016. Given that the complaint was dismissed at the preliminary stage of the proceeding, we are unable to estimate what, if any, liability may result from this litigation. However, we believe (as the district court concluded) that the claims are without merit, and we intend to defend the dismissal on appeal vigorously.

We also are named as one of many defendants in City of Providence v. BATS Global Markets, Inc., et al., 14 Civ. 2811 (S.D.N.Y.), which was filed on April 18, 2014 in the United States District Court for the Southern District of New York. The district court appointed lead counsel, who filed an amended complaint on September 2, 2014. The amended complaint names as defendants

seven national exchanges, as well as Barclays PLC, which operated a private alternative trading system. On behalf of a putative class of securities traders, the plaintiffs allege that the defendants engaged in a scheme to manipulate the markets through high-frequency trading; the amended complaint asserts claims against us under Section 10(b) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and Rule 10b-5, as well as under Section 6(b) of the Exchange Act. We filed a motion to dismiss the amended complaint on November 3, 2014. In response, the plaintiffs filed a second amended complaint on November 24, 2014, which names the same defendants and alleges essentially the same violations. We then filed a motion to dismiss the second amended complaint on January 23, 2015. On August 26, 2015, the district court entered an order dismissing the second amended complaint in its entirety with prejudice, concluding that most of the plaintiffs' theories were foreclosed by absolute immunity and in any event that the plaintiffs failed to state any claim. The plaintiffs have appealed the judgment of dismissal to the United States Court of Appeals for the Second Circuit. The Second Circuit heard oral argument on August 24, 2016. On August 25, 2016, the Second Circuit issued an order requesting the SEC's views on whether the district court had subject-matter jurisdiction over the case, and whether the defendants are immune from suit regarding the challenged conduct. Given the preliminary nature of the proceedings, and particularly the fact that the complaints have been dismissed, we are unable to estimate what, if any, liability may result from this litigation. However, we believe (as the district court concluded) that the claims are without merit and will continue to litigate vigorously.

In addition, we were named as one of many exchange defendants in Lanier v. BATS Exchange Inc., et al., 14 Civ. 3745 (S.D.N.Y.), Lanier v. BATS Exchange Inc., et al., 14 Civ. 3865 (S.D.N.Y.), and Lanier v. Bats Exchange Inc., 14 Civ. 3866 (S.D.N.Y.), which were filed between May 23, 2014 and May 30, 2014 in the United States District Court for the Southern District of New York. The plaintiff is the same in each of these cases, and the three complaints contain substantially similar allegations. On behalf of a putative class of subscribers for market data provided by national exchanges, the plaintiff alleges that the exchanges provided data more quickly to certain market participants than to others, supposedly in breach of the exchanges' plans for dissemination of market data and subscriber agreements executed under those plans. The complaint asserts contractual theories under state law based on these alleged breaches. On September 29, 2014, we filed a motion to dismiss the complaints. On April 28, 2015, the district court entered an order dismissing the complaints in their entirety with prejudice, concluding that they are foreclosed by the Exchange Act and in any event do not state a claim under the contracts. The plaintiff appealed the judgment of dismissal to the United States Court of Appeals for the Second Circuit. On September 23, 2016, the Second Circuit issued an opinion affirming the district court's dismissal of all three complaints, concluding that many of plaintiff's claims were preempted, that plaintiff failed to state a claim for breach of contract, and that, insofar as plaintiff alleged that the exchanges' implementation or operation of the NMS Plans violates the Exchange Act, plaintiff was required to exhaust his administrative remedies before the SEC. Plaintiff filed a petition for panel or en banc rehearing before the Second Circuit on October 7, 2016, in one of the three appeals. As of October 26, 2016, the Second Circuit has not taken any action on the petition. Given the preliminary nature of the proceedings, and particularly the fact that the complaints have been dismissed, we are unable to estimate what, if any, liability may result from this litigation. However, we believe (as the district court and the Second Circuit concluded) that the claims are without merit and intend to continue to litigate vigorously if the petition for rehearing is granted.

Except as disclosed above and in prior reports filed under the Exchange Act, we are not currently a party to any litigation or proceeding that we believe could have a material adverse effect on our business, consolidated financial condition, or operating results. However, from time to time, we have been threatened with, or named as a defendant in, lawsuits or involved in regulatory proceedings.

Tax Audits

We are engaged in ongoing discussions and audits with taxing authorities on various tax matters, the resolutions of which are uncertain. Currently, there are matters that may lead to assessments, some of which may not be resolved for several years. Based on currently available information, we believe we have adequately provided for any assessments that could result from those proceedings where it is more likely than not that we will be assessed. We review our positions on these matters as they progress.

16. Business Segments

We manage, operate and provide our products and services in four business segments: Market Services, Listing Services, Information Services and Technology Solutions. See Note 1, "Organization and Nature of Operations," for further discussion of our reportable segments.

Our management allocates resources, assesses performance and manages these businesses as four separate segments. We evaluate the performance of our segments based on several factors, of which the primary financial measure is operating income. Results of individual businesses are presented based on our management accounting practices and structure. Certain amounts are allocated to corporate items in our management reports based on the decision that those activities should not be used to evaluate the segment's operating performance. For the three and nine months ended September 30, 2016, the following items are allocated to corporate items for segment reporting purposes:

Amortization expense of acquired intangible assets: We amortize intangible assets acquired in connection with various acquisitions. Intangible asset amortization expense can vary from period to period due to episodic acquisitions completed, rather than from our ongoing business operations. As such, if intangible asset amortization is included in performance measures, it is more

difficult to assess the day-to-day operating performance of the segments, and the relative operating performance of the segments between periods. Management does not consider intangible asset amortization expense for the purpose of evaluating the performance of our segments or their managers or when making decisions to allocate resources. Therefore, we believe performance measures excluding intangible asset amortization expense provide management with a more useful representation of our segment's ongoing activity in each period.

Restructuring charges: Restructuring charges are associated with our 2015 restructuring plan to improve performance, cut costs and reduce spending and are primarily related to (i) the rebranding of our company name from The NASDAQ OMX Group, Inc. to Nasdaq, Inc., (ii) severance and other termination benefits, (iii) costs to vacate duplicate facilities, and (iv) asset impairment charges. We do not allocate these restructuring costs because they do not contribute to a meaningful evaluation of a particular segment's ongoing operating performance.

Merger and strategic initiatives expense: We have pursued various strategic initiatives and completed a number of acquisitions in recent years which have resulted in expenses which would not have otherwise been incurred. These expenses include integration costs, as well as legal, due diligence and other third party transaction costs. The frequency and the amount of such expenses vary significantly based on the size, timing and complexity of the transaction. Accordingly, we do not allocate these costs for purposes of disclosing segment results because they do not contribute to a meaningful evaluation of a particular segment's ongoing operating performance.

Other significant items: We have excluded certain other charges or gains that are the result of other non-comparable events to measure operating performance. We do not allocate these items for purposes of disclosing segment results as they do not contribute to a meaningful evaluation of a particular segment's ongoing operating performance.

The following table presents certain information regarding our operating segments for the three and nine months ended September 30, 2016 and 2015.

	Market Services	Listing Services	Information Services	Technology Solutions	Corporate Items and Eliminations	Consolidated
			(in millions)			
Three Months Ended September 30, 2016						
Total revenues	$ 557	$ 68	$ 137	$ 167	$ -	$ 929
Transaction-based expenses	(344)	-	-	-	-	(344)
Revenues less transaction-based expenses	213	68	137	167	-	585
Operating income (loss)[1]	$ 114	$ 31	$ 97	$ 30	$ (39)	$ 233
Three Months Ended September 30, 2015						
Total revenues	$ 542	$ 66	$ 132	$ 131	$ -	$ 871
Transaction-based expenses	(342)	-	-	-	-	(342)
Revenues less transaction-based expenses	200	66	132	131	-	529
Operating income (loss)[2]	$ 109	$ 29	$ 96	$ 19	$ (22)	$ 231
Nine Months Ended September 30, 2016						
Total revenues	$ 1,661	$ 202	$ 405	$ 464	$ -	$ 2,732
Transaction-based expenses	(1,054)	-	-	-	-	(1,054)
Revenues less transaction-based expenses	607	202	405	464	-	1,678
Operating income (loss)[3]	$ 332	$ 88	$ 290	$ 75	$ (159)	$ 626
Nine Months Ended September 30, 2015						
Total revenues	$ 1,561	$ 196	$ 385	$ 396	$ -	$ 2,538
Transaction-based expenses	(984)	-	-	-	-	(984)
Revenues less transaction-based expenses	577	196	385	396	-	1,554
Operating income (loss)[4]	$ 310	$ 86	$ 277	$ 52	$ (250)	$ 475

(1) Corporate items and eliminations for the three months ended September 30, 2016 primarily include:

- amortization expense of acquired intangible assets of $23 million; and
- merger and other strategic initiatives costs of $12 million primarily related to our acquisition of ISE.

(2) Corporate items and eliminations for the three months ended September 30, 2015 include:

- amortization expense of acquired intangible assets of $15 million;

- restructuring charges of $8 million. See Note 3, “Restructuring Charges,” for further discussion; and
- merger and other strategic initiatives costs of $4 million primarily related to certain strategic initiatives and our acquisition of DWA, partially offset by;
- insurance recovery of $5 million.

(3) Corporate items and eliminations for the nine months ended September 30, 2016 primarily include:

- amortization expense of acquired intangible assets of $59 million;
- restructuring charges of $41 million. See Note 3, “Restructuring Charges,” for further discussion; and
- merger and other strategic initiatives costs of $56 million primarily related to our acquisition of ISE.

(4) Corporate items and eliminations for the nine months ended September 30, 2015 primarily include:

- restructuring charges of $160 million. See Note 3, “Restructuring Charges,” for further discussion;
- amortization expense of acquired intangible assets of $46 million;
- special legal expenses of $26 million, which is net of a $5 million insurance recovery;
- reversal of VAT refund receivables no longer deemed collectible of $12 million; and
- merger and other strategic initiatives costs of $7 million primarily related to certain strategic initiatives and our acquisition of DWA.

For further discussion of our segments’ results, see “Part I. Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations—Segment Operating Results.”

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

The following discussion and analysis of the financial condition and results of operations of Nasdaq should be read in conjunction with our condensed consolidated financial statements and related notes included in this Form 10-Q.

Business Overview

We are a leading provider of trading, clearing, exchange technology, regulatory, securities listing, information and public company services across six continents. Our global offerings are diverse and include trading and clearing across multiple asset classes, trade management services, data products, financial indexes, capital formation solutions, corporate solutions and market technology products and services. Our technology powers markets across the globe, supporting equity derivative trading, clearing and settlement, cash equity trading, fixed income trading and many other functions.

Business Segments

We manage, operate and provide our products and services in four business segments: Market Services, Listing Services, Information Services and Technology Solutions. See Note 1, "Organization and Nature of Operations," to the condensed consolidated financial statements for further discussion of our reportable segments and Note 16, "Business Segments," to the condensed consolidated financial statements for further discussion of how management allocates resources, assesses performance and manages these businesses as four separate segments.

Business Environment

We serve listed companies, market participants and investors by providing derivative, commodities, cash equity, and fixed income markets, thereby facilitating economic growth and corporate entrepreneurship. We provide market technology to exchanges, clearing organizations and central securities depositories around the world. We also offer companies and other organizations access to innovative products, software solutions and services that increase transparency, mitigate risk, improve board efficiency and facilitate better corporate governance. In broad terms, our business performance is impacted by a number of drivers including macroeconomic events affecting the risk and return of financial assets, investor sentiment, government and private sector demands for capital, the regulatory environment for capital markets, and changing technology, particularly in the financial services industry. Our future revenues and net income will continue to be influenced by a number of domestic and international economic trends including, among others:

- Trading volumes in equity derivative, cash equity and FICC, which are driven primarily by overall macroeconomic conditions;
- The number of companies seeking equity financing, which is affected by factors such as investor demand, the global economy, and availability of diverse sources of financing, as well as tax and regulatory policies;
- The demand for information about, or access to, our markets, which is dependent on the products we trade, our importance as a liquidity center, and the quality and pricing of our data and trade management services;
- The demand by companies and other organizations for the products sold by our Corporate Solutions business, which is largely driven by the overall state of the economy and the attractiveness of our offerings;
- The demand for licensed ETPs and other financial products based on our indexes as well as changes to the underlying assets associated with existing licensed financial products;
- The challenges created by the automation of market data consumption, including competition and the quickly evolving nature of the data business;
- The outlook of our technology customers for capital market activity;
- Continuing pressure in transaction fee pricing due to intense competition in the U.S. and Europe;
- Competition related to pricing, product features and service offerings;
- Regulatory changes relating to market structure or affecting certain types of instruments, transactions, pricing structures or capital market participants; and
- Technological advances and members' and customers' demand for speed, efficiency, and reliability.

Currently our business drivers are defined by investors' and companies' increasingly cautious outlook about the pace of future global economic growth. The current consensus forecasts for gross domestic product growth for the United States is 1.5% in 2016 and 2.3% in 2017 and the Eurozone is 1.5% in 2016 and 1.3% in 2017. Forecasts for both regions have been experiencing downward revisions over the last year as the outlook for growth deteriorates with significant downward revisions for the Eurozone following Brexit. While we expect continued modest annual growth in many of our non-transaction businesses, we recognize that there are a number of significant structural and political issues continuing to impact the global economy. Consequently, sustained instability could return at any time, resulting in an increased level of market volatility, oscillating trading volumes, and a more cautious outlook by the clients of our non-transaction businesses. Market volatility continued to decline through July 2016 following Brexit and remained relatively low in the third quarter of 2016 with increased volatility over the last few weeks of September 2016. As a result of

this lower average market volatility, compared with higher average market volatility in the third quarter of 2015, our U.S. and European cash equity trading businesses and our European equity derivative business experienced decreases in trading volume. Although volatility and market uncertainty in the first quarter of 2016 led to the worst quarter for the number of IPO listings since 2009, the pace of IPO pricing has improved somewhat in the second and third quarters of 2016. Additional impacts on our business drivers include the international enactment and implementation of new legislative and regulatory initiatives, the evolution of market participants' trading and investment strategies, and the continued rapid progression and deployment of new technology in the financial services industry. The business environment that influenced our financial performance for the third quarter of 2016 may be characterized as follows:

- A slower pace of new equity issuance in the U.S. with 31 IPOs on The NASDAQ Stock Market in the third quarter of 2016, down from 35 in the third quarter of 2015. IPO activity in the Nordics was slightly lower in the third quarter of 2016 with 5 IPOs compared to 7 IPOs in third quarter of 2015 on the Nasdaq Nordic and Nasdaq Baltic exchanges;
- Average daily matched equity options volume for all our U.S. options exchanges increased 44.8% in the third quarter of 2016 compared with the same period in 2015 primarily due to our acquisition of ISE. Overall average daily U.S. options volume decreased 13.8% while our combined matched market share for our U.S. options exchanges increased in the third quarter of 2016 by 15.9 percentage points, primarily due to our acquisition of ISE;
- Matched share volume for all of our U.S. cash equity markets decreased by 19.5%, while average daily U.S. share volume decreased by 10.0% relative to the same period in 2015. Along with a decrease in matched share volumes on our U.S. equity exchanges, our market share has fallen from 18.8% in the third quarter of 2015 (NASDAQ 15.7%; Nasdaq BX 2.1%; Nasdaq PSX 1.0%) to 16.9% in the third quarter of 2016 (NASDAQ 13.4%; Nasdaq BX 2.6%; Nasdaq PSX 0.9%);
- A 2.8% decline relative to the third quarter of 2015 in the average daily number of cash equity trades executed on our Nasdaq Nordic and Nasdaq Baltic exchanges;
- An 11.4% decline relative to the third quarter of 2015 in the Swedish Krona value of cash equity transactions on our Nasdaq Nordic and Nasdaq Baltic exchanges;
- A 34.9% decline in U.S. fixed income notional trading volume, a 37.0% decline in total average daily volume of Nordic and Baltic fixed income derivative contracts, and a 16.6% decline in total cleared power contracts in the third quarter of 2016 compared with the same period in 2015;
- A 13.1% decline in the total average daily volume of options and futures contracts traded on our Nasdaq Nordic and Nasdaq Baltic exchanges relative to the third quarter of 2015 (including Finnish option contracts traded on EUREX Group);
- Intense competition among U.S. exchanges and dealer-owned systems for cash equity trading volume and strong competition between multilateral trading facilities and exchanges in Europe for cash equity trading volume;
- Globalization of exchanges, customers and competitors extending the competitive horizon beyond national markets; and
- Market trends requiring continued investment in technology to meet customers' and regulators' demands as markets adapt to a global financial industry, as increasing numbers of new companies are created, and as emerging countries show ongoing interest in developing their financial markets.

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Financial Summary

The following table summarizes our financial performance for the three and nine months ended September 30, 2016 when compared with the same periods in 2015. The comparability of our results of operations between reported periods is impacted by the acquisitions of Nasdaq CXC and Marketwired in February 2016, Boardvantage in May 2016, and ISE in June 2016. See "2016 Acquisitions" of Note 4, "Acquisitions," to the condensed consolidated financial statements for further discussion.

	Three Months Ended September 30,		Percentage Change	Nine Months Ended September 30,		Percentage Change
	2016	2015		2016	2015	
	(in millions, except per share amounts)			(in millions, except per share amounts)		
Revenues less transaction-based expenses	$ 585	$ 529	10.6%	$ 1,678	$ 1,554	8.0%
Operating expenses	352	298	18.1%	1,052	1,079	(2.5)%
Operating income	233	231	0.9%	626	475	31.8%
Interest expense	37	28	32.1%	98	83	18.1%
Net income from unconsolidated investees	2	2	-	6	16	(62.5)%
Income before income taxes	199	206	(3.4)%	541	411	31.6%
Income tax provision	68	68	-	208	132	57.6%
Net income attributable to Nasdaq	$ 131	$ 138	(5.1)%	$ 333	$ 280	18.9%
Diluted earnings per share	$ 0.77	$ 0.80	(3.8)%	$ 1.97	$ 1.63	20.9%

In countries with currencies other than the U.S. dollar, revenues and expenses are translated using monthly average exchange rates. The following discussion of results of operations isolates the impact of year-over-year foreign currency fluctuations to better measure the comparability of operating results between periods. Operating results excluding the impact of foreign currency fluctuations are calculated by translating the current period's results by the prior period's exchange rates.

Impacts on our revenues less transaction-based expenses and operating income associated with fluctuations in foreign currency are discussed in more detail under "Item 3. Quantitative and Qualitative Disclosures about Market Risk."

The following summarizes significant changes in our financial performance for the three and nine months ended September 30, 2016 when compared with the same periods in 2015:

- Revenues less transaction-based expenses increased $56 million, or 10.6%, to $585 million in the third quarter of 2016, compared with $529 million in the same period in 2015, reflecting an operational increase in revenues of $55 million and a positive impact from foreign exchange of $1 million. The increase in operational revenues was primarily due to an:
  - increase in corporate solutions revenues of $22 million;
  - increase in equity derivative trading and clearing revenues less transaction-based expenses of $16 million;
  - increase in market technology revenues of $13 million;
  - increase in trade management services revenues of $10 million; and
  - increase in data products revenues of $6 million, partially offset by;
  - a decrease in cash equity trading revenues less transaction-based expenses of $8 million; and
  - a decrease in FICC revenues less transaction-based expenses of $5 million.

- Revenues less transaction-based expenses increased $124 million, or 8.0%, to $1,678 million in the first nine months of 2016, compared with $1,554 million in the same period in 2015, reflecting an operational increase in revenues of $122 million and a positive impact from foreign exchange of $2 million. The increase in operational revenues was primarily due to an:
  - increase in corporate solutions revenues of $43 million;
  - increase in market technology revenues of $24 million;
  - increase in equity derivative trading and clearing revenues less transaction-based expenses of $20 million;
  - increase in data products revenues of $20 million;
  - increase in trade management services revenues of $18 million;
  - increase in listing services revenues of $6 million; and
  - increase in cash equity trading revenues less transaction-based expenses of $5 million, partially offset by;
  - a decrease in FICC revenues less transaction-based expenses of $14 million.

- Operating expenses increased $54 million, or 18.1%, to $352 million in the third quarter of 2016, compared with $298 million in the same period of 2015, reflecting an operational increase of $55 million and a favorable impact from foreign exchange of $1 million. The increase in operational expenses was primarily due to increases in compensation and benefits expense, depreciation and amortization expense, merger and strategic initiatives expense, general, administrative and other expense, and professional and contract services expense, partially offset by lower restructuring charges.

- Operating expenses decreased $27 million, or 2.5%, to $1,052 million in the first nine months of 2016, compared with $1,079 million in the same period of 2015, reflecting an operational decrease of $23 million and a favorable impact from foreign exchange of $4 million. The decrease in operational expenses was primarily due to lower restructuring charges and lower general, administrative and other expense, partially offset by higher merger and strategic initiatives expense, higher compensation and benefits expense and an increase in depreciation and amortization expense.
- Income tax provision was flat in the third quarter of 2016 compared with the same period in 2015; however, the effective tax rate in the third quarter of 2016 increased compared to the same period in 2015, primarily due to the impact of an unfavorable tax ruling.
- Income tax provision increased $76 million in the first nine months of 2016 compared with the same period in 2015, primarily due to an increase in income tax expense associated with an unfavorable tax ruling and an increase in tax expense due to higher income before income taxes.

These current and prior year items are discussed in more detail below.

Nasdaq's Operating Results

Key Drivers

The following table includes key drivers for our Market Services, Listing Services, Information Services and Technology Solutions segments. In evaluating the performance of our business, our senior management closely watches these key drivers.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Market Services				
Equity Derivative Trading and Clearing				
U.S. equity options				
Total industry average daily volume (in millions)	13.8	16.0	14.4	14.9
Nasdaq PHLX Options Market matched market share	16.0%	15.8%	16.1%	16.6%
The NASDAQ Options Market matched market share	8.5%	6.7%	7.6%	7.6%
Nasdaq BX Options Market matched market share	0.8%	0.9%	0.9%	0.8%
Nasdaq ISE Options Market matched market share[1]	12.0%	-	12.0%	-
Nasdaq GMNI Options Market matched market share[1]	1.8%	-	1.8%	-
Nasdaq MCRY Options Market matched market share[1]	0.2%	-	0.2%	-
Total matched market share executed on Nasdaq's exchanges	39.3%	23.4%	38.6%	25.0%
Nasdaq Nordic and Nasdaq Baltic options and futures				
Total average daily volume options and futures contracts[2]	291,410	335,361	391,884	378,383
Cash Equity Trading				
Total U.S.-listed securities				
Total industry average daily share volume (in billions)	6.59	7.32	7.45	6.86
Matched share volume (in billions)	71.0	88.2	245.3	245.5
Matched market share executed on NASDAQ	13.4%	15.7%	14.1%	16.1%
Matched market share executed on Nasdaq BX	2.6%	2.1%	2.3%	1.9%
Matched market share executed on Nasdaq PSX	0.9%	1.0%	1.0%	1.0%
Total matched market share executed on Nasdaq's exchanges	16.9%	18.8%	17.4%	19.0%
Market share reported to the FINRA/NASDAQ Trade Reporting Facility	33.5%	31.0%	32.8%	31.7%
Total market share[3]	50.4%	49.8%	50.2%	50.7%
Nasdaq Nordic and Nasdaq Baltic securities				
Average daily number of equity trades executed on Nasdaq's exchanges	394,181	405,614	447,928	423,093
Total average daily value of shares traded (in billions)	$ 4.4	$ 4.4	$ 5.1	$ 5.1
Total market share executed on Nasdaq's exchanges	62.4%	69.7%	62.9%	68.8%
Fixed Income and Commodities Trading and Clearing				
Total U.S. fixed income				
U.S. fixed income notional trading volume (in billions)	$ 4,816	$ 7,397	$ 16,039	$ 24,043
Nasdaq Nordic and Nasdaq Baltic fixed income				
Total average daily volume fixed income contracts	73,422	116,563	88,276	109,867
Nasdaq commodities				
Power contracts cleared (TWh)[4]	321	385	1,197	1,077
Listing Services				
Initial public offerings				
NASDAQ	31	35	66	111
Exchanges that comprise Nasdaq Nordic and Nasdaq Baltic	5	7	38	55
Total new listings				
NASDAQ[5]	79	80	199	202
Exchanges that comprise Nasdaq Nordic and Nasdaq Baltic[6]	10	9	57	65
Number of listed companies				
NASDAQ[7]	2,872	2,850	2,872	2,850
Exchanges that comprise Nasdaq Nordic and Nasdaq Baltic[8]	875	835	875	835
Information Services				
Number of licensed exchange traded products	289	210	289	210
ETP assets under management tracking Nasdaq indexes (in billions)[9]	$ 118	$ 103	$ 118	$ 103
Technology Solutions				
Market Technology				
Order intake (in millions)[10]	$ 49	$ 83	$ 140	$ 154
Total order value (in millions)[11]	$ 738	$ 738	$ 738	$ 738

[1] For the three and nine months ended September 30, 2016, Nasdaq ISE Options Market, Nasdaq GMNI Options Market, and Nasdaq MCRY Options Market matched market share represents trading volume which commenced on June 30, 2016.

[2] Includes Finnish option contracts traded on EUREX Group.

[3] Includes transactions executed on NASDAQ's, Nasdaq BX's and Nasdaq PSX's systems plus trades reported through the FINRA/NASDAQ Trade Reporting Facility.

[4] Transactions executed on Nasdaq Commodities or OTC and reported for clearing to Nasdaq Commodities measured by TWh.

[5] New listings include IPOs, including those completed on a best efforts basis, issuers that switched from other listing venues, closed-end funds and separately listed ETPs.

[6] New listings include IPOs and represent companies listed on the Nasdaq Nordic and Nasdaq Baltic exchanges and companies on the alternative markets of Nasdaq First North.

[7] Number of listed companies for NASDAQ at period end, including separately listed ETPs.

[8] Represents companies listed on the Nasdaq Nordic and Nasdaq Baltic exchanges and companies on the alternative markets of Nasdaq First North at period end.

[9] Represents AUM in licensed ETPs.

[10] Total contract value of orders signed during the period.

[11] Represents total contract value of signed orders that are yet to be recognized as revenue. Market technology deferred revenue, as discussed in Note 7, “Deferred Revenue,” to the condensed consolidated financial statements, represents consideration received that is yet to be recognized as revenue for these signed orders.

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Segment Operating Results

The following table shows our revenues by segment, transaction-based expenses for our Market Services segment and total revenues less transaction-based expenses:

	Three Months Ended September 30,		Percentage Change	Nine Months Ended September 30,		Percentage Change
	2016	2015		2016	2015	
	(in millions)			(in millions)		
Market Services	$ 557	$ 542	2.8%	$ 1,661	$ 1,561	6.4%
Transaction-based expenses	(344)	(342)	0.6%	(1,054)	(984)	7.1%
Market Services revenues less transaction-based expenses	213	200	6.5%	607	577	5.2%
Listing Services	68	66	3.0%	202	196	3.1%
Information Services	137	132	3.8%	405	385	5.2%
Technology Solutions	167	131	27.5%	464	396	17.2%
Total revenues less transaction-based expenses	$ 585	$ 529	10.6%	$ 1,678	$ 1,554	8.0%

Of our third quarter 2016 total revenues less transaction-based expenses of $585 million, 36.4% was from our Market Services segment, 11.6% was from our Listing Services segment, 23.4% was from our Information Services segment, and 28.6% was from our Technology Solutions segment. Of our third quarter 2015 total revenues less transaction-based expenses of $529 million, 37.8% was from our Market Services segment, 12.5% was from our Listing Services segment, 25.0% was from our Information Services segment and 24.7% was from our Technology Solutions segment.

Of our first nine months 2016 total revenues less transaction-based expenses of $1,678 million, 36.2% was from our Market Services segment, 12.0% was from our Listing Services segment, 24.1% was from our Information Services segment and 27.7% was from our Technology Solutions segment. Of our first nine months 2015 total revenues less transaction-based expenses of $1,554 million, 37.1% was from our Market Services segment, 12.6% was from our Listing Services segment, 24.8% was from our Information Services segment and 25.5% was from our Technology Solutions segment.

MARKET SERVICES

The following table shows total revenues, transaction-based expenses, and total revenues less transaction-based expenses from our Market Services segment:

	Three Months Ended September 30, 2016	Three Months Ended September 30, 2015	Percentage Change	Nine Months Ended September 30, 2016	Nine Months Ended September 30, 2015	Percentage Change
	(in millions)			(in millions)		
Market Services Revenues:						
Equity Derivative Trading and Clearing Revenues[1]	$ 164	$ 109	50.5%	$ 368	$ 322	14.3%
Transaction-based expenses:						
Transaction rebates	(90)	(53)	69.8%	(191)	(166)	15.1%
Brokerage, clearance and exchange fees[1]	(7)	(5)	40.0%	(17)	(16)	6.3%
Equity derivative trading and clearing revenues less transaction-based expenses	67	51	31.4%	160	140	14.3%
Cash Equity Trading Revenues[2]	302	349	(13.5)%	1,023	985	3.9%
Transaction-based expenses:						
Transaction rebates	(171)	(202)	(15.3)%	(599)	(566)	5.8%
Brokerage, clearance and exchange fees[2]	(72)	(80)	(10.0)%	(231)	(232)	(0.4)%
Cash equity trading revenues less transaction-based expenses	59	67	(11.9)%	193	187	3.2%
Fixed Income and Commodities Trading and Clearing Revenues	22	25	(12.0)%	74	76	(2.6)%
Transaction-based expenses:						
Transaction rebates	(4)	(1)	#	(14)	(1)	#
Brokerage, clearance and exchange fees	-	(1)	#	(2)	(3)	(33.3)%
Fixed income and commodities trading and clearing revenues less transaction-based expenses	18	23	(21.7)%	58	72	(19.4)%
Trade Management Services Revenues	69	59	16.9%	196	178	10.1%
Total Market Services revenues less transaction-based expenses	$ 213	$ 200	6.5%	$ 607	$ 577	5.2%

\# Denotes a variance greater than or equal to 100.0%.

(1) Includes Section 31 fees of $7 million in the third quarter of 2016, $5 million in the third quarter of 2015, $16 million in the first nine months of 2016 and $14 million in the first nine months of 2015. Section 31 fees are recorded as equity derivative trading and clearing revenues with a corresponding amount recorded in transaction-based expenses.

(2) Includes Section 31 fees of $67 million in the third quarter of 2016, $74 million in the third quarter of 2015, $215 million in the first nine months of 2016 and $213 million in the first nine months of 2015. Section 31 fees are recorded as cash equity trading revenues with a corresponding amount recorded in transaction-based expenses.

Market services revenues less transaction-based expenses increased in the third quarter and first nine months of 2016 compared with the same periods in 2015. The increase in the third quarter of 2016 was primarily due to increases in equity derivative trading and clearing revenues less transaction-based expenses and trade management services revenues, partially offset by decreases in cash equity trading revenues less transaction-based expenses and FICC revenues less transaction-based expenses. The increase in the first nine months of 2016 was primarily due to increases in equity derivative trading and clearing revenues less transaction-based expenses, trade management services revenues and cash equity trading revenues less transaction-based expenses, partially offset by a decrease in FICC revenues less transaction-based expenses.

Equity Derivative Trading and Clearing Revenues

Equity derivative trading and clearing revenues and equity derivative trading and clearing revenues less transaction-based expenses increased in the third quarter and first nine months of 2016. The increase in the third quarter of 2016 was primarily due to the inclusion of revenues from our acquisition of ISE in June 2016 and higher market share at The NASDAQ Options Market and Nasdaq PHLX Options Market, partially offset by lower industry trading volumes. The increase in the first nine months of 2016 was primarily due to the inclusion of revenues from our acquisition of ISE, partially offset by lower U.S. industry trading volumes and lower market share at Nasdaq PHLX Options Market.

Section 31 fees are recorded as equity derivative trading and clearing revenues with a corresponding amount recorded as transaction-based expenses. In the U.S., we are assessed these fees from the SEC and pass them through to our customers in the form of incremental fees. Pass-through fees can increase or decrease due to rate changes by the SEC and differences in actual dollar value

of shares traded. Since the amount recorded in revenues is equal to the amount recorded as transaction-based expenses, there is no impact on our revenues less transaction-based expenses. Section 31 fees were $7 million in the third quarter of 2016, $5 million in the third quarter of 2015, $16 million in the first nine months of 2016, and $14 million in the first nine months of 2015. The increase in the third quarter and first nine months of 2016 was primarily due to the inclusion of Section 31 fees from our acquisition of ISE.

Transaction rebates, in which we credit a portion of the per share execution charge to the market participant, increased in the third quarter and first nine months of 2016 compared with the same periods in 2015. The increase in the third quarter was primarily due to the inclusion of rebates associated with our acquisition of ISE and higher market share at The NASDAQ Options Market and Nasdaq PHLX Options Market, partially offset by lower industry trading volumes. The increase in the first nine months of 2016 was primarily due to the inclusion of rebates associated with our acquisition of ISE, partially offset by lower U.S. industry trading volumes and lower market share at Nasdaq PHLX Options Market.

Brokerage, clearance and exchange fees increased in the third quarter and first nine months of 2016 compared with the same periods in 2015 primarily due to higher Section 31 pass-through fees.

Cash Equity Trading Revenues

Cash equity trading revenues decreased in the third quarter of 2016 and increased in the first nine months of 2016 compared with the same periods in 2015. The decrease in the third quarter was primarily due to lower matched market share, lower industry trading volumes and lower Section 31 pass-through fee revenue, partially offset by the inclusion of revenues associated with our acquisition of Nasdaq CXC in February 2016. The increase in the first nine months of 2016 was primarily due to the inclusion of revenues associated with our acquisition of Nasdaq CXC and higher industry trading volumes, partially offset by a decrease in our overall U.S. and European matched market share.

Cash equity trading revenues less transaction-based expenses decreased in the third quarter of 2016 and increased in the first nine months of 2016 compared with the same periods in 2015. The decrease in the third quarter was primarily due to lower matched market share, lower industry trading volumes, and lower U.S. average net capture, partially offset by the inclusion of revenues associated with our acquisition of Nasdaq CXC. The increase in the first nine months was primarily due to higher industry trading volumes and the inclusion of revenues associated with our acquisition of Nasdaq CXC, partially offset by lower matched market share and lower U.S. average net capture.

Similar to equity derivative trading and clearing, in the U.S. we record Section 31 fees as cash equity trading revenues with a corresponding amount recorded as transaction-based expenses. We are assessed these fees from the SEC and pass them through to our customers in the form of incremental fees. Since the amount recorded in revenues is equal to the amount recorded as transaction-based expenses, there is no impact on our revenues less transaction-based expenses. Section 31 fees were $67 million in the third quarter of 2016, $74 million in the third quarter of 2015, $215 million in the first nine months of 2016 and $213 million in the first nine months of 2015. The decrease in the third quarter was primarily due to lower dollar value traded on Nasdaq's trading systems.

For NASDAQ and Nasdaq PSX, we credit a portion of the per share execution charge to the market participant that provides the liquidity and for Nasdaq BX, we credit a portion of the per share execution charge to the market participant that removes the liquidity. These transaction rebates decreased in the third quarter of 2016 compared with the same period in 2015 primarily due to lower overall U.S. matched market share and lower U.S. industry trading volumes, partially offset by the inclusion of rebates associated with our acquisition of Nasdaq CXC and an increase in rebate capture. The increase in first nine months of 2016 compared with the same period in 2015 was primarily due to higher U.S. industry trading volumes, the inclusion of rebates associated with our acquisition of Nasdaq CXC, and an increase in rebate capture, partially offset by lower overall U.S. matched market share.

Brokerage, clearance and exchange fees decreased in the third quarter and first nine months of 2016 compared with the same periods in 2015. The decrease in the third quarter was primarily due to a decrease in Section 31 pass-through fees.

FICC Revenues

FICC revenues and FICC revenues less transaction-based expenses decreased in the third quarter and first nine months of 2016 compared with the same periods in 2015. The decrease in the third quarter was primarily due to declines in U.S. fixed income and commodities revenues and the impact of trading incentives on NFX revenues. The decrease in the first nine months of 2016 was primarily due to the impact of NFX trading incentives and a decline in U.S. fixed income revenues, partially offset by higher commodities revenues.

FICC transaction rebates, in which we credit a portion of the per share execution charge to the market participant, increased in the third quarter and first nine months of 2016 compared with the same periods in 2015 primarily due to higher NFX trading incentives.

Trade Management Services Revenues

Trade management services revenues increased in the third quarter and first nine months of 2016 compared with the same periods in 2015 primarily due to the inclusion of revenues from our acquisition of ISE in June 2016 and an increase in customer demand for network connectivity.

LISTING SERVICES

The following table shows revenues from our Listing Services segment:

	Three Months Ended September 30,		Percentage Change	Nine Months Ended September 30,		Percentage Change
	2016	2015		2016	2015	
	(in millions)			(in millions)		
Listing Services Revenues	$ 68	$ 66	3.0%	$ 202	$ 196	3.1%

Listing Services revenues increased in the third quarter and first nine months of 2016 compared with the same periods in 2015 primarily due to an increase in European revenues due to new company listings. As of September 30, 2016, Nasdaq Nordic and Nasdaq Baltic exchanges, together with Nasdaq First North, were home to 875 listed companies compared with 835 as of September 30, 2015.

INFORMATION SERVICES

The following table shows revenues from our Information Services segment:

	Three Months Ended September 30,		Percentage Change	Nine Months Ended September 30,		Percentage Change
	2016	2015		2016	2015	
	(in millions)			(in millions)		
Information Services Revenues:						
Data products revenues	$ 109	$ 103	5.8%	$ 322	$ 302	6.6%
Index licensing and services revenues	28	29	(3.4)%	83	83	-
Total Information Services Revenues	$ 137	$ 132	3.8%	$ 405	$ 385	5.2%

Information Services revenues increased in the third quarter and first nine months of 2016 compared with the same periods in 2015 primarily due to an increase in data products revenues.

Data Products Revenues

Data products revenues increased in the third quarter and first nine months of 2016 compared with the same periods in 2015 primarily due to growth in proprietary data products revenues, the inclusion of revenues associated with the acquisitions of ISE in June 2016 and Nasdaq CXC in February 2016, and higher audit collections.

Index Licensing and Services Revenues

Index licensing and services revenues decreased in the third quarter of 2016 and were flat in the first nine months of 2016 compared with the same periods in 2015. The decrease in the third quarter was primarily due to a decrease in the value of underlying assets associated with non-ETP Nasdaq-licensed products and lower fees on derivative products licensing Nasdaq indices, due to lower volumes.

TECHNOLOGY SOLUTIONS

The following table shows revenues from our Technology Solutions segment:

	Three Months Ended September 30,		Percentage Change	Nine Months Ended September 30,		Percentage Change
	2016	2015		2016	2015	
	(in millions)			(in millions)		
Technology Solutions Revenues:						
Corporate Solutions revenues	$ 94	$ 72	30.6%	$ 265	$ 223	18.8%
Market Technology revenues	73	59	23.7%	199	173	15.0%
Total Technology Solutions Revenues	$ 167	$ 131	27.5%	$ 464	$ 396	17.2%

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Technology solutions revenues increased in the third quarter and first nine months of 2016 compared with the same periods in 2015 due to increases in both corporate solutions and market technology revenues.

Corporate Solutions Revenues

Corporate solutions revenues increased in the third quarter and first nine months of 2016 compared with the same periods in 2015 primarily due to the inclusion of revenues associated with the acquisitions of Marketwired in February 2016 and Boardvantage in May 2016.

Market Technology Revenues

Market technology revenues increased in the third quarter and first nine months of 2016 compared with the same periods in 2015 primarily due to an increase in revenues from software, licensing and support as well as surveillance products.

Total Order Value

Total order value, which represents the total contract value of orders signed that are yet to be recognized as revenues, was $738 million as of September 30, 2016 and 2015. As of September 30, 2016, market technology deferred revenue, included in total technology solutions deferred revenue of $243 million, represents consideration received that is yet to be recognized as revenue for these signed orders. See Note 7, "Deferred Revenue," to the condensed consolidated financial statements for further discussion. The recognition and timing of these revenues depends on many factors, including those that are not within our control. As such, the following table of market technology revenues to be recognized in the future represents our best estimate:

	Total Order Value
	(in millions)
Fiscal year ended:	
2016[1]	$ 58
2017	225
2018	152
2019	102
2020	93
2021 and thereafter	108
Total	$ 738

[1] Represents revenues that are anticipated to be recognized over the remaining three months of 2016.

Expenses

Operating Expenses

The following table shows our operating expenses:

	Three Months Ended September 30, 2016	Three Months Ended September 30, 2015	Percentage Change	Nine Months Ended September 30, 2016	Nine Months Ended September 30, 2015	Percentage Change
	(in millions)			(in millions)		
Compensation and benefits	$ 168	$ 150	12.0%	$ 484	$ 441	9.8%
Marketing and advertising	8	6	33.3%	22	20	10.0%
Depreciation and amortization	46	34	35.3%	125	102	22.5%
Professional and contract services	40	33	21.2%	111	108	2.8%
Computer operations and data communications	28	23	21.7%	80	81	(1.2)%
Occupancy	23	22	4.5%	62	63	(1.6)%
Regulatory	8	7	14.3%	21	20	5.0%
Merger and strategic initiatives	12	4	#	56	7	#
General, administrative and other	19	11	72.7%	50	77	(35.1)%
Restructuring charges	-	8	#	41	160	(74.4)%
Total operating expenses	$ 352	$ 298	18.1%	$ 1,052	$ 1,079	(2.5)%

# Denotes a variance greater than or equal to 100.0%.

Total operating expenses increased $54 million in the third quarter of 2016 compared with the same period in 2015 primarily due to increases in compensation and benefits expense, depreciation and amortization expense, merger and strategic initiatives expense, general, administrative and other expense, and professional and contract services expense, partially offset by lower restructuring charges.

Total operating expenses decreased $27 million in the first nine months of 2016 compared with the same period in 2015. The decrease reflects an operational decrease of $23 million and a favorable impact from foreign exchange of $4 million. The operational

decrease was primarily due to lower restructuring charges and lower general, administrative and other expense, partially offset by higher merger and strategic initiatives expense, higher compensation and benefits expense and an increase in depreciation and amortization expense.

Compensation and benefits expense increased in the third quarter and first nine months of 2016 compared with the same periods in 2015 primarily due to overall higher compensation costs resulting from our 2016 acquisitions. Headcount, including staff employed at consolidated entities where we have a controlling financial interest, increased to 4,364 employees at September 30, 2016 from 3,783 employees at September 30, 2015.

Depreciation and amortization expense increased in the third quarter and first nine months of 2016 compared with the same periods in 2015 mainly due to additional amortization expense associated with software assets placed in service and acquired intangible assets, primarily related to our 2016 acquisitions.

Professional and contract services expense increased in the third quarter and first nine months of 2016 compared with the same periods in 2015 primarily due to higher consulting expenses.

Computer operations and data communications expense increased in the third quarter of 2016 and decreased slightly in the first nine months of 2016 compared with the same periods in 2015. The increase in the third quarter of 2016 is primarily due to higher hardware and license costs. The decrease in the first nine months of 2016 is primarily due to a decrease in VAT, reflecting a charge for the reversal of previously recorded VAT receivables no longer deemed collectible of $12 million in the first nine months of 2015, partially offset by higher maintenance costs.

Occupancy expense increased in the third quarter of 2016 and decreased slightly in the first nine months of 2016 compared with the same periods in 2015. The increase in the third quarter of 2016 reflects additional facility and rent costs associated with our 2016 acquisitions, partially offset by lower facility and rent costs as a result of our restructuring activities.

Merger and strategic initiatives expense was $12 million in the third quarter of 2016, $56 million in the first nine months of 2016, $4 million in the third quarter of 2015 and $7 million in the first nine months of 2015. In the third quarter and first nine months of 2016, merger and strategic initiatives expense primarily related to our acquisition of ISE. Merger and strategic initiatives expense in the third quarter and first nine months of 2015 primarily related to certain strategic initiatives and our acquisition of DWA. Merger and strategic initiatives expense includes integration costs, legal, due diligence and other third party transaction costs.

General, administrative and other expense increased in the third quarter of 2016 and decreased in the first nine months of 2016 compared with the same periods in 2015. The increase in the third quarter of 2016 is primarily due to higher expenses associated with our 2016 acquisitions. The decrease in the first nine months of 2016 is primarily due to a reserve of $31 million for litigation arising from the Facebook IPO recorded in March 2015, partially offset by higher expenses associated with our 2016 acquisitions.

Restructuring charges were $8 million in the third quarter of 2015, $41 million in the first nine months of 2016 and $160 million in the first nine months of 2015. See Note 3, "Restructuring Charges," to the condensed consolidated financial statements for a discussion of our restructuring charges.

Non-operating Income and Expenses

The following table shows our non-operating income and expenses:

	Three Months Ended September 30,		Percentage Change	Nine Months Ended September 30,		Percentage Change
	2016	2015		2016	2015	
	(in millions)			(in millions)		
Interest income	$ 1	$ 1	-	$ 4	$ 3	33.3%
Interest expense	(37)	(28)	32.1%	(98)	(83)	18.1%
Net interest expense	(36)	(27)	33.3%	(94)	(80)	17.5%
Other investment income	-	-	-	3	-	#
Net income from unconsolidated investees	2	2	-	6	16	(62.5)%
Total non-operating expenses	$ (34)	$ (25)	36.0%	$ (85)	$ (64)	32.8%

# Denotes a variance equal to 100.0%.

Total non-operating expenses increased in the third quarter and first nine months of 2016 compared with the same periods in 2015. The increase in the third quarter of 2016 is primarily due to an increase in interest expense. The increase in the first nine months of 2016 is primarily due to an increase in interest expense and a decrease in net income from unconsolidated investees.

Interest Expense

Interest expense for the third quarter of 2016 was $37 million, and was comprised of $36 million of interest expense and $1 million of non-cash debt issuance amortization expense. The increase in the third quarter of 2016 is primarily due to our recent debt issuances. Interest expense for the third quarter of 2015 was $28 million, and was comprised of $27 million of interest expense and $1 million of non-cash debt issuance amortization expense.

Interest expense for the first nine months of 2016 was $98 million, and was comprised of $94 million of interest expense, $3 million of non-cash debt issuance amortization expense and $1 million of other bank and investment-related fees. The increase in the first nine months of 2016 is primarily due to our recent debt issuances. Interest expense for the first nine months of 2015 was $83 million, and was comprised of $79 million of interest expense, $2 million of non-cash debt issuance amortization expense, $1 million of non-cash expense associated with the accretion of debt discounts and $1 million of other bank and investment-related fees.

See Note 8, “Debt Obligations,” to the condensed consolidated financial statements for further discussion of our debt obligations.

Other Investment Income

Other investment income was $3 million in the first nine months of 2016 and primarily relates to dividend income received on a cost method investment.

Net Income from Unconsolidated Investees

Net income from unconsolidated investees was flat in the third quarter of 2016 compared with the same period in 2015. The decrease in the first nine months of 2016 compared with the same period in 2015 is primarily due to lower income recognized from our equity method investment in OCC. We were not able to determine what our share of OCC’s income was for the year ended December 31, 2014 until the first quarter of 2015, when financial statements were made available to us. As a result, we recorded other income of $13 million in the first quarter of 2015 relating to our share of OCC’s income for the year ended December 31, 2014.

See “Equity Method Investments,” of Note 6, “Investments,” to the condensed consolidated financial statements for further discussion of our investment in OCC.

Tax Matters

Nasdaq’s income tax provision was $68 million in the third quarter of 2016 and $208 million in the first nine months of 2016 compared with $68 million in the third quarter of 2015 and $132 million in the first nine months of 2015. The overall effective tax rate was 34.2% in the third quarter of 2016 and 38.4% in the first nine months of 2016 compared with 33.0% in the third quarter of 2015 and 32.1% in the first nine months of 2015. For further discussion of our tax matters, see “Tax Matters,” of Note 2, “Basis of Presentation and Principles of Consolidation.”

The effective tax rate may vary from period to period depending on, among other factors, the geographic and business mix of earnings and losses. These same and other factors, including history of pre-tax earnings and losses, are taken into account in assessing the ability to realize deferred tax assets.

In order to recognize and measure our unrecognized tax benefits, management determines whether a tax position is more likely than not to be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. Once it is determined that a position meets the recognition thresholds, the position is measured to determine the amount of benefit to be recognized in the condensed consolidated financial statements. Interest and/or penalties related to income tax matters are recognized in income tax expense.

Non-GAAP Financial Measures

In addition to disclosing results determined in accordance with U.S. GAAP, we also have provided non-GAAP net income attributable to Nasdaq and non-GAAP diluted earnings per share. Management uses this non-GAAP information internally, along with U.S. GAAP information, in evaluating our performance and in making financial and operational decisions. We believe our presentation of these measures provides investors with greater transparency and supplemental data relating to our financial condition and results of operations. In addition, we believe the presentation of these measures is useful to investors for period-to-period comparisons of results as the items described below do not reflect ongoing operating performance.

These measures are not in accordance with, or an alternative to, U.S. GAAP, and may be different from non-GAAP measures used by other companies. Investors should not rely on any single financial measure when evaluating our business. We recommend investors review the U.S. GAAP financial measures included in this Quarterly Report on Form 10-Q, including our condensed consolidated financial statements and the notes thereto. When viewed in conjunction with our U.S. GAAP results and the

accompanying reconciliation, we believe these non-GAAP measures provide greater transparency and a more complete understanding of factors affecting our business than U.S. GAAP measures alone.

We understand that analysts and investors regularly rely on non-GAAP financial measures, such as non-GAAP net income attributable to Nasdaq and non-GAAP diluted earnings per share, to assess operating performance. We use non-GAAP net income attributable to Nasdaq and non-GAAP diluted earnings per share because they highlight trends more clearly in our business that may not otherwise be apparent when relying solely on U.S. GAAP financial measures, since these measures eliminate from our results specific financial items that have less bearing on our ongoing operating performance. Non-GAAP net income attributable to Nasdaq for the periods presented below is calculated by adjusting for the following items:

Amortization expense of acquired intangible assets: We amortize intangible assets acquired in connection with various acquisitions. Intangible asset amortization expense can vary from period to period due to episodic acquisitions completed, rather than from our ongoing business operations. As such, if intangible asset amortization is included in performance measures, it is more difficult to assess the day-to-day operating performance of the businesses, the relative operating performance of the businesses between periods and the earnings power of Nasdaq. Management does not consider intangible asset amortization expense for the purpose of evaluating the performance of our business or its managers or when making decisions to allocate resources. Therefore, we believe performance measures excluding intangible asset amortization expense provide investors with a more useful representation of our businesses' ongoing activity in each period.

Restructuring charges: Restructuring charges are associated with our 2015 restructuring plan to improve performance, cut costs and reduce spending and are primarily related to (i) the rebranding of our company name from The NASDAQ OMX Group, Inc. to Nasdaq, Inc., (ii) severance and other termination benefits, (iii) costs to vacate duplicate facilities, and (iv) asset impairment charges. We exclude these restructuring costs because these costs do not reflect future operating expenses and do not contribute to a meaningful evaluation of Nasdaq's ongoing operating performance or comparison of Nasdaq's performance between periods.

Merger and strategic initiatives expense: We have pursued various strategic initiatives and completed a number of acquisitions in recent years which have resulted in expenses which would not have otherwise been incurred. These expenses include integration costs, as well as legal, due diligence and other third party transaction costs. The frequency and the amount of such expenses vary significantly based on the size, timing and complexity of the transaction. Accordingly, we exclude these costs for purposes of calculating non-GAAP measures which provide a more meaningful analysis of Nasdaq's ongoing operating performance or comparisons in Nasdaq's performance between periods.

Other significant items: We have excluded certain other charges or gains that are the result of other non-comparable events to measure operating performance. For the three months ended September 30, 2015, other significant items include an insurance recovery for litigation arising from the Facebook IPO in May 2012. For the nine months ended September 30, 2016, other significant items include tax expense due to an unfavorable tax ruling received during the three months ended June 30, 2016, the impact of which related to prior periods, and the release of a sublease loss reserve due to the early exit of a facility. For the nine months ended September 30, 2015, other significant items included income from our equity investment in OCC where we were not able to determine what our share of OCC's income was for the year ended December 31, 2014 until the first quarter of 2015, when financial statements were made available to us. As a result, we recorded other income in the first quarter of 2015 relating to our share of OCC's income for the year ended December 31, 2014. For the nine months ended September 30, 2015, other significant adjustments also included legal settlement costs, the reversal of a value added tax refund, and tax adjustments related to resolution of certain positions. We believe the exclusion of such amounts allows management and investors to better understand the financial results of Nasdaq.

The following table represents reconciliations between U.S. GAAP net income and diluted earnings per share and non-GAAP net income and diluted earnings per share:

	Three Months Ended September 30, 2016		Three Months Ended September 30, 2015	
	Net Income	Diluted Earnings Per Share	Net Income	Diluted Earnings Per Share
	(in millions, except share and per share amounts)			
U.S. GAAP net income attributable to Nasdaq and diluted earnings per share	$ 131	$ 0.77	$ 138	$ 0.80
Non-GAAP adjustments:				
Amortization expense of acquired intangible assets	23	0.14	15	0.09
Restructuring charges	-	-	8	0.05
Merger and strategic initiatives	12	0.07	4	0.02
Insurance recovery	-	-	(5)	(0.03)

	Net Income	Diluted Earnings Per Share	Net Income	Diluted Earnings Per Share
Adjustment to the income tax provision to reflect non-GAAP adjustments[1]	(12)	(0.07)	(9)	(0.05)
Total non-GAAP adjustments, net of tax	23	0.14	13	0.08
Non-GAAP net income attributable to Nasdaq and diluted earnings per share	$ 154	$ 0.91	$ 151	$ 0.88
Weighted-average common shares outstanding for diluted earnings per share		169,497,079		171,452,009

[1] We determine the tax effect of each item based on the tax rules in the respective jurisdiction where the transaction occurred.

	Nine Months Ended September 30, 2016		Nine Months Ended September 30, 2015	
	Net Income	Diluted Earnings Per Share	Net Income	Diluted Earnings Per Share
	(in millions, except share and per share amounts)			
U.S. GAAP net income attributable to Nasdaq and diluted earnings per share	$ 333	$ 1.97	$ 280	$ 1.63
Non-GAAP adjustments:				
Income from OCC equity investment	-	-	(13)	(0.08)
Restructuring charges	41	0.24	160	0.93
Special legal expense, net of insurance recovery	-	-	26	0.15
Amortization expense of acquired intangible assets	59	0.35	46	0.27
Reversal of value added tax refund	-	-	12	0.07
Merger and strategic initiatives	56	0.33	7	0.04
Sublease loss reserve	(2)	(0.01)	-	-
Adjustment to the income tax provision to reflect non-GAAP adjustments[1]	(28)	(0.17)	(85)	(0.49)
Total non-GAAP adjustments, net of tax	126	0.74	153	0.89
Non-GAAP net income attributable to Nasdaq and diluted earnings per share	$ 459	$ 2.71	$ 433	$ 2.52
Weighted-average common shares outstanding for diluted earnings per share		168,660,231		172,052,660

[1] We determine the tax effect of each item based on the tax rules in the respective jurisdiction where the transaction occurred. Also included in this adjustment for the nine months ended September 30, 2016 is $27 million in tax expense associated with an unfavorable decision from the Finnish Supreme Administrative Court on a tax position.

Liquidity and Capital Resources

Historically, we have funded our operating activities and met our commitments through cash generated by operations, augmented by the periodic issuance of our common stock and debt. See Note 8, "Debt Obligations," to the condensed consolidated financial statements for further discussion of our debt obligations. Currently, our cost and availability of funding remain healthy.

As part of the acquisition of eSpeed, Nasdaq has contingent future obligations to issue 992,247 shares of Nasdaq common stock annually which approximated certain tax benefits associated with the transaction of $484 million. Such contingent future issuances of Nasdaq common stock will be paid ratably through 2027 if Nasdaq's total gross revenues equal or exceed $25 million in each such year. The contingent future issuances of Nasdaq common stock are subject to anti-dilution protections and acceleration upon certain events.

In May 2016, Nasdaq issued the 2023 Notes and in June 2016, Nasdaq issued the 2026 Notes. We used the majority of the net proceeds from the 2023 Notes of $664 million and the 2026 Notes of $495 million to fund the acquisition of ISE and related expenses. See "3.85% Senior Unsecured Notes," and "1.75% Senior Unsecured Notes," of Note 8, "Debt Obligations," and "Acquisition of International Securities Exchange," of Note 4, "Acquisitions," to the condensed consolidated financial statements for further discussion.

In March 2016, Nasdaq entered into the 2016 Credit Facility which provides for a $400 million senior unsecured term loan facility. In March 2016, loans in an aggregate principal amount of $400 million were drawn under the 2016 Credit Facility and the net proceeds of $399 million were used to partially repay amounts outstanding under the revolving credit commitment of the 2014 Credit Facility. As of September 30, 2016, the balance of $399 million reflects the aggregate principal amount, less the unamortized debt issuance costs. See “2016 Credit Facility,” of Note 8, “Debt Obligations,” to the condensed consolidated financial statements for further discussion.

Our 2014 Credit Facility consists of a $750 million revolving credit commitment (with sublimits for non-dollar borrowings, swingline borrowings and letters of credit). As of September 30, 2016, availability under the revolving credit commitment was $734 million. See “2014 Credit Facility,” of Note 8, “Debt Obligations,” to the condensed consolidated financial statements for further discussion.

In the near term, we expect that our operations and availability under our revolving credit commitment will provide sufficient cash to fund our operating expenses, capital expenditures, debt repayments, any share repurchases, and any dividends.

Various assets and liabilities, including cash and cash equivalents, receivables, accounts payable and accrued expenses, can fluctuate from month to month. Working capital (calculated as current assets less current liabilities) was $292 million at September 30, 2016, compared with $340 million at December 31, 2015, a decrease of $48 million. Current asset balance changes increased working capital by $1,086 million, with increases in default funds and margin deposits, financial investments, at fair value, receivables, net, and other current assets, partially offset by decreases in cash and cash equivalents and restricted cash. Current liability balance changes decreased working capital by $1,134 million, due to increases in default funds and margin deposits, deferred revenue, current portion of debt obligations and accrued personnel costs, partially offset by decreases in Section 31 fees payable to the SEC and other current liabilities.

Principal factors that could affect the availability of our internally-generated funds include:

- deterioration of our revenues in any of our business segments;
- changes in our working capital requirements; and
- an increase in our expenses.

Principal factors that could affect our ability to obtain cash from external sources include:

- operating covenants contained in our credit facilities that limit our total borrowing capacity;
- increases in interest rates under our credit facilities;
- credit rating downgrades, which could limit our access to additional debt;
- a decrease in the market price of our common stock; and
- volatility in the public debt and equity markets.

The following sections discuss the effects of changes in our financial assets, debt obligations, clearing and broker-dealer net capital requirements, and cash flows on our liquidity and capital resources.

Financial Assets

The following table summarizes our financial assets:

	September 30, 2016	December 31, 2015
	(in millions)	
Cash and cash equivalents	$ 257	$ 301
Restricted cash	19	56
Financial investments, at fair value	238	201
Total financial assets	$ 514	$ 558

Cash and Cash Equivalents and Restricted Cash

Cash and cash equivalents include cash in banks and all non-restricted highly liquid investments with original maturities of 90 days or less at the time of purchase. The balance retained in cash and cash equivalents is a function of anticipated or possible short-term cash needs, prevailing interest rates, our investment policy, and alternative investment choices. As of September 30, 2016, our cash and cash equivalents of $257 million were primarily invested in bank deposits, money market funds and commercial paper. In the long-term, we may use both internally generated funds and external sources to satisfy our debt obligations and other long-term liabilities. Cash and cash equivalents as of September 30, 2016 decreased $44 million from December 31, 2015 primarily due to net cash used in investing activities, partially offset by net cash provided by operating and financing activities. See “Cash Flow Analysis” below for further discussion.

As of September 30, 2016 and December 31, 2015, current restricted cash included cash held for regulatory purposes and other requirements and is not available for general use. Current restricted cash was $19 million as of September 30, 2016 and $56 million as of December 31, 2015, a decrease of $37 million. The decrease is primarily due to lower restricted cash held at SecondMarket due to a decline in customer funds held in connection with privately negotiated securities transactions. Current restricted cash is classified as restricted cash in the Condensed Consolidated Balance Sheets.

Repatriation of Cash

Our cash and cash equivalents held outside of the U.S. in various foreign subsidiaries totaled $110 million as of September 30, 2016 and $105 million as of December 31, 2015. The remaining balance held in the U.S. totaled $147 million as of September 30, 2016 and $196 million as of December 31, 2015.

Unremitted earnings of subsidiaries outside of the U.S. are used to finance our international operations and are generally considered to be indefinitely reinvested. It is not our current intent to change this position. However, the majority of cash held outside the U.S. is available for repatriation, but under current law, could subject us to additional U.S. income taxes, less applicable foreign tax credits.

Share Repurchase Program

See “Share Repurchase Program,” of Note 11, “Nasdaq Stockholders’ Equity,” to the condensed consolidated financial statements for further discussion of our share repurchase program.

Cash Dividends on Common Stock

In June and September 2016, we paid a quarterly cash dividend of $0.32 per share on our outstanding common stock, and in March 2016, we paid a quarterly cash dividend of $0.25 per share on our outstanding common stock. See “Cash Dividends on Common Stock,” of Note 11, “Nasdaq Stockholders’ Equity,” to the condensed consolidated financial statements for further discussion of the dividends.

Financial Investments, at Fair Value

Our financial investments, at fair value totaled $238 million as of September 30, 2016 and $201 million as of December 31, 2015 and are primarily comprised of trading securities, mainly highly rated European government debt securities. Of these securities, $183 million as of September 30, 2016 and $166 million as of December 31, 2015 are assets utilized to meet regulatory capital requirements primarily for our clearing operations at Nasdaq Clearing. See Note 6, “Investments,” to the condensed consolidated financial statements for further discussion of our trading investment securities.

Debt Obligations

The following table summarizes our debt obligations by contractual maturity:

	Maturity Date	September 30, 2016	December 31, 2015
		(in millions)	
5.25% senior unsecured notes [1]	January 2018	$ 369	$ 368
$750 million revolving credit commitment [2]	November 2019	18	258
$400 million senior unsecured term loan facility[2]	November 2019	399	-
5.55% senior unsecured notes [1]	January 2020	598	597
3.875% senior unsecured notes [1]	June 2021	670	646
1.75% senior unsecured notes [1]	May 2023	665	-
4.25% senior unsecured notes [1]	June 2024	495	495
3.85% senior unsecured notes [1]	June 2026	495	-
Total debt obligations		3,709	2,364
Less current portion		(20)	-
Total long-term debt obligations		$ 3,689	$ 2,364

(1) Net of unamortized debt discount and debt issuance costs.
(2) Net of unamortized debt issuance costs.

In addition to the $750 million revolving credit commitment and $400 million term loan facility, we also have other credit facilities related to our Nasdaq Clearing operations in order to provide further liquidity. At September 30, 2016, credit facilities, which are available in multiple currencies, totaled $181 million in available liquidity, none of which was utilized. At December 31, 2015, credit facilities, which are available in multiple currencies, totaled $202 million in available liquidity, none of which was utilized.

At September 30, 2016, we were in compliance with the covenants of all of our debt obligations.

See Note 8, “Debt Obligations,” to the condensed consolidated financial statements for further discussion of our debt obligations.

Clearing and Broker-Dealer Net Capital Requirements

Clearing Operations Regulatory Capital Requirements

We are required to maintain minimum levels of regulatory capital for the clearing operations of Nasdaq Clearing. The level of regulatory capital required to be maintained is dependent upon many factors, including market conditions and creditworthiness of the counterparty. At September 30, 2016, our required regulatory capital consisted of $183 million of highly rated European government debt securities that are included in financial investments, at fair value in the Condensed Consolidated Balance Sheets.

Broker-Dealer Net Capital Requirements

Our operating broker-dealer subsidiaries, Nasdaq Execution Services, Execution Access, NPM Securities, LLC, SMTX, LLC and Nasdaq Capital Markets Advisory LLC are subject to regulatory requirements intended to ensure their general financial soundness and liquidity. These requirements obligate these subsidiaries to comply with minimum net capital requirements. The following table summarizes the net capital requirements for our broker-dealer subsidiaries as of September 30, 2016:

Broker-Dealer Subsidiaries	Total Net Capital	Required Minimum Net Capital	Excess Capital
		(in millions)	
Nasdaq Execution Services	$ 9.2	$ 0.3	$ 8.9
Execution Access	45.7	0.5	45.2
NPM Securities	0.4	-	0.4
SMTX	0.8	0.3	0.5
Nasdaq Capital Markets Advisory[1]	0.6	0.3	0.3

[1] In August 2016, Nasdaq Capital Markets Advisory’s application to act as a third-party advisor to privately-held or publicly-traded companies during IPOs and various other offerings was approved by FINRA.

Other Capital Requirements

Nasdaq Execution Services

Nasdaq Execution Services also is required to maintain a $2 million minimum level of net capital under our clearing arrangement with OCC.

Nasdaq CXC

As a member of the Investment Industry Regulatory Organization of Canada, or IIROC, Nasdaq CXC is subject to IIROC regulatory requirements which are intended to ensure its general financial soundness and liquidity. Under IIROC rules, Nasdaq CXC is required to comply with minimum net capital requirements. At September 30, 2016, Nasdaq CXC was required to maintain minimum net capital of $0.3 million and had total net capital of approximately $5.8 million, or $5.5 million in excess of the minimum amount required.

Cash Flow Analysis

The following tables summarize the changes in cash flows:

	Nine Months Ended September 30,		
	2016	2015	Percentage Change
	(in millions)		
Net cash provided by (used in):			
Operating activities	$ 453	$ 472	(4.0)%
Investing activities	(1,591)	(382)	#
Financing activities	1,093	(221)	#
Effect of exchange rate changes on cash and cash equivalents	1	(6)	#
Net decrease in cash and cash equivalents	(44)	(137)	(67.9)%
Cash and cash equivalents at the beginning of period	301	427	(29.5)%
Cash and cash equivalents at the end of period	$ 257	$ 290	(11.4)%

# Denotes a variance greater than 100.0%.

Net Cash Provided by Operating Activities

The following items impacted our net cash provided by operating activities for the nine months ended September 30, 2016:

- Net income of $333 million, plus:
  - Adjustments to reconcile net income to net cash provided by operating activities of $139 million comprised primarily of $125 million of depreciation and amortization expense, $55 million of share-based compensation expense, and $8 million in non-cash restructuring charges, partially offset by $38 million of excess tax benefits related to share-based payments and $10 million of deferred income taxes.
- Decrease in accounts receivable, net of $53 million primarily due to the timing of collections and activity.
- Increase in deferred revenue of $46 million mainly due to Listing Services’ annual billings.
- Decrease in other assets of $35 million primarily reflecting a decline in customer funds held as restricted cash in connection with privately negotiated securities transactions at SecondMarket, partially offset by an increase in capital requirements at Execution Access.

Partially offset by a:

- Decrease in Section 31 fees payable to the SEC of $77 million primarily due to timing of payments, which are made twice a year in September and March.
- Decrease of $65 million in other liabilities primarily reflecting a decline in customer funds held in connection with privately negotiated securities transactions at SecondMarket and declines in other current liabilities related to the timing of payments.
- Decrease in accrued personnel costs of $8 million primarily due to the payment of our 2015 incentive compensation in the first quarter of 2016, partially offset by the 2016 accrual.

The following items impacted our net cash provided by operating activities for the nine months ended September 30, 2015:

- Net income of $279 million, plus:
  - Adjustments to reconcile net income to net cash provided by operating activities of $201 million comprised primarily of $134 million in non-cash restructuring charges, $102 million of depreciation and amortization expense, and $49 million of share-based compensation expense, partially offset by deferred income taxes of $61 million, $16 million of excess tax benefits related to share-based payments and net income from unconsolidated investees of $16 million.
- Decrease in accounts receivable, net of $96 million primarily due to the timing of collections and activity.
- Increase of $37 million in other liabilities primarily reflecting an increase in accrued taxes and restructuring reserve.

Partially offset by a:

- Decrease in Section 31 fees payable to the SEC of $99 million primarily due to timing of payments, which are made twice a year in September and March.
- Decrease in accounts payable and accrued expenses of $21 million reflecting a decrease in interest payable as well as the timing of trade payables.
- Decrease in accrued personnel costs of $18 million primarily due to the payment of our 2014 incentive compensation in the first quarter of 2015, partially offset by the 2015 accrual.

Net Cash Used in Investing Activities

Net cash used in investing activities for the nine months ended September 30, 2016 primarily consisted of cash paid for our acquisitions (net of cash acquired) of ISE in June 2016 of $1,053 million, Boardvantage in May 2016 of $194 million, Marketwired and Nasdaq CXC, in February 2016 of $213 million, our purchases of trading and available-for-sale investment securities of $383 million and purchases of property and equipment of $85 million, partially offset by proceeds from sales and redemptions of trading securities of $328 million and proceeds from maturities of available-for-sale investment securities of $19 million.

Net cash used in investing activities for the nine months ended September 30, 2015 primarily consisted of cash paid for our acquisition of DWA in January 2015 of $226 million, our purchases of trading and available-for-sale investment securities of $291 million, a capital contribution of $30 million in connection with our equity method investment in OCC, and purchases of property and equipment of $91 million, partially offset by proceeds from sales and redemptions of trading securities of $236 million and proceeds from maturities of available-for-sale investment securities of $29 million.

Net Cash Provided by (Used in) Financing Activities

Net cash provided by financing activities for the nine months ended September 30, 2016 primarily consisted of net proceeds of $1,159 million related to the issuances of our 2023 Notes and 2026 Notes to fund our acquisition of ISE, net proceeds of $399 million

from our 2016 Credit Facility and proceeds from the partial utilization of the revolving credit commitment under our 2014 Credit Facility of $878 million to partially fund our acquisitions of Boardvantage, Marketwired and Nasdaq CXC, and other general corporate purposes, partially offset by repayment of $1,118 million on the revolving credit commitment under our 2014 Credit Facility, $147 million related to cash dividends paid on our common stock, and $100 million related to the repurchase of our common stock.

Net cash used in financing activities for the nine months ended September 30, 2015 primarily consisted of $310 million of cash used to repurchase our common stock, the repayment of $176 million on the revolving credit commitment of our 2014 Credit Facility, and $108 million related to cash dividends paid on our common stock, partially offset by $366 million from the partial utilization of the revolving credit commitment under our 2014 Credit Facility to partially fund our acquisition of DWA and other general corporate purposes.

For further discussion of our ISE, Boardvantage, Marketwired, Nasdaq CXC, and DWA acquisitions, see Note 4, “Acquisitions,” to the condensed consolidated financial statements. For further discussion of our debt obligations, see Note 8, “Debt Obligations,” to the condensed consolidated financial statements. For further discussion of our share repurchase program and cash dividends paid on our common stock, see “Share Repurchase Program,” and “Cash Dividends on Common Stock,” of Note 11, “Nasdaq Stockholders’ Equity,” to the condensed consolidated financial statements.

Contractual Obligations and Contingent Commitments

Nasdaq has contractual obligations to make future payments under debt obligations by contract maturity, minimum rental commitments under non-cancelable operating leases, net and other obligations. The following table shows these contractual obligations as of September 30, 2016:

	Payments Due by Period				
Contractual Obligations	**Total**	**Less than 1 year**	**1-3 years**	**3-5 years**	**More than 5 years**
			(in millions)		
Debt obligations by contract maturity[1]	$ 4,493	$ 44	$ 683	$ 1,175	$ 2,591
Minimum rental commitments under non-cancelable operating leases, net[2]	458	20	148	129	161
Other obligations[3]	33	32	1	-	-
Total	$ 4,984	$ 96	$ 832	$ 1,304	$ 2,752

(1) Our debt obligations include both principal and interest obligations. At September 30, 2016, an interest rate of 2.54% was used to compute the amount of the contractual obligations for interest on the 2016 Credit Facility and 2.21% was used to compute the amount of the contractual obligations for interest on the 2014 Credit Facility. All other debt obligations were primarily calculated on a 360-day basis at the contractual fixed rate multiplied by the aggregate principal amount at September 30, 2016. See Note 8, “Debt Obligations,” to the condensed consolidated financial statements for further discussion.

(2) We lease some of our office space and equipment under non-cancelable operating leases with third parties and sublease office space to third parties. Some of our leases contain renewal options and escalation clauses based on increases in property taxes and building operating costs.

(3) Other obligations primarily consist of potential future escrow agreement payments related to prior acquisitions as well as other service agreement payments.

Off-Balance Sheet Arrangements

For discussion of off-balance sheet arrangements see:

- Note 14, “Clearing Operations,” to the condensed consolidated financial statements for further discussion of our non-cash default fund contributions and margin deposits received for clearing operations; and
- Note 15, “Commitments, Contingencies and Guarantees,” to the condensed consolidated financial statements for further discussion of:
  - Guarantees issued and credit facilities available;
  - Lease commitments;
  - Other guarantees;
  - Non-cash contingent consideration;
  - Escrow agreements;
  - Routing brokerage activities;

- Litigation; and
- Tax audits.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Market risk represents the potential for losses that may result from changes in the market value of a financial instrument due to changes in market conditions. As a result of our operating, investing and financing activities, we are exposed to market risks such as interest rate risk and foreign currency exchange rate risk. We are also exposed to credit risk as a result of our normal business activities.

We have implemented policies and procedures to measure, manage, monitor and report risk exposures, which are reviewed regularly by management and the board of directors. We identify risk exposures and monitor and manage such risks on a daily basis.

We perform sensitivity analyses to determine the effects of market risk exposures. We may use derivative instruments solely to hedge financial risks related to our financial positions or risks that are incurred during the normal course of business. We do not use derivative instruments for speculative purposes.

Interest Rate Risk

We are subject to the risk of fluctuating interest rates in the normal course of business. Our exposure to market risk for changes in interest rates relates primarily to our financial investments and debt obligations which are discussed below.

Financial Investments

As of September 30, 2016, our investment portfolio was primarily comprised of trading securities, mainly highly rated European government debt securities, which pay a fixed rate of interest. These securities are subject to interest rate risk and will decrease in value if market interest rates increase. If market interest rates were to increase immediately and uniformly by 100 basis points from levels as of September 30, 2016, the fair value of this portfolio would have declined by $5 million.

Debt Obligations

As of September 30, 2016, substantially all of our debt obligations are fixed-rate obligations. While changes in interest rates will have no impact on the interest we pay on fixed-rate obligations, we are exposed to changes in interest rates as a result of borrowings under our 2016 Credit Facility and the 2014 Credit Facility, as these facilities have variable interest rates. As of September 30, 2016, the principal amount outstanding under the 2016 Credit Facility was $400 million and the 2014 Credit Facility was $20 million. A hypothetical 100 basis points increase in interest rates on the 2016 Credit Facility and the 2014 Credit Facility would increase interest expense by approximately $4 million based on borrowings as of September 30, 2016.

Foreign Currency Exchange Rate Risk

As a leading global exchange group, we are subject to foreign currency transaction risk. For the three months ended September 30, 2016, approximately 23.9% of our revenues less transaction rebates, brokerage, clearance and exchange fees and 15.1% of our operating income were derived in currencies other than the U.S. dollar, primarily the Euro and Swedish Krona. For the nine months ended September 30, 2016, approximately 24.7% of our revenues less transaction rebates, brokerage, clearance and exchange fees and 13.8% of our operating income were derived in currencies other than the U.S. dollar, primarily the Euro and Swedish Krona.

Our primary exposure to foreign currency denominated revenues less transaction-based expenses and operating income for the three and nine months ended September 30, 2016 is presented in the following table:

	Euro	Swedish Krona	Other Foreign Currencies	U.S. Dollar	Total
		(in millions, except currency rate)			
Three Months Ended September 30, 2016					
Average foreign currency rate to the U.S. dollar	1.1161	0.1173	#	N/A	N/A
Percentage of revenues less transaction-based expenses	9.5%	8.6%	5.8%	76.1%	100.0%
Percentage of operating income	16.7%	2.9%	(4.5)%	84.9%	100.0%
Impact of a 10% adverse currency fluctuation on revenues less transaction-based expenses	$ (6)	$ (5)	$ (3)	$ -	$ (14)
Impact of a 10% adverse currency fluctuation on operating income	$ (4)	$ (1)	$ (1)	$ -	$ (6)

	Euro	Swedish Krona	Other Foreign Currencies	U.S. Dollar	Total
		(in millions, except currency rate)			
Nine Months Ended September 30, 2016					

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Average foreign currency rate to the U.S. dollar	1.1162	0.1191	#	N/A	N/A
Percentage of revenues less transaction-based expenses	10.1%	8.7%	5.9%	75.3%	100.0%
Percentage of operating income	18.1%	1.5%	(5.8)%	86.2%	100.0%
Impact of a 10% adverse currency fluctuation on revenues less transaction-based expenses	$ (17)	$ (15)	$ (10)	$ -	$ (42)
Impact of a 10% adverse currency fluctuation on operating income	$ (11)	$ (1)	$ (4)	$ -	$ (16)

\# Represents multiple foreign currency rates.
N/A Not applicable.

Our investments in foreign subsidiaries are exposed to volatility in currency exchange rates through translation of the foreign subsidiaries' net assets or equity to U.S. dollars. Substantially all of our foreign subsidiaries operate in functional currencies other than the U.S. dollar. Fluctuations in currency exchange rates may create volatility in our results of operations as we are required to translate the balance sheets and operational results of these foreign currency denominated subsidiaries into U.S. dollars for consolidated reporting. The translation of foreign subsidiaries' non-U.S. dollar balance sheets into U.S. dollars for consolidated reporting results in a cumulative translation adjustment which is recorded in accumulated other comprehensive loss within stockholders' equity in the Condensed Consolidated Balance Sheets.

Our primary exposure to net assets in foreign currencies as of September 30, 2016 is presented in the following table:

	Net Assets	Impact of a 10% Adverse Currency Fluctuation
	(in millions)	
Swedish Krona[1]	$ 3,313	$ (331)
Norwegian Krone	209	(21)
British Pound	123	(12)
Euro	108	(11)
Australian Dollar	87	(9)

[1] Includes goodwill of $2,550 million and intangible assets, net of $626 million.

Credit Risk

Credit risk is the potential loss due to the default or deterioration in credit quality of customers or counterparties. We are exposed to credit risk from third parties, including customers, counterparties and clearing agents. These parties may default on their obligations to us due to bankruptcy, lack of liquidity, operational failure or other reasons. We limit our exposure to credit risk by rigorously evaluating the counterparties with which we make investments and execute agreements. The financial investment portfolio objective is to invest in securities to preserve principal while maximizing yields, without significantly increasing risk. Credit risk associated with investments is minimized substantially by ensuring that these financial assets are placed with governments which have investment grade ratings, well-capitalized financial institutions and other creditworthy counterparties.

Our subsidiary Nasdaq Execution Services may be exposed to credit risk, due to the default of trading counterparties, in connection with the routing services it provides for our trading customers. System trades in cash equities routed to other market centers for members of our cash equity exchanges are routed by Nasdaq Execution Services for clearing to the National Securities Clearing Corporation, or NSCC. In this function, Nasdaq Execution Services is to be neutral by the end of the trading day, but may be exposed to intraday risk if a trade extends beyond the trading day and into the next day, thereby leaving Nasdaq Execution Services susceptible to counterparty risk in the period between accepting the trade and routing it to the clearinghouse. In this interim period, Nasdaq Execution Services is not novating like a clearing broker but instead is subject to the short-term risk of counterparty failure before the clearinghouse enters the transaction. Once the clearinghouse officially accepts the trade for novation, Nasdaq Execution Services is legally removed from trade execution risk. However, Nasdaq has membership obligations to NSCC independent of Nasdaq Execution Services' arrangements.

Pursuant to the rules of the NSCC and Nasdaq Execution Services' clearing agreement, Nasdaq Execution Services is liable for any losses incurred due to a counterparty or a clearing agent's failure to satisfy its contractual obligations, either by making payment or delivering securities. Adverse movements in the prices of securities that are subject to these transactions can increase our credit risk. However, we believe that the risk of material loss is limited, as Nasdaq Execution Services' customers are not permitted to trade on margin and NSCC rules limit counterparty risk on self-cleared transactions by establishing credit limits and capital deposit requirements for all brokers that clear with NSCC. Historically, Nasdaq Execution Services has never incurred a liability due to a customer's failure to satisfy its contractual obligations as counterparty to a system trade. Credit difficulties or insolvency, or the

perceived possibility of credit difficulties or insolvency, of one or more larger or visible market participants could also result in market-wide credit difficulties or other market disruptions.

Execution Access is an introducing broker which operates the eSpeed trading platform for U.S. Treasury securities. Execution Access has a clearing arrangement with Cantor Fitzgerald. As of September 30, 2016, we have contributed $19 million of clearing deposits to Cantor Fitzgerald in connection with this clearing arrangement. These deposits are recorded in other current assets in our Condensed Consolidated Balance Sheets. Some of the trading activity in Execution Access is cleared by Cantor Fitzgerald through the Fixed Income Clearing Corporation. Execution Access assumes the counterparty risk of clients that do not clear through the Fixed Income Clearing Corporation. Counterparty risk of clients exists for Execution Access between the trade date and settlement date of the individual transactions, which is one business day. All of Execution Access' obligations under the clearing arrangement with Cantor Fitzgerald are guaranteed by Nasdaq. Counterparties that do not clear through the Fixed Income Clearing Corporation are subject to a credit due diligence process and may be required to post collateral, provide principal letters, or provide other forms of credit enhancement to Execution Access for the purpose of mitigating counterparty risk.

We are exposed to credit risk through our clearing operations with Nasdaq Clearing. See Note 14, "Clearing Operations," to the condensed consolidated financial statements for further discussion.

We also have credit risk related to transaction and subscription-based revenues that are billed to customers on a monthly or quarterly basis, in arrears. Our potential exposure to credit losses on these transactions is represented by the receivable balances in our Condensed Consolidated Balance Sheets. On an ongoing basis, we review and evaluate changes in the status of our counterparties' creditworthiness.

Credit losses such as those described above could adversely affect our condensed consolidated financial position and results of operations.

Item 4. Controls and Procedures.

(a) ***Disclosure controls and procedures.*** Nasdaq's management, with the participation of Nasdaq's Chief Executive Officer, and Executive Vice President, Corporate Strategy and Chief Financial Officer, has evaluated the effectiveness of Nasdaq's disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Exchange Act) as of the end of the period covered by this report. Based upon that evaluation, Nasdaq's Chief Executive Officer and Executive Vice President, Corporate Strategy and Chief Financial Officer, have concluded that, as of the end of such period, Nasdaq's disclosure controls and procedures are effective.

(b) ***Internal control over financial reporting.*** On June 30, 2016, we acquired ISE. In conducting our evaluation of the effectiveness of internal controls over financial reporting, we will elect to exclude ISE when conducting our evaluation as of December 31, 2016, as permitted by applicable regulations. There have been no changes in Nasdaq's internal controls over financial reporting (as defined in Rule 13a-15(f) and Rule 15d-15(f) under the Exchange Act) that occurred during the quarter ended September 30, 2016 that have materially affected, or are reasonably likely to materially affect, Nasdaq's internal controls over financial reporting.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings.

See "Litigation," of Note 15, "Commitments, Contingencies and Guarantees," to the condensed consolidated financial statements for further discussion.

Item 1A. Risk Factors.

In addition to the other information set forth in this Quarterly Report on Form 10-Q, you should carefully consider the factors discussed under "Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015 as filed with the SEC on February 26, 2016, our Quarterly Report on Form 10-Q for the quarter ended March 31, 2016, as filed with the SEC on May 5, 2016, and our Quarterly Report on Form 10-Q for the quarter ended June 30, 2016, as filed with the SEC on August 3, 2016. These risks could materially and adversely affect our business, financial condition and results of operations. The risks and uncertainties in our Form 10-K and Form 10-Q are not the only ones facing us. Additional risks and uncertainties not presently known to us or that we currently believe to be immaterial may also adversely affect our business.

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

Share Repurchase Program

See "Share Repurchase Program," of Note 11, "Nasdaq Stockholders' Equity," to the condensed consolidated financial statements for further discussion of our share repurchase program.

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Employee Transactions

During the fiscal quarter ended September 30, 2016, we purchased shares from employees in connection with the settlement of employee tax withholding obligations arising from the vesting of restricted stock.

The table below represents repurchases made by or on behalf of us or any "affiliated purchaser" of our common stock during the quarter ended September 30, 2016.

Period	(a) Total Number of Shares Purchased	(b) Average Price Paid Per Share	(c) Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	(d) Maximum Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (in millions)
July 2016				
Share repurchase program	127,580	$ 62.19	127,580	$ 476
Employee transactions	17,113	$ 67.98	N/A	N/A
August 2016				
Share repurchase program	-	$ -	-	$ 476
Employee transactions	3,455	$ 71.09	N/A	N/A
September 2016				
Share repurchase program	673,358	$ 69.33	673,358	$ 429
Employee transactions	2,071	$ 71.59	N/A	N/A
Total Quarter Ended September 30, 2016				
Share repurchase program	800,938	$ 68.19	800,938	$ 429
Employee transactions	22,639	$ 68.79	N/A	N/A

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

Not applicable.

Item 6. Exhibits.

The exhibits required by this item are listed on the Exhibit Index.

SIGNATURES

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

	Nasdaq, Inc. (Registrant)	
Date: November 8, 2016	By:	/s/ Robert Greifeld
	Name:	**Robert Greifeld**
	Title:	**Chief Executive Officer**
Date: November 8, 2016	By:	/s/ Michael Ptasznik
	Name:	**Michael Ptasznik**
	Title:	**Executive Vice President, Corporate Strategy and Chief Financial Officer**

Exhibit Index

Exhibit Number	
10.1	Employment Agreement between Nasdaq and Bradley J. Peterson, dated August 1, 2016.*
11	Statement regarding computation of per share earnings (incorporated herein by reference from Note 12 to the condensed consolidated financial statements under Part I, Item 1 of this Form 10-Q).
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (“Sarbanes-Oxley”).
31.2	Certification of Executive Vice President, Corporate Strategy and Chief Financial Officer pursuant to Section 302 of Sarbanes-Oxley.
32.1	Certifications Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of Sarbanes-Oxley.
101.INS	XBRL Instance Document**
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.DEF	Taxonomy Extension Definition Linkbase
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase

* Management contract or compensatory plan or arrangement.

** The following materials from the Nasdaq, Inc. Quarterly Report on Form 10-Q for the three and nine months ended September 30, 2016 are formatted in XBRL (eXtensible Business Reporting Language): (i) Condensed Consolidated Balance Sheets at September 30, 2016 and December 31, 2015; (ii) Condensed Consolidated Statements of Income for the three and nine months ended September 30, 2016 and 2015; (iii) Condensed Consolidated Statements of Comprehensive Income for the three and nine months ended September 30, 2016 and 2015; (iv) Condensed Consolidated Statements of Cash Flows for the nine months ended September 30, 2016 and 2015; and (v) notes to condensed consolidated financial statements.

EMPLOYMENT AGREEMENT

EMPLOYMENT AGREEMENT (this "*Agreement*"), made and entered into on August 1, 2016 and effective as of August 1, 2016 (the "*Effective Date*"), by and between Nasdaq, Inc. (the "*Company*") and Bradley Peterson (the "*Executive*").

In consideration of the premises and mutual covenants herein and for other good and valuable consideration, the parties hereby agree as follows:

1. *Term of Agreement*. Subject to Section 8 below, the term of this Agreement shall commence on the Effective Date and end on July 31, 2021 (the "Term").

2. *Position.*

(a) *Duties.* The Executive shall serve as the Company's Executive Vice President and Chief Information Officer and shall have such other duties as agreed to by the Executive, the Chief Executive Officer, and the Board of Directors of the Company (the "*Board*"). In such position, the Executive shall have such duties and authority as shall be determined from time to time by the Chief Executive Officer and the Board and as shall be consistent with the by-laws of the Company as in effect from time to time. During the Term, the Executive shall devote his full time and best efforts to his duties hereunder. The Executive shall report directly to the Chief Executive Officer. The scope, duties and responsibilities of the role will be evaluated at least annually and increased, as appropriate, based on performance in the role.

(b) *Company Code of Ethics.* The Executive shall comply in all respects with the Company's Code of Ethics and all applicable corporate policies referenced in the Code of Ethics, as may be amended from time to time (the "*Code of Ethics*"). The Executive may, in accordance with the Code of Ethics, (i) engage in personal activities involving charitable, community, educational, religious or similar organizations and (ii) manage his personal investments; provided, however, that, in each case, such activities are in all respects consistent with applicable law, the Continuing Obligations Agreement attached as Exhibit A ("*Continuing Obligations Agreement*") and Section 9 below.

3. *Base Salary.* During the Term, the Company shall pay the Executive a base salary (the "*Base Salary*") at an annual rate of not less than $525,000. The Base Salary shall be payable in regular payroll installments in accordance with the Company's payroll practices as in effect from time to time (but no less frequently than monthly). The Management Compensation Committee of the Board (the "*Compensation Committee*") shall review the Base Salary at least annually and may (but shall be under no obligation to) increase (but not decrease) the Base Salary on the basis of such review.

4. *Annual Bonus.*

(a) *Annual Bonus.* For each calendar year during the Term, the Executive shall be eligible to participate in the Executive Corporate Incentive Plan of the Company (the "*Bonus Program*") in accordance with the terms and provisions of such Bonus Program as established from time to time by the Compensation Committee and pursuant to which the Executive will be eligible to earn an annual cash bonus (the "*Annual Bonus*"). Pursuant to the terms of the Bonus Program, the Executive shall be eligible to earn, for each full calendar year during the Term, a target Annual Bonus of not less than $800,000 (the "*Target Bonus*") based upon the achievement of one or more performance goals established for such year by the Chief Executive Officer and the Compensation Committee. The Executive shall have the opportunity to make suggestions to the Chief Executive Officer and the Compensation Committee prior to the determination of the performance goals for the Bonus Program for each performance period, but the Compensation Committee will have final power and authority concerning the establishment of such goals. The Chief Executive Officer and the Compensation Committee shall review the Target Bonus at least annually and may (but shall be under no obligation to) increase (but shall not decrease) the Target Bonus on the basis of such review. The Target Bonus for each year during the Term shall never be less than the Target Bonus for the immediately preceding year.

(b) *Timing and Deferral of Annual Bonus.* The Annual Bonus for each year shall be paid to the Executive as soon as reasonably practicable following the end of such year, but in no event later than March 15th following the end of the calendar year to which such Annual Bonus relates.

5. *Equity Compensation.* The Executive shall be eligible for a target equity compensation award of not less than $1,600,000 (the "*Target Equity Incentive*"), in accordance with the terms and provisions of the Company's Equity Incentive Plan (the "*Stock Plan*"), which has been adopted by the Board and may from time to time be amended. The applicable provisions of the Company's Stock Plan or each equity award agreement executed by the Executive and the Company shall govern the treatment of the equity awards.

6. *Employee Benefits.* During the Term, the Company shall provide the Executive with benefits on the same basis as benefits are generally made available to other senior executives of the Company, including, without limitation, medical, dental, vision, disability and life insurance, financial and tax planning services and retirement benefits. The Executive shall be entitled to four weeks of paid vacation to be used in accordance with the Company's then current vacation policy; provided, however, that, in the event the Executive's employment ends for any reason, the Executive shall be paid only for unused vacation that accrued in the calendar year his employment terminated and any unused vacation for any prior year shall be forfeited.

7. *Business and Other Expenses.*

(a) *Business Expenses.* During the Term, the Company shall reimburse the Executive for reasonable business expenses incurred by his in the performance of his duties hereunder in accordance with the policy established by the Compensation Committee.

8. *Termination.* Notwithstanding any other provision of this Agreement, subject to the further provisions of this Section 8, the Company may terminate the Executive's employment or the Executive may resign such employment for any reason or no stated reason at any time, subject to the notice and other provisions set forth below:

(a) *Generally.* In the event of the termination of the Executive's employment for any reason, the Executive shall receive payment of (i) any unpaid Base Salary through the Date of Termination (as defined below), to be paid in accordance with Section 3 above, (ii) subject to Section 6 above, any accrued but unpaid vacation through the Date of Termination payable within 14 days of the Date of Termination (iii) any earned but unpaid Annual Bonus with respect to the calendar year ended prior to the Date of Termination, payable in accordance with Section 4(b) (the "*Base Obligations*"). In addition, in the event of the Executive's termination of employment, the applicable provisions of the Company's Stock Plan or each equity award agreement executed by the Executive and the Company shall govern the treatment of the equity awards.

For purposes of this Agreement, "*Date of Termination*" means (i) in the event of a termination of the Executive's employment by the Company for Cause or by the Executive for Good Reason, the date specified in a written notice of termination (or, if not specified therein, the date of delivery of such notice), but in no event earlier than the expiration of the cure periods set forth in Section 8(b)(ii) or 8(b)(iii) below, respectively; (ii) in the event of a termination of the Executive's employment by the Company without Cause, the date specified in a written notice of termination (or if not specified therein, the date of delivery of such notice); (iii) in the event of a termination of the Executive's employment by the Executive without Good Reason, the date specified in a written notice of termination, but in no event less than 60 days following the date of delivery of such notice; (iv) in the event of a termination of the Executive's employment due to Permanent Disability (as defined below), the date the Company terminates the Executive's employment following the certification of the Executive's Permanent Disability; or (v) in the event of a termination of employment due to the Executive's death, the date of the Executive's death.

(b) *Termination by the Company Without Cause or by the Executive for Good Reason Other Than in Connection with Change in Control.*

(i) The Executive's employment hereunder may be terminated by the Company without Cause or by the Executive for Good Reason. Upon the termination of the Executive's employment by the Company without Cause or by the Executive for Good Reason pursuant to this Section 8(b), the Executive shall, subject to Section 8(h) below, and unless the Executive is entitled to the CIC Severance Benefits (as defined below), be entitled to receive, in addition to the Base Obligations, the following payments and benefits (the "*Severance Benefits*"):

(A) *Severance Payment*. If Executive is terminated between August 1, 2016 and January 31, 2017, the Company shall pay the Executive an amount (the "*Severance Payment*") equal to the sum of (I) 2 times the Base Salary paid to the Executive with

respect to the calendar year immediately preceding the Executive's Date of Termination, (II) the Target Bonus and (III) any pro rata Target Bonus with respect to the calendar year in which the Date of Termination occurs, determined in accordance with the Pro Rata Target Bonus Calculation. If Executive is terminated between February 1, 2017 and July 31, 2021, the Company shall pay the Executive an amount (the "*Severance Payment*") equal to the sum of (I) 1.5 times the Base Salary paid to the Executive with respect to the calendar year immediately preceding the Executive's Date of Termination, (II) the Target Bonus and (III) any pro rata Target Bonus with respect to the calendar year in which the Date of Termination occurs, determined in accordance with the Pro Rata Target Bonus Calculation.

Target Bonus for severance purposes is defined under the Executive Corporate Incentive Plan for the calendar year which precedes the year in which occurs the Executive's Date of Termination. Target Bonus is intended to be a fixed severance payment equal to the prior year Target Bonus and not a performance-contingent payment dependent on current year or prior year performance. "*Pro-Rata Target Bonus Calculation"* is determined by multiplying the Target Bonus by a fraction, the numerator of which is the number of days in the fiscal year in which the Date of Termination occurs through the Date of Termination and the denominator of which is three hundred sixty-five. Pro-rata Target Bonus with respect to the calendar year in which Executive's Date of Termination occurs shall be paid only in the event the performance goals established under the ECIP for that calendar year with respect to such Target Bonus have been satisfied. Payment of the pro-rata Target Bonus shall be delayed until following the date the Company's Compensation Committee determines that such performance goals have been satisfied, in accordance with the rules under the ECIP (the "Performance Goal Determination Date").

The Severance Payment is payable in substantially equal monthly installments for the twelve month period following the Executive's Date of Termination, with the first installment to be paid in the month following the month in which the Release Effective Date occurs; provided, however (consistent with the requirements of Section 409A), that if the 60 day period described in Section 8(h) below begins in one calendar year and ends in another, the first installment of the Severance Payment shall be paid not earlier than January 1 of the calendar year following the Date of Termination (the period during which the Severance Benefits are paid being the "*Severance Period*"). Payments of the pro-rata Target Bonus portion of the Severance Payment shall be paid beginning as of date described above or, if later, within 30 days following the Performance Goal Determination Date. If payment of one or more installments of the pro-rata Target Bonus portion of the Severance Payment must be delayed until following the Performance Goal Determination Date, the initial installment shall consist of a lump sum equal to the total of all such installments delayed or due as of such payment date, without adjustment for interest; and

(B) *Health Care Coverage Payments*. The Company shall pay to the Executive on a monthly basis during the Coverage Period a taxable cash payment equal to the Consolidated Omnibus Budget Reconciliation Act ("COBRA") premium for the highest level of coverage available under the Company's group health plans, but reduced by the monthly amount that the Executive would pay for such coverage if the Executive was an active employee. "*Coverage Period*" shall mean the period commencing on the first day of the Severance Period

and ending on the earlier of (i) the expiration of 18 months from the first day of the Severance Period, and (ii) the date that the Executive is eligible for coverage under the health care plans of a subsequent employer. The payments provided by this Section shall be conditioned upon the Executive being covered by the Company's health care plans immediately prior to the Date of Termination.

All other benefits, if any, due the Executive following termination pursuant to this Section 8(b) shall be determined in accordance with the plans, policies and practices of the Company; provided, however, that the Executive shall not participate in any severance plan, policy or program of the Company. The Severance Benefits are payments and benefits to which the Executive is not otherwise entitled, are given in consideration for the Release (as described in Section 8(h) below) and are in lieu of any severance plan, policy or program of the Company or any of its subsidiaries that may now or hereafter exist. The payments and benefits to be provided pursuant to this Section 8(b)(i) shall constitute liquidated damages and shall be deemed to satisfy and be in full and final settlement of all obligations of the Company to the Executive under this Agreement. The Executive acknowledges and agrees that such amounts are fair and reasonable, and are his sole and exclusive remedy, in lieu of all other remedies at law or in equity, with respect to the termination of his employment hereunder. If, during the Severance Period, the Executive breaches in any material respect any of his obligations under Section 9, or the Confidentiality Agreement, the Company may, upon written notice to the Executive (x) terminate the Severance Period and cease to make any further payments of the Severance Payment and (y) cease any health care coverage payments, except in each case as required by applicable law.

(ii) For purposes of this Agreement, "*Cause*" shall mean (A) the Executive's conviction of, or pleading nolo contendere to, any crime, whether a felony or misdemeanor, involving the purchase or sale of any security, mail or wire fraud, theft, embezzlement, moral turpitude, or Company property (with the exception of minor traffic violations or similar misdemeanors); (B) the Executive's repeated neglect of his duties to the Company; or (C) the Executive's willful misconduct in connection with the performance of his duties or other material breach by the Executive of this Agreement provided that the Company may not terminate the Executive's employment for Cause unless (x) the Company first gives the Executive written notice of its intention to terminate and of the grounds for such termination within 90 days following the date the Board is informed of such grounds at a meeting of the Board and (y) the Executive has not, within 30 days following receipt of such notice, cured such Cause (if capable of cure) in a manner that is reasonably satisfactory to the Board.

(iii) For purposes of this Agreement, "*Good Reason*" shall mean the Company (A) reducing the Executive's position, duties, or authority; (B) failing to secure the agreement of any successor entity to the Company that the Executive shall continue in his position without reduction in position, duties or authority; (C) relocating the Executive's principal work location beyond a 50 mile radius of his work location as of the Effective Date (provided that this Clause (C) shall apply only to a relocation that occurs during the two year period beginning upon a Change of Control, as defined below, and ending two years thereafter); or (D) committing any other material breach of this Agreement; provided, however, that the occurrence of a Change in Control, following which the Company continues to have its common

stock publicly traded and the Executive is offered continued employment as an executive officer with substantially the same duties and authority as she has hereunder of such publicly traded entity, shall not be deemed to give rise to an event or condition constituting Good Reason; and provided further that no event or condition shall constitute Good Reason unless (x) the Executive gives the Company a Notice of Termination specifying his objection to such event or condition within 90 days following the occurrence of such event or condition, (y) such event or condition is not corrected, in all material respects, by the Company in a manner that is reasonably satisfactory to the Executive within 30 days following the Company's receipt of such notice and (z) the Executive resigns from his employment with the Company not more than 30 days following the expiration of the 30-day period described in the foregoing clause (y).

(c) *Permanent Disability.*

(i) The Executive's employment hereunder shall terminate upon his Permanent Disability. Upon termination of the Executive's employment due to Permanent Disability, the Executive shall, subject to Section 8(h) below, be entitled to receive, in addition to the Base Obligations, (A) a pro rata Target Bonus with respect to the calendar year in which the Date of Termination occurs, determined in accordance with the Pro Rata Target Bonus Calculation and payable in a lump sum within 30 days following the Release Effective Date (provided that if the 60 day period described in Section 8(h) below begins in one calendar year and ends in another, the pro rata Target Bonus shall be paid not earlier than January 1 of the calendar year following the Date of Termination) and (B) accelerated vesting of all unvested equity compensation awarded to the Executive by the Company as of the Effective Date and, in accordance with Section 5, each equity award agreement executed by the Executive and the Company shall describe the treatment of the equity awards under this Section 8(c). All other benefits, if any, due the Executive following termination pursuant to this Section 8(c) shall be determined in accordance with the plans, policies and practices of the Company; *provided*, *however*, that the Executive shall not participate in any other severance plan, policy or program of the Company.

(ii) For purposes of this Agreement, *"Permanent Disability"* means either (i) the inability of the Executive to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment that can be expected to result in death or can be expected to last for a continuous period of not less than 12 months or (ii) the Executive is, by reason of any medically determinable physical or mental impairment that can be expected to result in death or can be expected to last for a continuous period of not less than 12 months, receiving income replacement benefits for a period of not less than three months under an accident and health plan covering employees of the Company. The Executive shall be deemed Permanently Disabled if she is determined to be (i) totally disabled by the Social Security Administration or (ii) disabled in accordance with a disability insurance program, provided such definition of disabled under the program complies with the definition of Permanent Disability hereunder. Otherwise, such Permanent Disability shall be certified by a physician chosen by the Company and reasonably acceptable to the Executive (unless she is then legally incapacitated, in which case such physician shall be reasonably acceptable to the Executive's authorized legal representative).

(d) *Death.* The Executive's employment hereunder shall terminate due to his death. Upon termination of the Executive's employment hereunder due to death, the Executive's estate shall, subject to Section 8(h) below, be entitled to receive, in addition to the Base Obligations,(A) a pro rata Target Bonus with respect to the calendar year in which the Date of Termination occurs, determined in accordance with the Pro Rata Target Bonus Calculation and payable in a lump sum within 30 days following the Release Effective Date (provided that if the 60 day period described in Section 8(h) below begins in one calendar year and ends in another, the pro rata Target Bonus shall be paid not earlier than January 1 of the calendar year following the Date of Termination) and (B) accelerated vesting of all unvested equity compensation awarded to the Executive by the Company as of the Effective Date and, in accordance with Section 5, each equity award agreement executed by the Executive and the Company shall describe the treatment of the equity awards under this Section 8(d). All other benefits, if any, due the Executive's estate following termination pursuant to this Section 8(d) shall be determined in accordance with the plans, policies and practices of the Company.

(e) *For Cause by the Company or Without Good Reason by the Executive.* The Executive's employment hereunder may be terminated by the Company for Cause or by the Executive without Good Reason. Upon termination of the Executive's employment for Cause or without Good Reason pursuant to this Section 8(e), the Executive shall have no further rights to any compensation (including any Annual Bonus) or any other benefits under this Agreement other than the Base Obligations. All other benefits, if any, due the Executive following the Executive's termination of employment pursuant to this Section 8(e) shall be determined in accordance with the plans, policies and practices of the Company; provided, however, that the Executive shall not participate in any severance plan, policy, or program of the Company.

(f) *Termination of Employment due to a Non-Continuation Notice.* The Executive's employment hereunder may be terminated by the Executive after August 1, 2018, by providing at least 270 days prior written notice to the Company designating the termination as being pursuant to this Section 8(f) (a *"Non-Continuation Notice*"). Upon termination of the Executive's employment pursuant to a Non-Continuation Notice, the Executive shall, subject to Section 8(i), be entitled to receive, in addition to the Base Obligations, a pro-rata Target Bonus with respect to the calendar year in which the Date of Termination occurs, determined in accordance with the Pro Rata Target Bonus Calculation and payable in substantially equal monthly installments for the twelve month period following the Executive's Date of Termination with the first installment to be paid in the month following the month in with the Release Effective Date occurs (provided that if the 60 day period described in Section 8(i) below begins in one calendar year and ends in another, the pro rata Target Bonus shall be paid not earlier than January 1 of the calendar year following the Date of Termination), the equity awards described in Section 5 and continued vesting of outstanding performance share units, and/or other forms of equity compensation issued prior to providing Non-Continuation Notice, based on actual performance during the respective performance periods. The Executive acknowledges and agrees that the compensation paid under this Section 8(f) is fair and reasonable, and are his sole and exclusive remedy, in lieu of all other remedies at law or in equity, with respect to the termination of his employment hereunder, and is subject to the Executive complying in all material respects with his obligations under Section 9 or the Confidentiality Agreement. All other benefits, if any, due the Executive following termination pursuant to this Section 8(f) shall

be determined in accordance with the plans, policies and practices of the Company; provided, however, that the Executive shall not participate in any severance plan, policy or program of the Company.

(g) *Termination in Connection with Change in Control by the Company Without Cause or by the Executive for Good Reason.*

(i) If, within the period beginning on a Change in Control (as defined herein below), and ending two (2) years following such Change in Control, the Executive's employment is terminated by the Company without Cause or by the Executive for Good Reason, the Executive shall, subject to Section 8(h) below, be entitled to receive, in addition to the Base Obligations, the following payments and benefits (the "*CIC Severance Benefits*"):

(A) *CIC Severance Payment*. On the first day of the seventh (7th) month following the Executive's Date of Termination, the Company shall pay the Executive a lump sum cash payment equal to the sum of (I) two times the Base Salary paid to the Executive with respect to the calendar year immediately preceding the Executive's Date of Termination, (II) the Target Bonus and (III) a pro rata portion of the Target Bonus for the calendar year in which Executive's Date of Termination occurs and determined in accordance with the Pro Rata Target Bonus Calculation. Target Bonus for severance purposes is defined under the Executive Corporate Incentive Plan for the calendar year which precedes the year in which occurs the Executive's Date of Termination. Target Bonus is intended to be a fixed severance payment equal to the prior year Target Bonus and not a performance-contingent payment dependent on current year or prior year performance. "*Pro-Rata Target Bonus Calculation"* is determined by multiplying the Target Bonus by a fraction, the numerator of which is the number of days in the fiscal year in which the Date of Termination occurs through the Date of Termination and the denominator of which is three hundred sixty-five. Pro-rata Target Bonus with respect to the calendar year in which Executive's Date of Termination occurs shall be paid only in the event the performance goals established under the ECIP for that calendar year with respect to such Target Bonus have been satisfied. Payment of the pro-rata Target Bonus shall be delayed until following the date the Company's Compensation Committee determines that such performance goals have been satisfied, in accordance with the rules under the ECIP (the "Performance Goal Determination Date"). Payment of the pro-rata portion of the Severance Payment shall be paid in a lump sum on the date described above or, if later, within 30 days of the Performance Goal Determination Date with respect to such Performance-Conditioned Portion.

If (i) any amounts payable to the Executive under this Agreement or otherwise are characterized as excess parachute payments pursuant to Section 4999 of the Internal Revenue Code of 1986, as amended (the "*Section 4999*"), and (ii) the Executive thereby would be subject to any United States federal excise tax due to that characterization, the Executive's termination benefits hereunder will be reduced to an amount so that none of the amounts payable constitute excess parachute amounts payments if this would result, after taking into account the applicable federal, state and local income taxes and the excise tax imposed by Section 4999, in Executive's receipt on an after-tax basis of the greatest amount of termination and other benefits. The determination of any reduction required pursuant to this section (including the determination as to which

specific payments shall be reduced) shall be made by a neutral party designated by the Company and such determination shall be conclusive and binding upon the Company or any related corporation for all purposes.

(B) *Health and Welfare Benefits*. The Company shall pay to Executive on a monthly basis during the CIC Coverage Period a taxable monthly cash payment equal to the COBRA premium for the highest level of coverage available under the Company's group health plans, but reduced by the monthly amount that Executive would pay for such coverage if the Executive was an active employee. "*CIC Coverage Period*" shall mean the period (I) commencing on the first day of the month following the Release Effective Date (provided that if the 60 day period described in Section 8(h) below begins in one calendar year and ends in another, the CIC Coverage Period shall commence not earlier than January 1 of the calendar year following the Date of Termination) and (II) ending on the earlier of (x) the expiration of 24 months from the first day of the CIC Coverage Period, and (y) the date that the Executive is eligible for coverage under the health care plans of a subsequent employer. The payments provided by this Section shall be conditioned upon the Executive being covered by the Company's health care plans immediately prior to the Date of Termination. The foregoing payments are not intended to limit or otherwise reduce any entitlements that Executive may have under COBRA. In addition, the Company shall continue to provide the Executive with the same level of accident (AD&D) and life insurance benefits upon substantially the same terms and conditions (including contributions required by the Executive for such benefits) as existed immediately prior to the Executive's Date of Termination (or, if more favorable to the Executive, as such benefits and terms and conditions existed immediately prior to the Change in Control) for the same period for which the Company shall provide the Executive with continued health care coverage payments.

All other benefits, if any, due the Executive following termination pursuant to this Section 8(g) shall be determined in accordance with the plans, policies and practices of the Company; provided, however, that the Executive shall not participate in any severance plan, policy or program of the Company. The payments and other benefits provided for in this Section 8(g) are payments and benefits to which the Executive is not otherwise entitled, are given in consideration for the Release and are in lieu of any severance plan, policy or program of the Company or any of its subsidiaries that may now or hereafter exist. The payments and benefits to be provided pursuant to this Section 8(g)(i) shall constitute liquidated damages and shall be deemed to satisfy and be in full and final settlement of all obligations of the Company to the Executive under this Agreement. The Executive acknowledges and agrees that such amounts are fair and reasonable, and are his sole and exclusive remedy, in lieu of all other remedies at law or in equity, with respect to the termination of his employment hereunder. If, during the CIC Coverage Period, the Executive breaches in any material respect any of his obligations under Section 9 or the Confidentiality Agreement, the Company may, upon written notice to the Executive, (x) terminate the CIC Coverage Period and cease to make any further payments of the CIC Severance Payment and (y) cease any health and welfare benefits and payments, except in each case as required by applicable law.

(ii) For purposes of this Agreement "Change in Control" means the first to occur of any one of the following events:

(A) any "Person," as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934 (the "*Exchange Act*") (other than (1) the Company, (2) any Person who becomes the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act) of more than 50% of the Company's then outstanding securities eligible to vote in the election of the Board ("*Voting Securities*") as a result of a reduction in the number of Voting Securities outstanding due to the repurchase of Voting Securities by the Company unless and until such Person, after becoming aware that such Person has become the beneficial owner of more than 50% of the then outstanding Voting Securities, acquires beneficial ownership of additional Voting Securities representing 1% or more of the Voting Securities then outstanding, (3) any trustee or other fiduciary holding securities under an employee benefit plan of the Company, and (4) any entity owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their ownership of Voting Securities), is or becomes the beneficial owner, directly or indirectly, of more than 50% of the Voting Securities (not including any securities acquired directly (or through an underwriter) from the Company or the Companies);

(B) the date on which, within any twelve (12) month period (beginning on or after the Effective Date), a majority of the directors then serving on the Board are replaced by directors not endorsed by at least two-thirds (2/3) of the members of the Board before the date of appointment or election;

(C) there is consummated a merger or consolidation of the Company with any other corporation or entity or the Company issues Voting Securities in connection with a merger or consolidation of any direct or indirect subsidiary of the Company with any other corporation, other than (1) a merger or consolidation that would result in the Voting Securities outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into Voting Securities of the surviving or parent entity) more than 50% of the Company's then outstanding Voting Securities or more than 50% of the combined voting power of such surviving or parent entity outstanding immediately after such merger or consolidation or (2) a merger or consolidation effected to implement a recapitalization of the Company (or similar transaction) in which no Person, directly or indirectly, acquired more than 50% of the Company's then outstanding Voting Securities (not including any securities acquired directly (or through an underwriter) from the Company or the Companies); or

(D) the consummation of an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets (or any transaction having a similar effect), provided that such agreement or transaction of similar effect shall in all events require the disposition, within any twelve (12) month period, of at least 40% of the gross fair market value of all of the Company's then assets; other than a sale or disposition by the Company of all or substantially all of the Company's assets to an entity, at least 50% of the combined voting power of the voting securities of which are owned directly or indirectly by stockholders of the Company in substantially the same proportions as their ownership of the Company immediately prior to such sale.

Notwithstanding the foregoing, in no event shall a Change in Control be deemed to occur hereunder unless such event constitutes a change in ownership of the Company, a change in

effective control of the Company or a change in ownership of a substantial portion of the Company's assets within the meaning of Section 409A.

(g) *Mitigation; Offset.* Following the termination of his employment under any of the above clauses of this Section 8, the Executive shall have no obligation or duty to seek subsequent employment or engagement as an employee (including self-employment) or as a consultant or otherwise mitigate the Company's obligations hereunder; nor shall the payments provided by this Section 8 be reduced by the compensation earned by the Executive as an employee or consultant from such subsequent employment or consultancy.

(h) *Release.* Notwithstanding anything to the contrary in this Agreement, receipt of the Severance Benefits and the CIC Severance Benefits or other compensation or benefits under this Section 8 (other than the Base Obligations), if any, by the Executive is subject to the Executive executing and delivering to the Company a general release of claims following the Date of Termination, in substantially the form attached as Exhibit B (the "*Release*"), that, within 60 days following the Executive's Date of Termination, has become irrevocable by the Executive (such date the Release becomes irrevocable being the "*Release Effective Date*"). If the Executive dies or becomes legally incapacitated prior to the Release Effective Date, then the Release requirements described in the preceding sentence shall apply with respect to the Executive's estate and the Release shall be modified as reasonably necessary to allow for execution and delivery by the personal representative of the Executive's estate or the Executive's authorized legal representative, as applicable.

9. *Non-Competition.* The Executive acknowledges and recognizes the highly competitive nature of the businesses of the Company and accordingly agrees as follows:

(a) *Non-Competition.* For a period of two years following the Date of Termination (the "*Restricted Period*"), regardless of the circumstances surrounding such termination of employment, the Executive will not, directly or indirectly (i) engage in any "Competitive Business" (as defined below) for the Executive's own account while she is in self-employment or acting as a sole proprietor, (ii) enter the employ of, or render any services to, any person engaged in a Competitive Business, (iii) acquire a financial interest in, or otherwise become actively involved with, any person engaged in a Competitive Business, directly or indirectly, as an individual, partner, shareholder, officer, director, principal, agent, trustee or consultant, or (iv) interfere with business relationships (whether formed before or after the Effective Date) between the Company and customers or suppliers of the Company. For purposes of this Agreement, "*Competitive Business*" shall mean (x) any national securities exchange registered with the Securities and Exchange Commission, (y) any electronic communications network or (z) any other entity that engages in substantially the same business as the Company, in each case in North America or in any other location in which the Company operates. For purposes of this Agreement, "*person*" shall mean an individual, corporation, partnership, limited partnership, limited liability company, syndicate, person (including, without limitation, a "person" as defined in Section 13(d)(3) of the Securities Exchange Act of 1934, as amended), trust, association or entity or government, political subdivision, agency or instrumentality of a government.

(b) *Securities Ownership.* Notwithstanding anything to the contrary in this Agreement, the Executive may, directly or indirectly, own, solely as an investment, securities of any person engaged in the business of the Company which are publicly traded on a national or regional stock exchange or on the over-the-counter market if the Executive (i) is not a controlling person of, or a member of a group which controls, such person and (ii) does not, directly or indirectly, own five percent or more of any class of securities of such person.

(c) *Severability.* It is expressly understood and agreed that, although the Executive and the Company consider the restrictions contained in this Section 9 to be reasonable, if a final judicial determination is made by a court of competent jurisdiction that the time or territory or any other restriction contained in this Agreement is an unenforceable restriction against the Executive, the provisions of this Agreement shall not be rendered void, but shall be deemed amended to apply as to such maximum time and territory and to such maximum extent as such court may judicially determine or indicate to be enforceable. Alternatively, in the event that any one or more of the provisions of this Agreement shall be or become invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions of this Agreement shall not be affected thereby.

10. *Specific Performance* The Executive acknowledges and agrees that the Company's remedies at law for a breach or threatened breach of Section 9 above would be inadequate and, in recognition of this fact, the Executive agrees that, in the event of such a breach or threatened breach, in addition to any remedies at law, the Company, without posting any bond, shall be entitled to obtain equitable relief in the form of specific performance, temporary restraining order, temporary or permanent injunction or any other equitable remedy which may then be available.

11. *Disputes.* Except as provided in Section 10 above, any dispute arising between the parties under this Agreement, under any statute, regulation, or ordinance, under any other agreement between the parties, and/or in way relating to the Executive's employment, shall be submitted to binding arbitration before the American Arbitration Association ("*AAA*") for resolution. Such arbitration shall be conducted in New York, New York, and the arbitrator will apply New York law, including federal law as applied in New York courts. The arbitration shall be conducted in accordance with the AAA's Employment Arbitration Rules as modified herein. The arbitration shall be conducted by a panel of three arbitrators that is mutually agreeable to both the Executive and the Company, all in accordance with AAA's Employment Arbitration Rules then in effect. If the Executive and the Company cannot agree upon the panel of arbitrators, the arbitration shall be settled before a panel of three arbitrators, one to be selected by the Company, one by the Executive, and the third to be selected by the two persons so selected, all in accordance with AAA's Employment Arbitration Rules. With respect to any and all costs and expenses associated with any such arbitration that are not assignable to one of the parties by the arbitrator, each party shall pay their own costs and expenses, including without limitation, attorney's fees and costs, except that the Company shall pay the cost of the arbitrators and the filing fees charged to Executive by the AAA, provided she is the claimant or counter claimant in such arbitration and is the prevailing party. The award of the arbitrators shall be final and binding on the parties, and judgment on the award may be confirmed and entered in any state or federal court in the State and City of New York. The arbitration shall be conducted on a strictly

confidential basis, and Executive shall not disclose the existence of a claim, the nature of a claim, any documents, exhibits, or information exchanged or presented in connection with such a claim, or the result of any action (collectively, "*Arbitration Materials"*), to any third party, with the sole exception of the Executive's legal counsel, who also shall be bound by confidentiality obligations no less protective than the provisions set forth in the Confidentiality Agreement. In the event of any court proceeding to challenge or enforce an arbitrators' award, the parties hereby consent to the exclusive jurisdiction of the state and federal courts in New York, New York and agree to venue in that jurisdiction. The parties agree to take all steps necessary to protect the confidentiality of the Arbitration Materials in connection with any such proceeding, agree to file all Confidential Information, as defined in the Confidentiality Agreement (and documents containing Confidential Information) under seal, subject to court order and agree to the entry of an appropriate protective order encompassing the confidentiality terms of this Agreement. Nothing contained in this Section 11 shall be construed to preclude the Company from exercising its rights under Section 10 above.

12. *Miscellaneous.*

(a) *Acceptance.* The Executive hereby represents and warrants, as a material inducement to the Company's agreement to enter into this Agreement, that there are no legal, contractual or other impediments precluding the Executive from entering into this Agreement or from performing the services with the Company contemplated hereby. Any violation of this representation and warranty by the Executive shall render all of the obligations of the Company under this Agreement void *ab initio* and of no force and effect.

(b) *Entire Agreement; Amendments.* This Agreement, together with the equity award agreements between the Executive and the Company contain the entire understanding of the parties with respect to the employment of the Executive by the Company, and shall supersede any and all previous contracts, arrangements or understandings between the Company and the Executive with respect to the subject matter set forth herein. There are no restrictions, agreements, promises, warranties, or covenants by and between the Company and the Executive and undertakings between the parties with respect to the subject matter herein other than those expressly set forth herein. This Agreement may not be altered, modified or amended except by written instrument signed by the parties hereto.

(c) *No Waiver.* The failure of a party to insist upon strict adherence to any term of this Agreement on any occasion shall not be considered a waiver of such party's rights or deprive such party of the right thereafter to insist upon strict adherence to that term or any other term of this Agreement.

(d) *Successor; Assignment.* This Agreement is confidential and personal and neither of the parties hereto shall, without the consent of the other, assign or transfer this Agreement or any rights or obligations hereunder. Without limiting the foregoing, the Executive's right to receive payments hereunder shall not be assignable or transferable whether by pledge, creation of a security interest or otherwise, other than a transfer by the Executive's will or by the laws of descent and distribution. In the event of any attempted assignment or transfer contrary to this Section 12(d), the Company shall have no liability to pay the assignee or

transferee any amount so attempted to be assigned or transferred. The Company shall cause this Agreement to be assumed by any entity that succeeds to all or substantially all of the Company's business or assets and this Agreement shall be binding upon any successor to all or substantially all of the Company's business or assets; provided, however, that no such assumption shall release the Company of its obligations hereunder, to the extent not satisfied by such successor, without the Executive's prior written consent.

(e) *Confidentiality of Tax Treatment and Structure.* Notwithstanding anything herein to the contrary, each party and its representatives may consult any tax advisor regarding the tax treatment and tax structure of this Agreement and may disclose to any person, without limitation of any kind, the tax treatment and tax structure of this Agreement and all materials (including opinions or other tax analyses) that are provided relating to such treatment or structure.

(f) *Notice.* For the purpose of this Agreement, notices and all other communications provided for in this Agreement shall be in writing and shall be deemed to have been duly given when delivered or mailed by United States registered mail, return receipt requested, postage prepaid, addressed to the respective addresses set forth on the execution page of this Agreement, provided that all notices to the Company shall be directed to the attention of the General Counsel or to such other address as either party may have furnished to the other in writing in accordance herewith, except that notice of change of address shall be effective only upon receipt:

if to the Company:

The Office of the General Counsel
Nasdaq, Inc.
One Liberty Plaza
New York, NY 10006

if to the Executive:

his address as shown in the records of the Company

(g) *Withholding Taxes.* The Company may withhold from any amounts payable under this Agreement such federal, state and local taxes as may be required to be withheld pursuant to any applicable law or regulation.

(h) *Section 409A*. Notwithstanding any other provision of this Agreement, any payment, settlement or benefit triggered by termination of the Executive’s employment with the Company shall not be made until six months and one day following Date of Termination if such delay is necessary to avoid the imposition of any tax, penalty or interest under Section 409A of the Internal Revenue Code of 1986, as amended (Section “*409A*”). Any installment payments that are delayed pursuant to this Section 12(h) shall be accumulated and paid in a lump sum on the day that is six months and one day following the Date of Termination (or, if earlier, upon the Executive’s death) and the remaining installment payments shall begin on such date in

accordance with the schedule provided in this Agreement. For purposes of this Agreement, termination or severance of employment will be read to mean a "separation from service" within the meaning of Section 409A where it is reasonably anticipated that no further services would be performed after that date or that the level of services the Executive would perform after that date (whether as an employee or independent contractor) would permanently decrease to no more than 20 percent of the average level of bona fide services performed over the immediately preceding thirty-six (36) month period. Additionally, the amount of expenses eligible for reimbursement or in-kind benefits to be provided during one calendar year may not affect the expenses eligible for reimbursement or any in-kind benefits to be provided in any other calendar year and the right to reimbursement or in-kind benefits is not subject to liquidation or exchange for another benefit. All reimbursements shall be made no later than the last day of the calendar year following the calendar year in which the Executive incurs the reimbursable expense. This Agreement is intended to comply with the requirements of Section 409A (including the exceptions thereto), to the extent applicable, and the Agreement shall be administered and interpreted in accordance with such intent. If any provision contained in the Agreement conflicts with the requirements of Section 409A (or the exemptions intended to apply under the Agreement), the Agreement shall be deemed to be reformed to comply with the requirements of Section 409A (or the applicable exemptions thereto). The Company, after consulting with the Executive, may amend this Agreement or the terms of any award provided for herein in any manner that the Company considers necessary or advisable to ensure that cash compensation, equity awards or other benefits provided for herein are not subject to United States federal income tax, state or local income tax or any equivalent taxes in territories outside the United States prior to payment, exercise, vesting or settlement, as applicable, or any tax, interest or penalties pursuant to Section 409A. Any such amendments shall be made in a manner that preserves to the maximum extent possible the intended benefits to the Executive. This Section 12(h) does not create an obligation on the part of the Company to modify this Agreement and does not guarantee that the amounts or benefits owed under the Agreement will not be subject to interest and penalties under Section 409A. For purposes of this Agreement, all rights to payments and benefits hereunder shall be treated as rights to receive a series of separate payments and benefits to the fullest extent allowed by Section 409A.

(i) *Clawback*. The Executive agrees that compensation and benefits provided by the Company under this Agreement or otherwise will be subject to recoupment or clawback by the Company under any applicable clawback or recoupment policy of the Company that is generally applicable to the Company's executives, as may be in effect from time-to-time, or as required by applicable law.

(j) *Audit Rights*. Any and all equity compensation of any kind due hereunder to Executive after the Date of Termination shall be accompanied by a detailed statement from the Company showing the calculation for such compensation for the period being measured. Within thirty (30) days after the delivery of such statement, the Executive may notify the Company of any objections or changes thereto, specifying in reasonable detail any such objections or changes. If the Executive does not notify the Company of any objections or changes thereto or if within twenty (20) days of the delivery of an objection notice the Executive and the Company agree on the resolution of all objections or changes, then such statements delivered by the Company, with such changes as are agreed upon, shall be final and

binding. If the parties shall fail to reach an agreement with respect to all objections or changes within such twenty (20) day period, then all disputed objections or changes shall, be subject to resolution in accordance with Section 11 above.

(k) *Counterparts.* This Agreement may be signed in counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument.

(l) *Governing Law.* This Agreement shall be governed by and construed in accordance with the laws of the State of New York.

* * *

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the day and year first above written.

EXECUTIVE

/s/ Bradley Peterson

Bradley Peterson

Robert Greifeld

Nasdaq, Inc.

By: /s/ Robert Greifeld

Name: Robert Greifeld
Title: Chief Executive Officer

Exhibit A

NASDAQ CONTINUING OBLIGATIONS AGREEMENT

During the course of my employment or engagement with Nasdaq and/or its subsidiaries and affiliates (collectively, the "***Company***"), I understand that I will have or be given access to, and/or receive, certain non-public, confidential, and proprietary information and or specialized training and trade secrets pertaining to the business of the Company and Company's customers or prospective customers ("***Company Parties***"). Any unauthorized disclosure or use of such information would cause grave harm to the Company Parties. Therefore, to assure the confidentiality and proper use of Confidential Information and other Company Property (each as defined herein), and in consideration of my engagement with the Company, my access to confidential information, training and trade secrets, and the compensation paid or to be paid for my services during that engagement, and the mutual covenants and promises contained herein, I agree to the following:

1. Confidentiality and Company Property.

All Confidential Information and Company Property (as those terms are defined below) is owned by and for the Company Parties exclusively; is intended solely for authorized, work-related purposes on behalf of the Company Parties; and shall not be used for personal or other non-work related purposes. Specifically, without limitation, I shall not, directly or indirectly, at any time during or after engagement with the Company, without prior express written authorization from the Company (i) divulge, disclose, transmit, reproduce, convey, summarize, quote, share, or make accessible to any other person or entity Confidential Information or non-public Company Property; (ii) use any Confidential Information or Company Property for any purpose outside the course of performing the authorized duties of my work with the Company; (iii) remove Company Property or Confidential Information from the Company Parties' premises without obtaining prior express written authorization from the Company; or (iv) review or seek to access any Confidential Information or Company Property except as required in connection with my work for the Company.

2. Non-Solicitation.

I agree that, for a period of six (6) months following my separation from service for any reason, I shall not, directly or indirectly, without express written consent from Company's Office of General Counsel:

a) Interfere with any customer relationship the Company has with any of its current customers or potential customers that I had any involvement with, directly or indirectly, during the last twelve (12) months of my employment; or

b) Solicit, or induce to enter into any business arrangement with, any employee or contractor of the Company with whom I had any contact or a relationship with during the last twelve (12) months of my employment; or

c) Solicit, or induce to enter into any business arrangement with, any employee or contractor of the Company's customers that I knew, or reasonably could be expected to know, was solicited by the Company for any technology, operations, sales or business role during the last twelve (12) months of my employment with the Company.

Nothing in this Section shall be construed to prohibit me from becoming employed or engaged by another entity after my termination of employment from the Company, as long as I am not engaged in duties that violate the non-solicitation provisions in this Section. Other non-competition provisions in other Company agreements signed by me may apply depending on the law of the applicable jurisdiction.

3. Inventions Assignment.

I will promptly disclose to the Company, or its designee, all Nasdaq Inventions (as defined below). All Nasdaq Inventions shall be the exclusive property of the Company, and I acknowledge that all Nasdaq Inventions shall be considered as "works made for hire" belonging to the Company. To the extent that any Nasdaq Inventions may not be considered works made for hire, I hereby assign to the Company, without any further consideration, all right, title, and interest in and to all such Nasdaq Inventions, including, without limitation, all copyrights, all patents, all patent applications all provisional applications, divisional applications, continuation applications, continuation in-part applications, and all patents that may issue therefrom and all reissues, reexaminations and extensions thereof, all other intellectual property rights, all moral rights, all contract and licensing rights, and all claims and causes of action of any kind with respect to such rights, including, without limitation, the right to sue and recover damages or other compensation and/or obtain equitable relief for any past, present, or future infringement or misappropriation thereof. The assignment to the Company herein of all rights to the Nasdaq Inventions is without additional compensation to me. At the Company's expense, I will assist in every proper way to perfect the Company's rights in the Nasdaq Inventions and to protect the Nasdaq Inventions throughout the world, including, without limitation, (i) executing in favor of the Company or its designee(s) documents confirming patent, copyright, and other applications' assignment to the Company relating to the Nasdaq Inventions and (ii) the filing by the Company of such assignment in the United States Patent and Trademark Office, and any corresponding entities in any applicable foreign countries or multinational authorities, to record the Company or its designee(s) of the Company's patents or patent applications as the assignee and owner of the patents or patent applications. I agree not to challenge the validity of the Nasdaq Inventions or the ownership by the Company or its designee(s) of the Nasdaq Inventions.

4. Non-Disparagement.

I agree that I shall not issue, circulate, publish or utter any false or disparaging, statement, remarks, opinions or rumors about the Company or its shareholders unless giving truthful testimony under subpoena or court order. Notwithstanding, I understand that I may provide truthful information to any governmental agency or self-regulatory organization with or without subpoena or court order. With the exception of communications made in a private corporate communication as an employee or consultant with regard to a listing decision of my employer or my consulting client, I agree that public communications regarding a preference for listing a security on a market other than the Company, that the quality of the Company as a securities market is in any way inferior to any other securities market or exchange, and/or that the regulatory efforts and programs of the Company are or have been lax in any way, are specifically defined as disparaging and will constitute a material breach of this Agreement. Nothing in this paragraph, however, shall prevent me from making good faith, factual and truthful statements related to listing with the Company as long as my statements are not based on proprietary information.

5. Cooperation.

If I receive a subpoena or process from any person or entity (including, but not limited to, any governmental agency) which may or will require me to disclose documents or information or provide

testimony (in a deposition, court proceeding, or otherwise) regarding, in whole or in part, any of the Company Parties or any Confidential Information or Company Property, I shall: (i) to the extent permissible by law, notify Nasdaq's Office of the General Counsel of the subpoena or other process within twenty-four (24) hours of receiving it; and (ii) to the maximum extent possible, not make any disclosure until the Company Parties have had a reasonable opportunity to contest the right of the requesting person or entity to such disclosure, limit the scope or nature of such disclosure, and/or seek to participate in the proceeding or matter in which the disclosure is sought.

6. Definitions.

"Competitor" shall mean any entity or enterprise engaged or having intent to engage in the sale or marketing of any product or service that is sold in competition with, or is being developed to compete with, a product or service developed or sold by the Company. For reference, a discussion of some likely competitors can be found in the Company's SEC Form 10-K (Competition section), for which the last filed version prior to my separation from service shall be considered by the Office of General Counsel in connection with any request for a waiver. This discussion section shall be neither fully determinative, nor fully exhaustive.

"***Confidential Information"*** shall mean any non-public, proprietary information regarding the Company Parties, whether in writing or not, whether in digital, hardcopy, or another format, including all personal information, all personnel information, financial data, commercial data, trade secrets, business plans, business models, organizational structures and models, business strategies, pricing and advertising techniques and strategies, research and development activities, software development, market development, exchange registration, studies, market penetration plans, listing retention plans and strategies, marketing plans and strategies, communication and/or public relations products, plans, programs, recruiting strategies, databases, processes, work product or inventions, financial formulas and methods relating to Company Parties' business, computer software programs, accounting policies and practices, and all strategic plans or other matters, strategies, and financial or operating information pertaining to current or potential customers or transactions (including information regarding each Company Party's current or prospective customers, customer names, and customer representatives), templates and agreements, and all other information about or provided by the Company Parties, including information regarding any actual or prospective business opportunities, employment opportunities, finances, investments, and other proprietary information and trade secrets. Notwithstanding the above, Confidential Information shall not include any information that: (i) was known to me prior to my engagement with the Company as evidenced by written records in my possession prior to such disclosure; or (ii) is generally and publicly available and known to all persons in the industries where the Company conducts business, other than because of any unauthorized disclosure by me.

"***Company Property***" shall mean all property and resources of the Company Parties, or any Company Party, including, without limitation, Confidential Information, each Company Party's products, each Company Party's computer systems and all software, E-mail, web pages and databases, telephone and facsimile services, and all other administrative and/or support services provided by the Company Parties. I further agree that "Company Property" shall include processes, data, works of authorship, methods, Inventions (as that term is defined below), developments, and improvements that I conceive, originate, develop, author, or create, solely or jointly with others, during or as a result of my employment with the Company, or using Company Property, and without regard to whether any of the foregoing also may be included within "Confidential Information" as defined under this Agreement.

"Nasdaq Inventions" shall mean all ideas, improvements, trade secrets, know-how, confidential technical or business information, sales and other commercial relationships, potential sales and other

commercial relationships, business methods or processes, copyrightable expression, research, marketing plans, computer software (including, without limitation, source code(s)), computer programs, original works of authorship, industrial designs, trade dress, developments, discoveries, trading systems, trading strategies and methodologies, improvements, modifications, technology, algorithms and designs, (regardless of whether any of the foregoing are subject to patent or copyright protection), that are (i) made, conceived, expressed, developed, or reduced to practice by me (solely or jointly with others) during or as a result of my employment with the Company or using Company Property and (ii) which relate in any manner to the Company, the business of the Company (including without limitation the services the Company provides to any of the Company Parties), or my engagement by the Company.

7. <u>Return Of Confidential Information And Company Property</u>.

Upon my termination of engagement with the Company, for any reason, or if the Company so requests, I shall promptly deliver to the Company all Confidential Information and Company Property, including Nasdaq Inventions in my possession or under my control, as well as all documents, disks, tapes, or other electronic, digital, or computer means of storage, and all copies of such information and property.

8. <u>Injunctive Action</u>.

I acknowledge that the foregoing provisions and restrictions are reasonable and necessary for the protection of the Company Parties and their respective businesses. These obligations are not limited in time to the duration of my engagement and rather shall survive the termination of my engagement by the Company, regardless of the reason for its termination. I agree that my breach of any of the foregoing provisions will result in irreparable injury to the Company Parties, that monetary relief alone will be inadequate to redress such a breach, and further that the Company shall be entitled to obtain an injunction to prevent and/or remedy such a breach (without first having to post a bond).

(a) In any proceeding for an injunction and upon any motion for a temporary or permanent injunction ("Injunctive Action"), the Company's right to receive monetary damages shall not be a bar or interposed as a defense to the granting of such injunction. The Company's right to an injunction is in addition to, and not in lieu of, any other rights and remedies available to the Company under law or in equity, including any remedy the Company may seek in any arbitration brought pursuant to Paragraph 9 of this Agreement.

(b) I hereby irrevocably submit to the jurisdiction of the courts of New York in any Injunctive Action and waive any claim or defense of inconvenient or improper forum or lack of personal jurisdiction under any applicable law or decision. Upon the issuance (or denial) of an injunction, the underlying merits of any such dispute shall be resolved in accordance with Paragraph 9 of this Agreement.

9. <u>Arbitration</u>.

Except as provided in Section 8 of this Agreement, any dispute arising between the Parties under this Agreement, under any statute, regulation, or ordinance, under any other agreement between the Parties, and/or in way relating to my engagement by the Company, shall be submitted to binding arbitration before the American Arbitration Association ("AAA") for resolution. Such arbitration shall be conducted in New York, New York, and the arbitrator will apply New York law, including federal law as applied in New York courts. The arbitration shall be conducted in accordance with the AAA's Employment Arbitration Rules as modified herein. The arbitration shall be conducted by a single arbitrator, who shall be an attorney who specializes in the field of employment law and who shall have prior experience arbitrating employment disputes. The award of the arbitrator shall be final and binding on the Parties, and judgment on the award may be confirmed and entered in any state or federal court in the State of New York and City of New York. In the event of any court proceeding to challenge or enforce an arbitrator's

award, the Parties hereby consent to the exclusive jurisdiction of the state and federal courts in New York, New York and agree to venue in that jurisdiction.

The arbitration shall be conducted on a strictly confidential basis, and I shall not disclose the existence of a claim, the nature of a claim, any documents, exhibits, or information exchanged or presented in connection with such a claim, or the result of any action (collectively, "**Arbitration Materials**"), to any third party, with the sole exception of my legal counsel, who also shall be bound by these confidentiality terms. The Parties agree to take all steps necessary to protect the confidentiality of the Arbitration Materials in connection with any such proceeding, agree to file all Confidential Information (and documents containing Confidential Information) under seal, and agree to the entry of an appropriate protective order encompassing the confidentiality terms of this Agreement.

10. Governing Law; Amendment; Waiver; Severability.

This Agreement shall be construed in accordance with and shall be governed by the laws of the State of New York, excluding any choice of law principles. This Agreement constitutes the entire agreement between the Parties with respect to the subject matter hereof, and may not be amended, discharged, or terminated, nor may any of its provisions be waived, except upon the execution of a valid written instrument executed by me and the Company.

(a) If any term or provision of this Agreement (or any portion thereof) is determined by an arbitrator or a court of competent jurisdiction to be invalid, illegal, or incapable of being enforced, all other terms and provisions of this Agreement shall nevertheless remain in full force and effect.

(b) Upon a determination that any term or provision (or any portion thereof) is invalid, illegal, or incapable of being enforced, the Company and I agree that an arbitrator or reviewing court shall have the authority to amend or modify this Agreement so as to render it enforceable and effect the original intent of the Parties to the fullest extent permitted by applicable law.

11. Miscellaneous.

This Agreement (i) may be executed in identical counterparts, which together shall constitute a single agreement; (ii) shall be fairly interpreted in accordance with its terms and without any strict construction in favor of or against either Party, notwithstanding which Party may have drafted it; and (iii) the headings herein are included for reference only and are not intended to affect the meaning or interpretation of the Agreement. This Agreement is binding upon, and shall inure to the benefit of, me and the Company and our respective heirs, executors, administrators, successors and assigns.

Without limiting the scope or generality of the terms of this Agreement in any way, I acknowledge and agree that the terms of this Agreement and all discussions regarding this Agreement are confidential, and accordingly I agree not to disclose any such information to any third party, except to my attorney(s), or as otherwise may be required by law. Notwithstanding the foregoing, I may disclose to any prospective employer the fact and existence of this Agreement, and provide copies of this Agreement to such entity. The Company also has the right to apprise any prospective employer or other entity or person of the terms of this Agreement and provide copies to any such persons or entities.

12. Other Terms of My Engagement.

Nothing in this Agreement alters the at-will nature of my employment or engagement with the Company. I acknowledge and agree that my employment or engagement is at-will, which means that both I and the Company shall have the right to terminate such engagement at any time, for any reason, with or without cause and with or without prior notice.

To the extent I am signing this Agreement in any capacity other than as an employee (e.g., consultant, independent contractor), the written terms of my engagement supersede the terms of this Paragraph.

Moreover, I acknowledge that my engagement with the Company requires undivided attention and effort. Therefore, I will not, during my engagement with the Company, engage in any other employment or business, other than for the Company, or assist in any manner any business that is competitive with the business or the future business plans of the Company, unless I receive prior express written consent from the Company's Global Ethics Team.

I hereby acknowledge and accept the terms of this Agreement as of the Effective Date, by signature below.

/s/ Bradley J. Peterson **Date: 8/1/2016**

Print Name: Bradley J. Peterson

Exhibit B

Release of Claims

GENERAL RELEASE

WHEREAS, Bradley Peterson (hereinafter referred to as the "*Executive*") and Nasdaq, Inc. (hereinafter referred to as "*Employer*") are parties to an Employment Agreement, dated August 1, 2016 (the "*Employment Agreement*"), which provided for the Executive's employment with Employer on the terms and conditions specified therein; and

WHEREAS, the Executive has agreed to execute a release of the type and nature set forth herein as a condition to his entitlement to certain payments and benefits upon his termination of employment with Employer.

NOW, THEREFORE, in consideration of the premises and mutual promises herein contained and for other good and valuable consideration received or to be received by the Executive in accordance with the terms of the Employment Agreement, it is agreed as follows:

1. Excluding enforcement of the covenants, promises and/or rights reserved herein, the Executive hereby irrevocably and unconditionally releases, acquits and forever discharges Employer and each of Employer's owners, stockholders, predecessors, successors, assigns, directors, officers, employees, divisions, subsidiaries, affiliates (and directors, officers and employees of such companies, divisions, subsidiaries and affiliates) and all persons acting by, through, under or in concert with any of them (collectively "*Releasees*"), or any of them, from any and all charges, complaints, claims, liabilities, obligations, promises, agreements, controversies, damages, actions, causes of action, suits, rights, demands, costs, losses, debts and expenses (including attorneys' fees and costs actually incurred) of any nature whatsoever, known or unknown, suspected or unsuspected, including, but not limited to, rights arising out of alleged violations of any contracts, express or implied, any covenant of good faith and fair dealing, express or implied, or any tort or any legal restrictions on Employer's right to terminate employees, or any Federal, state or other governmental statute, regulation or ordinance, including, without limitation, Title VII of the Civil Rights Act of 1964, as amended, the Federal Age Discrimination In Employment Act of 1967 ("*ADEA*"), as amended, the Employee Retirement Income Security Act ("*ERISA*"), as amended, the Civil Rights Act of 1991, as amended, the Rehabilitation Act of 1973, as amended, the Older Workers Benefit Protection Act ("*OWBPA*"), as amended, the Worker Adjustment Retraining and Notification Act ("*WARN*"), as amended, the Fair Labor Standards Act ("*FLSA*"), as amended, the Occupational Safety and Health Act of 1970 ("*OSHA*"), the New York State Human Rights Law, as amended, the New York Labor Act, as amended, the New York Equal Pay Law, as amended, the New York Civil Rights Law, as amended, the New York Rights of Persons With Disabilities Law, as amended, and the New York Equal Rights Law, as amended, that the Executive now has, or has ever had, or ever will have, against each or any of the Releasees, by reason of any and all acts, omissions, events, circumstances or facts existing or occurring up through the date of the Executive's execution hereof that directly or indirectly arise out of, relate to, or are connected with, the Executive's services to, or employment by Employer (any of the foregoing being a "*Claim*" or,

collectively, the "*Claims*"); *provided*, *however*, that this release shall not apply to any of the obligations of Employer or any other Releasee under the Employment Agreement, or under any agreements, plans, contracts, documents or programs described or referenced in the Employment Agreement; and *provided*, *further*, that this release shall not apply to any rights the Executive may have to obtain contribution or indemnity against Employer or any other Releasee pursuant to contract, Employer's certificate of incorporation and by-laws or otherwise.

2. The Executive expressly waives and relinquishes all rights and benefits afforded by California Civil Code Section 1542 and does so understanding and acknowledging the significance of such specific waiver of Section 1542. Section 1542 states as follows:

> "A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR."

Thus, notwithstanding the provisions of Section 1542, and for the purpose of implementing a full and complete release and discharge of the Releasees, the Executive expressly acknowledges that this Agreement is intended to include in its effect, without limitation, all Claims that the Executive does not know or suspect to exist in the Executive's favor at the time of execution hereof, and that this Agreement contemplates the extinguishment of any such Claim or Claims.

3. The Executive understands that she has been given a period of 21 days to review and consider this General Release before signing it pursuant to the Age Discrimination In Employment Act of 1967, as amended. The Executive further understands that she may use as much of this 21-day period as the Executive wishes prior to signing.

4. The Executive acknowledges and represents that she understands that she may revoke the waiver of his rights under the Age Discrimination In Employment Act of 1967, as amended, effectuated in this Agreement within 7 days of signing this Agreement. Revocation can be made by delivering a written notice of revocation to Office of the General Counsel, Nasdaq, Inc., One Liberty Plaza, New York, New York 10006. For this revocation to be effective, written notice must be received by the General Counsel no later than the close of business on the seventh day after the Executive signs this Agreement. If the Executive revokes the waiver of his rights under the Age Discrimination In Employment Act of 1967, as amended, Employer shall have no obligations to the Executive under Section 8 (other than the Base Obligations) of the Employment Agreement.

5. The Executive and Employer respectively represent and acknowledge that in executing this Agreement neither of them is relying upon, and has not relied upon, any representation or statement not set forth herein made by any of the agents, representatives or attorneys of the Releasees with regard to the subject matter, basis or effect of this Agreement or otherwise.

6. This Agreement shall not in any way be construed as an admission by any of the Releasees that any Releasee has acted wrongfully or that the Executive has any rights whatsoever against any of the Releasees except as specifically set forth herein, and each of the Releasees specifically disclaims any liability to any party for any wrongful acts.

7. It is the desire and intent of the parties hereto that the provisions of this Agreement be enforced to the fullest extent permissible under law. Should there be any conflict between any provision hereof and any present or future law, such law will prevail, but the provisions affected thereby will be curtailed and limited only to the extent necessary to bring them within the requirements of law, and the remaining provisions of this Agreement will remain in full force and effect and be fully valid and enforceable.

8. The Executive represents and agrees (a) that the Executive has to the extent she desires discussed all aspects of this Agreement with his attorney, (b) that the Executive has carefully read and fully understands all of the provisions of this Agreement, and (c) that the Executive is voluntarily entering into this Agreement.

9. This General Release shall be governed by, and construed in accordance with, the laws of the State of New York, without giving effect to the conflicts of laws principles thereof or to those of any other jurisdiction which, in either case, could cause the application of the laws of any jurisdiction other than the State of New York. This General Release is binding on the successors and assigns of, and sets forth the entire agreement between, the parties hereto; fully supersedes any and all prior agreements or understandings between the parties hereto pertaining to the subject matter hereof; and may not be changed except by explicit written agreement to that effect subscribed by the parties hereto.

PLEASE READ CAREFULLY. THIS GENERAL RELEASE INCLUDES A RELEASE OF ALL KNOWN AND UNKNOWN CLAIMS.

This General Release is executed by the Executive and Employer as of the ____ day of ______, 20__.

____
Bradley Peterson

Nasdaq, Inc.

By:
Name: Robert Greifeld
Title: Chief Executive Officer

Exhibit 31.1

CERTIFICATION

I, Robert Greifeld, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Nasdaq, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Robert Greifeld

Name: Robert Greifeld

Title: Chief Executive Officer

Date: November 8, 2016

Exhibit 31.2

CERTIFICATION

I, Michael Ptasznik, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Nasdaq, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Michael Ptasznik

Name: Michael Ptasznik

Title: Executive Vice President, Corporate Strategy and Chief Financial Officer

Date: November 8, 2016

Exhibit 32.1

Certification of CEO and CFO Pursuant to
18 U.S.C. Section 1350
as Adopted Pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Quarterly Report on Form 10-Q of Nasdaq, Inc. (the "Company") for the quarter ended September 30, 2016 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Robert Greifeld, as Chief Executive Officer of the Company, and Michael Ptasznik, as Executive Vice President, Corporate Strategy and Chief Financial Officer of the Company, each hereby certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to the best of his knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of the operations of the Company.

/s/ Robert Greifeld

Name: Robert Greifeld

Title: Chief Executive Officer

Date: November 8, 2016

/s/ Michael Ptasznik

Name: Michael Ptasznik

Title: Executive Vice President, Corporate Strategy and Chief Financial Officer

Date: November 8, 2016

This certification accompanies the Report pursuant to § 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002, be deemed filed by the Company for purposes of § 18 of the Securities Exchange Act of 1934, as amended.