

# Fueling Ambition

2016 NASDAQ ANNUAL REPORT





## Fueling our Ambitions

“One of the things that really I’m passionate about is the fact that we are a mission driven company. We are here to make the capital markets around the world as efficient, as effective as possible. And that includes partnering with corporate clients, and as they are accessing the capital markets, what tools do they need, what kind of liquidity capabilities do they need, in order to have an effective relationship with the capital markets to raise money, to be able to grow their businesses, and expand around the world. That is a critical part of what we do, and as we look at technologies and capabilities that we can launch inside our markets, but as well as to support the C-suite as they’re making that road into the capital markets. We feel really, really excited about helping them on that journey. We have a range of ways that we can make sure that they have the right tools, intelligence, and capabilities to interact with the capital markets effectively. How do we use that technology to make sure that we create a more efficient capital markets and make it so that the world wide capital markets are operating in a well-tuned manner that can allow for economic growth around the world. It is so exciting when I see the level of pride and passion that our employees have around what we can do to further the ability for people to access capital and then invest in the markets around the world and how it really does drive economic growth. It gets everyone excited to come to work every day.”

-Adena T. Friedman, President and Chief Executive Officer, Nasdaq, Inc.

“All of our efforts are centered on a singular focus—to fuel the ambition of our clients. By better serving broker-dealers, exchange operators, corporates and investors we create better opportunities for all parties to interact with the capital markets. And by doing so, we will create value for shareholders, continue to foster a culture of performance and success for our employees, and advance our position as the franchise of choice for prospects and partners around the globe.”

Adena T. Friedman, President and Chief Executive Officer, Nasdaq, Inc.

## Dear Shareholders,

Over the past year, Nasdaq again advanced its ambitions to improve and serve the capital markets ecosystem. Our progress was evident in the strengthening of our competitive position through the adoption of new technologies, our strategic acquisitions and the expansion of our product and service portfolio. All of our efforts are centered on a singular focus – to fuel the ambition of our clients.

By better serving broker-dealers, exchange operators, corporates and investors we create better opportunities for all parties to interact with the capital markets. And by doing so, we will create value for shareholders, continue to foster a culture of performance and success for our employees, and advance our position as the franchise of choice for prospects and partners around the globe.

### Our Ambitions

I am deeply honored by the Board’s decision to select me as Nasdaq’s Chief Executive Officer. To me, Nasdaq is far more than a company. The technology, products, and services we provide help our clients better navigate the complexities of today’s global capital markets. Our offerings allow ideas to find capital and to seize opportunity, and we create more constructive interactions with capital markets which create jobs and drive economic growth. I have spent most of my career at Nasdaq, nearly 20 years, and consider the entrepreneurial spirit and energy of my colleagues to be the engine that fuels our own ambition.

This spirit is the direct result of the extraordinary leadership of my predecessor, Bob Greifeld, who led Nasdaq through several important transformations, leveraging the underpinnings of our position as a leading U.S. cash equity market to become a global capital market and financial technology solutions leader with a market capitalization of more than \$11 billion.

The long-term focus on shareholder value that Bob advanced during his 14-year tenure as CEO is a focus that I fully embrace. We accomplished much for our shareholders in 2016, and we intend to continue making great strides for you in 2017 and the years and decades to come. Financially, our results were strong in 2016, with full-year net revenues<sup>1</sup> up to a record \$2.28 billion and non-GAAP operating income<sup>2</sup> also rising to a record, \$1.06 billion.

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1. Represents revenues less transaction-based expenses.

2. Refer to our accompanying reconciliation of U.S. GAAP to non-GAAP operating income.

“If fueling our clients’ ambitions is our core focus, undoubtedly, technology is a key catalyst to our mutual success. It is a component we know well.”

## Our Actions

Our industry is dynamic and we continue to make key investments in our businesses that help strengthen our competitive position, deepen our client relationships, and drive future product innovation. In Market Services, we acquired International Securities Exchange, the operator of three U.S. equity options exchanges. We also completed the acquisition of Nasdaq CXC, formerly Chi-X Canada, an alternative market in Canada for the trading of Canadian-listed securities. In Corporate Solutions, we purchased Marketwired, a global provider of news distribution services with about 7,500 corporate clients, and Boardvantage, a leading board collaboration and productivity provider with approximately 1,900 clients. We are already well along the path to integrate these four businesses, and are targeting about \$60 million of combined cost synergies.

It has always been our people at Nasdaq who have been responsible for our progress and taking the business to new heights. In addition to developing a diverse mix of businesses that will best serve our industry and our clients, we focus on having the right people to operate these businesses – individuals with vision, finely honed management skills and deep industry knowledge. In 2016, we continued to strengthen our senior management team in order to drive the kind of performance and innovation we demand of ourselves.

At midyear, we appointed Michael Ptasznik as Chief Financial Officer, a position he held at TMX Group since 2002. Later in the year, we promoted Stacie Swanstrom to Executive Vice President, Corporate Solutions and Bjørn Sibbern to Executive Vice President, Global Information Services. Additionally, Hans-Ole Jochumsen was elevated to Vice Chairman, a role in which he works closely with senior leaders across Nasdaq, most notably in Europe, to identify and select appropriate new opportunities for our businesses.

## Fueling Our Clients’ Ambitions

Opportunities within Nasdaq’s businesses are numerous in today’s environment. We find ourselves in a period of technological innovation that is truly exciting in its breadth and potential to impact the businesses we operate. If fueling our clients’ ambitions is our core focus, undoubtedly, technology is a key catalyst to our mutual success. It is a component we know well. Nasdaq was founded in 1971 as the world’s first electronic stock market and we remain a financial technology leader today. In fact, nearly one-third of our global workforce comprises engineers, and today our technology powers more than 85 marketplaces around the world.

In many ways however, we feel we are still taking the early steps in this journey and there is much more ahead. Last year, for example, we unveiled the Nasdaq Financial Framework, which brings together all of the elements of our Market Technology capabilities. The Framework consists of a single operational core that ties together our business functionality, allowing exchanges, marketplaces, broker-dealers, clearinghouses and other clients to integrate our applications with each other seamlessly to create a more streamlined end-to-end trade lifecycle solution. Additionally, our capital markets clients can now easily leverage the latest technologies we are developing, such as blockchain-driven services and cloud applications to help achieve their objectives.

Importantly, we have also built new products and services for our corporate clients. During 2016, we launched a new innovative Investor Relations platform called Nasdaq IR Insight, which was designed with significant client collaboration to capture the work streams of Investor Relations Officers, improve data intelligence and enhance decision-making through a single product. We also unveiled Nasdaq Influencers, a new solution for communications and marketing professionals to discover and connect with the most relevant public thought leaders.

In addition, we rolled out Trading Insights, a product suite that combines proprietary data with advanced analytics and machine learning to provide our broker-dealer clients with additional insights about the markets that we operate.

While the ways in which we support our clients' ambitions continue to evolve, the principles of capital formation and well-functioning markets remain at the core of our organization. Companies seek growth, from emerging private companies to the opening bell of their IPOs, to the moment when they become industry giants and household names. In fact, Nasdaq led U.S. exchanges last year by helping companies begin that journey, with a total of 91 IPOs, representing 73% of all U.S. IPOs and including 87% of technology IPOs. We have been successful in combining our market structure and trading tools with our corporate solutions, as well as the attributes of our brand, to create a truly differentiated value proposition for our new listed clients.

### Executing On Our Ambitions

In 2017, we find ourselves well-positioned to capitalize on the opportunities inherent in a rapidly changing world. Looking across Nasdaq today, I believe this franchise has the broadest set of capabilities in the industry and therefore is well-suited to serve the diverse needs of our global client base. Of course, the secret to capitalizing on these capabilities is extraordinary execution. To us, that means functioning as a single, seamless entity across business units, and we are in a better place to achieve this today than at any point in our history.

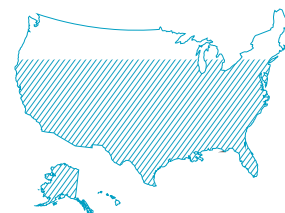
Progress for us also means we routinely evaluate our businesses and relationships to find the best path to serve our clients in a unified and strategic way. With our fourth-quarter results, we announced the realignment of our reporting segments, creating a new Corporate Services segment that incorporates our Listing Services and Corporate Solutions businesses. In addition, Market Technology has become a stand-alone segment. These changes are designed to let the investment community better understand how we approach our clients, develop our offerings and create value across the franchise. We also announced a new fixed income strategy, bringing together our U.S. and European fixed income products and services under a single brand called Nasdaq Fixed Income.

Last year was both eventful and successful and one that speaks to the opportunities that lie ahead for Nasdaq. We live in dynamic times – technology, business and the geopolitical landscapes are all evolving at a rapid pace. The role Nasdaq plays at the intersection of capital markets and technology uniquely allows us to help clients navigate this challenging environment. Our management team is keenly focused on identifying these opportunities and advancing our clients' ambitions.

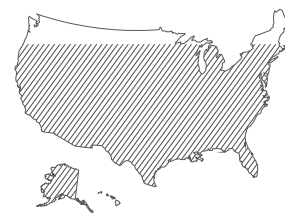
I am excited to lead this organization forward in the next phase of its journey. I look forward to reporting to you next year on our achievements and our progress in executing our long-term strategy.

Adena T. Friedman  
President and Chief Executive Officer  
Nasdaq, Inc.

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of all U.S. IPOs



87%  
of all tech IPOs

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## Fueling Long-Term Growth and Shareholder Value

Nasdaq continues to fuel progress for clients and its business. In 2016, the company delivered net revenues<sup>1</sup> of \$2.3 billion, record non-trading segment revenues<sup>2</sup> of \$1.5 billion and record non-GAAP diluted earnings per share (EPS) of \$3.68<sup>3</sup>. As a reflection of the company's strong performance, Nasdaq delivered a double digit shareholder return of 17.5%.

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### Net Revenues

\$2,277M

+9% Increase Year-over-Year

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### Operating Cash Flow\*

\$722M

+6% Increase Year-Over-Year

\*Cash flow from operating activities

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### Non-GAAP Net Income<sup>3</sup>

\$621M

+7% Increase Year-Over-Year

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## First in FinTech

Nasdaq's disruptive nature has been part of its DNA since its start in 1971. And although the term Fintech wasn't around back then, the Fintech culture and spirit of new value creation was thriving at Nasdaq—just as it is today. Fintech is a mindset that challenges the status quo with innovation and new ideas and solutions for navigating the capital markets ecosystem. Nasdaq has always been First in Fintech by putting Fintech First.

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### Nasdaq 2017 Execution Priorities

As a global capital market infrastructure provider, Nasdaq has one of the broadest sets of capabilities in the industry. We use these capabilities to enable entrepreneurs and innovators to find capital to grow and move their businesses forward—which is the heart of our fintech mission. Here are some of the priorities that will ensure we are successful in the delivery of that mission.

### Enhance Competitive Positioning

#### Market Services:

- Intense customer focus
- Introduce innovative order types
- Continue NFX progress

#### Information Services:

- Expanding offering from critical data to value-added analytics
- Extend Smart Beta

#### Corporate Services:

- Enhance/integrate Corporate Solutions offering
- Continuous improvement of sales/service capabilities in Corporate Solutions
- Continue Listing Services share gain story

### Market Technology:

- Expanding use of Nasdaq Financial Framework
- Continue expanding capabilities and user segments in SMARTS

### Complete Integration of Acquisitions

#### Market Services:

- Migrate 4 exchanges to Nasdaq's platform
- Maintain healthy share capture
- Deliver efficiencies to customers

#### Corporate Services:

- Integrate Directors Desk/Boardvantage
- Integrate Marketwired/GlobeNewswire

### Financial Targets:

- Achieve \$60m in synergies by year-end 2017
- Deliver \$0.40 accretion to 2015 diluted EPS

### Commercialize Disruptive Technologies

#### Blockchain:

- Incorporate into Market Technology offering
- The Nasdaq Private Market

#### Cloud:

- Utilize across Corporate Solutions
- Increasingly use in Market Technology

#### Machine Intelligence:

- SMARTS eComms
  - Trading Analytics
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1. Represents revenues less transaction-based expenses.

2. Non-trading segment revenues represents revenues from our Corporate Services, Information Services and Market Technology segments.

3. Refer to our accompanying reconciliations of U.S. GAAP to non-GAAP net income, diluted earnings per share and operating income.

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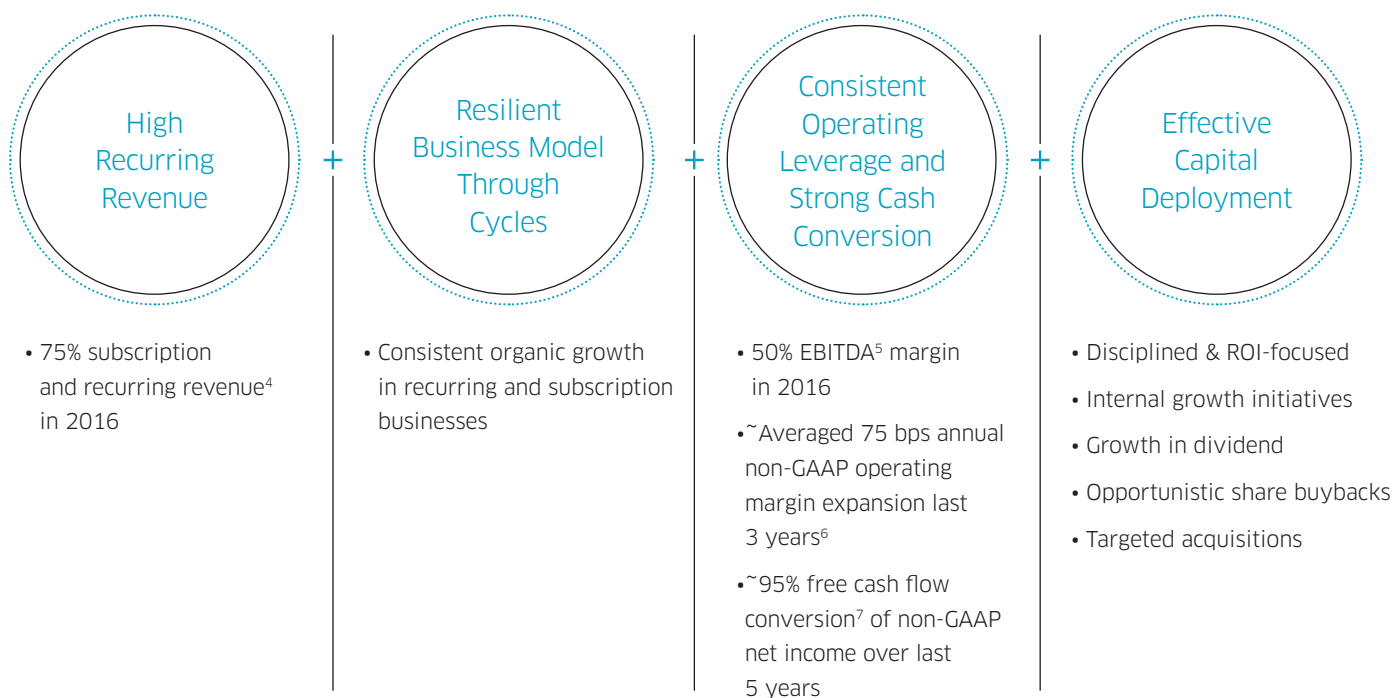
## Profitable Growth Drives Value Creation

A resilient business model and consistent execution enables Nasdaq to achieve its goal of double-digit value creation, which the company achieved in 2016 with 17.5% total shareholder return.

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### Objective: Double-Digit Value Creation (TSR)

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4. Represents revenues from our Corporate Services, Information Services and Market Technology segments, as well as our Trade Management Services business, formerly referred to as Access and Broker Services.

5. Refer to accompanying EBITDA margin schedule.

6. Non-GAAP operating margin increased from 44% in 2013 to 46% in 2016. Refer to accompanying reconciliation of U.S. GAAP to non-GAAP Operating income and operating margin

7. Free cash flow conversion defined as free cash flow excluding Section 31 fees divided by non-GAAP net income.

# Our FinTech Past, Present and Future



1985

## Providing Investors with Transparency and Insight

The NASDAQ-100 Index® launched on **January 31, 1985** as a market capitalization-weighted index. Fast forward to November 1998, in order to make the NASDAQ-100 suitable for the basis of an exchange-traded fund (ETF), the index weights were modified away from market cap weights in a special rebalance. This paved the way for the launch of QQQ or the NASDAQ-100 Index Tracking Stock®, today known as the PowerShares QQQ™.



2004

## Greater Market Certainty in Pricing

**In 2004**, Nasdaq launched a new electronic closing process, the **Nasdaq Closing Cross**, which provides the industry with even greater certainty in pricing major transactions and daily mutual fund Net Asset Values. Today, markets around the world rely on the Closing Cross to set the Nasdaq Official Closing Price (NOCP) for U.S.-listed securities.



2016

## Ramping up Market Surveillance

Through the use of cognitive computing and machine learning, Nasdaq has dramatically increased its SMARTS Trade Surveillance capabilities to offer a next-generation, holistic surveillance technology to the global capital markets.



1971

## Pioneering Electronic Trading

Nasdaq began on **Feb. 8, 1971**, as the first electronic market to display quotes for stocks not listed on exchanges. Nasdaq capitalized on the microprocessor, a new technology also born in 1971, to create the first electronic stock market. Today, our trading technology powers more than 85 marketplaces in 50 countries.



1990

## Electrifying Derivatives Trading

**In 1990**, then OMX sold the world's **first electronic exchange system for derivatives trading** after commercializing proprietary technology through OM, a European derivatives market. Derivatives trading used to happen on trading floors and over the phone. Now more than 85 marketplaces around the world use technology powered by Nasdaq.



2015

## Bringing Blockchain to Private Transactions

Nasdaq demonstrated a proof-of-concept to help transform how transactions occur in the private market. Using Nasdaq Linq, a customer successfully completed its first private market transaction using blockchain technology. Now it is possible for private shares to digitally represent a record of ownership thus reducing settlement times and the need for paper certificates.





## 2016

### Making Powerful Technology Available to Clients

Nasdaq unveiled the Nasdaq Financial Framework, which brings together all the elements of our fintech innovation onto a single platform. The framework consists of a single operational core that ties together business functionality, allowing exchanges, broker-dealers, clearinghouses and others to easily integrate our business applications with each other. Simply stated, this framework lets customers benefit from Nasdaq services like blockchain at any particular moment in time with a minimum amount of effort.



### Bringing Vast Amounts of Information into Focus with Data Analytics

Nasdaq is already leveraging technology to harness market intelligence through visualization and data enhancement both for our own marketplaces and for our technology customers. By extracting data from multiple sources and putting it into interactive dashboards, we have a real-time understanding of events. With these capabilities, we can proactively develop new offerings to support our customers.



### More Efficient and Secure Transactions with Blockchain

Blockchain has great potential across the financial services industry, particularly in the post-trade environment. As an absolute record of ownership, it could create greater efficiency and transparency in position-keeping and reconciliation. As we gain more experience with the technology, we have several areas where we are creating working proofs of concepts.

## 2017 AND BEYOND



## 2016

### Greater Insight for Better Decision-Making

Nasdaq introduced Trading Insights, a product suite that combines proprietary data with advanced analytics and machine learning to provide the trading community with a comprehensive view of how they perform in the market, how the market behaves, and how they can adjust their strategies to be more successful.



### The Power of the Cloud - Data and Tools on Demand Anywhere, Anytime

Today we are using the cloud to power applications as well as provide clients with services for the delivery of key applications like IR Insight and the new IR webhosting platform. Innovative cloud services like these will become increasingly popular, especially as the cloud proves itself to be a safer haven for data - maybe even more secure than on-premises systems.



### Machine Learning: Powering the New Age of Intelligence

Today in the cloud, there are approximately 8 zettabytes of data and that number is expected to grow to 35 ZB by 2020. Machine Intelligence thrives on an abundance of data, and this is why we are seeing more adoption and increased effectiveness of these technologies. Nasdaq expects to harness Machine Intelligence across its businesses to provide deep insights to the financial community, from improving surveillance with cognitive computing to the creation of next-generation investment models with machine learning.

# Disclosures

## Non-GAAP Information

In addition to disclosing results determined in accordance with U.S. GAAP, Nasdaq also discloses certain non-GAAP results of operations, including, but not limited to, net income attributable to Nasdaq, diluted earnings per share, and operating income, that include certain adjustments or exclude certain charges and gains that are described in the reconciliation table of U.S. GAAP to non-GAAP information provided in this communication. 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 our 2016 Annual Report on Form 10-K including our consolidated financial statements and the notes thereto. When viewed in conjunction with our U.S. GAAP results and the accompanying reconciliations, 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, non-GAAP diluted earnings per share, and non-GAAP operating income to assess operating performance. We use these measures 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, such as those described below, that have less bearing on our ongoing operating performance.

**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.

**Asset impairment charges:** Intangible assets that have indefinite lives are reviewed for impairment at least annually, or when indicators of impairment are present. For the year ended December 31, 2016, we recorded a pre-tax, non-cash asset impairment charge of \$578 million related to a trade name. The impairment charge was the result of a decline in operating performance and the rebranding of the trade name due to a strategic change in the direction of our Fixed Income business.

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 2016, other significant items primarily included accelerated expense due to the retirement of the company's former CEO for equity awards previously granted, a regulatory fine received by our exchange in Stockholm and Nasdaq Clearing, the release of a sublease loss reserve due to the early exit of a facility, and the impact of the write-off of an equity method investment, partially offset by a gain resulting from the sale of a percentage of a separate equity method investment. For 2015, other significant items included income from our equity investment in The Options Clearing Corporation, or 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. Significant adjustments also included the reversal of a value added tax refund.

## Disclaimer

### **Cautionary Note Regarding Forward-Looking Statements**

Information set forth in this communication contains forward-looking statements that involve a number of risks and uncertainties. Nasdaq cautions readers that any forward-looking information is not a guarantee of future

performance and that actual results could differ materially from those contained in the forward-looking information. Such forward-looking statements include, but are not limited to (i) projections relating to our future financial results, growth, trading volumes, products and services, order backlog, taxes and achievement of synergy targets, (ii) statements about the closing or implementation dates and benefits of certain strategic, restructuring, technology, de-leveraging and capital return initiatives, (iii) statements about our integrations of our recent acquisitions, (iv) statements relating to any litigation or regulatory or government investigation or action to which we are or could become a party, and (v) other statements that are not historical facts. Forward-looking statements involve a number of risks, uncertainties or other factors beyond Nasdaq's control. These factors include, but are not limited to, Nasdaq's ability to implement its strategic initiatives, economic, political and market conditions and fluctuations, government and industry regulation, interest rate risk, U.S. and global competition, and other factors detailed in Nasdaq's filings with the U.S. Securities and Exchange Commission, including its annual reports on Form 10-K and quarterly reports on Form 10-Q which are available on Nasdaq's investor relations website at <http://ir.nasdaq.com> and the SEC's website at [www.sec.gov](http://www.sec.gov). Nasdaq undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise.

## Operating Income And Operating Margin

### Reconciliation of U.S. GAAP to Non-GAAP

(US\$ millions)	2013	2014	2015	2016
U.S. GAAP REVENUES less transaction-based expenses	\$1,895	\$2,067	\$2,090	2,277
U.S. GAAP OPERATING INCOME	\$688	\$754	\$720	\$839
Voluntary Accommodation Program <sup>(12)</sup>	44	-	-	-
Securities and Exchange Commission matter <sup>(13)</sup>	10	-	-	-
Merger and strategic initiatives <sup>(3)</sup>	22	81	10	76
Restructuring charges <sup>(2)</sup>	9	-	172	41
Extinguishment of debt <sup>(15)</sup>	-	11	-	-
Special legal expenses <sup>(10)</sup>	3	2	-	-
Sublease reserve <sup>(9)</sup>	-	11	-	(1)
Reversal of value added tax refund <sup>(8)</sup>	-	-	12	-
Amortization of acquired intangible assets <sup>(1)</sup>	63	69	62	82
Other	(3)	2	-	-
Regulatory matters <sup>(5)</sup>	-	-	-	6
Executive compensation <sup>(6)</sup>	-	-	-	12
Total Non-GAAP adjustments	148	176	256	216
NON-GAAP OPERATING INCOME	\$836	\$930	\$976	\$1,055
U.S. GAAP OPERATING MARGIN*	36%	36%	34%	37%
NON-GAAP OPERATING MARGIN**	44%	45%	47%	46%

\*U.S. GAAP operating margin equals U.S. GAAP operating income divided by total revenues less transaction-based expenses.

\*\*Non-GAAP operating margin equals non-GAAP operating income divided by total revenues less transaction-based expenses.

## EBIDTA Margin

### Earnings Before Interest, Taxes, Depreciation and Amortization

(US\$ millions)	2016
U.S. GAAP net income attributable to Nasdaq	\$108
Income tax provision	28
Net income from unconsolidated investees	(2)
Other investment income	(3)
Net interest expense	130
Asset impairment charges	578
U.S. GAAP operating income	\$839
Non-GAAP Adjustments <sup>†</sup>	216
Non-GAAP operating income	\$1,055
Depreciation and amortization of tangibles	88
EBITDA	\$1,143
Net Revenues	\$2,277
EBITDA Margin <sup>**</sup>	50%

<sup>†</sup>See accompanying reconciliation of U.S. GAAP operating income to non-GAAP operating income for summary of 2016 non-GAAP adjustments.

<sup>\*\*</sup>EBITDA margin defined as EBITDA divided by net revenues.

## Free Cash Flow

Free Cash Flow Calculation (US\$ millions)	2012	2013	2014	2015	2016	2012 - 2016
Cash flow from operations*	\$567	\$548	\$632	\$682	\$722	\$3,151
Capital expenditure	(87)	(115)	(140)	(133)	(134)	(609)
Free cash flow	480	433	492	549	588	2,542
Section 31 fees (net)**	13	8	(28)	16	(4)	5
Free cash flow ex. Section 31 fees	493	441	464	565	584	2,547
Non-GAAP Net Income	464	484	542	581	621	2,692
Free Cash Flow ex. Section 31 Fees divided by Non-GAAP Net Income	106%	91%	86%	97%	94%	95%

\* Cash flow from operations has been restated for adoption of Accounting Standards Update 2016-15 and 2016-18.

\*\* Net of change in Section 31 fees receivables of \$4 million in 2012; (\$7 million) in 2013; \$14 million in 2014; (\$11 million) in 2015; \$1 million in 2016 and \$1 million in 2012-2016.

## Net Income and Diluted EPS

### Reconciliation of U.S. GAAP to Non-GAAP

(US\$ millions, except EPS)

	2012	2013	2014	2015	2016
U.S. GAAP NET INCOME ATTRIBUTABLE TO NASDAQ	\$352	\$385	\$414	\$428	\$108
Voluntary Accommodation Program <sup>(12)</sup>	-	44	-	-	-
Securities and Exchange Commission matter <sup>(13)</sup>	-	10	-	-	-
Income from open positions relating to the operations of the exchange	(11)	-	-	-	-
Gain on sale of an investment security <sup>(14)</sup>	-	(30)	-	-	-
Merger and strategic initiatives <sup>(3)</sup>	4	22	81	10	76
Extinguishment of debt <sup>(15)</sup>	-	-	11	-	-
Asset impairment charges <sup>(4)</sup>	40	14	49	-	578
Loss on divestiture of a business <sup>(17)</sup>	14	-	-	-	-
Sublease reserve <sup>(9)</sup>	-	-	11	-	(1)
Restructuring charges <sup>(2)</sup>	44	9	-	172	41
Special legal expenses <sup>(10)</sup>	7	3	2	-	-
Income from OCC investment <sup>(7)</sup>	-	-	-	(13)	-
Reversal of value added tax refund <sup>(8)</sup>	-	-	-	12	-
Amortization of acquired intangible assets <sup>(1)</sup>	52	63	69	62	82
Other <sup>(11)</sup>	-	(3)	2	-	6
Regulatory matters <sup>(5)</sup>	-	-	-	-	6
Executive compensation <sup>(6)</sup>	-	-	-	-	12
<b>TOTAL NON-GAAP ADJUSTMENTS</b>	<b>150</b>	<b>132</b>	<b>225</b>	<b>243</b>	<b>800</b>
Non-GAAP adjustment to the income tax provision <sup>(16)</sup>	(38)	(33)	(97)	(90)	(287)
Total Non-GAAP Adjustments, net of tax	112	99	128	153	513
<b>NON-GAAP NET INCOME ATTRIBUTABLE TO NASDAQ</b>	<b>\$464</b>	<b>\$484</b>	<b>\$542</b>	<b>\$581</b>	<b>\$621</b>
GAAP diluted EPS	\$2.04	\$2.25	\$2.39	\$2.50	\$0.64
Total adjustments from non-GAAP net income, above	\$0.65	\$0.58	\$0.74	\$0.89	\$3.04
<b>NON-GAAP DILUTED EPS</b>	<b>\$2.69</b>	<b>\$2.83</b>	<b>\$3.13</b>	<b>\$3.39</b>	<b>\$3.68</b>

## Non-GAAP Adjustments Footnotes

(1) Refer to the non-GAAP information section for further discussion of why we consider amortization expense of acquired intangible assets to be a non-GAAP adjustment.

(2) 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. In June 2016, we completed our 2015 restructuring plan. For the year ended December 31, 2016 restructuring charges primarily related to severance costs, asset impairment charges, facility-related costs associated with the consolidation of leased facilities and other charges. For the year ended December 31, 2015, restructuring charges primarily related to the rebranding of our trade name, severance costs, facility-related costs associated with the consolidation of leased facilities and other charges. 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 liabilities. For the year ended December 31, 2013, as part of our 2012 restructuring plan, we recognized restructuring charges totaling \$9 million, primarily related to severance costs. For the year ended December 31, 2012, restructuring charges of \$44 million related to workforce reductions of \$23 million, facilities-related charges of \$10 million, asset impairment charges of \$9 million and \$2 million of other charges. The 2012 restructuring plan was completed in the first quarter of 2013. Refer to the non-GAAP information section for further discussion of why we consider restructuring charges to be a non-GAAP adjustment.

(3) For the year ended December 31, 2016, merger and strategic initiatives expense primarily related to our acquisition of U.S. Exchange Holdings, Inc. and its subsidiaries. For the year ended December 31, 2015, merger and strategic initiatives expense primarily related to certain strategic initiatives and our acquisition of Dorsey, Wright & Associates, LLC. For the year ended December 31, 2014, merger and strategic initiatives expense primarily related to our acquisition of the TR Corporate businesses in May 2013 and eSpeed in June 2013 and a charge of \$23 million related to the reversal of a receivable under a tax sharing agreement with an unrelated party. For the year ended December 31, 2013, merger and strategic initiatives expense reflected \$45 million of merger and strategic initiative costs primarily associated with our acquisitions of eSpeed and the TR Corporate businesses, partially offset by a credit of \$23 million

associated with a receivable under a tax sharing agreement with an unrelated party. For the year ended December 31, 2012, merger and strategic initiatives expense related to acquisitions and other strategic initiatives, net of gain on acquisition of NOS Clearing ASA. Refer to the non-GAAP information for further discussion on why we consider merger and strategic initiatives expense to be a non-GAAP adjustment.

(4) For the year ended December 31, 2016, we recorded a pre-tax, non-cash asset impairment charge of \$578 million related to our eSpeed trade name. The impairment was the result of a decline in operating performance and the rebranding of the eSpeed trade name due to a strategic change in the direction of our overall Fixed Income business. For the year ended December 31, 2014, we recorded pre-tax, non-cash asset impairment charges of \$49 million related to certain acquired intangible assets associated with customer relationships and certain technology assets. For the year ended December 31, 2013, pre-tax, non-cash asset impairment charges of \$14 million related to certain acquired intangible assets associated with customer relationships and a certain trade name. For the year ended December 31, 2012, we recorded pre-tax, non-cash asset impairment charges of \$40 million related to certain acquired intangible assets totaling \$28 million as well as an other-than-temporary impairment charge of \$12 million related to an equity method investment. Refer to the non-GAAP information section for further discussion of why we consider asset impairment charges to be a non-GAAP adjustment.

(5) During 2016, the Swedish Financial Supervisory Authority, or SFSA, completed their investigation of cybersecurity processes at our Nordic exchanges and clearinghouse. In December 2016, we were issued a \$6 million fine as a result of findings in connection with this investigation. We have appealed the SFSA's decision, including the amount of the fine.

(6) For the year ended December 31, 2016, we recorded \$12 million in accelerated expense due to the retirement of the company's former CEO for equity awards previously granted.

(7) We record our investment in The Options Clearing Corporation, or OCC, as an equity method investment. 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 a result of a new capital plan implemented by 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 OCC financial statements were made available to us. Therefore, 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.

(8) We previously recorded receivables for expected value added tax refunds based on an approach that had been accepted by the tax authorities in prior years. The tax authorities have since challenged our approach, and the revised position of the tax authorities was upheld in court during the first quarter of 2015. As a result, in the first quarter of 2015, we recorded a charge of \$12 million for previously recorded receivables based on the court decision.

(9) The credit of \$1 million for the year ended December 31, 2016, pertains to the release of a previously recorded sublease loss reserve due to the early exit of a facility, partially offset by a sublease loss reserve charge recorded on space we currently occupy due to excess capacity. For the year ended December 31, 2014, we recorded a sublease loss reserve of \$11 million on space we occupied due to excess capacity.

(10) In March 2015, we established a loss reserve of \$31 million for litigation arising from the Facebook IPO in May 2012. The reserve was intended to cover the estimated amount of a settlement of class-action litigation initiated on behalf of investors in Facebook common stock on the date of its IPO. The reserve also covered the cost of re-opening Nasdaq's voluntary accommodation program to allow any Nasdaq member that did not file for compensation in 2013 to submit a claim during the second quarter of 2015, subject to the conditions and limitations that were applicable to claims filed in 2013. The re-opened accommodation program is now closed. The insurance recovery recognized during the three months ended December 31, 2015 represents amounts reimbursed by applicable insurance coverage which offsets the loss reserve that was recorded in March 2015. For the year ended December 31, 2014, we recorded special legal expense of \$2 million and recorded special legal expense of \$3 million for the year December 31, 2013.

(11) Other charges primarily include the write-off in 2016 of an equity method investment, partially offset by a gain resulting from the sale of a percentage of a separate equity method investment.

(12) For the year ended December 31, 2013, we recorded a \$44 million charge related to the one-time program for voluntary accommodations to qualifying members of up to \$62 million, for which a liability was recorded when the program was approved by the SEC in March 2013. This program expanded the pool available to compensate members of The Nasdaq Stock Market for qualified losses arising directly from the system issues experienced with the Facebook IPO that occurred on May 18, 2012. After claims were reviewed, our liability was reduced to \$44 million and payment of valid claims totaling \$44 million was made in the fourth quarter of 2013.

(13) For the year ended December 31, 2013, we recorded a charge of \$10 million related to an SEC matter related to system issues experienced with the Facebook IPO.

(14) For the year ended December 31, 2013, we recorded a gain on the sale of an investment security of \$30 million related to the sale of our available-for-sale investment security in Dubai Financial Market PJSC.

(15) For the year ended December 31, 2014, we recorded a loss on extinguishment of debt of \$11 million reflecting \$9 million related to notes due in 2015 and \$2 million related to refinancing costs.

(16) Primarily includes the tax impact of each non-GAAP adjustment. In addition, for the year ended December 31, 2016, we recorded a \$27 million tax expense due to an unfavorable tax ruling received during the second quarter of 2016, the impact of which related to prior periods. For the year ended December 31, 2014, the amount includes \$23 million associated with the recognition of a previously unrecognized tax benefit. This amount is offset by the reversal of the receivable described in note 3 above. For the year ended December 31, 2013, the amount includes \$23 million associated with a reserve for an unrecognized tax benefit. This amount is offset by the receivable described in note 3 above.

(17) For the year ended December 31, 2012, we sold International Derivatives Clearing Group, LLC and recorded a loss of \$14 million.

