Nasdaq Opportunity: Creating Sustainable Value

1. Building on a strong foundation
   - Sustaining our marketplaces core and re-allocating capital and resources to higher growth opportunities

2. Early execution results
   - Advancement of strategy yielding encouraging initial progress

3. Future growth opportunities
   - Market Technology and Information Services capitalize on secular dynamics to lead growth

4. Clear performance objectives and capital plan
   - Focus on organic growth, attractive returns on capital, double digit TSR objective
Agenda

1. Building on a strong foundation
2. Early execution results
3. Future growth opportunities
4. Clear performance objectives and capital plan
Building on a Record of Strong Financial Performance…

$2.5B
2018 Net Revenues¹

>70%
Recurring & Subscription²

Net Revenue¹

2015 2016 2017 2018
$2.1B $2.5B
7% CAGR

Non-GAAP Diluted EPS

2015 2016 2017 2018
$3.39 $4.84
13% CAGR

¹Represents revenues less transaction-based expenses.
²Represents 2018 revenues from our Corporate Services, Information Services and Market Technology segments plus our Trade Management Services business.
Strategic pivot aligns capabilities with clear opportunities

Strategical Capital Allocation

Re-allocate Resources to Growth Opportunities
- Market Technology
- Information Services

Sustain our Foundation
- Market Services
- Corporate Services

Optimize Slower Growth Businesses
- Select product lines or businesses

To Leverage Key Industry Trends

- Data Explosion
- Evolution of Investment Management
- Banks Changing As They Evolve
- Markets Economy
Agenda

1 Building on a strong foundation

2 Early execution results

3 Future growth opportunities

4 Clear performance objectives and capital plan
Capital and Resource Re-allocation Underway

**Slower Growth Businesses or Non-core Assets**

- $0.5B Capital released from divestitures or sales
  - Divested Public Relations Solutions & Digital Media Services businesses
  - Sale of LCH minority stake
  - Announced Sale Agreement of BWise

**Marketplace Core**

- Launched public offer for Oslo Bors VPS
- Nasdaq Fixed Income replatforming to NFF
- New products (M-ELO, Auction on Demand, DV01)
- Enhanced client experience at Nasdaq marketsite

**Growth Platforms**

- ~$1B Capital invested in growth platforms
- Inorganic investment in:
  - eVestment + Quandl
  - Cinnober + Sybenetix
- Organic investment in:
  - Nasdaq Financial Framework (NFF)
  - SMARTS Buy-Side
  - eVestment Private Markets

Capital invested in growth platforms: $0.5B
Enhanced client experience at Nasdaq marketsite: $1B
Encouraging Early Outcomes from Strategic Shift

**Acceleration in Non-Trading Organic Growth**
8% organic growth in 2018 versus 4.5% average between 2014-17

**Pro forma increase in Market Technology revenues since 2017**
Factoring organic growth in 2018 + additional revenues from acquisition of Cinnober

**% of Information Services revenues from non-exchange sources**
Double-digit medium-term organic revenue growth outlook in Investment Data & Analytics; Mid-to-high single digits in Index

**Expansion in non-GAAP Operating Margin**
48% in 2018 versus 47% in 2017, including 260 basis points improvement in 4Q18 versus 4Q17
Agenda

1. Building on a strong foundation
2. Early execution results
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4. Clear performance objectives and capital plan
**Our Growth Platform**

**Market Technology**
- Operate and power the world’s leading marketplaces
  - 2018 revenues: $270M
  - 3-Year revenue CAGR: 9%

**Information Services**
- Trusted data, index and analytics
  - 2018 revenues: $714M
  - % Nasdaq 2018 non-GAAP op income: 38%
  - Nasdaq-licensed ETPs: $172B AUM (12/31/18)

**Key Growth Segments**
Industry Leading Market Technology Provider Repositioning To A Managed Solution Model

Market Infrastructure Operators (MIO)
- Comprehensive marketplace solutions
- Serving exchanges, clearinghouses, CSDs and regulators

Buy-Side / Sell-Side
- A surveillance leader for sell-side, expanding into buy-side
- Outsourced execution platform solutions for banks/brokers

Non-Financial Markets (NFM)
- Delivering benefits of price discovery beyond financial markets
- Entry position serving use-cases in multiple industry verticals

Introduction of Nasdaq Financial Framework

Next-gen offering enables transition to more-scalable, SaaS/Managed Solution model
Complementary Information Services Products With Distinct Growth Opportunities

- **$714M Revenues**
  - 55%
  - 29%
  - 16%

**2018 Information Services**

**Investment Data & Analytics**
- Growth in institutional/alternative AUMs
- Secular demand drivers for advanced analytics
- International expansion

**Index**
- Growing demand for passive investment vehicles
- Contribution of smart beta and multi-factor models >40% is approximately 2x industry avg.

**Market Data**
- Customer growth, in particular in Asia
- New products reflect evolving client needs
- Fee adjustments where earned through significant product enhancements
Our Marketplace Core

**Corporate Services**

A leading position in listings and C-Suite offerings
- 2018 Revenue: $528M
- 2018 Operating margin: 31%

**Market Services**

Diverse portfolio of North American and Nordic markets
- 2018 net revenues: $958M
- 2018 operating margin: 57%

**Foundational Segments**
Marketplace Foundation For Other Nasdaq Businesses

**Corporate Services**

- **4,000+** Listed Companies
- **3,500+** Clients using IR Services
- **150,000+** Board Portal Users
- **72%** U.S. IPO Win Rate in 2018

**Market Services**

**Leading Liquidity Pools**

- **#1 Positions:**
  - U.S. equity options
  - Nasdaq-listed U.S./Nordic equities
  - Nordic derivatives

**Niche Markets in FICC**

**Trusted Technology**

Nasdaq’s trading systems are chosen most by 3rd-party exchange operators

**Comprehensive Connectivity**

Nasdaq’s marketplace platform connects companies, investors, and capital market intermediaries to unlock opportunities
Agenda

1. Building on a strong foundation
2. Early execution results
3. Future growth opportunities
4. Clear performance objectives and capital plan
Clear Objectives to Measure Strategy’s Success

- **Organic Revenue Growth**: 5% – 7% Non-Trading Segments (3-5 year time frame)
  - Accelerate recurring revenue base

- **Operational Focus**
  - ~3%<sup>2</sup> Avg Annual Organic Expense Growth (3-5 year time frame)
  - Drive operating leverage

- **Return On Invested Capital**
  - ≥10% Target on New Investments (3-5 year time frame)
  - Improve Enterprise-wide ROIC

- **Total Shareholder Return**
  - Double Digit TSR
    - Deliver strong EPS growth and dividend yield

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¹Revenue growth outlook assumes a stable market backdrop.
²Expense growth may vary depending upon a variety of factors, including our investment requirements, economic outlook and market conditions.
Clear And Transparent Capital Priorities

**Invest in Profitable Growth**
- Attractive ROIC significantly above cost of capital
- $\geq 10\%$ target on investments

**Grow Dividend as Earnings/FCF Grow**
- 35% Payout Ratio\(^1\)
- 2.0% Yield\(^1\)
- $0.44$ Quarterly dividend

**Maintain Investment Grade Status**
- Deleverage Debt reduction + EBITDA growth
- mid-2x (from >3x) by mid-2019

**Share Repurchases**
- Buybacks Primarily to offset dilution
- $196M Annualized average repurchases 2015-18\(^2\)

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\(^1\)Dividend payout based on 1Q18 dividend of $0.38 and three subsequent quarterly dividends of $0.44, divided by 2018 adjusted non-GAAP EPS of $4.84. Dividend yield calculated on 1/31/19 using annualized dividend of $0.44 per share.

\(^2\)Excludes $290 million in repurchases funded by sale of the Public Relations Solutions & Digital Media Services businesses. Including these repurchases, the average annual repurchase is $269 million since 2015.
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   - Market Technology and Information Services capitalize on secular dynamics to lead growth

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Appendix
## SUMMARY OF HISTORICAL FINANCIAL RESULTS

<table>
<thead>
<tr>
<th>NON-GAAP RESULTS(1) (US$ Millions, except EPS)</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Revenues</td>
<td>2,067</td>
<td>2,090</td>
<td>2,276</td>
<td>2,411</td>
<td>2,526</td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>1,137</td>
<td>1,114</td>
<td>1,224</td>
<td>1,271</td>
<td>1,320</td>
</tr>
<tr>
<td>Operating Income</td>
<td>930</td>
<td>976</td>
<td>1,052</td>
<td>1,140</td>
<td>1,206</td>
</tr>
<tr>
<td>Operating Margin (2)</td>
<td>45%</td>
<td>47%</td>
<td>46%</td>
<td>47%</td>
<td>48%</td>
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<tr>
<td>EBITDA (1)</td>
<td>998</td>
<td>1,052</td>
<td>1,140</td>
<td>1,236</td>
<td>1,306</td>
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<tr>
<td>EBITDA Margin (3)</td>
<td>48%</td>
<td>50%</td>
<td>50%</td>
<td>51%</td>
<td>52%</td>
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<tr>
<td>Net Income</td>
<td>542</td>
<td>581</td>
<td>619</td>
<td>681</td>
<td>811</td>
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<tr>
<td>DILUTED EPS</td>
<td>$3.13</td>
<td>$3.39</td>
<td>$3.67</td>
<td>$4.02</td>
<td>$4.84</td>
</tr>
</tbody>
</table>

1. Please refer to pages 39-41 for a reconciliation of U.S. GAAP to non-GAAP measures.
2. Operating margin equals operating income divided by net revenues.
3. EBITDA margin equals EBITDA divided by net revenues.
**EBITDA**  
Earnings Before Interest, Taxes, Depreciation and Amortization

<table>
<thead>
<tr>
<th>(US$ millions)</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. GAAP net income attributable to Nasdaq:</td>
<td>$414</td>
<td>$428</td>
<td>$106</td>
<td>$729</td>
<td>$458</td>
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<tr>
<td>Income tax provision</td>
<td>181</td>
<td>203</td>
<td>27</td>
<td>143</td>
<td>606</td>
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<tr>
<td>Net income from unconsolidated investees</td>
<td>—</td>
<td>(17)</td>
<td>(2)</td>
<td>(15)</td>
<td>(18)</td>
</tr>
<tr>
<td>Other investment income</td>
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<td>—</td>
<td>(3)</td>
<td>(2)</td>
<td>(7)</td>
</tr>
<tr>
<td>Net interest expense</td>
<td>111</td>
<td>107</td>
<td>130</td>
<td>136</td>
<td>140</td>
</tr>
<tr>
<td>Asset impairment charges</td>
<td>49</td>
<td>—</td>
<td>578</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Net loss attributable to noncontrolling interests</td>
<td>(1)</td>
<td>(1)</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Gain on the sale of businesses, net</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(33)</td>
</tr>
<tr>
<td>Gain on sale of investment security</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(118)</td>
</tr>
<tr>
<td><strong>U.S. GAAP operating income:</strong></td>
<td><strong>$754</strong></td>
<td><strong>$720</strong></td>
<td><strong>$836</strong></td>
<td><strong>$991</strong></td>
<td><strong>$1,028</strong></td>
</tr>
<tr>
<td>Non-GAAP Adjustments (1)</td>
<td>176</td>
<td>256</td>
<td>216</td>
<td>149</td>
<td>178</td>
</tr>
<tr>
<td><strong>Non-GAAP operating income:</strong></td>
<td><strong>$930</strong></td>
<td><strong>$976</strong></td>
<td><strong>$1,052</strong></td>
<td><strong>$1,140</strong></td>
<td><strong>$1,206</strong></td>
</tr>
<tr>
<td>Depreciation and amortization of tangibles (Nasdaq)</td>
<td>68</td>
<td>76</td>
<td>88</td>
<td>96</td>
<td>100</td>
</tr>
<tr>
<td><strong>EBITDA</strong></td>
<td><strong>$998</strong></td>
<td><strong>$1,052</strong></td>
<td><strong>$1,140</strong></td>
<td><strong>$1,236</strong></td>
<td><strong>$1,306</strong></td>
</tr>
</tbody>
</table>

(1) Please see slide 40 for reconciliation of U.S. GAAP operating income to non-GAAP operating income.
## OPERATING EXPENSES

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

<table>
<thead>
<tr>
<th>(US$ Millions)</th>
<th>1Q18</th>
<th>2Q18</th>
<th>3Q18</th>
<th>4Q18</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. GAAP operating expenses</td>
<td>$393</td>
<td>$346</td>
<td>$354</td>
<td>$404</td>
<td>$1,313</td>
<td>$1,370</td>
<td>$1,440</td>
<td>$1,420</td>
<td>$1,498</td>
</tr>
<tr>
<td>Amortization of acquired intangible assets</td>
<td>(28)</td>
<td>(28)</td>
<td>(27)</td>
<td>(26)</td>
<td>(69)</td>
<td>(62)</td>
<td>(82)</td>
<td>(92)</td>
<td>(109)</td>
</tr>
<tr>
<td>Merger and strategic initiatives</td>
<td>(10)</td>
<td>10</td>
<td>6</td>
<td>14</td>
<td>(81)</td>
<td>(10)</td>
<td>(76)</td>
<td>(44)</td>
<td>(21)</td>
</tr>
<tr>
<td>Restructuring charges</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(172)</td>
<td>(41)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Executive compensation</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(12)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Regulatory matters</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(6)</td>
<td>—</td>
</tr>
<tr>
<td>Reversal of value added tax refund</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(12)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Extinguishment of debt</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(11)</td>
<td>—</td>
<td>—</td>
<td>(10)</td>
</tr>
<tr>
<td>Sublease reserve</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(11)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Clearing default</td>
<td>—</td>
<td>—</td>
<td>(8)</td>
<td>(23)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(31)</td>
</tr>
<tr>
<td>Other</td>
<td>(2)</td>
<td>(3)</td>
<td>(2)</td>
<td>(11)</td>
<td>(4)</td>
<td>—</td>
<td>1</td>
<td>(3)</td>
<td>(17)</td>
</tr>
<tr>
<td>Total non-GAAP adjustments</td>
<td>$(40)</td>
<td>$(21)</td>
<td>$(43)</td>
<td>$(74)</td>
<td>$(176)</td>
<td>$(256)</td>
<td>$(216)</td>
<td>$(149)</td>
<td>$(178)</td>
</tr>
<tr>
<td>NON-GAAP operating expenses</td>
<td>$353</td>
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<td>$311</td>
<td>$330</td>
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<td>$1,224</td>
<td>$1,271</td>
<td>$1,320</td>
</tr>
</tbody>
</table>

Please see pages 42-43 for above footnotes.
## OPERATING INCOME

Reconciliation of U.S. GAAP to non-GAAP

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<thead>
<tr>
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<tr>
<td>Merger and strategic initiatives (2)</td>
<td>81</td>
<td>10</td>
<td>76</td>
<td>44</td>
<td>21</td>
</tr>
<tr>
<td>Restructuring charges (3)</td>
<td>—</td>
<td>172</td>
<td>41</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Regulatory matters (5)</td>
<td>—</td>
<td>—</td>
<td>6</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Executive compensation (6)</td>
<td>—</td>
<td>—</td>
<td>12</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Reversal of value added tax refund (8)</td>
<td>—</td>
<td>12</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Sublease reserve (9)</td>
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<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Other (10)</td>
<td>4</td>
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<td>(1)</td>
<td>3</td>
<td>17</td>
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<tr>
<td>Extinguishment of debt (11)</td>
<td>11</td>
<td>—</td>
<td>—</td>
<td>10</td>
<td>—</td>
</tr>
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<td>Clearing default (13)</td>
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<td>$1,206</td>
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</table>

Please see pages 42-43 for above footnotes.
## NET INCOME (LOSS) AND DILUTED EPS

### Reconciliation Of U.S. GAAP To Non-GAAP

<table>
<thead>
<tr>
<th>(US$ millions, except EPS)</th>
<th>1Q18</th>
<th>2Q18</th>
<th>3Q18</th>
<th>4Q18</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>U.S. GAAP NET INCOME (LOSS) ATTRIBUTABLE TO NASDAQ</strong></td>
<td>$177</td>
<td>$162</td>
<td>$163</td>
<td>$(44)</td>
<td>$414</td>
<td>$428</td>
<td>$106</td>
<td>$729</td>
<td>$458</td>
</tr>
<tr>
<td>Amortization expense of acquired intangible assets (1)</td>
<td>28</td>
<td>28</td>
<td>27</td>
<td>26</td>
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<td>62</td>
<td>82</td>
<td>92</td>
<td>109</td>
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<td>—</td>
<td>172</td>
<td>41</td>
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<td>—</td>
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<tr>
<td>Asset impairment charges (4)</td>
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<td>—</td>
<td>49</td>
<td>—</td>
<td>578</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Regulatory matters (5)</td>
<td>—</td>
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<td>—</td>
<td>—</td>
<td>—</td>
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<td>12</td>
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<tr>
<td>Executive compensation (6)</td>
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<td>12</td>
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<tr>
<td>Reversal of value added tax refund (8)</td>
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<td>—</td>
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<tr>
<td>Sublease loss reserve (9)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>11</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Other (10)</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>11</td>
<td>4</td>
<td>—</td>
<td>5</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>Extinguishment of debt (11)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>11</td>
<td>—</td>
<td>—</td>
<td>10</td>
<td>—</td>
</tr>
<tr>
<td>Gain on sale of businesses, net (12)</td>
<td>—</td>
<td>(41)</td>
<td>8</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(33)</td>
<td>—</td>
</tr>
<tr>
<td>Clearing default (13)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>8</td>
<td>23</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>31</td>
</tr>
<tr>
<td>Gain on sale of investment security (14)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(118)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(118)</td>
</tr>
<tr>
<td><strong>TOTAL NON-GAAP ADJUSTMENTS</strong></td>
<td>$40</td>
<td>$(20)</td>
<td>$51</td>
<td>$(44)</td>
<td>$225</td>
<td>$243</td>
<td>$800</td>
<td>$151</td>
<td>$27</td>
</tr>
<tr>
<td>Non-GAAP adjustment to the income tax (benefit) provision (15)</td>
<td>(8)</td>
<td>15</td>
<td>(17)</td>
<td>14</td>
<td>(97)</td>
<td>(90)</td>
<td>(314)</td>
<td>(70)</td>
<td>4</td>
</tr>
<tr>
<td>Impact of newly enacted U.S. tax legislation (16)</td>
<td>5</td>
<td>—</td>
<td>(4)</td>
<td>289</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(89)</td>
<td>290</td>
</tr>
<tr>
<td>Excess tax benefits related to employee share-based compensation (17)</td>
<td>(5)</td>
<td>—</td>
<td>—</td>
<td>(4)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(40)</td>
<td>(9)</td>
</tr>
<tr>
<td>Reversal of Swedish tax benefits (18)</td>
<td>—</td>
<td>41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>41</td>
</tr>
<tr>
<td>Reversal of Finnish tax benefits (19)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>27</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Adjustment to the income tax provision to reflect non-GAAP adjustments</td>
<td>(8)</td>
<td>56</td>
<td>(21)</td>
<td>299</td>
<td>(97)</td>
<td>(90)</td>
<td>(287)</td>
<td>(199)</td>
<td>326</td>
</tr>
<tr>
<td><strong>Total Non-GAAP Adjustments, net of tax</strong></td>
<td>32</td>
<td>36</td>
<td>30</td>
<td>255</td>
<td>128</td>
<td>153</td>
<td>513</td>
<td>(48)</td>
<td>353</td>
</tr>
</tbody>
</table>

### NON-GAAP NET INCOME ATTRIBUTABLE TO NASDAQ

| NON-GAAP NET INCOME ATTRIBUTABLE TO NASDAQ | $209 | $198 | $193 | $211 | $542 | $581 | $619 | $681 | $811 |

### U.S. GAAP diluted earnings (loss) per share

| U.S. GAAP diluted earnings (loss) per share | $1.05 | $0.97 | $0.97 | $(0.27) | $2.39 | $2.50 | $0.63 | $4.30 | $2.73 |

### Total adjustments from non-GAAP net income, above

| Total adjustments from non-GAAP net income, above | $0.19 | $0.21 | $0.18 | $1.53 | $0.74 | $0.89 | $3.04 | (0.28) | $2.11 |

### NON-GAAP DILUTED EARNINGS PER SHARE

| NON-GAAP DILUTED EARNINGS PER SHARE | $1.24 | $1.18 | $1.15 | $1.26 | $3.13 | $3.39 | $3.67 | $4.02 | $4.84 |

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1. Due to the net loss for the quarter ended December 31, 2018, the diluted earnings (loss) per share calculation excludes 3.2 million of employee stock awards as they were anti-dilutive. Please see pages 42-43 for above footnotes.
NON-GAAP ADJUSTMENTS FOOTNOTES

(1) 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.

(2) We have pursued various strategic initiatives and completed a divestiture and a number of acquisitions in recent years which have resulted in expenses which would not have otherwise been incurred. These expenses generally include integration costs, as well as legal, due diligence and other third party transaction costs and will vary based on the size and frequency of the activities described above.

(3) During 2016, we completed our 2015 restructuring plan. For the year ended December 31, 2016, restructuring charges primarily related to severance and other termination benefits, asset impairment charges, and other charges. For the year ended December 31, 2015, restructuring charges primarily related to the rebranding of our trade name, severance cost, facility-related costs associated with the consolidation of leased facilities and other charges.

(4) For the year ended December 31, 2016, we recorded a pre-tax, non-cash intangible asset impairment charge of $578 million related to the write-off of a trade name from an acquired business due to a continued decline in operating performance of the business during 2016 and a rebranding of our 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. Refer to the non-GAAP information section for further discussion of why we consider asset impairment changes to be a non-GAAP adjustment.

(5) During 2016, the Swedish Financial Supervisory Authority, or SFSA, completed their investigations of cybersecurity processes at our Nordic exchanges and clearinghouse. In December 2016, we were issued a $6 million fine by the SFSA as a result of findings in connection with its investigation. The SFSA’s conclusions related to governance issues rather than systems and platform security. This charge is recorded in regulatory expense in our Condensed Consolidated Statements of Income.

(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. This charge is recorded in compensation and benefits expense in our Condensed Consolidated Statements of Income.

(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, or VAT, 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) 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) For the three months and year ended December 31, 2018 and the three months ended September 30, 2018, other charges included litigation costs related to certain legal matters and are recorded in professional and contract services expense in our Condensed Consolidated Statements of Income (Loss). For the three months and year ended December 31, 2018, other charges also included certain charges related to a sales and use tax audit and VAT reserves which are recorded in general, administrative and other expense in our Condensed Consolidated Statements of Income (Loss). For the three months ended June 30, 2018, other relates to a charge associated with a sales and use tax audit, which related to prior periods. For the year ended December 31, 2017, other charge relates to wind down costs associated with an equity method investment that was previously written off, which is included in net income (loss) from unconsolidated investees in the Condensed Consolidated Statements of Income (Loss). For the year ended December 31, 2016, other charges primarily include 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. We recorded the net loss in net income (loss) from unconsolidated investees in the Condensed Consolidated Statements of Income (Loss).
NON-GAAP ADJUSTMENTS FOOTNOTES

(11) For the year ended December 31, 2017, in connection with the early extinguishment of our 5.25% senior unsecured notes and the $300 million repayment on our $400 million senior unsecured term loan facility due November 25, 2019, we recorded a charge of $10 million primarily related to a premium paid for early redemption. 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.

(12) In April 2018, we completed the sale of the Public Relations Solutions and Digital Media Services businesses. For the year ended December 31, 2018, we recognized a pretax net gain of $33 million which includes an $8 million post-closing working capital adjustment recorded during the three months ended September 30, 2018.

(13) For the year ended December 31, 2018, we recorded $31 million in expenses related to the clearing default that occurred in September 2018. For the three months ended December 2018, we recorded a $23 million charge associated with our capital relief program, where we will allocate capital back to default fund participants. The capital relief program is in addition to any funds to be recovered from the defaulting member. For the three months ended September 30, 2018, we recorded an $8 million loss related to the default of a Nasdaq Clearing member. These charges are recorded in general, administrative and other expense in our Condensed Consolidated Statements of Income.

(14) In December 2018, we sold our 5.0% ownership interest in LCH Group Holdings Limited for $169 million in cash. As a result of the sale, we recognized a pre-tax gain of $118 million ($93 million after tax).

(15) The non-GAAP adjustment to the income tax provision includes the tax impact of each non-GAAP adjustment. In certain periods the adjustment may include the recognition of previously unrecognized tax benefits associated with positions taken in prior years and/or the impact of state tax rate changes.

(16) For the three months and year ended December 31, 2018, we recorded an increase to tax expense of $289 million and $290 million, respectively. In the fourth quarter of 2018, we finalized the provisional estimate related to the Tax Cuts and Jobs Act, resulting in a reduction to deferred tax assets relating to foreign currency translation losses. For the three months ended September 30, 2018, we recorded a decrease to tax expense due to the remeasurement of certain deferred tax assets and liabilities. For the three months ended March 31, 2018, we recorded an increase to tax expense which reflects the reduced federal tax benefit associated with state unrecognized tax benefits. For the three months and year ended December 31, 2017, we recorded a decrease to tax expense primarily related to the remeasurement of our net U.S. deferred tax liability at the lower U.S. federal corporate income tax rate.

(17) The excess tax benefits related to employee share-based compensation reflect the recognition of income tax effects of share-based awards when awards vest or are settled. These tax benefits were recorded in the income statement as a result of the adoption of accounting guidance beginning January 1, 2017.

(18) For the three months ended June 30, 2018 and year ended December 31, 2018, we recorded a reversal of previously recognized Swedish tax benefits, due to unfavorable court rulings received by other Swedish entities during the year, the impact of which is related to prior periods.

(19) For the year ended December 31, 2016, we recorded a reversal of previously recognized Finnish tax benefits due to unfavorable tax ruling received during the second quarter of 2016, the impact of which is related to prior periods.
## ORGANIC REVENUE GROWTH

### Non-Trading Segments

<table>
<thead>
<tr>
<th>All figures in US$ Millions</th>
<th>Current Period</th>
<th>Prior-year Period</th>
<th>$M</th>
<th>%</th>
<th>$M</th>
<th>%</th>
<th>$M</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2018</strong></td>
<td>1,512</td>
<td>1,336</td>
<td>176</td>
<td>13%</td>
<td>113</td>
<td>8%</td>
<td>63</td>
<td>5%</td>
</tr>
<tr>
<td><strong>2017</strong></td>
<td>1,530</td>
<td>1,449</td>
<td>81</td>
<td>6%</td>
<td>59</td>
<td>4%</td>
<td>22</td>
<td>2%</td>
</tr>
<tr>
<td><strong>2016</strong></td>
<td>1,449</td>
<td>1,319</td>
<td>130</td>
<td>10%</td>
<td>53</td>
<td>4%</td>
<td>77</td>
<td>6%</td>
</tr>
<tr>
<td><strong>2015</strong></td>
<td>1,319</td>
<td>1,271</td>
<td>48</td>
<td>4%</td>
<td>70</td>
<td>6%</td>
<td>(22)</td>
<td>(2)%</td>
</tr>
<tr>
<td><strong>2014</strong></td>
<td>1,271</td>
<td>1,139</td>
<td>132</td>
<td>12%</td>
<td>46</td>
<td>4%</td>
<td>86</td>
<td>8%</td>
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</table>

### Market Services Segment

<table>
<thead>
<tr>
<th>All figures in US$ Millions</th>
<th>Current Period</th>
<th>Prior-year Period</th>
<th>$M</th>
<th>%</th>
<th>$M</th>
<th>%</th>
<th>$M</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2018</strong></td>
<td>958</td>
<td>881</td>
<td>77</td>
<td>9%</td>
<td>75</td>
<td>9%</td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td><strong>2017</strong></td>
<td>881</td>
<td>827</td>
<td>54</td>
<td>7%</td>
<td>(7)</td>
<td>(1)%</td>
<td>61</td>
<td>7%</td>
</tr>
<tr>
<td><strong>2016</strong></td>
<td>827</td>
<td>771</td>
<td>56</td>
<td>7%</td>
<td>(13)</td>
<td>(2)%</td>
<td>69</td>
<td>9%</td>
</tr>
<tr>
<td><strong>2015</strong></td>
<td>771</td>
<td>796</td>
<td>(25)</td>
<td>(3)%</td>
<td>23</td>
<td>3%</td>
<td>(48)</td>
<td>(6)%</td>
</tr>
<tr>
<td><strong>2014</strong></td>
<td>796</td>
<td>756</td>
<td>40</td>
<td>5%</td>
<td>21</td>
<td>2%</td>
<td>19</td>
<td>3%</td>
</tr>
</tbody>
</table>

### Total Company

<table>
<thead>
<tr>
<th>All figures in US$ Millions</th>
<th>Current Period</th>
<th>Prior-year Period</th>
<th>$M</th>
<th>%</th>
<th>$M</th>
<th>%</th>
<th>$M</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2018</strong></td>
<td>2,526</td>
<td>2,411</td>
<td>115</td>
<td>5%</td>
<td>188</td>
<td>8%</td>
<td>(73)</td>
<td>(3)%</td>
</tr>
<tr>
<td><strong>2017</strong></td>
<td>2,411</td>
<td>2,276</td>
<td>135</td>
<td>6%</td>
<td>52</td>
<td>2%</td>
<td>83</td>
<td>4%</td>
</tr>
<tr>
<td><strong>2016</strong></td>
<td>2,276</td>
<td>2,090</td>
<td>186</td>
<td>9%</td>
<td>40</td>
<td>2%</td>
<td>146</td>
<td>7%</td>
</tr>
<tr>
<td><strong>2015</strong></td>
<td>2,090</td>
<td>2,067</td>
<td>23</td>
<td>1%</td>
<td>93</td>
<td>4%</td>
<td>(70)</td>
<td>(3)%</td>
</tr>
<tr>
<td><strong>2014</strong></td>
<td>2,067</td>
<td>1,895</td>
<td>172</td>
<td>9%</td>
<td>67</td>
<td>4%</td>
<td>105</td>
<td>6%</td>
</tr>
</tbody>
</table>

1. Other impact includes acquisitions, divestiture and changes in FX rates.
DISCLAIMERS

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, operating income, and operating expenses, 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 at the end of this release. 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 earnings release. 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, non-GAAP operating income and non-GAAP operating expenses 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.

Foreign exchange impact: In countries with currencies other than the U.S. dollar, revenues and expenses are translated using monthly average exchange rates. Certain discussions in this release isolate 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.

Adopted accounting standards

ASU 2016-09: “Compensation —Stock Compensation (Topic 718)”
DISCLAIMERS

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, total shareholder returns, 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 acquisitions and other strategic, restructuring, technology, de-leveraging and capital allocation 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. Nasdaq undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise.

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