Investor Day

November 8, 2022
Introduction

Ed Ditmire
Senior Vice President, Investor Relations
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, non-GAAP net income attributable to Nasdaq, non-GAAP diluted earnings per share, non-GAAP operating income, non-GAAP operating expenses, and non-GAAP EBITDA, 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 https://ir.nasdaq.com/static-files/5fd92a92-4f46-4482-895e-4ca2236cbe90. 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 certain items do not reflect ongoing operating performance.

The recast segment financial information for the period 2017-2022 is available on our website, https://ir.nasdaq.com/static-files/5fd92a92-4f46-4482-895e-4ca2236cbe90, and were furnished on a Current Report on Form 8-K on November 8, 2022. The segment disclosures for the periods presented on the following slides are for illustrative purposes only. Nasdaq intends to publish its fourth quarter and full year 2022 results, as well as all future reporting, in alignment with the new corporate structure described on the following slides. These unaudited segment disclosures are based on information available to management as of today and are subject to change. The final recast segment disclosure will be available in Nasdaq’s Annual Report on Form 10-K for the year ended December 31, 2022.

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. In addition, other companies, including companies in our industry, may calculate such measures differently, which reduces their usefulness as a comparative measure. Investors should not rely on any single financial measure when evaluating our business. This information should be considered as supplemental in nature and is not meant as a substitute for our operating results in accordance with U.S. GAAP. We recommend investors review the U.S. GAAP financial measures included in this presentation. 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 those noted above, to assess our 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 that have less bearing on our ongoing operating performance.

Organic revenue and expense growth, organic change and organic impact are non-GAAP measures that reflect adjustments for: (i) the impact of period-over-period changes in foreign currency exchange rates; and (ii) the revenues, expenses and operating income associated with acquisitions and divestitures for the twelve month period following the date of the acquisition or divestiture. Reconciliations of these measures can be found in the appendix to this presentation.

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 presentation 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.

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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, ability to transition to new business models, taxes and achievement of synergy targets, (ii) statements about the closing or implementation dates and benefits of certain acquisitions, divestitures and other strategic, restructuring, technology, de-leveraging and capital allocation initiatives, including the stock split, (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, geopolitical instability arising from the Russian invasion of Ukraine, 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.

Website Disclosure

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.
# Investor Day Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 – 8:05</td>
<td>Introduction</td>
<td>Ed Ditmire, SVP Investor Relations</td>
</tr>
<tr>
<td>8:05 – 8:25</td>
<td>Strategic Overview</td>
<td>Adena T. Friedman, President &amp; CEO</td>
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<tr>
<td>8:25 – 8:55</td>
<td>Capital Access Platforms</td>
<td>Nelson Griggs, President</td>
</tr>
<tr>
<td>8:55 – 9:05</td>
<td>Break</td>
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<tr>
<td>9:05 – 9:35</td>
<td>Market Platforms</td>
<td>Tal Cohen, President</td>
</tr>
<tr>
<td>9:35 – 10:05</td>
<td>Panel #1: Leveraging Specific Technologies to Elevate Growth</td>
<td>Brad Peterson, Brenda Hoffman, Nick Ciubotariu, Ira Auerbach, Rob Norris</td>
</tr>
<tr>
<td>10:05 – 10:15</td>
<td>Break</td>
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<tr>
<td>10:15 – 10:45</td>
<td>Anti-Financial Crime</td>
<td>Jamie King, EVP</td>
</tr>
<tr>
<td>10:45 – 11:15</td>
<td>Panel #2: How Nasdaq Adds Value to Clients During Economic Downturns</td>
<td>Phil Mackintosh, Brendan Brothers, Oliver Albers, Jeff Thomas</td>
</tr>
<tr>
<td>11:15 – 11:35</td>
<td>Finance and Sustainability</td>
<td>Ann Dennison, EVP &amp; CFO</td>
</tr>
<tr>
<td>11:35 – 12:00</td>
<td>Q&amp;A with Adena Friedman &amp; Ann Dennison</td>
<td></td>
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</table>
Elevating Nasdaq’s Growth from a Successful Strategic Pivot

Adena T. Friedman
President and Chief Executive Officer
Nasdaq Kickoff Video
What You Will Hear Today

1. We have strategically pivoted the company and improved our performance.

2. Nasdaq is now positioned to capitalize on our largest secular growth opportunities.

3. Strong market position, differentiated capabilities, and a client focused alignment make Nasdaq more effective than ever.

4. Executing successfully enhances our performance potential.
Elevating Nasdaq's Growth from a Successful Strategic Pivot

1. Quality franchise & proven strategy
2. Expanding opportunities
3. Elevating performance
A Scaled Financial Technology Platform Aligned to Drive Growth

(LTM’22¹)

$3.6B
Net Revenue³

Capital Access Platforms
$1.8B
52%

Marketplace Technology
$1.4B
40%

Solutions Businesses²
$2.7B
75%

Anti-Financial Crime
$292M
8%

Market Platforms

Key Characteristics

9% / 8%
Solutions Businesses / Total Organic
Revenue Growth
(Average of 2017–YTD’22)

~$2B
Annualized Recurring Rev. (ARR)³
(3Q22)

35%
SaaS Revenues % of ARR
(3Q22)

>50%
Non-GAAP EBITDA Margin
(2017–YTD’22)

16%
Non-GAAP Diluted EPS CAGR
(2017–LTM’22)

11.5%
Non-GAAP Return on Invested Capital⁴
(LTM’22)

¹ LTM’22 net revenues represent last twelve months ending September 30, 2022 including Other.
³ For all defined terms, please see the appendix of this presentation.
⁴ See appendix for reconciliation of return on invested capital
<table>
<thead>
<tr>
<th>Core Purpose</th>
<th>Long-Term Vision</th>
<th>Value Proposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>We advance economic progress for all</td>
<td>We will be the trusted fabric of the world’s financial system</td>
<td>We deliver world-leading platforms that improve the integrity, transparency, and liquidity of the global economy</td>
</tr>
</tbody>
</table>
## Key Elements of Nasdaq’s Strategic Evolution Since 2017

### Key Elements

- Enhanced the performance of existing businesses by shifting R&D focus to high growth areas
- Released capital related to non-core businesses and re-allocated
- Invested in technology & analytics capabilities critical to address clients’ largest challenges

### Notable Results

- **Accelerated SaaS and cloud offerings, created a premier AFC division**
- **Divested PR and multimedia businesses, LCH ownership, Bwise, NFX and NFI**
- **Acquired eVestment, Cinnober, Solovis and Verafin**
- **Emphasized client success and innovation as key corporate values**
**Execution Against our Strategy Resulted in Strong and Improved Performance over the Last Five Years**

<table>
<thead>
<tr>
<th>Solutions Businesses</th>
<th>Non-GAAP Operating Margin¹</th>
<th>Non-GAAP Diluted EPS¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic Revenue Growth</td>
<td>&gt;2x Acceleration</td>
<td>+500 Basis points increase</td>
</tr>
<tr>
<td>2017</td>
<td>4%</td>
<td>2017</td>
</tr>
<tr>
<td>2018-YTD'22 Avg.</td>
<td>9%</td>
<td>LTM'22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$1.32</td>
</tr>
</tbody>
</table>

¹ Non-GAAP reconciliations can be found at: [ir.nasdaq.com/Income-Statement-Trend-Summary-and-GAAP-to-Non-GAAP-Reconciliation](http://ir.nasdaq.com/Income-Statement-Trend-Summary-and-GAAP-to-Non-GAAP-Reconciliation)
We Continue to Deliver Against Our Objectives

<table>
<thead>
<tr>
<th>Metric</th>
<th>Outlook (at 2020 Investor Day)</th>
<th>Since Investor Day 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solutions Businesses Organic Growth</td>
<td>6%-9%¹ Medium-term</td>
<td>13% average 2021-2022 YTD</td>
</tr>
<tr>
<td>SaaS % ARR</td>
<td>40%-50% by 2025</td>
<td>35% as of 3Q22 versus 29% in 3Q20</td>
</tr>
<tr>
<td>Annualized TSR</td>
<td>Double Digit (constant valuation)</td>
<td>23% TSR² (actual)</td>
</tr>
<tr>
<td>Enterprise Non-GAAP ROIC</td>
<td>≥10%</td>
<td>11.5% (LTM'22)</td>
</tr>
</tbody>
</table>

¹ Following the acquisition of Verifin in February 2021, Nasdaq's medium-term organic revenue growth outlook for the Solutions segments was raised from 5%-7% to 6%-9%.

² Actual TSR calculated from November 10, 2020 to October 31, 2022.
Agenda

Elevating Nasdaq’s Growth from a Successful Strategic Pivot

1. Quality franchise & proven strategy
2. Expanding opportunities
3. Elevating performance
Strategic Review in 2022 Yielded Several Key Results

Review Highlights

1. Prioritized megatrends
2. Identified key internal strengths
3. Recognized realignment of organization needed

Potential Impact

- Focused capital allocation strategy
- Better address large opportunities where Nasdaq has the right to win
- Amplify growth opportunities, simplify organization
The Three Prioritized, Industry-Shaping Megatrends Driving Growth Opportunities

Market Modernization
- Modern APIs, cloud, machine intelligence, and micro-service architecture.
- Digital assets mature as an asset class, with defined infrastructure and regulation.

Development of ESG Ecosystem
- ESG moves to measurable actions to satisfy consumers, regulators, investors, and employees.
- Governance and climate solutions give rise to new markets.

Anti-Financial Crime
- Emerging technologies facilitate more criminal disruption and require increasingly sophisticated anti-financial crime protection.
Our Realigned Organization: Three Segments Aligned to Megatrends, Simplifying Our Story and Driving Growth

**Market Platforms**
Modernizing markets to amplify liquidity
- Trading Services
- Marketplace Technology

**Capital Access Platforms**
Connecting Corporates and Investors
- Data & Listing Services
- Index
- Workflow & Insights

**Anti-Financial Crime**
Delivering a comprehensive Anti-Financial Crime Suite
- Fraud and Anti-Money Laundering (FRAML)
- Surveillance
More of Nasdaq Revenues Positioned in Attractive, High Growth Markets

<table>
<thead>
<tr>
<th>Business</th>
<th>SAM Penetration</th>
<th>SAM</th>
<th>TAM</th>
<th>Key Offerings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti Financial Crime</td>
<td>~4%</td>
<td>$7.6B</td>
<td>$18B</td>
<td>$292M • Verafin Fraud &amp; AML (FRAML) • Nasdaq Surveillance</td>
</tr>
<tr>
<td>Marketplace Technology</td>
<td>~7%</td>
<td>$3.3B</td>
<td>$12.7B</td>
<td>$226M • Market Infrastructure Operators • New Markets • Crypto Exchanges • Trade Execution Services</td>
</tr>
<tr>
<td>Workflows &amp; Insights</td>
<td>~5%</td>
<td>$10B</td>
<td>$30.4B</td>
<td>$460M • eVestment • Nasdaq Data Link • Nasdaq Fund Network • IR Insight &amp; Advisory Services • Boardantage • ESG Advisory • OneReport</td>
</tr>
<tr>
<td>Index</td>
<td>~17%</td>
<td>$2.9B</td>
<td>$6.3B</td>
<td>$501M • Nasdaq-100 • Thematics • SmartBeta</td>
</tr>
</tbody>
</table>

1. Total addressable market (TAM) based on consulting reports (including from Burton-Taylor and Opimas), public filings, and Nasdaq analysis. Serviceable addressable market (SAM) is based on internal estimates reflecting market opportunity of existing offerings.
2. Refers to the Market Infrastructure Technology business only; excludes Trade Management Services.
3. TAM/SAM refer to Workflow & Insights solutions within the Capital Access Platforms division.
Agenda

Elevating Nasdaq’s Growth from a Successful Strategic Pivot

1. Quality franchise & proven strategy
2. Expanding opportunities
3. Elevating performance
Elevating Nasdaq’s Growth Potential – Drivers

01. Business mix improvements
02. Expanding SaaS enabled technology
03. Unlocking opportunities from realigned organizational structure
DRIVER #1
Business Mix Improvements and Improved Scale in Key Growth Markets

~2x increase in mix of higher growth businesses

Enterprise Growth

2017¹
Net Revenues $2.4B
19%

Higher growth:  
- Market Technology  
- Index  
- Analytics

2022² LTM
Net Revenues $3.6B
42%

Higher growth:  
- Anti Financial Crime  
- Index  
- Workflow and Insights  
- Marketplace Technology³

¹ Reflect the corporate structure through 3Q22 reporting period and prior to the September 2022 announcement of new corporate structure.
² Reflects new corporate structure announced September 2022.
³ Reflects Market Infrastructure Technology excluding Trade Management Services.
Expanding Deployment of SaaS Model

**Annualized SaaS Revenues ($M)**

- **20%** CAGR
- **2016**: $244
- **2020**: $447
- **2022**: $699

**SaaS % ARR**

- **2016**: 21%
- **2020**: 29%
- **2022**: 35%
- **2025E**: >40%
- **2027E**: >50%

**Positioning to Deliver Quality SaaS Metrics:**

- **Gross Retention (LTM'22)**: 94%
- **Non-GAAP Gross Margin (LTM'22)**: 72%
- **Rule of 40 (LTM'22)**: 38%
Unlocking Growth Opportunities through the Realigned Organizational Structure

<table>
<thead>
<tr>
<th>Key Opportunities</th>
<th>Actions Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhanced Client Experience and Relationships</td>
<td>Created a simpler structure for clients to navigate while enhancing our ability to deliver value and deepen client relationships</td>
</tr>
<tr>
<td>Streamlined Sales Processes</td>
<td>Aligned product expertise with a global salesforce to deliver holistic client solutions and better identify value add opportunities</td>
</tr>
<tr>
<td>Focused Capital Allocation</td>
<td>Defined a focused capital allocation strategy to capitalize on megatrends</td>
</tr>
<tr>
<td>Increased Go-to-Market Agility</td>
<td>Brought technology, product, and marketing resources into the divisions, creating a nimbler product development and go-to-market process</td>
</tr>
</tbody>
</table>
Continuing to Drive Disciplined Growth

Solutions Businesses Medium Term Growth Outlook

9% Organic Revenue Growth (Average 2017-YTD’22)

Mid-single digits
5-7%
6-9%
7-10%

2017 2018-2020 2021-2022 Current

1 Revenue growth outlook assumes stable market backdrop. Note: Outlook in prior periods including 2017, 2018-2020 and 2021-2022 reflect the Solutions Segments, which excluded Trade Management Services. The current outlook for the Solutions Businesses includes Trade Management Services.
How We Measure the Success of Our Strategy

- **Organic Revenue Growth**<sup>1</sup>
  - 7-10% Solutions Businesses
    - (3-5 year time frame)

- **SaaS % ARR**
  - >50%
    - (4Q27E)

- **Return on Invested Capital**
  - ≥10% and >WACC
    - Total Enterprise
      - (Long-term outlook, with variation in short-term)

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<sup>1</sup> Growth outlook assumes stable market backdrop.
IN SUMMARY

Key Messages

1. We have strategically pivoted the company and improved our performance

2. Nasdaq is now positioned to capitalize on our largest secular growth opportunities

3. Strong market position, differentiated capabilities, and a client focused alignment make Nasdaq more effective than ever

4. Executing successfully raises our growth potential
Combining Successful Corporate and Investor Franchises to Expand Opportunities

Nelson Griggs
President, Capital Access Platforms
Agenda

1. Strong corporate and investor franchises
2. Leveraging key strengths
3. Key priorities going forward

Combining Corporate and Investor Franchises to Expand Opportunities
Capital Access Platforms (LTM’22)

- Index: $501M (27%)
- Data & Listing Services: $873M (48%)
- Workflow & Insights: $460M (25%)
- Revenue: $1,834M

Key Characteristics

- 12% Revenue CAGR (2017-LTM’22)
- $1,172M Annualized Recurring Rev. (ARR) (3Q22)
- $380M SaaS ARR (3Q22)
- $326M Licensed AUM-based Revenue (LTM’22)
- 59% Non-GAAP EBITDA Margin (LTM’22)
Capital Access Platforms Contributes to Nasdaq’s Strategic Framework

**Nasdaq**

**Core Purpose**
We advance economic progress for all

**Long-Term Vision**
We will be the trusted fabric of the world’s financial system

**Value Proposition**
We deliver world-leading platforms that improve the integrity, transparency and liquidity of the global economy

**Capital Access Platforms**

We enable economic growth through access to capital and transparency

Being the trusted partner for investment and corporate communities to make more informed decisions

Empower our clients to effectively navigate the capital markets, accelerate their sustainability goals, and drive governance excellence
Connecting Investors & Corporates Brings Unique Opportunities to Serve a Base of over 15,000 Clients

<table>
<thead>
<tr>
<th>Chief Executive Officer</th>
<th>Chief Financial Officer</th>
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</thead>
<tbody>
<tr>
<td>Investor Relations</td>
<td>Sustainability Officer</td>
</tr>
<tr>
<td>General Counsel</td>
<td>Corporate Secretary</td>
</tr>
<tr>
<td>Board of Directors</td>
<td></td>
</tr>
<tr>
<td>Fundraising &amp; Distribution</td>
<td>Chief Investment Officer</td>
</tr>
<tr>
<td>Product Development</td>
<td>Investment Consultants</td>
</tr>
<tr>
<td>Chief Data Officer</td>
<td>Portfolio Managers &amp; Research</td>
</tr>
</tbody>
</table>

Unmatched Corporate Business Servicing

>10,000
Private and Public Clients

Established Investment Business Servicing

>5,000
Institution and Investment Manager Clients
Our Position as Trusted Provider of Market Transparency Enables Us to Serve All Market Participants

<table>
<thead>
<tr>
<th>IPO / Capital Raising</th>
<th>Critical Market Information</th>
<th>Passive Investing</th>
<th>Derivative Products</th>
<th>Investment Solutions</th>
<th>Corporate Services</th>
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</thead>
<tbody>
<tr>
<td>• U.S. Listings</td>
<td>• Nasdaq Totalview</td>
<td>• Nasdaq 100</td>
<td>• Nasdaq 100 E-Mini &amp; Micros Futures</td>
<td>• eVestment Analytics</td>
<td>• Investor Relations Intelligence</td>
</tr>
<tr>
<td>• Nordic Listings</td>
<td>• Nasdaq Basic</td>
<td>• Nasdaq SmartBeta</td>
<td>• Nasdaq 100 Options</td>
<td>• Solovis Portfolio Analytics</td>
<td>• Governance Solutions</td>
</tr>
<tr>
<td>• Direct Listings</td>
<td>• Nasdaq Cloud API's</td>
<td>• Global Index Data Service</td>
<td>• Insurance Solutions</td>
<td>• Nasdaq Fund Network</td>
<td>• ESG Services</td>
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<td>• Nasdaq Dorsey Wright</td>
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<td>• Nasdaq Data Link</td>
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Significant Achievements Since 2020 Investor Day

Performance Highlights Over Last 2 Years

- **Revenues**: +15% CAGR
- **ARR**: +10% CAGR
- **Licensed AUM-based Revenues**: +35% CAGR
- **Operating Income**: +19% CAGR

Notable Accomplishments

- **21% increase in Nasdaq-listed operating companies**
- **34% increase in Market Data international revenue**
- **80+ New ETPs licensed our Indices globally**
- **29% increase in public companies buying two or more products**
- **9% growth in investor client base**

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1. Revenues, operating income, ARR and SaaS revenues calculated over two-year period comparing the last 12 months ended September 30, 2022 to the comparable 12-month period ended September 30, 2020. Capital Access Platform revenues and operating income for the 12-month period ended September 30, 2020 was $1,382 million and $740 million, respectively. Capital Access Platform ARR totaled $1,172 million at September 30, 2022 and $960 million at September 30, 2020.
Well-Positioned to Build on Success

Net Revenue

- 2017: $1.1B
- 2018: $1.2B
- 2019: $1.3B
- 2020: $1.4B
- 2021: $1.5B
- 2022 LTM: $1.8B

12% CAGR

Non-GAAP Operating Margin (%)

- 2017: 54%
- 2018: 55%
- 2019: 56%
- 2020: 57%
- 2021: 57%
- 2022 LTM: 57%

+300 bps

Non-GAAP Operating Income

- 2017: $0.6B
- 2018: $0.8B
- 2019: $1.0B
- 2020: $1.2B
- 2021: $1.3B
- 2022 LTM: $1.0B

14% CAGR
Agenda

Combining Corporate and Investor Franchises to Expand Opportunities

1. Strong corporate and investor franchises
2. Leveraging key strengths
3. Key priorities going forward
## Our Robust Data and Listings Business Create an Incredible Foundation

<table>
<thead>
<tr>
<th>Leading Listing Services Business</th>
<th>Leading Market Data Business</th>
</tr>
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<tbody>
<tr>
<td>79% U.S. IPO win rate during last 2-year period(^1)</td>
<td>Billions of end users worldwide</td>
</tr>
<tr>
<td>$464B market capitalization of switches last 2 years bringing 5-year total to $1.0T(^1)</td>
<td>75% increase in enterprise license clients</td>
</tr>
<tr>
<td>#1 In new listings for European IPOs during last 2 years(^1)</td>
<td>Introduced cloud delivery for 9 data products(^2)</td>
</tr>
</tbody>
</table>

### Data and Listing Services Revenue

- **7% CAGR**
- **$873M LTM**
- **$642M**
- **$710M**
- **$710M**
- **$761M**
- **$805M**
- **$873M**

Note: All stats presented for the 2-year period between September 30, 2020 and September 30, 2022.

\(^1\) Total switches from competing US exchanges for the period 1/1/2018 through 9/30/2022 excluding ETFs; Market value calculated based on day switch occurred.

\(^2\) Reflects the following products now offered via cloud delivery: Nasdaq Last Sale Plus, Nasdaq Basic, Nasdaq TotalView, Nasdaq Canada, Indexes, NFN, Consolidated Quotes and Trades, Over-the-Counter Bulletin Board, and Historical Data for U.S. listed instruments.
Our High-Profile Index Brand is Driving Exceptional Long-Term Growth

### High Quality Brand
- **$35B** increase in AUM tracking the Nasdaq-100® index family
- **12%** growth in licensed ETPs
- **Over 70%** of the Top 40 ETF sponsors are partners

### Leading Product Lineup
- **$311B** in AUM
- **$109B** total net inflows last 24 months
- **8%** Index Data revenue 2-year CAGR

**Index Revenue**

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue</th>
</tr>
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<tbody>
<tr>
<td>2017</td>
<td>$171M</td>
</tr>
<tr>
<td>2018</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td><strong>$501M</strong></td>
</tr>
</tbody>
</table>

**25% CAGR**

Note: All stats presented for the 2-year period between September 30, 2020 and September 30th, 2022.
Strong Brand Driving Higher Index Revenue Growth Compared to Industry

5 Year Index Revenue CAGR\(^1\)

<table>
<thead>
<tr>
<th>Industry Competitor 1</th>
<th>Industry Competitor 2</th>
<th>Industry Competitor 3</th>
<th>Nasdaq</th>
</tr>
</thead>
<tbody>
<tr>
<td>12%</td>
<td>13%</td>
<td>14%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Net Inflows\(^2\)

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Inflows</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>13</td>
</tr>
<tr>
<td>2020</td>
<td>46</td>
</tr>
<tr>
<td>2021</td>
<td>74</td>
</tr>
<tr>
<td>LTM'22</td>
<td>56</td>
</tr>
</tbody>
</table>

15% Average Organic Flow Rate\(^2\)

Growth in Futures Volumes\(^3\)

<table>
<thead>
<tr>
<th>Year</th>
<th>Growth in Futures Volumes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>149</td>
</tr>
<tr>
<td>2020</td>
<td>329</td>
</tr>
<tr>
<td>2021</td>
<td>387</td>
</tr>
<tr>
<td>LTM'22</td>
<td>532</td>
</tr>
</tbody>
</table>

\(^1\) 5-year revenue CAGR calculated between 2016 through 2021.
\(^2\) LTM'22 period through September 30, 2022; numbers in billions.
\(^3\) Options and futures contracts tracking Nasdaq indexes traded on the CME; LTM period through September 30, 2022; numbers in millions.
Bringing Transparency and Digitization to the Marketplace through Workflow & Insights

Allocate Capital
Asset Owners
Providing Asset Owners with real-time monitoring and analytics on invested capital

+740
Asset Owner clients globally
Serving 76% of the top 50 largest U.S. plans and 64% of the largest global plans

Invest Capital
Asset Managers
Supporting Asset Managers to win and retain more assets

+1,000
Asset Manager clients globally
+3,700
Asset Managers reporting funds in 52 countries

Raise Capital
Corporates
Enabling Corporates to connect with investor base and build sustainable businesses

Serving a corporate client base of approximately +6,500
Focused on improving workflow, data and insights on key marketplace trends
Client Experience Video

Los Angeles County Employees Retirement Association
Our Workflow and Insights Businesses Deliver Expanding Solutions to Investors and Corporates

- **Trusted Partner**
  - 9% Growth in Investor client base
  - 11% Growth in Corporate client base
  - >58 Average Net Promoter Score across service lines

- **Strong Growth Metrics**
  - 10% CAGR ARR growth
  - 83% SaaS revenue
  - 88% CAGR in new ESG services growth

---

Note: All growth comparisons presented for the 2-year period between September 30, 2020 and September 30, 2022.

1 Includes revenue growth from One Report, Metric, and CBE
2 Average amongst products reporting Net Promoter Score including eVestment, Data Link, NFN, BoardVantage, IR Insight, and Advisory Services.

Workflow and Insights Net Revenue

- $240M
- $460M

- 2017
- 2018
- 2019
- 2020
- 2021
- 2022 LTQ

15% CAGR
Client Experience Video

Crowdstrike
1. Strong corporate and investor franchises
2. Leveraging key strengths
3. Key priorities going forward
Positioned Ourselves Against Three Sizable Secular Growth Opportunities

Index\(^1\)

- $2.8B SAM
  - ESG $0.6B
  - $6.3B TAM

Workflow & Insights\(^2\)

- $9.2B SAM
  - ESG $3.5B
  - $30.4B TAM

ESG\(^3\)

- ESG Workflow & Insights $3.5B
- ESG Index $0.6B
- Carbon Markets $4.1B SAM
- $15.1B TAM

$36B+ TAM | $12B+ SAM | ~8% SAM Penetration

\(^1\) TAM represents projected industry-wide index revenues.

\(^2\) TAM represents the estimated market for solutions related to pre- and post-commitment workflows for allocators, distribution for asset managers, alternative data, private fund secondaries, and corporate services.

\(^3\) ESG TAM and SAM are a subset of the Index and Workflows & Insights TAM and SAM, Carbon Removals (Puro.earth) represents a growth opportunity for Market Platforms as the industry matures.
Capital Access Platforms Well Positioned to Capitalize on Industry Leading Trends

- Continued acceleration in passive investing
  - Capitalize on raised prominence of index franchise

- Rapid digitalization and the need for better workflow and transparency
  - Leveraging trusted relationships and market position to grow customer base

- Growing ESG needs and objectives
  - Harness synergies across service lines to expand ESG offerings
Helped by Raised Prominence of Nasdaq Index Franchise

**Initiatives**

- **Launch new indexes** helped by strong brand by licensing 60 unique, differentiated products
- **Continue releasing product line extensions** of Nasdaq 100® to support market adoption of key index benchmark
- **Capture the growing ESG opportunity** by understanding of ESG requirements and needs of investors

**Outcomes**

- ✓ Continue to lead the Index Industry in organic growth
- ✓ Continue to increase industry market share
- ✓ Increase diversification of revenue mix
Leveraging Trusted Relationships and Market Position to Grow Customer Base

**Initiatives**

- **Institutionalize client listening** to evolve and enhance our solutions across a growing portfolio of products and customer base
- **Accelerate product adoption upsells** with cross platform integrations and targeted marketing campaigns
- **Drive international logo expansion** leveraging deep relationships with corporates and investor base

**Outcomes**

- Double digit organic revenue growth
- Maintain leadership position and new products to market
- Increase products per client globally
Progress Towards Previous ESG Goals and Ambitions Going Forward

Revenue On Track to Reach $50M Target\(^1\)

Expanding Growth of ESG Services

- Regulatory tailwinds driving continued customer demand
- ESG Advisory services well positioned as client entry point
- Increasing subscription-based revenue from expanded ESG Reporting product offerings

---

\(^1\) ESG Revenue includes ESG Advisory, ESG Reporting Solutions (OneReport) and Board Advisory and Compliance Solutions (Center for Board Excellence and Q-Diligence).
Expanding Our ESG Revenue Scope to Capitalize on the ESG Opportunity

Enterprise ESG Initiatives

- Governance Solutions becoming more relevant as companies look to align ESG strategy with overall company strategy
- Become the leading platform for collecting, measuring, and reporting corporate ESG metrics
- Become a global leader in carbon removals through the Puro.earth platform
- Creating ESG index methodologies that allow clients to align to regulatory frameworks

Outcomes
Achieve $250M in ESG Revenue\(^1\) by 2027

$250M
Governance Solutions
Workflow Tools
ESG Advisory
Index
Carbon Removals

Capital Access Platforms
Market Platforms

$112M
Governance Solutions + Index + ESG Services\(^2\)

2022E
2027F

\(^1\) As the opportunity to provide ESG services to our customer base expands, we now included our Governance Solutions, Index, and Puro.earth platform in our total Nasdaq Enterprise ESG outlook

\(^2\) ESG services includes Workflow Tools, ESG Advisory, and Carbon Removals.
How We Will Measure Success

Medium-Term Organic Revenue Growth Outlook

<table>
<thead>
<tr>
<th>Data &amp; Listing Services</th>
<th>Index</th>
<th>Workflow &amp; Insights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Single Digit</td>
<td>Mid to High Single Digit</td>
<td>High Single to Low Double Digit</td>
</tr>
</tbody>
</table>

Capital Access Platforms

5% - 8%

1 Growth outlook assumes stable market backdrop.
Leading by Bringing Transparency to the Capital Markets

1. Strong customer base covering Corporates and Investment Managers

2. Division strategy aligned to industry leading trends

3. Clear objectives to extend service offerings to customers
Program will resume in 10 minutes
Enhancing Liquidity by Modernizing Markets

Tal Cohen
President, Market Platforms
Enhancing Liquidity by Modernizing Markets

1. A strong and consistent markets franchise
2. Clear vision for resilient markets
3. Key priorities going forward
At-A-Glance

Market Platforms (LTM'22)

- Trading Services: $864M (61%)
- Marketplace Technology: $556M (39%)

$1.4B Revenue

Capital Access Platforms
Market Platforms
Anti-Financial Crime

$3.6B

Key Characteristics

$1.4B LTM'22 Revenue; $503M ARR
8% Revenue CAGR (2017-LTM'22)
56% EBITDA Margin (LTM'22)
#1 Provider of Marketplace Technology
#1 Share in Nasdaq-listed equity trading (LTM'22)
#1 Share in U.S. multiply-listed equity options (LTM'22)
Creating an Aligned Division to Drive Scalable Growth

Unlocks Incremental Growth + Delivers More of Nasdaq to Clients + Drives Innovation

Marketplace Technology  North American Trading Services  European Trading Services  Digital Assets
Market Platforms Contributes to Nasdaq’s Strategic Framework

**Nasdaq**

**Core Purpose**
We advance economic progress for all

**Long-Term Vision**
We will be the trusted fabric of the world’s financial system

**Value Proposition**
We deliver world-leading platforms that improve the integrity, transparency and liquidity of the global economy

**Market Platforms**

We drive economies forward with innovative technology

We modernize markets to create sustainable and trusted financial networks

We architect and operate the world’s best markets
Material Growth, Consistent Financial Performance

Total Net Revenues

- 2017: $981M
- 2018: $1,012M
- 2019: $1,058M
- 2020: $1,111M
- 2021: $1,187M
- LTM '22: $1,420M

8% CAGR

Annual Recurring Revenues

- 2017: $395M
- 2018: $418M
- 2019: $440M
- 2020: $463M
- 2021: $485M
- LTM '22: $503M

6% CAGR

Operating Income

- 2017: $481M
- 2018: $498M
- 2019: $514M
- 2020: $530M
- 2021: $546M
- LTM '22: $742M

10% CAGR
Driving Alpha in a High Beta Environment, Outperforming Peers

Highest Market Share in Lit Trading of Primary Listings Amongst European Exchanges:

- Nasdaq: 73%
- Exchange 1: 69%
- Exchange 2: 68%
- Exchange 3: 64%

Largest Expansion In Share of Wallet of U.S. Transaction Revenues Between Major U.S. Exchanges:

- 2019:
  - Nasdaq: 18%
  - U.S. Competitor 1: 34%
  - U.S. Competitor 2: 48%

- LTM'22:
  - Nasdaq: 19%
  - U.S. Competitor 1: 30%
  - U.S. Competitor 2: 51%

---

1. Share of wallet reflects transaction revenue share of publicly reported U.S. equities and U.S. options (multiply-listed) companies.
2. Reflects the YTD'22 period ended September 30, 2022.
Significant Achievements Since 2020 Investor Day

Performance Highlights Over Last 2 Years

- **Revenues**: +8% CAGR
- **ARR / SaaS ARR**: +5% / +19% CAGR
- **Options Proprietary Products Revenue**: +38% CAGR
- **Operating Income**: +9% CAGR

Notable Accomplishments

- **Launched Second U.S. options market on Global Derivatives Platform, deployed on AWS Outposts**
- **15% Expansion of Marketplace Technology customer base**
- **Delivered Record trading revenues and margin**
- **Launched Nasdaq Digital Assets Business**

---

1 Revenues, operating income, ARR and SaaS revenues calculated over two-year period comparing the last 12 months ended September 30, 2022 to the comparable 12-month period ended September 30, 2020. Market Platforms revenues and operating income for the 12-month period ended September 30, 2020 was $1,222 million and $627 million, respectively. Market Platforms ARR totaled $503 million at September 30, 2022 and $457 million at September 30, 2020.
Agenda

Enhancing Liquidity by Modernizing Markets

1. A strong and consistent markets franchise
2. Clear vision for resilient markets
3. Key priorities going forward
Shaping Markets Of The Future

<table>
<thead>
<tr>
<th>Innovation</th>
<th>Partner with Clients</th>
<th>Unique Experience and Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evolve our technology into a modern, cloud-native blueprint and standardize the infrastructure of the world’s markets</td>
<td>Client-centric approach, meeting the needs today and tomorrow of market infrastructure operators and market participants</td>
<td>Ability to lead the industry on its exciting transition to future markets</td>
</tr>
</tbody>
</table>

- Embrace frontier technologies to solve client problems
- Extensive experience moving capital markets (data) to the cloud
- Full value chain coverage enables us to shape the markets of tomorrow

Unified Vision:
Modernizing markets to create sustainable and trusted financial networks
Well Positioned to Meet Expanding, Evolving Needs of External Market Operator Clients

Growth Drivers

- Post-COVID acceleration of investments into modernization and digitalization
- Broader adoption of advanced technologies require reevaluating operating models
- Emergence of new markets that are cloud native increases accessibility and drives evolving client needs
- Elevated activity and heightened volatility increases focus on market risks and growing demand for resilient, scalable risk management technology
Nasdaq's Own Marketplaces Leveraging Strong Demand Tailwinds

U.S. Equity Options to U.S. Equities Volume Ratio

<table>
<thead>
<tr>
<th>Year</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>14%</td>
</tr>
<tr>
<td>2007-10</td>
<td>15%</td>
</tr>
<tr>
<td>2011-14</td>
<td>23%</td>
</tr>
<tr>
<td>2015-18</td>
<td>22%</td>
</tr>
<tr>
<td>2019-'22YTD</td>
<td>29%</td>
</tr>
</tbody>
</table>

Key Growth Drivers Since December 2019

<table>
<thead>
<tr>
<th>Growth Driver</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. and Nordic Equities Market Capitalization</td>
<td>+51%²</td>
</tr>
<tr>
<td>Nasdaq-listed shares outstanding</td>
<td>+72%</td>
</tr>
<tr>
<td>Nasdaq-listed companies</td>
<td>+26%</td>
</tr>
<tr>
<td>Swedish Household Equity Ownership</td>
<td>+20%³</td>
</tr>
</tbody>
</table>

1. Ratio reflects Equity Options Contracts multiplied by 100 and divided by U.S. Cash Equity volume
2. Source: World Federation of Exchanges and Nasdaq Data from 2019 to 2021
Enhancing Liquidity by Modernizing Markets

1. A strong and consistent markets franchise
2. Clear vision for resilient markets
3. Key priorities going forward
Top Priorities to Drive Growth

- Driving Marketplace Technology to Sustainable Organic Growth
- Advancing the Market Ecosystem of the Future
- Establishing and Scaling High Potential Businesses
Driving Marketplace Technology to Sustainable Growth

- Develop deeper customer partnerships
- Product portfolio rationalization
- Remodel "Client Success" to service an expanding global footprint
- Product engineering efficiency

Outcomes

- Best-in-class product leadership
- Enhanced client success
- Increase in share of SaaS revenues
- Improvement in EBITDA margin
Advancing the Market Ecosystem of the Future

**Initiatives**

1. Migrate Nasdaq markets to advanced technology buoyed by AWS partnership
2. Flexibility, choice, and on demand capacity
3. Accelerate customer transformation from on-prem to SaaS & Managed Solutions

**Outcomes**

ARR growth
Increase in SaaS Revenues
**Establishing and Scaling High Potential Businesses**

### Digital Assets
- As institutional adoption accelerates, well positioned to capture growth
- Prioritized custody and liquidity capabilities to address industry challenges around connectivity, availability and efficiency
- Establish end-to-end solution that leverages Nasdaq’s existing technology to deliver Institutional grade scale and resiliency
- Greater regulatory oversight viewed as a competitive tailwind

### Carbon Markets
- Establish Puro.earth as the global Standard and Registry for engineered carbon removals
- Build upon first to market with new methodologies in frontier removal processes
- Offer Carbon Market Platform via Marketplace Technology
- Global carbon leadership key component of Nasdaq’s overall ESG strategy

---

1. Serviceable addressable market (SAM) based on consulting reports and Nasdaq analysis on growth potential
How We Will Measure Success

Organic Growth in Marketplace Technology Revenues\(^1\)  
+3–5% Medium-term outlook\(^2\)

SaaS Revenue  
>2x By 2025

Revenue from New Growth Initiatives\(^3\)  
>$60M By 2025

---

1 Under the new Divisional structure, Marketplace Technology will include the Trade Management Solutions and Market Infrastructure Technology businesses.
2 Growth outlook assumes stable market backdrop.
3 Growth initiatives include Digital Assets, Carbon, Cloud and Options Proprietary products.
IN SUMMARY

Continuing to Modernize Markets Around the World

1. Strong, consistent financial profile
2. Supporting Nasdaq's broader business strategy through innovative solutions and adoption of new technologies
3. Unlocking global, scalable revenue opportunities
Q&A

Market Platforms
Panel #1

Leveraging Specific Technologies to Elevate Growth
Program will resume in 10 minutes
Establishing a New Leader in High Growth Anti-Financial Crime

Jamie King
Executive Vice President, Anti-Financial Crime
A New Leader in High Growth Anti-Financial Crime

1. A strong Anti-Financial Crime franchise

2. Expanding opportunities in fast-growing market

3. Our strategy to increase market share
AFC Contributes to Nasdaq's Strategic Framework

**Nasdaq**

**Core Purpose**
We advance economic progress for all

**Long-Term Vision**
We will be the trusted fabric of the world's financial system

**Value Proposition**
We deliver world-leading platforms that improve the integrity, transparency and liquidity of the global economy

**Anti-Financial Crime**

We protect the world from financial crime

We protect all the world's financial interactions

We provide SaaS solutions for Anti-Money Laundering, Fraud Detection, and Trade / Market Surveillance
We Have Built a Global Anti-Financial Crime Leader

Anti-Financial Crime

Fraud Detection & AML
- Strong cloud expertise
- Analyzing data patterns across over 2,200 financial institutions
- SaaS processes at scale: nurture and customer success

Surveillance
- Impressive global sales and service organization
- Experience in the largest institutions in the world
- Technology solutions running at immense scale

A Global Leader in AFC

With unique and differentiated cloud-offering to increase penetration in large banks and key markets
Comprehensive Anti-Financial Crime (AFC) Suite

Anti-Financial Crime

Suites
- Fraud Detection
- Anti-Money Laundering (AML)
- Surveillance

Products
- Payments Fraud Detection
- Deposit/Check Fraud Detection
- Online Account Takeover Detection
- Money Laundering Detection
- Sanctions Screening
- Regulatory Reporting
- Trade Surveillance
- Market Surveillance

Platform Capabilities
- Alert & Case Management
- Intelligent Investigations
- Enterprise Reporting
- Collaboration, Data Sharing & Peer Analytics
- Data Integrations: Batch & Real-time
World Class SaaS Business

Anti-Financial Crime (LTM’22)

- Surveillance: $128M, 44%
- Revenue: $292M
- Verafin: $164M, 56%

$320M Signed ARR (3Q22)

$295M Annual Recurring Revenue (ARR) (3Q22)

17% Revenue CAGR\(^1\) (2020-LTM’22)

46 Rule of 40\(^2\) (LTM’22)

230 Surveillance Clients (Global) (Q322)

2,241 Verafin Clients (North America) (Q322)

---

\(^{1}\) Nasdaq acquired Verafin in February 2021; 2020 pro forma are Non-US GAAP (Verafin 2020 results in accordance with ASPE) and assume Verafin included in AFC for all of 2020.

\(^{2}\) Excludes the impact of the deferred revenue write-down related to the acquisition of Verafin.
Significant Product and Customer Growth In Last Two Years

Surveillance, Fraud Detection and AML: Since 2020

Product Enhancements

- Payments Fraud Proof of Concept Evaluations for Large Banks
- Point Solutions for Tier 1
- Digital Asset Solutions

Customers¹

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>3Q22</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2,246</td>
<td>2,471</td>
</tr>
</tbody>
</table>

6% CAGR

Revenue¹

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>LTM '22</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$221M</td>
<td>$292M</td>
</tr>
</tbody>
</table>

¹ Nasdaq acquired Verafin in February 2021; 2020 pro forma are Non-US GAAP (Verafin 2020 results in accordance with ASPE) and assume Verafin included in AFC for all of 2020
A New Leader in High Growth Anti-Financial Crime

1. A strong Anti-Financial Crime franchise
2. Expanding opportunities in fast-growing market
3. Our strategy to increase market share
Financial Crime is a Large and Difficult Problem

Substantial Investment to Fight Financial Crime\(^1\)
- Globally
- ~$214B
- 2021

Immense Magnitude of Funds Laundered\(^2\)
- Globally
- ~$4T
- per year

Miniscule Amount of Funds Recovered\(^2\)
- Less than
- 1%
- annually

---

Financial Crime is Growing Rapidly

**Attempted Wire Fraud by Value**

- **Elderly Persons**
  - Increase: +57%
  - Basis Points: 8.68 (Q1 2022) - 5.52 (Q1 2021)

- **Businesses**
  - Increase: +119%
  - Basis Points: 0.31 (Q1 2022) - 0.68 (Q1 2021)

**Market Abuse**

- Increase: +15%
- Reports: ~78 (2020) - 90 (2021)

**Cryptocurrency**

- Increase: +30%
- Value: ~6.6B (2020) - ~8.6B (2021)

---

Regulations are getting tougher.

**Fraud Consumer Protection and Payments Innovation**
- Potential liability shift in consumer fraud scams such as Authorized Push Payment (APP) fraud
- Move to Faster Payments and cross-border payments creates opportunities

**Regulations and Enforcement**
- AML Act of 2020 and Corporate Transparency Act (U.S.)
- Focus on spoofing and related instrument detection (OCC)
- Economic Crime and Corporate Transparency Bill (U.K.)
- Increasing investigations and enforcement actions by Securities Exchange Commission (SEC)

**Digital Asset Regulation**
- Regulatory uncertainty for cryptocurrency ecosystem
- MAS, SFC, CFTC, MiCa focus on crypto, as well as pump-and-dump
- Potential changes to Travel Rule and record keeping requirements

OCC: Office of the Comptroller of the Currency; MAS: Monetary Authority of Singapore; SFC: Securities and Futures Commission; CFTC: Commodity Futures Trading Commission; MiCA: Markets in Crypto-Assets
Client Testimonial Video

First National Bank of Omaha
Large SAMs and Strong Position in Segments

AFC

~$18B TAM | $7.6B SAM | ~4% Market Position

Fraud Detection + AML

3% Market Position

SEGMENTS:
- Banks & Credit Unions
- $1T
- $200B–1T
- $50B–200B
- $10B–50B
- $200M–10B
- <$200M
- Crypto

Market Surveillance

12% Market Position

SEGMENTS:
- T1-2 Exchanges
- T3-4 Exchanges
- Regulators
- Central Banks
- ATS/SEF/MTF
- Carbon/ESG
- Crypto

Trade Surveillance

15% Market Position

SEGMENTS:
- Uber T1 Brokers
- T1-2 Brokers
- T3-4 Brokers
- Systematic HFT
- Retail Brokerage Specialist
- FCMs
- Energy
- Crypto Natives

1 Total addressable market (TAM) is based on total tech spend from consulting reports including Oliver Wyman, Chartis and Celent, and internal analysis of the total opportunities in the market.

2 Serviceable addressable market (SAM) is internal estimate reflecting value of current market opportunities based on product fit relative to total addressable market.

Agenda

A New Leader in High Growth Anti-Financial Crime

1. A strong Anti-Financial Crime franchise
2. Expanding opportunities in fast-growing market
3. Our strategy to increase market share
We Bring A Powerful Differentiated Approach...

### Leading Customer Network
- 2,200 Fraud Detection and AML customers in core market
- 230 Surveillance customers including Tier 1 banks, exchanges and regulators
- Existing relationships with Tier 1 banks
- Significant reference power in adjacent segments to drive opportunities in key markets
- Low customer churn

### Unmatched SaaS / Cloud-Based Solutions
- One product approach by building solutions for one market creates value for many
- Unmatched scalability and responsiveness in the cloud
- Unique consortium data approach for 10x value in fraud effectiveness and AML efficiency
- Differentiate with fiat + crypto monitoring for digital assets AFC offering

### Data-Driven Approach and Integration Expertise
- Data integration and standardization expertise
- Rich data from financial services data systems, core banking, exchange drop copies, market data, open source and third-party sources
- Data lake with immense set of rich data provides unprecedented analytical capability
- Unique counterparty data and payee analysis derived from rich data from across the cloud
... Provides Opportunity to Grow Share in Markets with Outdated Technology

- On-premise, outdated legacy systems
- Disconnected point solutions
- Inefficient manual processes
- Ineffective detection approaches
- High operational costs

Traditional Financial Services & Digital Asset Space
Clear Priorities to Advance Position in Large, Growing Market

1. Continue growth in smaller bank FRAML opportunities
2. Unlock large-bank opportunity for Fraud Detection & AML
3. Invest to grow in key Surveillance segments
4. Expand solutions with joint digital asset offering
Continue Growth in Smaller Bank FRAML Opportunities

Initiatives

- Drive **operational efficiency** in areas of Fraud Detection and AML operations, including lead generation and client onboarding
- Capitalize on **key growth opportunities** within segments
- **Enhance offerings and adoption** for existing customers to drive increased wallet share
- Continue to **increase customer base** and leadership in smaller bank segment

One Product Approach for Value and Coverage

- Cloud platform enables a build once and deploy-to-many approach
- Ensures proactive response and comprehensive coverage for emerging threats and trends
- Significant opportunity for new acquisitions
Unlock Large-Bank Opportunity for Fraud Detection & AML

Initiatives

- Leverage Cloud expertise as large banks embrace move away from on-premise systems
- Disruptive technology and approach for fraud detection that significantly improves effectiveness
- Expand into global Tier 1s with differentiated fraud product offering: consortium data approach to payments fraud
- Move towards a unified platform for AFC: fraud detection, AML and surveillance in one platform – a unique offering in a fragmented marketplace

Early Successes with Tier 1-2 Banks
Proof of Concept Evaluations

Bank A: Wire Fraud
50% reduction in false positive alerts

Bank B: Business Email Compromise Scams
25% reduction in false positive alerts and
2.5x improvement in value of fraud detected
Invest to Grow in Key Surveillance Segments

Initiatives

- Drive increased sales and marketing engagement and scale teams to increase sales funnel
- Advance detection of manipulative behaviors in related instruments
- Develop a consolidated offering that aligns with needs of lower tier segments
- Finalize Surveillance transformation initiatives for cloud migration, new alerting service and new workbench platform

Accelerate growth in Surveillance

- Strong segment focus will drive new customer growth:
  - Tier 1 - Tier 3 Banks
  - Retail Brokerages
  - Systematic Buy-Side firms

- Build upon strong community of over 230 customers including Tier 1 banks, exchanges and regulators

- Drive surveillance effectiveness & efficiency through enhanced detection coverage and reduced false positive rates.
Expand Solutions with Joint Digital Asset Offering

Initiatives

- Leverage the **differentiated strength of fiat + crypto monitoring** across a growing market
- Position AFC as unique all-in-one offering to digital asset ecosystem
  - analytics, case management, reporting
- Further **expand digital asset product capabilities** for Surveillance and AML
- Execute on **joint marketing initiatives** including thought leadership and lead generation

AFC Suite
for Digital Assets

- Purpose-built, cloud-based holistic suite of solutions
- Total and unmatched coverage for traditional finance (fiat) + cryptocurrency
- Deep-domain expertise in AML, Fraud Detection and Surveillance
Strong Growth Outlook

3-5 Year Revenue Growth Outlook:

Anti-Financial Crime

Revenue CAGR

18-23%

1 Revenue and expense growth outlooks assume stable market backdrop.
Leading the Way in AFC

1. A strong franchise and global leader in Anti-Financial Crime

2. Pursuing expanding opportunities in a fast-growing market

3. We have developed clear strategies to expand market share
Q&A

Anti-Financial Crime
Panel #2

How Nasdaq Adds Value to Clients During Economic Downturns
Supporting and Measuring the Success of Our Strategy

Ann Dennison
Executive Vice President and Chief Financial Officer
1. Strong performance

2. Proven resiliency

3. Capital allocation

4. Clear ambitions
<table>
<thead>
<tr>
<th>Category</th>
<th>2017</th>
<th>LTM'22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Revenue</td>
<td>$2.4B</td>
<td>$3.6B</td>
</tr>
<tr>
<td>Non-GAAP Operating Margin</td>
<td>9% CAGR</td>
<td>+500 BPS</td>
</tr>
<tr>
<td>Non-GAAP Diluted EPS</td>
<td>$1.32</td>
<td>$2.67</td>
</tr>
<tr>
<td>Non-GAAP Return on Invested Capital</td>
<td>7.8%</td>
<td>11.5%</td>
</tr>
</tbody>
</table>
Strategic Pivot Has Raised Our Performance Potential

Solutions Businesses Organic Revenue Growth

<table>
<thead>
<tr>
<th>Year</th>
<th>Pre-pivot baseline</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>YTD'22</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>4%</td>
<td>7%</td>
<td>6%</td>
<td>9%</td>
<td>14%</td>
<td>11%</td>
</tr>
</tbody>
</table>

2x+ Increase in Organic Revenue Growth Rate

<table>
<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018-YTD'22 Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Delivering Strong Returns to Shareholders

Annualized Total Shareholder Return
Since January 1, 2017
- S&P 500: 12%
- Western Exchanges\(^1\): 15%
- Expanded Tech-Software ETF\(^2\): 17%
- NDAQ: 21%
- Info-Business Services\(^3\): 24%

Since NDAQ’s 2020 Investor Day
- Expanded Tech-Software ETF\(^2\): -7%
- S&P 500: 6%
- Info-Business Services\(^3\): 10%
- Western Exchanges\(^1\): 15%
- NDAQ: 23%

Note: Annualized total shareholder return, or TSR, calculated from the start of 2017 to October 31, 2022, and 11/10/20 to October 31, 2022, respectively. Source: FactSet.

\(^1\) Western Exchange peers include equal weighted average of CBOE, CME, ICE, DB1-DE, LSEG-GB, ENX-FR, and X-CA.

\(^2\) iShares Expanded Tech-Software Sector ETF (symbol IGV).

\(^3\) Info-Business Services reflects equal weighted average of BR, FDS, INTU, MSCI, MCO, SPGI, SSNC and VRSK.
Driving Excellence Across Everything We Do

Key Pillars

E
Minimizing our environmental footprint

S
Solidifying our position as a destination for the best talent

G
Advancing governance best practices

Driving Change

Carbon neutral since 2018

GHG reduction targets approved by The Science Based Targets initiative (SBTi):
- Reduce Scope 1 and Scope 2 GHG emissions 100% by 2030¹
- Reduce absolute Scope 3 GHG emissions 95% by 2050¹

Increasing representation of women and under-represented minorities

Increasing the percentage of diverse suppliers

Increasing our board diversity

¹ Reduction versus base year of 2021.
**Earning Exceptionally Strong ESG Reputation**

<table>
<thead>
<tr>
<th>Notable Recognition</th>
<th>Leading Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Included in S&amp;P DJSI (6th consecutive year)</td>
<td>MSCI ESG Rating AA “Leader” C-AAA Scale</td>
</tr>
<tr>
<td>Named to Seramount’s 100 Best Companies</td>
<td>Sustainalytics Risk Ratings 12.1 “Low Risk” 100-1 Scale</td>
</tr>
<tr>
<td>Best Place to work for LGBTQ+ Equality</td>
<td>ISS Governance #1 Rating 10-1 Scale, 1 = Best</td>
</tr>
<tr>
<td>Included in Bloomberg GEI Diversity Index</td>
<td>Ecovadis Gold Medal designation 95th percentile</td>
</tr>
</tbody>
</table>

**Building Positive Consensus**

Nasdaq in top 5% of S&P 500 constituents to have earned leading assessments from each of MSCI, Sustainalytics and ISS\(^1\)

---

\(^1\) Reflects S&P 500 constituents with MSCI ESG Rating of AA or AAA; ISS Governance QualityScore of 1 or 2; and Sustainalytics ESG Risk Rating of <20 (Low or Negligible Risk)
1. Strong performance
2. Proven resiliency
3. Capital allocation
4. Clear ambitions
Nasdaq’s Businesses Are Resilient

High % Net Revenues from Solutions Businesses

Trading Services

25%

<15%
Revenues Directly Tied to Market Values

75%

Solutions Businesses

Low EBITDA Volatility

1 Versus Western Exchanges

1 EBITDA standard deviation reflects the trailing eight semi-annual fiscal reporting periods, divided by the absolute value of the average of EBITDA over the same period. EBITDA reflects operating income plus depreciation and amortization. Source: Bloomberg and company reports as of last disclosed period.

2 Western exchanges include CBOE, CME, ICE, DB1-DE, LSEG-GB, ENX-FR, and X-CA.
### Responding to Today’s Unique Environment

<table>
<thead>
<tr>
<th>Key Issues</th>
<th>Actions Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation</td>
<td>• Responded to ensure continued high retention</td>
</tr>
<tr>
<td></td>
<td>• Built into 2022 expense guidance</td>
</tr>
<tr>
<td>Possible economic recession</td>
<td>• Client driven focus on sales and retention</td>
</tr>
<tr>
<td></td>
<td>• Calibrating staffing needs with client demand</td>
</tr>
<tr>
<td>Rising interest rates</td>
<td>• Termed out debt maturities</td>
</tr>
<tr>
<td></td>
<td>• Refinanced debt in advance of rising rates</td>
</tr>
</tbody>
</table>

### Near-Term Sensitivity

- 1%-2% potential impact to expense growth
- 2%-3% of inflation related expense growth can be absorbed by product pricing adjustments
- Meaningful variability in transactional revenue
- Higher likelihood of lower Solutions Businesses organic growth in short-term
- Very minimal exposure to floating rate debt
- New debt to fund incremental M&A would be subject to current market rates
1. Strong performance
2. Proven resiliency
3. Capital allocation
4. Clear ambitions
Strong and Consistent Cash Generation Engine

Free Cash Flow\(^1\)
(Ex. Section 31 fees and Verafin structuring items) in millions

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>$926</td>
</tr>
<tr>
<td>2019</td>
<td>$822</td>
</tr>
<tr>
<td>2020</td>
<td>$1,007</td>
</tr>
<tr>
<td>2021</td>
<td>$1,349</td>
</tr>
<tr>
<td>LTM'22</td>
<td>$1,430</td>
</tr>
</tbody>
</table>

12% CAGR

Free Cash Flow Conversion

106%

FCF excluding Sec 31 Fees and Verafin structuring items compared to non-GAAP Net Income (2018-YTD'22)

---

\(^1\) Free cash flow defined as cash flow from operations less capital expenditures, net of the change in Section 31 fees receivables and excludes the impact of Verafin related tax and structuring items. Please see the appendix for a reconciliation of cash flows.
Clear, Consistent and Proven Capital Allocation Principles

<table>
<thead>
<tr>
<th>Invest to Support Growth</th>
<th>Consistent Dividend Growth</th>
<th>Share Repurchase Program</th>
<th>Investment-Grade Debt Issuer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategically aligned</td>
<td></td>
<td></td>
<td>Manage leverage</td>
</tr>
<tr>
<td>Enhance enterprise</td>
<td>35-38%</td>
<td>Buyback primarily to</td>
<td></td>
</tr>
<tr>
<td>performance</td>
<td></td>
<td>offset dilution</td>
<td></td>
</tr>
<tr>
<td>Attractive returns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≥10% and &gt;WACC</td>
<td>10%</td>
<td>~$175M</td>
<td>Maintain</td>
</tr>
<tr>
<td>Nasdaq enterprise</td>
<td></td>
<td></td>
<td>Investment-grade</td>
</tr>
<tr>
<td>ROIC long-term</td>
<td></td>
<td></td>
<td>issuer status</td>
</tr>
</tbody>
</table>

1 Dividend payout ratio calculated annualizing the last paid quarterly dividend divided by last 12 months non-GAAP net income. Dividend CAGR reflects the last paid quarterly dividend of $0.20 per share on 9/30/22 compared to $0.13 per share paid five years ago on 9/30/17.

2 Excludes repurchases related to offsetting the majority of the EPS dilution from the sale of NFI.
Investing to Support Growth Objectives

Organic Investments
% of R&D Operating Expense + Capital Expenditures

Sustain investments in our foundational marketplace core

Accelerate investments in our technology and workflows & insights businesses

2015-2017 Average: ~30%
2018-2020 Average: ~50%
2021-Current Average: ~70%

Strategically Targeted Acquisitions

2017: eVestment
- ~50% increase in ARR since acquisition

2021: Verafin
- ~50% increase in ARR and 11% growth in customers since year end 2020

Successful Venture Investing
- 24 investments
- Delivered top quartile VC performance
- Realizations returned all capital to date
- Investments allow Nasdaq to: 1) access new technologies, capabilities and markets; 2) catalyze new product development; and 3) reinforce our core business
Consistent and Compelling Dividend Growth Story

Growth in Dividend Per Share

<table>
<thead>
<tr>
<th>Year</th>
<th>Dividend Per Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>$0.49</td>
</tr>
<tr>
<td>2018</td>
<td>$0.57</td>
</tr>
<tr>
<td>2019</td>
<td>$0.62</td>
</tr>
<tr>
<td>2020</td>
<td>$0.65</td>
</tr>
<tr>
<td>2021</td>
<td>$0.70</td>
</tr>
<tr>
<td>LTM'22</td>
<td>$0.76</td>
</tr>
</tbody>
</table>

10% CAGR

Dividend Payout Ratio

- **Current**: 30%
- **2027E**: 35%-38%

Strong income growth + rising payout ratio = double-digit dividend growth potential

---

1 Dividend payout calculated annualizing the last paid quarterly dividend divided by last 12 months non-GAAP net income.
Successfully Executing Share Repurchase Initiatives

Share Repurchases

$1.0B
Significant cumulative employee related share repurchases\(^1\) (2017-3Q22)

\(~500M\)
Stable share count\(^2\) (2017 – 3Q22)

18.6M
Repurchases to eliminate dilution from NFI divestiture

---

1. Excludes cumulative share repurchases of $1.8 billion due to offsetting annual issuance related to NFI and the majority of the dilution related to the NFI divestiture.
2. Average of years 2017-2021 and year to date 2022 through September 30, 2022.

Outlook

Maintain stable share count

Opportunistic repurchases considered when shares are especially attractive
**Strong Balance Sheet Supports Strategic Opportunities**

<table>
<thead>
<tr>
<th>Category</th>
<th>Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical Low Leverage</td>
<td>2.7x Debt to LTM EBITDA</td>
</tr>
<tr>
<td></td>
<td>(10-year range of 2.2x – 3.5x)</td>
</tr>
<tr>
<td>Low Cost of Debt</td>
<td>2.1% Pre-tax</td>
</tr>
<tr>
<td></td>
<td>(10-year average of 3.4%)</td>
</tr>
<tr>
<td>Well-Laddered Debt Maturities</td>
<td>No long-term debt maturities</td>
</tr>
<tr>
<td></td>
<td>until 2026¹</td>
</tr>
</tbody>
</table>

---

*Clear Benefits*

- Strong capital position provides optionality
- Our strategic priorities are well established and clearly communicated
- Low near term refinancing needs

---

¹ Nasdaq plans to refinance the December 2022 debt maturity by using cash on hand and issuing commercial paper. The company plans to reduce the outstanding commercial paper in 2023.
Agenda

Supporting and Measuring the Success of Our Strategy

1. Strong performance
2. Proven resiliency
3. Capital allocation
4. Clear ambitions
Continuing to Deliver in Our Solutions Businesses

<table>
<thead>
<tr>
<th>Business Segment</th>
<th>Organic Revenue Outlook(^1) (3-5 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-Financial Crime</td>
<td>18 - 23%</td>
</tr>
<tr>
<td>Capital Access Platforms</td>
<td>5 - 8%</td>
</tr>
<tr>
<td>Marketplace Technology</td>
<td>3 - 5%</td>
</tr>
<tr>
<td>Solutions Businesses</td>
<td>7 - 10%</td>
</tr>
<tr>
<td>Trading Services</td>
<td>Variable with market activity</td>
</tr>
</tbody>
</table>

\(^1\) Revenue growth outlook assumes stable market backdrop.

SaaS Revenue As % of ARR Outlook

>50% by 4Q27E
Thoughtfully Investing to Drive Sustainable Growth

<table>
<thead>
<tr>
<th>Metric</th>
<th>2017-2020</th>
<th>2021-22'YTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic Non-GAAP Expense Outlook(^1)</td>
<td>2%-4%</td>
<td>3%-6%</td>
</tr>
<tr>
<td>Solutions Businesses Organic Revenue Outlook(^1)</td>
<td>5%-8%</td>
<td>6%-9%</td>
</tr>
</tbody>
</table>

3-5 Year Outlook \(^1\)

- 4% - 7%
- 7% - 10%

\(^1\) Revenue and expense growth outlooks assume stable market backdrop.
How We Measure the Success of the Strategy

<table>
<thead>
<tr>
<th>Objective</th>
<th>Target</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic Revenue Growth(^1)</td>
<td>7-10%</td>
<td>Solutions Businesses (3-5 year time frame)</td>
</tr>
<tr>
<td>Maintain Operating Leverage</td>
<td>4-7%</td>
<td>Average Annual Organic Expense Growth(^1) (3-5 year time frame)</td>
</tr>
<tr>
<td>Deliver Attractive ROIC</td>
<td>≥10% and &gt;WACC</td>
<td>Total Enterprise (Long-term outlook, with variation in short-term)</td>
</tr>
<tr>
<td>Reduce Climate Footprint</td>
<td>Reduce Scope 1 &amp; 2</td>
<td>GHG emissions 100% by 2030(^2)</td>
</tr>
<tr>
<td></td>
<td>Reduce absolute Scope 3</td>
<td>GHG emissions 95% by 2050(^2)</td>
</tr>
</tbody>
</table>

---

1. Revenue and expense growth outlooks assume stable market backdrop.
2. SBTi targets; reduction versus base year of 2021.
The Success of Our Strategy Will Continue to be Clearly Measurable

1. Successfully executing Nasdaq's strategy has driven strong performance

2. Nasdaq is proven to be resilient across various economic backdrops

3. Consistent capital plan supports our strategic progress as well as contributes to attractive shareholder returns

4. Our performance potential continues to increase
Q&A
Feedback on Today’s Event

Thank you for joining us for our 2022 Investor Day. We hope you found it informative.

Your feedback is important to us, so we would appreciate it if you could fill out a quick survey - it should take only 2-3 minutes. The answers are all anonymous.

This survey will be online for the next 5 days so we ask you to please complete it as soon as possible as we will then tabulate the results and share with our management team.

Here is the link to the survey
https://forms.office.com/Pages/DesignPageV2.aspx?subpage=design&FormId=rWvxNGyyQ0jX-dYkZqi0wW_6ZFaq-IBAsfP9FsyV-4RUMkNCWVZHTUFVBVFUzFNRjAyUEIxDHY1Ti4u&Token=6b0a847cf7d948e5998b6d610083fe5e

Or use this QR code

Thank you
Supplemental Information

Additional non-GAAP reconciliations may be found at ir.nasdaq.com/Income-Statement-Trend-Summary-and-GAAP-to-Non-GAAP-Reconciliation.
## Summary of Historical Financial Results

| NON-GAAP RESULTS ¹  
<table>
<thead>
<tr>
<th>(U.S.$ Millions, except EPS)</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>LTM² 22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solutions Businesses Revenues</td>
<td>$1,572</td>
<td>$1,748</td>
<td>$1,894</td>
<td>$2,090</td>
<td>$2,499</td>
<td>$2,682</td>
</tr>
<tr>
<td>Trading Services Net Revenues</td>
<td>541</td>
<td>622</td>
<td>583</td>
<td>770</td>
<td>882</td>
<td>864</td>
</tr>
<tr>
<td>Other Revenues</td>
<td>298</td>
<td>156</td>
<td>58</td>
<td>43</td>
<td>39</td>
<td>14</td>
</tr>
<tr>
<td>Net Revenues</td>
<td>2,411</td>
<td>2,526</td>
<td>2,535</td>
<td>2,903</td>
<td>3,420</td>
<td>3,560</td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>1,271</td>
<td>1,320</td>
<td>1,295</td>
<td>1,414</td>
<td>1,616</td>
<td>1,692</td>
</tr>
<tr>
<td>Operating Income</td>
<td>1,140</td>
<td>1,206</td>
<td>1,240</td>
<td>1,489</td>
<td>1,804</td>
<td>1,868</td>
</tr>
<tr>
<td>Operating Margin ²</td>
<td>47%</td>
<td>48%</td>
<td>49%</td>
<td>51%</td>
<td>53%</td>
<td>52%</td>
</tr>
<tr>
<td>EBITDA ¹</td>
<td>1,236</td>
<td>1,306</td>
<td>1,328</td>
<td>1,585</td>
<td>1,912</td>
<td>1,971</td>
</tr>
<tr>
<td>EBITDA Margin ³</td>
<td>51%</td>
<td>52%</td>
<td>52%</td>
<td>55%</td>
<td>56%</td>
<td>55%</td>
</tr>
<tr>
<td>Net Income</td>
<td>670</td>
<td>797</td>
<td>835</td>
<td>1,031</td>
<td>1,273</td>
<td>1,334</td>
</tr>
<tr>
<td>Diluted Earnings Per Share</td>
<td>$1.32</td>
<td>$1.58</td>
<td>$1.67</td>
<td>$2.06</td>
<td>$2.52</td>
<td>$2.67</td>
</tr>
<tr>
<td>Dividend Per share</td>
<td>$0.49</td>
<td>$0.57</td>
<td>$0.62</td>
<td>$0.65</td>
<td>$0.70</td>
<td>$0.76</td>
</tr>
</tbody>
</table>


² Operating margin equals operating income divided by net revenues.

³ EBITDA margin equals EBITDA divided by net revenues.
## Historical Cash Flow / Use of Cash Flow

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash flow from operations</td>
<td>$1,028</td>
<td>$963</td>
<td>$1,252</td>
<td>$1,083</td>
<td>$1,212</td>
<td>$5,538</td>
</tr>
<tr>
<td>Capital expenditure</td>
<td>(111)</td>
<td>(127)</td>
<td>(188)</td>
<td>(163)</td>
<td>(118)</td>
<td>(707)</td>
</tr>
<tr>
<td>Free cash flow</td>
<td>$917</td>
<td>$836</td>
<td>$1,064</td>
<td>$920</td>
<td>$1,094</td>
<td>$4,831</td>
</tr>
<tr>
<td>Verafin structuring items ^1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>323</td>
<td>—</td>
<td>323</td>
</tr>
<tr>
<td>Section 31 fees, net ^2</td>
<td>9</td>
<td>(14)</td>
<td>(57)</td>
<td>106</td>
<td>40</td>
<td>84</td>
</tr>
<tr>
<td>Free cash flow ex. Section 31 and Verafin structuring items</td>
<td>$926</td>
<td>$822</td>
<td>$1,007</td>
<td>$1,349</td>
<td>$1,134</td>
<td>$5,238</td>
</tr>
</tbody>
</table>

### Uses of (provided for) cash flow

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Share repurchases</td>
<td>$394</td>
<td>$200</td>
<td>$222</td>
<td>$468</td>
<td>$308</td>
<td>$1,592</td>
</tr>
<tr>
<td>Cash paid for ASR agreement</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>475</td>
<td>325</td>
<td>800</td>
</tr>
<tr>
<td>Net repayment/(borrowing) of debt</td>
<td>320</td>
<td>430</td>
<td>(1,912)</td>
<td>(409)</td>
<td>195</td>
<td>(1,376)</td>
</tr>
<tr>
<td>Acquisitions, net of dispositions and other</td>
<td>(380)</td>
<td>63</td>
<td>157</td>
<td>2,240</td>
<td>41</td>
<td>2,121</td>
</tr>
<tr>
<td>Verafin structuring items ^1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>323</td>
<td>—</td>
<td>323</td>
</tr>
<tr>
<td>Dividends paid</td>
<td>280</td>
<td>305</td>
<td>320</td>
<td>350</td>
<td>285</td>
<td>1,540</td>
</tr>
<tr>
<td>Total uses of (provided for) cash flow</td>
<td>$614</td>
<td>$998</td>
<td>$(1,213)</td>
<td>$3,447</td>
<td>$1,154</td>
<td>$5,000</td>
</tr>
</tbody>
</table>

^1 Verafin purchase price of $2.758 billion reflected certain amounts that were paid post close due to tax and other structuring items. These included a tax payment of $221 million and a purchase price holdback escrow of $102 million. The cash outflow for the tax liability is offset within Acquisitions of businesses, net of cash and cash equivalents acquired within investing activities, leading to no impact on the total change in cash and cash equivalents and restricted cash and cash equivalents for the year ended December 31, 2021.

^2 Net of change in Section 31 fees receivables of $(10 million) in 2018; $9 million in 2019; $35 million in 2020; $(56) million in 2021; $40 million in 2022 YTD; and $18 million in 2018-2022 YTD.
## Solutions Businesses Organic Growth

<table>
<thead>
<tr>
<th>(U.S.$ millions)</th>
<th>Current Period</th>
<th>Prior year Period</th>
<th>Total Variance</th>
<th>Organic Impact</th>
<th>Other¹</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M</td>
<td>%</td>
<td>$M</td>
<td>%</td>
<td>$M</td>
</tr>
<tr>
<td>3Q22</td>
<td>$677</td>
<td>$627</td>
<td>50</td>
<td>8%</td>
<td>61</td>
</tr>
<tr>
<td>2Q22</td>
<td>673</td>
<td>616</td>
<td>57</td>
<td>9%</td>
<td>68</td>
</tr>
<tr>
<td>1Q22</td>
<td>664</td>
<td>586</td>
<td>78</td>
<td>13%</td>
<td>70</td>
</tr>
<tr>
<td>4Q21</td>
<td>668</td>
<td>572</td>
<td>96</td>
<td>17%</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022 YTD</td>
<td>2,014</td>
<td>1,829</td>
<td>185</td>
<td>10%</td>
<td>194</td>
</tr>
<tr>
<td>2021 ²</td>
<td>2,511</td>
<td>2,102</td>
<td>409</td>
<td>19%</td>
<td>288</td>
</tr>
<tr>
<td>2020 ³</td>
<td>2,124</td>
<td>1,927</td>
<td>197</td>
<td>10%</td>
<td>173</td>
</tr>
<tr>
<td>2019 ³</td>
<td>1,927</td>
<td>1,785</td>
<td>142</td>
<td>8%</td>
<td>115</td>
</tr>
<tr>
<td>2018 ³, 4</td>
<td>1,825</td>
<td>1,649</td>
<td>176</td>
<td>11%</td>
<td>114</td>
</tr>
<tr>
<td>2017 ³, 4, 5</td>
<td>1,843</td>
<td>1,731</td>
<td>112</td>
<td>6%</td>
<td>74</td>
</tr>
</tbody>
</table>

Note: The sum of the percentage changes may not tie to the percent change in total variance due to rounding.

¹ Other impact includes acquisitions, divestitures, and changes in FX rates.
² Solutions businesses revenues are not recast for the Broker Services wind down that occurred in 2022.
³ Solutions businesses revenues are not recast for the NPM contribution and NFI sale that occurred in 2021 and the Broker Services wind down that occurred in 2022.
⁴ Solutions businesses are not recast for the BWise enterprise governance, risk and compliance software platform, which was sold in March 2019.
⁵ Solutions businesses are not recast for the Public Relations Solutions and Digital Media Services businesses, which were sold in mid-April 2018.
## Total Organic Revenue Growth

<table>
<thead>
<tr>
<th></th>
<th>Current Period</th>
<th>Prior year Period</th>
<th>Total Variance</th>
<th>Organic Impact</th>
<th>Other&lt;sup&gt;1&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>($US$ millions)</td>
<td></td>
<td>($M)</td>
<td>($M)</td>
<td>($M)</td>
</tr>
<tr>
<td>3Q22</td>
<td>$890</td>
<td>$838</td>
<td>52</td>
<td>77</td>
<td>(25)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>%</td>
<td>9%</td>
<td>3%</td>
</tr>
<tr>
<td>2Q22</td>
<td>893</td>
<td>846</td>
<td>47</td>
<td>76</td>
<td>(29)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>%</td>
<td>9%</td>
<td>3%</td>
</tr>
<tr>
<td>1Q22</td>
<td>892</td>
<td>851</td>
<td>41</td>
<td>51</td>
<td>(10)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>%</td>
<td>6%</td>
<td>1%</td>
</tr>
<tr>
<td>4Q21</td>
<td>885</td>
<td>788</td>
<td>97</td>
<td>78</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>%</td>
<td>10%</td>
<td>2%</td>
</tr>
<tr>
<td>2022 YTD</td>
<td>2,675</td>
<td>2,534</td>
<td>141</td>
<td>199</td>
<td>(58)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>%</td>
<td>8%</td>
<td>(2)%</td>
</tr>
<tr>
<td>2021</td>
<td>3,420</td>
<td>2,903</td>
<td>517</td>
<td>386</td>
<td>131</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>%</td>
<td>13%</td>
<td>5%</td>
</tr>
<tr>
<td>2020</td>
<td>2,903</td>
<td>2,535</td>
<td>368</td>
<td>350</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>%</td>
<td>14%</td>
<td>1%</td>
</tr>
<tr>
<td>2019</td>
<td>2,535</td>
<td>2,526</td>
<td>9</td>
<td>83</td>
<td>(74)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>%</td>
<td>3%</td>
<td>(3)%</td>
</tr>
<tr>
<td>2018</td>
<td>2,526</td>
<td>2,411</td>
<td>115</td>
<td>188</td>
<td>(73)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>%</td>
<td>8%</td>
<td>(3)%</td>
</tr>
<tr>
<td>2017</td>
<td>2,411</td>
<td>2,276</td>
<td>135</td>
<td>52</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>%</td>
<td>2%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Note: The sum of the percentage changes may not tie to the percent change in total variance due to rounding.

<sup>1</sup> Other impact includes acquisitions, divestitures, and changes in FX rates.
## Segment EBITDA

<table>
<thead>
<tr>
<th>Segment</th>
<th>LTM' 22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Platforms net revenue</td>
<td>$1,420</td>
</tr>
<tr>
<td>Market Platforms operating income</td>
<td>$742</td>
</tr>
<tr>
<td>Depreciation</td>
<td>$59</td>
</tr>
<tr>
<td>Market Platforms EBITDA</td>
<td>$801</td>
</tr>
<tr>
<td>Market Platforms EBITDA margin</td>
<td>56%</td>
</tr>
<tr>
<td>Capital Access Platforms revenue</td>
<td>$1,834</td>
</tr>
<tr>
<td>Capital Access Platforms operating income</td>
<td>$1,045</td>
</tr>
<tr>
<td>Depreciation</td>
<td>$35</td>
</tr>
<tr>
<td>Capital Access Platforms EBITDA</td>
<td>$1,080</td>
</tr>
<tr>
<td>Capital Access EBITDA margin</td>
<td>59%</td>
</tr>
<tr>
<td>Anti-Financial Crime net revenue</td>
<td>$292</td>
</tr>
<tr>
<td>Anti-Financial Crime operating income</td>
<td>$73</td>
</tr>
<tr>
<td>Depreciation</td>
<td>$9</td>
</tr>
<tr>
<td>Anti-Financial Crime EBITDA</td>
<td>$82</td>
</tr>
<tr>
<td>Anti-Financial Crime EBITDA margin</td>
<td>28%</td>
</tr>
</tbody>
</table>
Non-GAAP Return on Invested Capital

We define return on invested capital, or ROIC, as non-GAAP net operating profit less amortization of acquired intangibles, adjusted for tax, divided by invested capital. The income tax adjustment reflects the effective non-GAAP tax rate during the period. Invested capital is defined as the aggregate of the average of debt and equity, less average of cash & equivalents and investments. ROIC is not a measure of financial performance under U.S. GAAP and should not be considered a substitute for return on assets, net earnings or total assets as determined in accordance with GAAP and may not be comparable to similarly titled measures reported by other companies.

<table>
<thead>
<tr>
<th>(U.S.$ millions)</th>
<th>2017</th>
<th>LTM'22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-GAAP operating income</td>
<td>$1,140</td>
<td>$1,868</td>
</tr>
<tr>
<td>Amortization of acquired intangibles</td>
<td>(92)</td>
<td>(172)</td>
</tr>
<tr>
<td>Non-GAAP tax rate</td>
<td>34%</td>
<td>23%</td>
</tr>
<tr>
<td>Income tax adjustment</td>
<td>(351)</td>
<td>(398)</td>
</tr>
<tr>
<td>Net operating profit after tax (a)</td>
<td>697</td>
<td>1,298</td>
</tr>
</tbody>
</table>

Invested Capital

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>LTM'22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average debt</td>
<td>3,905</td>
<td>5,650</td>
</tr>
<tr>
<td>Average equity</td>
<td>5,654</td>
<td>6,120</td>
</tr>
<tr>
<td>Average cash &amp; cash equivalents</td>
<td>(390)</td>
<td>(302)</td>
</tr>
<tr>
<td>Average investments</td>
<td>(240)</td>
<td>(157)</td>
</tr>
<tr>
<td>Average Invested Capital (b)</td>
<td>8,929</td>
<td>11,310</td>
</tr>
</tbody>
</table>

Return on Invested Capital (a / b) 7.8% 11.5%
Defined Terms

ARR: ARR for a given period is the annualized revenue derived from subscription contracts with a defined contract value. This excludes contracts that are not recurring, are one-time in nature, or where the contract value fluctuates based on defined metrics. ARR is currently one of our key performance metrics to assess the health and trajectory of our recurring business. ARR does not have any standardized definition and is therefore unlikely to be comparable to similarly titled measures presented by other companies. ARR should be viewed independently of revenue and deferred revenue and is not intended to be combined with or to replace either of those items. ARR is not a forecast and the active contracts at the end of a reporting period used in calculating ARR may or may not be extended or renewed by our customers.


Net Revenues: Revenues less transaction-based expenses.

AUM: Assets Under Management.

ETP: Exchange Traded Product.

NFI: Nasdaq's former U.S. Fixed Income business, which was sold in June 2021.

NPM: Nasdaq Private Market.

Net Promoter Score (NPS): A measure used to gauge customer loyalty, satisfaction and enthusiasm with a company or product or service.

New Logo Clients: New clients that have not previously transacted with Nasdaq.

Rule of 40: Reflects the sum of year over year revenue percentage change plus EBITDA margin over last 12 months.
Investor Day

November 8, 2022