



# Nasdaq 3Q23 Quarterly Update

October 18, 2023

# 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 [ir.nasdaq.com/Income-Statement-Trend-Summary-and-GAAP-to-Non-GAAP-Reconciliation](https://ir.nasdaq.com/Income-Statement-Trend-Summary-and-GAAP-to-Non-GAAP-Reconciliation). 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.

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 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.

Divisional alignment program: In October 2022, following our September announcement to realign our segments and leadership, we initiated a divisional alignment program with a focus on realizing the full potential of this structure. In connection with the program, we expect to incur pre-tax charges principally related to employee-related costs, consulting, asset impairments and contract terminations over a two-year period. We expect to achieve benefits in the form of both increased customer engagement and operating efficiencies. Costs related to the divisional alignment program will be recorded as "restructuring" in our consolidated statements of income. We will exclude charges associated with this program for purposes of calculating non-GAAP measures as they are not reflective of ongoing operating performance or comparisons in Nasdaq's performance between periods.

References to Adenza financial information and customer data in this presentation were provided to Nasdaq by Adenza's management.

# 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, dividend program, trading volumes, products and services, ability to transition to new business models or implement our new corporate structure, 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, environmental, 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, geopolitical instability, government and industry regulation, interest rate risk, U.S. and global competition. Additionally, with respect to Nasdaq's proposed acquisition of Adenza, these risks and uncertainties include Nasdaq's ability to secure regulatory approvals on the terms expected, in a timely manner or at all, Nasdaq's ability to successfully integrate Adenza's operations, Nasdaq's ability to implement its plans, forecasts and other expectations with respect to Adenza's business after the completion of the transaction and realize expected synergies, the ability to realize the anticipated benefits of the proposed transaction, including the possibility that the expected benefits from the proposed transaction will not be realized or will not be realized within the expected time period, the impact of Adenza's business model on Nasdaq's ability to forecast revenue results, disruption from the transaction making it more difficult to maintain business and operational relationships, risks related to diverting management's attention from Nasdaq's ongoing business operations, the negative effects of the announcement or the consummation of the proposed transaction on the market price of Nasdaq's common stock or on Nasdaq's operating results, significant transaction costs, unknown liabilities, the risk of litigation or regulatory actions related to the proposed transaction, future levels of Nasdaq's indebtedness, including additional indebtedness that will be incurred in connection with the proposed transaction, and the effect of the announcement or pendency of the transaction on Adenza's business relationships, operating results, and business generally. Further information on these and other factors are detailed in Nasdaq's filings with the U.S. Securities and Exchange Commission, including its annual reports on Form 10-K and quarterly reports on Form 10-Q which are available on Nasdaq's investor relations website at <http://ir.nasdaq.com> and the SEC's website at [www.sec.gov](http://www.sec.gov). Nasdaq undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise.

## **Website Disclosure**

Nasdaq intends to use its website, [ir.nasdaq.com](http://ir.nasdaq.com), as a means for disclosing material non-public information and for complying with SEC Regulation FD and other disclosure obligations.

# Strategic Update



“Our third quarter 2023 results reflect Nasdaq’s solid execution amid a continued dynamic economic and capital markets backdrop. We experienced some improvement in the IPO environment by welcoming marquee IPOs, we continued to broaden our Anti-Financial Crime clientele, and we introduced new innovations to our products and services.

We have completed the antitrust review process for our announced acquisition of Adenza and we expect to close the transaction in the fourth quarter of 2023. With Adenza, we are excited to deepen our client relationships as we expand our role as a leading financial technology provider to the global financial system.”

# Solid growth in 3Q23, Continued Progress Advancing Strategy

(Year over year % change)

Annualized Recurring  
Revenues (ARR)\*

\$2,081M

+6%

Solutions Businesses\*  
Revenue

\$694M

+9%

Solutions Businesses  
Organic Revenue  
Growth

\$52M

+8%

Net Revenues\*

\$940M

+6%

Non-GAAP Diluted EPS

\$0.71

+4%

- We delivered a quarter of **strong execution** in a prolonged uncertain macroeconomic and capital markets environment.
- We continue to demonstrate strong momentum in our evolution as a technology company with **Solutions Business** revenue representing 74% of total revenue, a two percentage point increase from a year ago.
- **Index** delivered 15% year-over-year revenue growth, primarily driven by 22% year-over-year increase in average AUM for exchange traded products linked to Nasdaq indexes resulting from the combination of strong market performance and \$24 billion in cash inflows over the last twelve months, including \$5 billion in the third quarter.
- **Anti-Financial Crime** delivered 21% year-over-year organic revenue growth including 29% growth in Fraud and Anti-Money Laundering solutions.

For all non-GAAP information throughout this presentation, the U.S. GAAP to non-GAAP reconciliations may be found at [ir.nasdaq.com/Income-Statement-Trend-Summary-and-GAAP-to-Non-GAAP-Reconciliation](https://ir.nasdaq.com/Income-Statement-Trend-Summary-and-GAAP-to-Non-GAAP-Reconciliation). Reconciliations of organic revenue growth can be found in the appendix to this presentation. Organic revenue growth is considered a non-GAAP metric.

\* For all defined terms, refer to the appendix to this presentation.

# Pillars of Strategy

## Liquidity

Enhance liquidity by modernizing markets with innovative technology

## Transparency

Providing access and transparency to capital markets to enable economic growth and empower informed investment and capital markets decision-making

## Integrity

Ensure and enhance the integrity of the world's financial system through Anti-Financial Crime SaaS technology solutions

## Recent Accomplishments

- Received SEC approval for **Dynamic Midpoint Extended Life Order (M-ELO)** type which uses AI to increase order fill rates for M-ELO participants.
  - Puro.earth platform announced a partnership with Xpansiv, in which **Puro.earth's CO<sub>2</sub> removal certificates (CORCs)** would be listed for trading on Xpansiv's spot marketplace, CBL.
- 
- Nasdaq continues its leadership as a premier listing venue with a **84% operating company U.S. IPO win rate** YTD in 2023.
  - We continued to evolve the ESG ecosystem with the launch of two new ESG solutions, **Nasdaq Metrio** and **ESG Analytics for eVestment**.
- 
- Verafin is seeing broad-based growth with **47 new customers and an expansion with an existing Tier 2** bank customer.
  - **Surveillance** delivered solid customer growth including Tier 3 banks and retail brokers.

# Progress on Key Metrics Confirms our Confidence in our Strategy

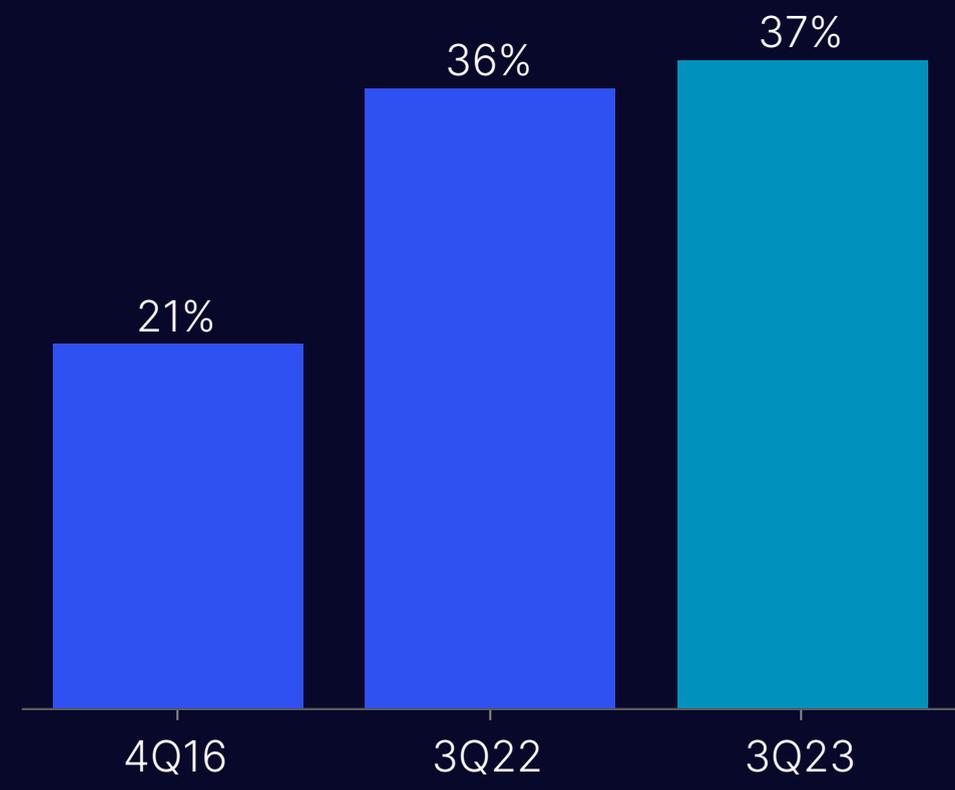
Solutions Businesses Revenue and ARR



Solutions Businesses 3-5 Year Outlook<sup>2</sup>:

**7-10%**

SaaS as % of ARR



4Q27 Objective<sup>2</sup>:

**>50%**

<sup>1</sup> ARR reflects the vast majority of the Solutions Businesses and excludes the AUM and transaction licensing components of Index.

<sup>2</sup> Growth outlook and objectives assume stable market backdrop and do not reflect the proposed acquisition of Adenza.

# Today's Environment Supportive of Near-Term Execution

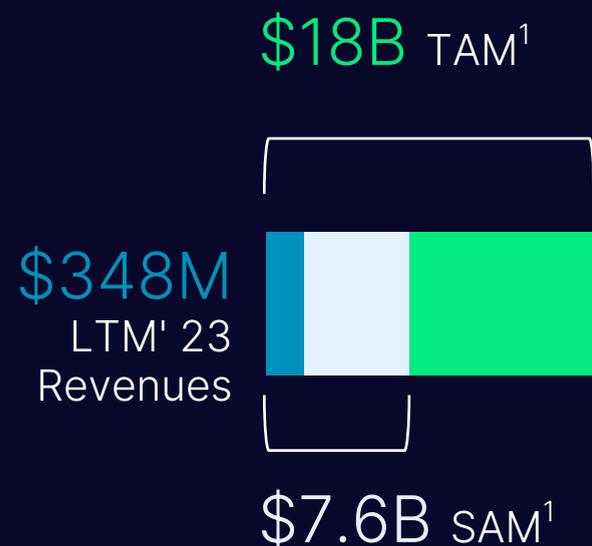
How our business environment impacts our ability to meet client needs and address challenges of our clients

	 <b>Institutional Investors &amp; Asset Owners</b>	 <b>Exchanges and other Market Operators</b>	 <b>Corporate Issuers</b>	 <b>Banks &amp; Broker Dealers</b>
<b>Long-term Secular Dynamics</b>	<p><b>Digitalization of investment processes</b> drives increased demand for analytics and data</p> <p>Increases in <b>passive</b> and <b>thematic investing</b></p>	<p>Market dynamics, digitization, and desire for greater agility are driving <b>modernization of legacy tech platforms</b></p> <p><b>Growing client demand for trusted end-to-end technology partners</b> and cloud based/SaaS solutions to drive transformation</p>	<p><b>Pipeline of companies planning IPOs is healthy</b></p> <p><b>Overall demand for corporate solutions products remain solid</b></p>	<p><b>Increased outsourcing of technology</b> that is not critical to client competitive differentiation</p> <p>Increasing <b>need for technology solutions to stop financial crime more effectively</b> drives demand for fraud and anti-money laundering solutions</p>
<b>Cyclical &amp; External Factors</b>	<p><b>Index AUM increased</b> driven by continued asset inflows and solid YTD market performance</p> <p><b>Elongated sales cycles</b> continue for SaaS solutions with asset owners</p>	<p>Current clients are <b>prioritizing post-trade and risk management</b> and are creating increased demand for new solutions</p> <p>More <b>complex budget review processes</b> amidst current macro backdrop</p>	<p>Several high-profile IPOs in the quarter but <b>IPO environment remains impacted</b> by market dynamics</p> <p><b>Elongated sales cycles</b> continue for IR solutions. Governance sales impacted by slower IPO environment.</p>	<p><b>Demand remains strong among financial institutions for anti-financial crime solutions</b></p> <p>Banking sector volatility is driving <b>new regulatory and capital requirements</b></p>

# Continue to Be Well Positioned Against Sizeable, Growing Opportunities

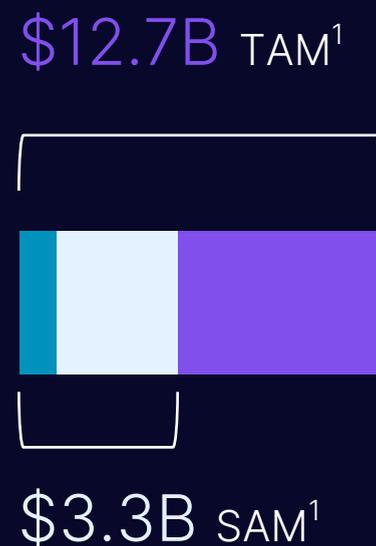
## Anti-Financial Crime

- Fraud Detection & AML (FRAML)
- Nasdaq Surveillance



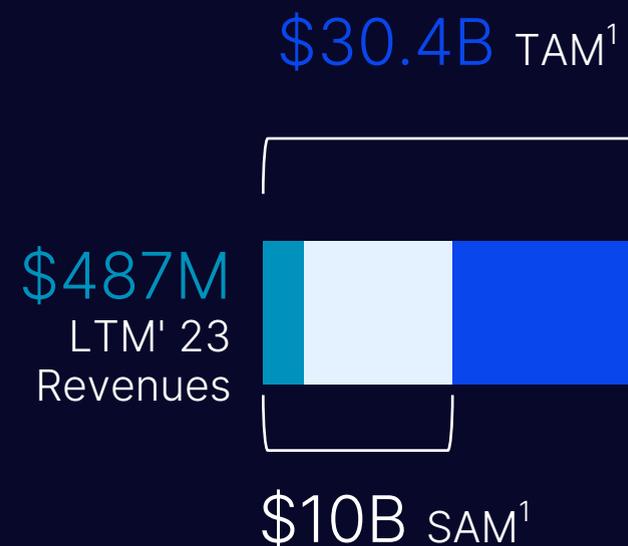
## Marketplace Technology<sup>2</sup>

- Market Infrastructure Operators
- New Markets
- Crypto Exchanges
- Trade Execution Services



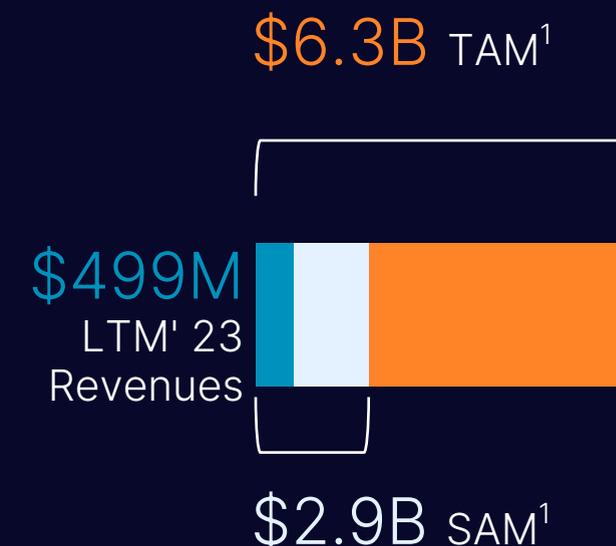
## Workflow and Insights

- eVestment
- Nasdaq Data Link
- Nasdaq Fund Secondaries
- Investor Relations Intelligence
- Governance Solutions
- ESG Solutions



## Index

- Nasdaq-100
- Thematics



<sup>1</sup> 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.

<sup>2</sup> TAM/SAM refers to the Market Technology business only within Marketplace Technology.

# Business and Financial Update



“We delivered broad-based revenue growth in the third quarter and had particularly strong performance in our Index and Anti-Financial Crime businesses.

With our continued strong cash flows, we are fully prepared to execute our capital plan to pay down debt, continue to increase our dividend, and repurchase shares in the coming quarters to achieve our financial goals with the announced Adenza acquisition.”

# 3Q23 Financial Performance Summary

Driving Accelerating Growth,  
Creating Sustainable Value

**+8%**

Solutions Businesses  
Organic Revenue Growth

**+6%**

Growth in ARR  
to \$2.1 billion

**+11%**

Growth in Annualized SaaS  
Revenues to \$773 million

**\$473M**

Capital returned to  
shareholders YTD through  
September 30, 2023,  
including \$159 million in  
share repurchases

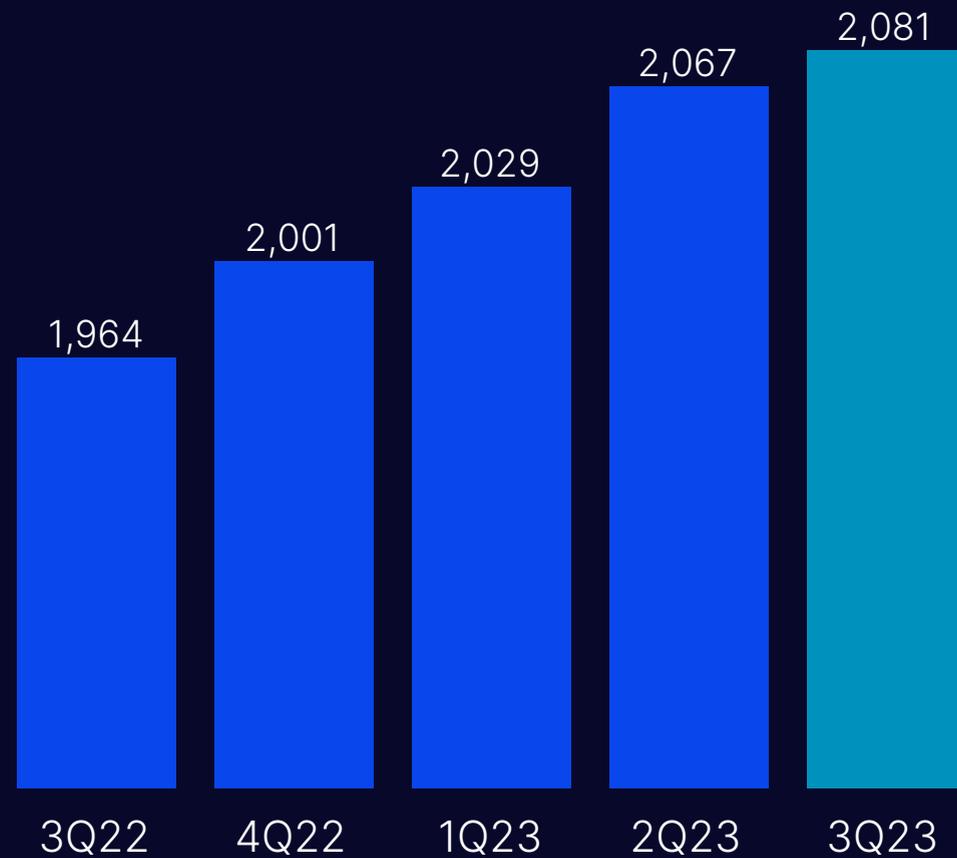
## Non-GAAP Financial Results

(US\$ millions, except per share)	3Q23	3Q22	% Δ
Net Revenues	\$940	\$890	6%
<i>Organic</i>			5%
Solutions Revenues	\$694	\$639	9%
<i>Organic</i>			8%
Operating Expenses	\$449	\$417	8%
<i>Organic</i>			8%
Operating Income	\$491	\$473	4%
<i>Operating Margin</i>	52%	53%	
Income Before Income Taxes	\$470	\$443	6%
Net Income attributable to Nasdaq	\$349	\$335	4%
Diluted EPS <sup>1</sup>	\$0.71	\$0.68	4%
Effective Tax Rate	25.7%	24.4%	
Dividend Per Share	\$0.22	\$0.20	10%

<sup>1</sup> Diluted EPS reflects weighted average diluted shares outstanding of 494.1 million in 3Q23 and 496.3 million in 3Q22.

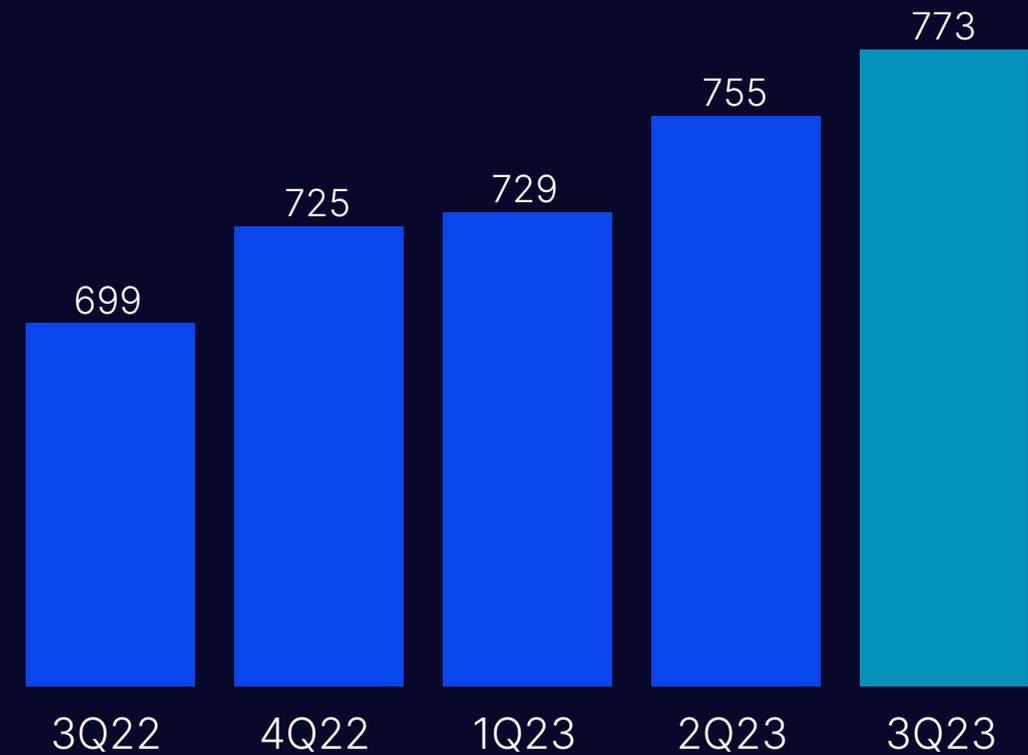
# Recurring Revenue KPIs Reflect Solid Growth

Annualized Recurring Revenue (\$Ms)



+6% YoY

Annualized SaaS Revenues (\$Ms)



+11% YoY

# Market Platforms

+2%

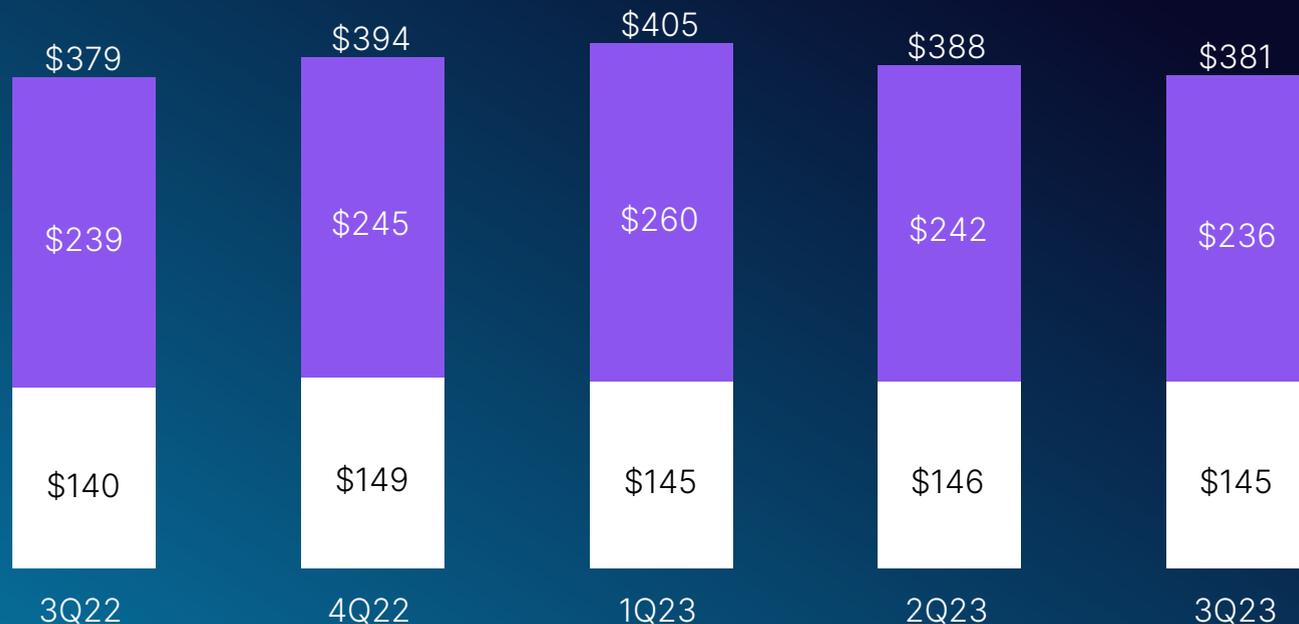
Increase in ARR

+4%

Marketplace  
Technology revenue  
growth

## 3Q23 Net Revenues

■ Trading Services ■ Marketplace Technology



## Year over Year Comparison

(US\$ millions)	3Q23	3Q22	% Δ
Trading Services	\$236	\$239	(1)%
Marketplace Technology	\$145	\$140	4%
Total Net Revenues	\$381	\$379	1%
Organic revenue growth			—%
Operating income	\$200	\$213	(6)%
Operating margin	52%	56%	
Annualized SaaS revenues	\$39	\$38	3%
ARR	\$511	\$499	2%

## 3Q23 Financial Highlights

- Trading Services: Revenues decreased due to a modest revenue decline from European cash equities and derivatives partially offset by U.S. cash equity growth and the impact of changes in FX rates.
  - U.S. cash equities capture benefited from record third quarter closing cross volumes due in part to a special rebalance of Nasdaq-100
- Marketplace Technology: Revenues increased primarily due to higher support licensing, higher professional services revenues, and higher connectivity services. Growth in ARR across both Trade Management Services and Market Technology.

# Capital Access Platforms

**+5%**      **+\$24B**      **84%**

Workflow and Insights  
YoY revenue growth

Index LTM  
AUM net  
inflows

Operating company IPO  
win rate YTD

Period ending and average ETP  
AUM (\$B)



■ Period ending ETP AUM (\$B)  
● Average ETP AUM (\$B)

Total listed corporate issuers  
and U.S. operating company  
IPO win rate



■ Total listed corporate issuers  
● U.S. operating company IPO win rate YTD

## Year over Year Comparison

(US\$ millions)	3Q23	3Q22	% Δ
Data and Listing Services	\$188	\$179	5%
Index	\$144	\$125	15%
Workflow and Insights	\$124	\$118	5%
Total Revenues	\$456	\$422	8%
<i>Organic revenue growth</i>			8%
Operating income	\$254	\$233	9%
Operating margin <sup>1</sup>	56%	55%	
Annualized SaaS revenues	\$402	\$380	6%
ARR	\$1,222	\$1,170	4%

## 3Q23 Financial Highlights

- Data and Listing Services: Revenues increased primarily due to higher international demand for our data products and annual listing fee growth partially offset by lower initial listings fees.
- Index: Revenues increased due to higher AUM in exchange traded products linked to Nasdaq indexes and strong futures capture, partially offset by lower futures trading linked to the Nasdaq-100 Index.
- Workflow and Insights: Revenues increased primarily due to continued demand for ESG solutions and Analytics sales to asset managers

<sup>1</sup> The Capital Access Platforms operating margin reflects the allocation of certain costs that support the operation of various aspects of Nasdaq's business, including Trading Services, to units other than Capital Access Platforms.

# Anti-Financial Crime

**+21%**

Organic YoY revenue growth

**+19%**

Increase in Signed ARR\* year over year

**+47**

New Verafin SaaS Clients

Signed ARR (\$M)



## Year over Year Comparison

(US\$ millions)	3Q23	3Q22	% Δ
Total Revenues	\$93	\$77	21%
<i>Organic revenue growth</i>			21%
Operating income	\$31	\$21	48%
Operating margin	33%	27%	
Annualized SaaS revenues	\$332	\$281	18%
ARR	\$348	\$295	18%
Signed ARR	\$381	\$320	19%

## 3Q23 Financial Highlights

- Revenues increased due to continued Fraud and Anti-Money Laundering solutions growth across both small and medium bank and enterprise customers. During the quarter, Verafin signed an expansion with an existing Tier 2 customer. Surveillance solutions revenue growth reflects new customer growth including Tier 3 banks and retail brokers.
- The operating margin in the third quarter of 2023 totaled 33% versus 27% in the prior year period.
  - Change in year-over-year operating margin primarily reflects the timing of recognition of incentive compensation

\* For all defined terms, refer to the appendix to this presentation.

# Supporting Growth with Appropriate Resources

## 2023 Non-GAAP Operating Expense Guidance<sup>1</sup>

**\$1.785B-\$1.805B**

- The midpoint of the expense guidance range reflects an increase of approximately 4.5% and primarily reflects our continued investments to drive growth across ESG, Anti-Financial Crime and market modernization.

## Non-GAAP Tax Rate<sup>1</sup>

**24.5%-25.5%**

## Year over Year Comparison

<i>(US\$ millions)</i>	3Q23	3Q22	% Δ
Non-GAAP operating expenses			
Compensation and benefits	\$260	\$249	4%
Professional and contract services	\$30	\$31	(3)%
Computer operations and data communications	\$58	\$50	16%
Occupancy	\$27	\$25	8%
General, administrative and other	\$26	\$18	44%
Marketing and advertising	\$12	\$10	20%
Depreciation and amortization	\$27	\$25	8%
Regulatory	\$9	\$9	—%
Non-GAAP operating expenses	\$449	\$417	8%
Organic non-GAAP operating expense			8%

3Q23 non-GAAP operating expenses increased \$32 million, or 8%, to \$449 million. The \$32 million, or 8%, organic increase primarily reflects:

- \$11 million, or 4%, increase in compensation and benefits expense, driven by increased headcount and the impact of merit increases
- \$8 million, or 16%, increase in computer operations and data communications expense, reflecting the continued investment in our businesses (i.e.cloud)
- \$8 million, or 44%, increase in general, administrative, and other costs
- \$2 million, or 20%, increase in marketing and advertising largely driven by new listing activity in the period

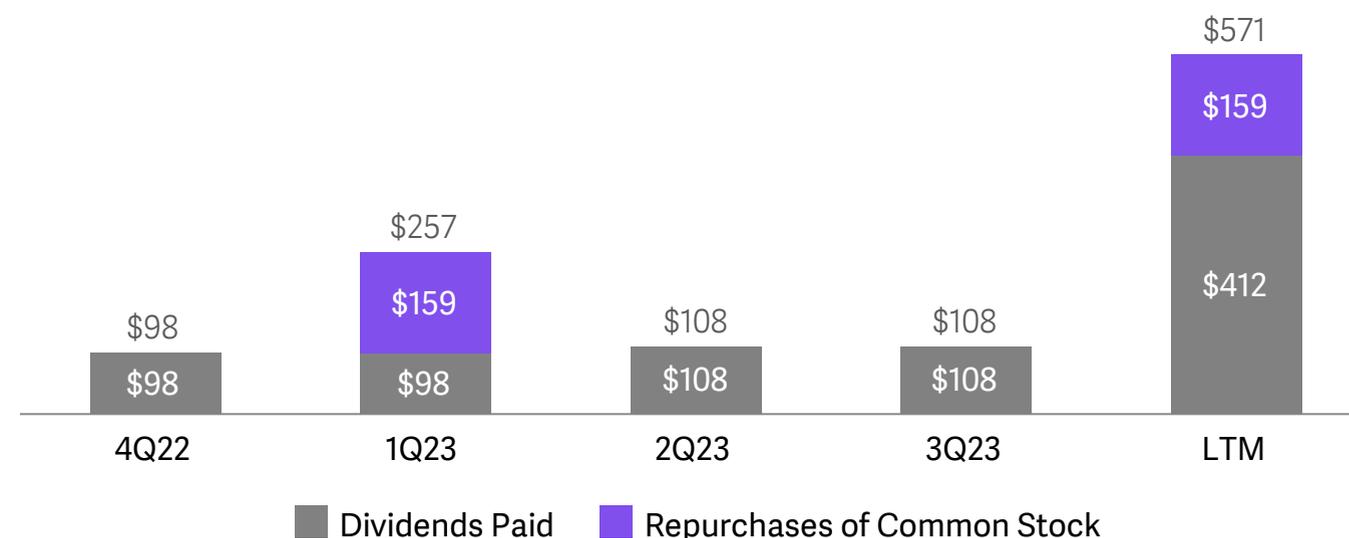
<sup>1</sup> U.S. GAAP operating expense and tax rate guidance are not provided due to the inherent difficulty in quantifying certain amounts due to a variety of factors including the unpredictability in the movement in foreign currency rates, as well as future charges or reversals outside of the normal course of business.

# Executing Consistent Capital Plan

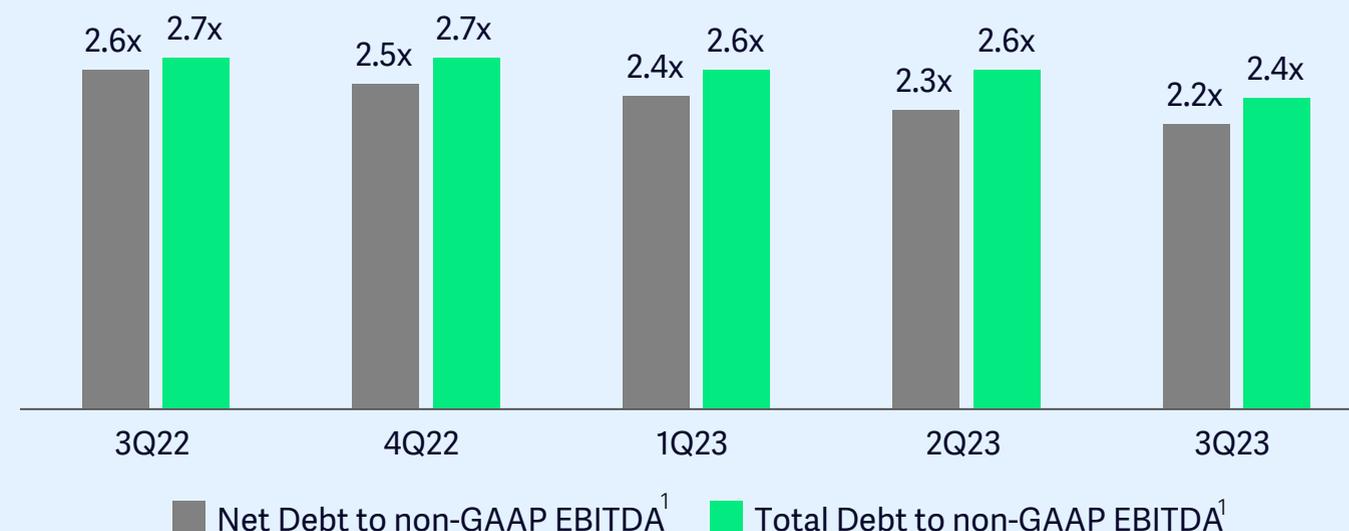
## 3Q23 Highlights

- Returned \$108 million of cash to shareholders through the payment of dividends.
- 3Q23 end of period diluted share count totaled 494.1 million.
- In September, Nasdaq's board of directors approved an increase in the share repurchase authorization to an aggregate of \$2.0 billion, all of which is remaining as of September 30, 2023.
- 3Q23 debt decreased by \$229 million vs. 2Q23 primarily due to a net paydown of \$140 million of commercial paper as well as a roughly \$87 million decrease in Euro bonds book values caused by a weaker Euro.

## Capital Returned to Shareholders



## Leverage Ratios



<sup>1</sup> All non-GAAP EBITDA is trailing twelve months. 3Q23 and 2Q23 gross leverage excludes \$4.9 billion and \$4.8 billion of debt related to Adenza financing, respectively, as EBITDA will not include Adenza and acquisition related debt would be required to be repaid in the event the proposed acquisition does not close.

# Our ESG Strategy

Solidify

Support

Enable

## Corporate Sustainability

## External Impact

Solidify

Support

Enable

Environmental: Reduce our environmental impact by addressing climate risk and reducing our environmental footprint

Social: Create a workplace culture of belonging and inclusion by attracting, training and retaining a diverse workforce

Governance: Maintain robust corporate governance policies and practices

ESG Products and Services: Enable clients to effectively navigate the ESG ecosystem through our marketplace and technology solutions, reporting tools and data analytics capabilities

Anti-Financial Crime: Address complex market and societal challenges through our comprehensive suite of solutions aimed at combating financial crime

Market Platforms: Modernize markets globally by providing exchanges, emerging marketplaces and other critical ecosystem participants in the capital markets with institutional-grade technology

Purpose: Drive impact across our community through our purpose-led initiatives to advance financial inclusion

# 2023 Highlights

## External Impact

- Nasdaq's Capital Access Platforms division launched two new offerings – Nasdaq Metrio and Nasdaq ESG Analytics – to help corporates and investors better streamline their sustainability and impact journeys.
- Hosted Nasdaq's inaugural New York Climate Week Conference bringing together more than 300 corporates, investors, climate tech innovators, standard-setters, and rating and ranking organizations for impactful discussions.

## Corporate Sustainability

- Published our 2022 Annual Sustainability Report (with GRI, SASB, and WEF indexes) and Task Force on Climate-Related Financial Disclosures (TCFD) Report.
- Closed on our first Sustainability-linked Finance agreement in 1Q23, a sustainability-linked amendment to our revolving Credit Facility.

## Third Party Recognition

- MSCI ESG Rating maintained at "AA", placing Nasdaq in MSCI's "Leader" category.
- Awarded "Best Company for Sustainability Reporting, Technology & Telecoms, Large Cap" in *ESG Investing's* Corporate ESG Awards recognizing the best listed companies across all areas of ESG and sustainability performance and reporting.
- Named one of 'America's Greenest Companies' by *Newsweek* for progress in positively changing our sustainability footprint.
- Nominated for Corporate Secretary's Corporate Governance Award: Best ESG Reporting – Large Cap.

# Recap:

## Continued Progress Advancing Strategy

- We delivered a quarter of **strong execution** in an uncertain macroeconomic and capital markets environment.
- We continued our evolution as a technology company with a 200 basis point increase in **Solutions Business** revenue mix to 74% of total revenue.
- Completed antitrust review process for the **Adenza** acquisition.
- Nasdaq continued its innovation in AI including the receipt of SEC approval for its **Dynamic Midpoint Extended Life Order (M-ELO)** order type.
- **Anti-Financial Crime** delivered continued strong growth with the addition of 47 new fraud and anti-money laundering customers and an expansion with an existing Tier 2 bank.
- We continued to evolve the **ESG ecosystem** with the launch of two new ESG solutions. **Nasdaq Metrio** streamlines corporate ESG data collection and management. Nasdaq **ESG Analytics for eVestment**, allows investors to see the ESG contribution of individual positions to a portfolio.

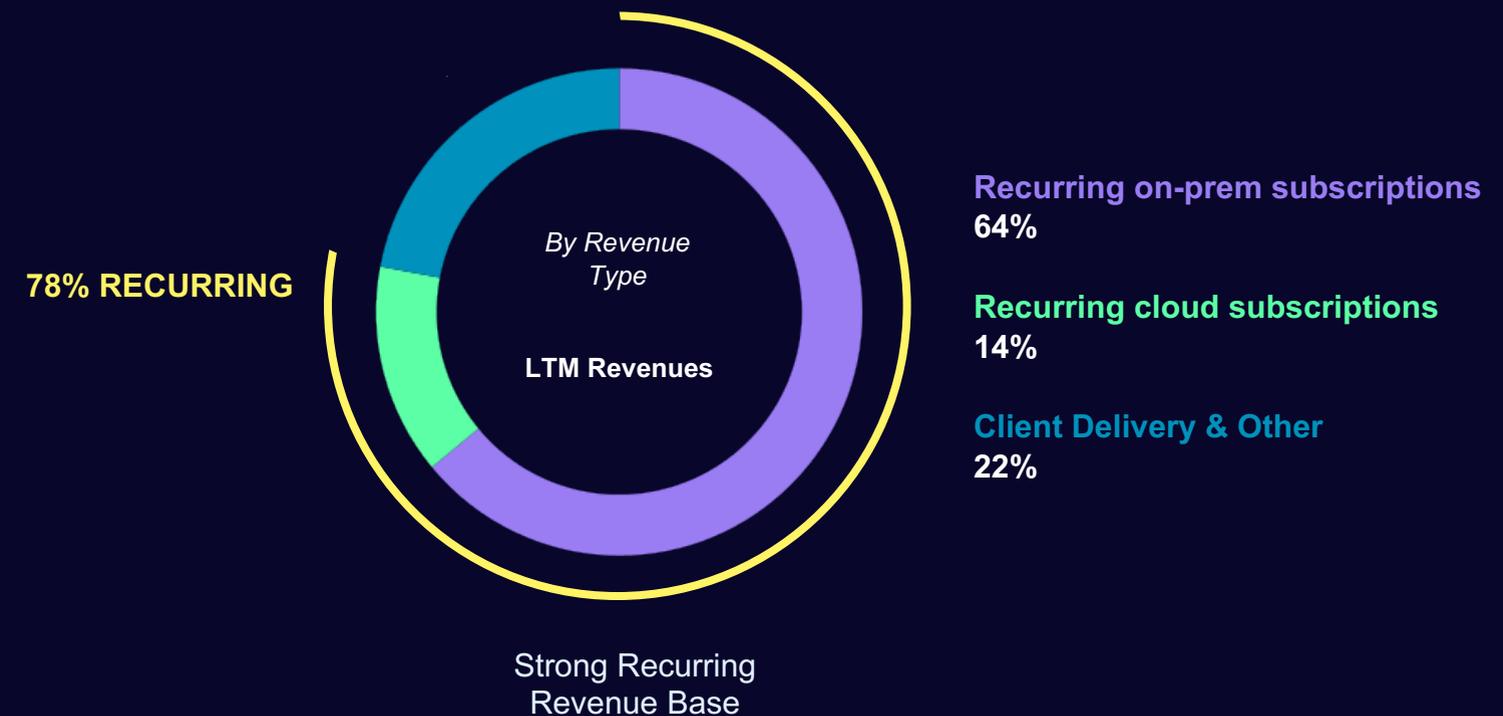
# Adenza Update

# Nasdaq's Acquisition of Adenza Transaction on Track

## Adenza Strategic Updates

- ✓ Completed antitrust review process for the transaction, with deal-close expected before the end of the year
- ✓ Continued strong constant currency ARR<sup>1</sup> growth<sup>2</sup> in the high-teens compared to the prior-year period
- ✓ During YTD 2023, Adenza had 55% of new bookings from cloud solutions, compared to 27% in the prior year period
- ✓ Maintained robust client and revenue retention with 97.4% gross and 113.1% net retention
- ✓ During YTD 2023, Adenza signed 17 new clients and had 3 cross-sells, which compares to 7 new clients and 3 cross-sells in the prior year period
- ✓ Both product lines maintained strong growth across new logo wins and client upsells

## Adenza 3Q23 LTM Revenue Detail



References to Adenza financial information and customer data in this presentation were provided to Nasdaq by Adenza's management.

Performance information is as of September 30, 2023

(1) For certain Adenza specific term-based subscription license agreements, ARR is calculated based upon annualized contract value, which deviates from U.S. GAAP revenue recognition whereby a portion of the total contract value is recognized upfront as license revenue, with the remainder allocated to the maintenance and support performance obligation and recognized ratably over the contract term. 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.

(2) Excludes the impact of changes in FX exchange rates

# Anticipated Organizational Structure to Deliver for Nasdaq's Clients and Shareholders

## Pre-Acquisition

**Anti-Financial  
Crime**

**Fraud & AML  
Surveillance**

**Market  
Platforms**

**Marketplace Technology \***

Trading Services

**Capital  
Access  
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## Post-Acquisition

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Technology

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Fraud & AML  
Surveillance

Capital Markets  
Technology

**Calypso**  
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\* Includes TMS + Market Technology

# Appendix

# RECLASSIFIED OPERATING SEGMENT RESULTS - European power trading and clearing business

(\$s in millions)	2Q23			1Q23			4Q22			3Q22		
	As reported	Adj.	Recasted Results	As reported	Adj.	Recasted Results	As reported	Adj.	Recasted Results	As reported	Adj.	Recasted Results
<b>Market Platforms <sup>(1)</sup></b>												
<b>Trading services</b>	\$250	\$(8)	\$242	\$267	\$(7)	\$260	\$253	\$(8)	\$245	\$248	\$(9)	\$239
<b>Marketplace Technology</b>	147	(1)	146	146	(1)	145	150	(1)	149	141	(1)	140
<b>Net Revenues</b>	<b>397</b>	<b>(9)</b>	<b>388</b>	<b>413</b>	<b>(8)</b>	<b>405</b>	<b>403</b>	<b>(9)</b>	<b>394</b>	<b>389</b>	<b>(10)</b>	<b>379</b>
Expense	186	(5)	181	184	(5)	179	194	(6)	188	171	(5)	166
<b>Operating income</b>	<b>211</b>	<b>(4)</b>	<b>207</b>	<b>229</b>	<b>(3)</b>	<b>226</b>	<b>209</b>	<b>(3)</b>	<b>206</b>	<b>218</b>	<b>(5)</b>	<b>213</b>
<b>Capital Access Platforms <sup>(1)</sup></b>												
<b>Revenues</b>	<b>438</b>	—	<b>438</b>	<b>416</b>	<b>(1)</b>	<b>415</b>	<b>420</b>	<b>(1)</b>	<b>419</b>	<b>423</b>	<b>(1)</b>	<b>422</b>
Expense	197	—	197	190	—	190	209	—	209	189	—	189
<b>Operating income</b>	<b>241</b>	—	<b>241</b>	<b>226</b>	<b>(1)</b>	<b>225</b>	<b>211</b>	<b>(1)</b>	<b>210</b>	<b>234</b>	<b>(1)</b>	<b>233</b>
<b>Anti-Financial Crime</b>												
<b>Revenues</b>	<b>89</b>	—	<b>89</b>	<b>84</b>	—	<b>84</b>	<b>82</b>	—	<b>82</b>	<b>77</b>	—	<b>77</b>
Expense	57	—	57	61	—	61	56	—	56	56	—	56
<b>Operating income</b>	<b>32</b>	—	<b>32</b>	<b>23</b>	—	<b>23</b>	<b>26</b>	—	<b>26</b>	<b>21</b>	—	<b>21</b>
<b>Corporate Items <sup>(1)</sup></b>												
<b>Revenues</b>	<b>1</b>	<b>9</b>	<b>10</b>	<b>1</b>	<b>9</b>	<b>10</b>	<b>1</b>	<b>10</b>	<b>11</b>	<b>1</b>	<b>11</b>	<b>12</b>
Expense	1	5	6	1	5	6	1	6	7	1	5	6
<b>Operating income</b>	<b>—</b>	<b>4</b>	<b>4</b>	<b>—</b>	<b>4</b>	<b>4</b>	<b>—</b>	<b>4</b>	<b>4</b>	<b>—</b>	<b>6</b>	<b>6</b>
<b>Total Company</b>												
<b>Solution businesses revenue</b>	<b>674</b>	<b>(1)</b>	<b>673</b>	<b>646</b>	<b>(2)</b>	<b>644</b>	<b>652</b>	<b>(2)</b>	<b>650</b>	<b>641</b>	<b>(2)</b>	<b>639</b>
<b>Net revenues</b>	<b>925</b>	—	<b>925</b>	<b>914</b>	—	<b>914</b>	<b>906</b>	—	<b>906</b>	<b>890</b>	—	<b>890</b>
Total expense	441	—	441	436	—	436	460	—	460	417	—	417
<b>Operating income</b>	<b>484</b>	—	<b>484</b>	<b>478</b>	—	<b>478</b>	<b>446</b>	—	<b>446</b>	<b>473</b>	—	<b>473</b>
Operating margin	52%	—%	52%	52%	—%	52%	49%	—%	49%	53%	—%	53%
<b>ARR</b>	<b>2,073</b>	<b>(6)</b>	<b>2,067</b>	<b>2,035</b>	<b>(6)</b>	<b>2,029</b>	<b>2,007</b>	<b>(6)</b>	<b>2,001</b>	<b>1,970</b>	<b>(6)</b>	<b>1,964</b>

1- In conjunction with the anticipated sale of our European power trading and clearing business, quarterly results were reclassified from the Market Platforms and Capital Access Platforms segment to Other revenues.

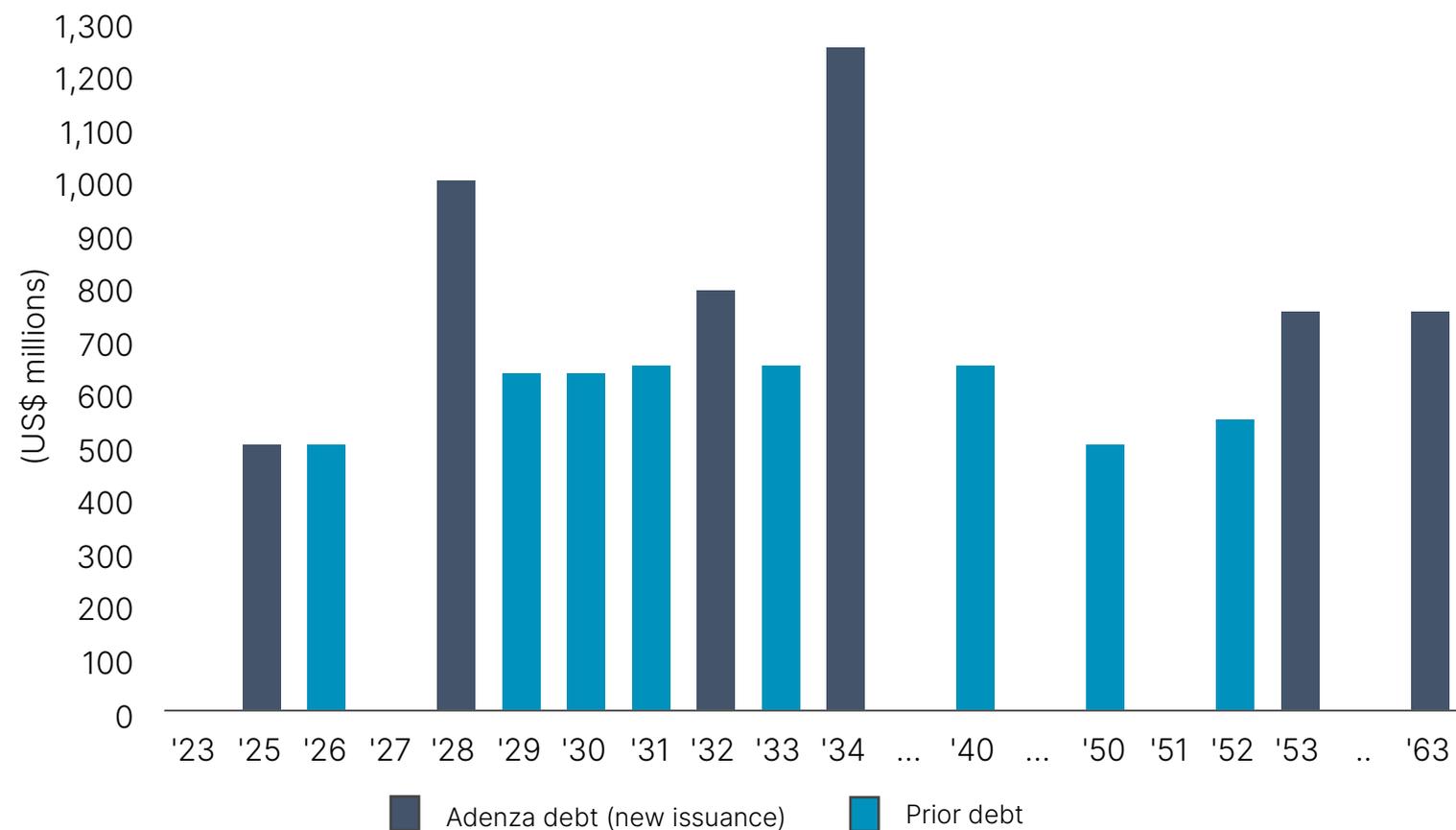
# RECLASSIFIED OPERATING SEGMENT RESULTS - European power trading and clearing business cont

(\$s in millions)	2022			2021		
	As reported	Adj.	Recasted Results	As reported	Adj.	Recasted Results
<b>Market Platforms <sup>(1)</sup></b>						
<b>Trading services</b>	\$1,019	\$(31)	\$988	\$1,037	\$(32)	\$1,005
<b>Marketplace Technology</b>	562	(4)	558	545	(4)	541
<b>Net Revenues</b>	<b>1,581</b>	<b>(35)</b>	<b>1,546</b>	<b>1,582</b>	<b>(36)</b>	<b>1,546</b>
Expense	722	(22)	700	689	(22)	667
<b>Operating income</b>	<b>859</b>	<b>(13)</b>	<b>846</b>	<b>893</b>	<b>(14)</b>	<b>879</b>
<b>Capital Access Platforms <sup>(1)</sup></b>						
<b>Revenues</b>	<b>1,684</b>	<b>(2)</b>	<b>1,682</b>	<b>1,568</b>	<b>(2)</b>	<b>1,566</b>
Expense	768	—	768	724	—	724
<b>Operating income</b>	<b>916</b>	<b>(2)</b>	<b>914</b>	<b>844</b>	<b>(2)</b>	<b>842</b>
<b>Anti-Financial Crime</b>						
<b>Revenues</b>	<b>306</b>	—	<b>306</b>	<b>231</b>	—	<b>231</b>
Expense	226	—	226	187	—	187
<b>Operating income</b>	<b>80</b>	—	<b>80</b>	<b>44</b>	—	<b>44</b>
<b>Corporate Items <sup>(1)</sup></b>						
<b>Revenues</b>	<b>11</b>	<b>37</b>	<b>48</b>	<b>39</b>	<b>38</b>	<b>77</b>
Expense	5	22	27	16	22	38
<b>Operating income</b>	<b>6</b>	<b>15</b>	<b>21</b>	<b>23</b>	<b>16</b>	<b>39</b>
<b>Total Company</b>						
<b>Solution businesses revenue</b>	<b>2,552</b>	<b>(6)</b>	<b>2,546</b>	<b>2,344</b>	<b>(6)</b>	<b>2,338</b>
<b>Net revenues</b>	<b>3,582</b>	—	<b>3,582</b>	<b>3,420</b>	—	<b>3,420</b>
Total expense	1,721	—	1,721	1,616	—	1,616
<b>Operating income</b>	<b>1,861</b>	—	<b>1,861</b>	<b>1,804</b>	—	<b>1,804</b>
<i>Operating margin</i>	52%	—%	52%	53%	—%	53%

1 - In conjunction with the anticipated sale of our European power trading and clearing business, quarterly results were reclassified from the Market Platforms and Capital Access Platforms segment to Other revenues.

# Debt Overview

## Well Laddered Debt Maturities



## \$4.4B Net Debt

(US\$ millions)	9/30/2023	6/30/2023	Maturity Date
Commercial Paper	\$—	\$140	NA
Revolver (SOFR + 115 bps) <sup>1</sup>	\$(4)	\$(5)	Dec 2027
3.85% Notes	\$499	\$499	Jun 2026
1.75% Euro Notes	\$630	\$650	Mar 2029
0.875% Euro Notes	\$630	\$650	Feb 2030
1.65% Notes	\$644	\$644	Jan 2031
0.90% Euro Notes	\$645	\$666	Jul 2033
2.50% Notes	\$644	\$644	Dec 2040
3.25% Notes	\$487	\$487	Apr 2050
3.95% Notes	\$541	\$541	Mar 2052
5.65% Notes	\$497	\$497	Jun 2025
5.35% Notes	\$991	\$992	Jun 2028
4.5% Euro Notes	\$784	\$810	Feb 2032
5.55% Notes	\$1,239	\$1,240	Feb 2034
5.95% Notes	\$738	\$739	Aug 2053
6.10% Notes	\$738	\$738	Jun 2063
<b>Total Debt Obligations</b>	<b>\$9,703</b>	<b>\$9,932</b>	
Less Cash and Cash Equivalents <sup>2</sup>	\$(5,340)	\$(5,347)	
<b>Net Debt</b>	<b>\$4,363</b>	<b>\$4,585</b>	

<sup>1</sup> The revolver spread is as of 9/30/2023. This includes debt issuance costs of \$4M at 9/30/2023 and \$5M at 6/30/2023.

<sup>2</sup> Excludes \$25M of restricted cash at 9/30/2023 and \$23M at 6/30/2023.

# Historical Cash Flow / Uses of Cash Flow

- 2023 YTD free cash flow excluding Section 31 fees totaled **\$1,303 million**.
- 2021 free cash flow includes the impact of Verafin related tax and structuring items, described below:
  - The Verafin purchase price of \$2.75B reflected certain amounts that were paid post close due to tax and other structuring items. These included a tax payment of \$221M and a purchase price holdback escrow of \$102M.
  - 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.

Free Cash Flow Calculation (US\$ millions)	2020	2021	2022	2023 YTD	2020 - 2023 YTD
Cash flow from operations	\$1,252	\$1,083	\$1,706	\$1,279	\$5,320
Capital expenditure	(188)	(163)	(152)	(116)	(619)
<b>Free cash flow</b>	<b>\$1,064</b>	<b>\$920</b>	<b>\$1,554</b>	<b>\$1,163</b>	<b>\$4,701</b>
Verafin structuring items	—	323	—	—	323
Section 31 fees, net <sup>1</sup>	(57)	106	(103)	140	86
<b>Free cash flow ex. Section 31 and Verafin structuring items</b>	<b>\$1,007</b>	<b>\$1,349</b>	<b>\$1,451</b>	<b>\$1,303</b>	<b>\$5,110</b>
<b>Uses of cash flow</b>					
Share repurchases	\$222	\$468	\$308	\$159	\$1,157
Cash paid for ASR agreement	—	475	325	—	800
Net repayment/(borrowing) of debt	(1,912)	(409)	334	(4,324)	(6,311)
Acquisitions, net of dispositions and other	157	2,240	41	—	2,438
Verafin structuring items	—	323	—	—	323
Dividends paid	320	350	383	314	1,367
<b>Total uses of cash flow</b>	<b>\$(1,213)</b>	<b>\$3,447</b>	<b>\$1,391</b>	<b>\$(3,851)</b>	<b>\$(226)</b>

<sup>1</sup> Net of change in Section 31 fees receivables of \$35M in 2020; \$(56)M in 2021; \$79M in 2022; \$(84)M in 2023 YTD; and \$(26)M in 2020-2023 YTD.

# Total Variance Net Impacts: 3Q23

<i>All figures in US\$ Millions</i>			Total Variance		Organic Impact		Acq. & Div. Impact <sup>1</sup>		FX Impact	
	3Q23	3Q22	\$M	%	\$M	%	\$M	%	\$M	%
Market Platforms	\$381	\$379	\$2	1 %	\$—	— %	\$—	— %	\$2	1 %
Capital Access Platforms	456	422	34	8 %	32	8 %	—	— %	2	— %
Anti-Financial Crime	93	77	16	21 %	16	21 %	—	— %	—	— %
Other	10	12	(2)	(17) %	(1)	(8) %	(1)	(8) %	—	— %
<b>Total Solutions Businesses Revenue</b>	<b>694</b>	<b>639</b>	<b>55</b>	<b>9 %</b>	<b>52</b>	<b>8 %</b>	<b>—</b>	<b>— %</b>	<b>3</b>	<b>— %</b>
<b>Total Revenue less transaction-based expenses</b>	<b>940</b>	<b>890</b>	<b>50</b>	<b>6 %</b>	<b>47</b>	<b>5 %</b>	<b>(1)</b>	<b>— %</b>	<b>4</b>	<b>— %</b>
<b>Non-GAAP Operating Expenses</b>	<b>449</b>	<b>417</b>	<b>32</b>	<b>8 %</b>	<b>32</b>	<b>8 %</b>	<b>—</b>	<b>— %</b>	<b>—</b>	<b>— %</b>
<b>Non-GAAP Operating Income</b>	<b>491</b>	<b>473</b>	<b>18</b>	<b>4 %</b>	<b>15</b>	<b>3 %</b>	<b>(1)</b>	<b>— %</b>	<b>4</b>	<b>1 %</b>
<b>Non-GAAP Operating Margin</b>	<b>52 %</b>	<b>53 %</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

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

<sup>1</sup> Reflects the impact of the conclusion of the Nasdaq Fixed Income platform service agreement.

# Trading Services Additional Detail

(US\$ in Millions)	3Q23	2Q23	1Q23	4Q22	3Q22
<b>U.S. Equity Derivatives Trading</b>	\$92	\$89	\$102	\$96	\$92
<b>U.S. Cash Equity Trading</b>	71	79	77	72	70
<b>European Cash Equity Trading</b>	22	24	26	24	24
<b>U.S. Tape Plans</b>	35	35	36	36	36
<b>Other<sup>1</sup></b>	16	15	19	17	17
<b>Trading Services Net Revenues</b>	<b>\$236</b>	<b>\$242</b>	<b>\$260</b>	<b>\$245</b>	<b>\$239</b>

<sup>1</sup> Other includes Nordic fixed income trading & clearing, Nordic derivatives, and Canadian cash equities trading.

# Summary of Historical Financial Results

Non-GAAP Results (US\$ Millions, except EPS)	2019	YoY % Chg	2020	YoY % Chg	2021	YoY % Chg	2022	YoY % Chg
Revenue from Solutions Businesses	\$1,731	9%	\$1,922	11%	\$2,338	22%	\$2,546	9%
Trading Services Net Revenues	713	(4)%	902	27%	1,005	11%	988	(2)%
Other Revenues	91	(53)%	79	(13)%	77	(3)%	48	(38)%
<b>Net Revenues</b>	<b>2,535</b>	<b>—%</b>	<b>2,903</b>	<b>15%</b>	<b>3,420</b>	<b>18%</b>	<b>3,582</b>	<b>5%</b>
Operating Expenses	1,295	(2)%	1,414	9%	1,616	14%	1,721	6%
Operating Income	1,240	3%	1,489	20%	1,804	21%	1,861	3%
Operating Margin <sup>1</sup>	49%		51%		53%		52%	
Income Before Income Taxes	1,128	5%	1,393	23%	1,681	21%	1,740	4%
Net Income	835	5%	1,031	23%	1,273	23%	1,324	4%
Diluted Earnings Per Share	\$1.67	6%	\$2.06	23%	\$2.52	22%	\$2.66	6%
Dividend Per share	\$0.62	9%	\$0.65	5%	\$0.70	8%	\$0.78	11%

<sup>1</sup> Operating margin equals operating income divided by net revenues.

# Solutions Businesses Organic Revenue Growth

<u>Solutions Businesses</u>			Total Variance		Organic Impact		Other Impact <sup>(1)</sup>		
	<i>All figures in US\$ Millions</i>	Current Period	Prior-year Period	\$	%	\$	%	\$	%
3Q23		\$694	\$639	55	9 %	52	8 %	3	— %
2Q23 <sup>(5)</sup>		674	637	37	6 %	36	6 %	1	— %
1Q23 <sup>(5)</sup>		646	623	23	4 %	29	5 %	(6)	(1)%
4Q22 <sup>(5)</sup>		652	631	21	3 %	30	5 %	(9)	(1)%
2022 <sup>(5)</sup>		2,552	2,344	208	9 %	227	10 %	(19)	(1)%
2021 <sup>(2)(5)</sup>		2,356	1,940	416	21 %	295	15 %	121	6 %
2020 <sup>(3)(5)</sup>		1,962	1,770	192	11 %	168	9 %	24	1 %
2019 <sup>(3)(5)</sup>		1,770	1,635	135	8 %	108	7 %	27	2 %
2018 <sup>(3)(4)(5)</sup>		1,675	1,506	169	11 %	107	7 %	62	4 %

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.

<sup>2</sup> Solutions businesses revenues are not recast for the Broker Services wind down that occurred in 2022.

<sup>3</sup> 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.

<sup>4</sup> Solutions business are not recast for the BWISE enterprise governance, risk and compliance software platform, that occurred in 2019.

<sup>5</sup> Solutions business revenues for organic growth calculations have not been recast for the proposed sale of our European power trading and clearing business.

# Trading Services Organic Revenue Growth

<u>Trading Services Business</u>			Total Variance		Organic Impact		Other Impact <sup>(1)</sup>		
	<i>All figures in US\$ Millions</i>	Current Period	Prior-year Period	\$	%	\$	%	\$	%
3Q23		\$236	\$239	(3)	(1)%	(4)	(2)%	1	— %
2Q23 <sup>(3)</sup>		250	252	(2)	(1)%	—	— %	(2)	(1)%
1Q23 <sup>(3)</sup>		267	264	3	1 %	7	3 %	(4)	(2)%
4Q22 <sup>(3)</sup>		253	250	3	1 %	11	4 %	(8)	(3)%
2022 <sup>(3)</sup>		1,019	1,037	(18)	(2)%	12	1 %	(30)	(3)%
2021 <sup>(3)</sup>		1,037	932	105	11 %	91	10 %	14	2 %
2020 <sup>(2)(3)</sup>		941	755	186	25 %	182	24 %	4	1 %
2019 <sup>(2)(3)</sup>		755	794	(39)	(5)%	(25)	(3)%	(14)	(2)%
2018 <sup>(2)(3)</sup>		794	711	83	12 %	81	11 %	2	— %

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. Trading Services revenues for organic growth calculations have not been recast for the sale of NFI that occurred in 2021.

3. Trading Services revenues for organic growth calculations have not been recast for the proposed sale of our European power trading and clearing business.

# 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. For certain Adenza specific term-based subscription license agreements, ARR is calculated based upon annualized contract value, which deviates from U.S. GAAP revenue recognition whereby a portion of the total contract value is recognized upfront as license revenue, with the remainder allocated to the maintenance and support performance obligation and recognized ratably over the contract term. 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.

**AUM:** Assets Under Management.

**Corporate Solutions:** Our corporate solutions business serves both public and private companies and organizations through our Investor Relations Intelligence offerings, Governance Solutions & ESG Solutions.

**ETP:** Exchange Traded Product.

**Gross Retention:** As used herein for Adenza, ARR in the current period over ARR in the prior year period for existing customers excluding price increases and upsells and excluding new customers.

**Net Retention:** As used herein for Adenza, ARR in the current period over ARR in the prior year period for existing customers including price increases and upsells and excluding new customers.

**Net Revenues:** Revenues less transaction-based expenses.

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

**NPM:** Nasdaq Private Market.

**Signed ARR:** includes ARR recognized as revenue in the current period as well as ARR for new contracts signed but not yet commenced.

**Solutions Businesses:** Revenues from our Capital Access Platforms and Anti-Financial Crime segments and Marketplace Technology business within Market Platforms segment.

## *For Additional Investor Relations Information*

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