

Nasdaq Reports Second Quarter 2023 Results; Consistent Execution Drives Solid Revenue Growth

NEW YORK, July 19, 2023 - Nasdaq, Inc. (Nasdaq: NDAQ) today reported financial results for the second quarter of 2023.

- Second quarter 2023 net revenues¹ increased **4%** compared to the second quarter of 2022. Solutions businesses² revenues increased **6%** with organic growth³ also at **6%**.
- Annualized Recurring Revenue (ARR)⁴ increased **6%** compared to the second quarter of 2022. Annualized SaaS revenues increased **11%** and represented **36%** of ARR.
- Anti-Financial Crime revenue increased **19%** compared to the second quarter of 2022. Large financial institutions are accelerating their adoption of Verafin’s fraud detection and anti-money laundering solutions, including the previously announced signing of two **Tier 1** clients and two **Tier 2** clients in the second quarter.
- Second quarter 2023 GAAP diluted earnings per share decreased **13%** compared to the second quarter of 2022. Second quarter 2023 non-GAAP³ diluted earnings per share increased **3%** compared to the second quarter of 2022.
- The company returned **\$109** million to shareholders in the second quarter of 2023 through dividends.

Second Quarter 2023 Highlights

(US\$ millions, except per share)	2Q23	% Change (YoY)	Organic % Change (YoY)
Solutions Businesses Revenues	\$674	6%	6%
Trading Services Net Revenues	\$250	(1)%	—%
Net Revenues*	\$925	4%	4%
ARR	\$2,073	6%	
GAAP Diluted EPS	\$0.54	(13)%	
Non-GAAP Diluted EPS	\$0.71	3%	

*Net revenues include Other revenues of \$1 million in the second quarter of 2023 and \$4 million in the second quarter of 2022.

Adena Friedman, Chair and CEO said, “Nasdaq achieved another quarter of solid financial results in an uncertain environment as we took a significant step to expand our ability to serve our financial clients in solving their most complex operational challenges.

Our planned acquisition of Adenza represents another critical step in our multi-year transformation to become a leading technology partner to the financial system, with a specific focus on managing liquidity and capital risk, reducing financial crime, and meeting regulatory obligations. Our goal is to deliver mission-critical platforms that enhance liquidity, transparency, and integrity of the global financial system.”

Ann Dennison, Executive Vice President and CFO said, “Our solid financial performance in the second quarter reflects the durability and recurring nature of our business and the resilient demand for our diversified set of client solutions.

In June, we secured \$5 billion in bond financing for the Adenza acquisition at favorable rates and saw exceptional demand for our multi-currency global debt offerings. Our consistent cash flow generation makes Nasdaq well positioned to execute our deleveraging plan while making focused, organic investments that advance our strategy, while executing our dividend growth and share repurchase strategies.”

FINANCIAL REVIEW

- Second quarter 2023 net revenues were \$925 million, an increase of \$32 million, or 4%, from \$893 million in the prior year period. Net revenues reflected a \$36 million, or 4%, positive impact from organic growth, including positive contributions from all segments, partially offset by a \$2 million decrease from the impact of changes in FX rates and a \$2 million decrease from the net impact of an acquisition and divestiture.
- Solutions Businesses revenues were \$674 million in the second quarter of 2023, an increase of \$37 million, or 6% with organic growth also of 6%. ARR, which reflects the majority of the Solutions Businesses revenues and excludes the AUM and transaction licensing components of Index, increased 6% from the prior year period.
- Trading Services net revenues were \$250 million in the second quarter of 2023, a decrease of \$2 million, or 1%. The decrease reflects flat organic growth and a \$2 million negative impact from changes in FX rates.
- Second quarter 2023 GAAP operating expenses increased \$62 million, or 13%, versus the prior year period. The increase primarily reflects higher merger and strategic initiatives expense related to the Adenza acquisition, higher restructuring expenses associated with the launch of our divisional alignment program in the fourth quarter of 2022, and higher employee compensation costs, partially offset by lower general and administrative expense.
- Second quarter 2023 non-GAAP operating expenses increased \$28 million, or 7% versus the prior year period. The increase primarily reflects increased expenses associated with the continued investment in our people and our businesses to drive long term growth, partially offset by changes in FX rates.
- The company did not repurchase any of its common stock during the second quarter of 2023. As of June 30, 2023, there was \$491 million remaining under the board authorized share repurchase program.

2023 EXPENSE AND TAX GUIDANCE UPDATE⁵

- The company is updating its 2023 non-GAAP operating expense guidance to a range of \$1,785 million to \$1,815 million. Nasdaq expects its 2023 non-GAAP tax rate to be in the range of 24% to 26%.

STRATEGIC AND BUSINESS UPDATES

- **Nasdaq announced the acquisition of Adenza.** In June, Nasdaq announced it entered into a definitive agreement to acquire Adenza for \$10.5 billion in cash and stock. The transaction supercharges Nasdaq's ability to become a leading provider of capital markets risk and regulatory technology. Adenza operates two leading software platforms: Calypso's front-to-back suite of capital markets risk management, treasury, cash, collateral management, and post-trade solutions; and AxiomSL's regulatory reporting, global shareholder disclosure, capital and liquidity management, transaction and ESG reporting solutions. Adenza expands Nasdaq's serviceable addressable market by approximately 40% by adding a solidly expanding market opportunity with powerful secular growth drivers across regulatory and market reforms, digitization and modernization, and vendor simplification as financial institutions move from in-house to trusted-partner solutions.
- **Nasdaq secured approximately \$5 billion in financing for the proposed acquisition of Adenza through an oversubscribed debt offering.** Nasdaq secured financing through a successful bond issuance of \$4.25 billion in US dollar denominated debt across 2, 5, 10, 30 and 40 year terms and a 750 million Euro denominated 8-year bond with an attractive weighted average interest rate of just under 5.5%.
- **In Marketplace Technology, two leading Latin American exchanges, DCV and B3, adopted Nasdaq's post-trade technology.** Chile's central securities depository, Depósito Central de Valores (DCV), has launched Nasdaq Central Security Depository platform for issuing and settling digital securities. Separately, Nasdaq signed a 10-plus year partnership with Brazil's largest stock exchange, Brasil, Bolsa, Balcão (B3), to build a next generation clearing solution under which B3 will migrate to Nasdaq's real-time clearing platform and work as a product roadmap development partner.
- **Nasdaq announced its plan to sell its European energy trading and clearing business.** As part of its focus on prioritizing high value opportunities, Nasdaq entered into an agreement to sell its European energy trading and clearing business, subject to regulatory approval, but remains committed to being a leading European market operator.
- **Verafin accelerated its large customer momentum signing four significant new bank clients in the second quarter.** As we previously announced, Verafin signed two Tier 1 bank customers and signed two additional Tier 2 banks to its anti-fraud solutions. Verafin's continuing growth with large financial institutions reflects the differentiated value of its SaaS enabled anti-money laundering and fraud prevention solutions data consortium.
- **Nasdaq executed second-highest ever one-day Closing Cross volume in June.** During the annual Russell U.S. indexes reconstitution, which occurred in late June, Nasdaq successfully executed approximately 2.6 billion shares representing \$62 billion dollars in market value in 0.86 seconds across Nasdaq-listed securities. This represented the second highest volume of shares crossed since implementing the Closing Cross in 2004, demonstrating Nasdaq's robust and resilient market infrastructure.

- **Nasdaq maintained listings leadership in the U.S.** The Nasdaq Stock Market led U.S. exchanges for operating company IPOs with a 77% total win rate during the first half of 2023. The Nasdaq Stock Market featured two of the three largest U.S. operating company IPOs by capital raised, with a strong pipeline of companies on file and committed to list with Nasdaq.

¹ Represents revenues less transaction-based expenses.

² Constitutes revenues from our Capital Access Platforms and Anti-Financial Crime segments and Marketplace Technology business within Market Platforms.

³ Refer to our reconciliations of U.S. GAAP to non-GAAP net income, diluted earnings per share, operating income, operating expenses and organic impacts included in the attached schedules.

⁴ Annualized Recurring Revenue (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.

⁵ 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.

ABOUT NASDAQ

Nasdaq (Nasdaq: NDAQ) is a global technology company serving corporate clients, investment managers, banks, brokers, and exchange operators as they navigate and interact with the global capital markets and the broader financial system. We aspire to deliver world-leading platforms that improve the liquidity, transparency, and integrity of the global economy. Our diverse offering of data, analytics, software, exchange capabilities, and client-centric services enables clients to optimize and execute their business vision with confidence. To learn more about the company, technology solutions and career opportunities, visit us on [LinkedIn](#), on Twitter [@Nasdaq](#), or at www.nasdaq.com.

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, and non-GAAP operating expenses, that include certain adjustments or exclude certain charges and gains that are described in the reconciliation table of U.S. GAAP to non-GAAP information provided at the end of this release. Management uses this non-GAAP information internally, along with U.S. GAAP information, in evaluating our performance and in making financial and operational decisions. We believe our presentation of these measures provides investors with greater transparency and supplemental data relating to our financial condition and results of operations. In addition, we believe the presentation of these measures is useful to investors for period-to-period comparisons of results as the items described below in the reconciliation tables 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 earnings release. When viewed in conjunction with our U.S. GAAP results and the accompanying reconciliations, we believe these non-GAAP measures provide greater transparency and a more complete understanding of factors affecting our business than U.S. GAAP measures alone.

We understand that analysts and investors regularly rely on non-GAAP financial measures, such as 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 are described within the body of this release.

Foreign exchange impact: In countries with currencies other than the U.S. dollar, revenues and expenses are translated using monthly average exchange rates. Certain discussions in this release isolate the impact of year-over-year foreign currency fluctuations to better measure the comparability of operating results between periods. Operating results excluding the impact of foreign currency fluctuations are calculated by translating the current period's results by the prior period's exchange rates.

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.

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. 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.

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Nasdaq, Inc.
Condensed Consolidated Statements of Income
(in millions, except per share amounts)
(unaudited)

	Three Months Ended		Six Months Ended	
	June 30, 2023	June 30, 2022	June 30, 2023	June 30, 2022
Revenues:				
Market Platforms	\$ 905	\$ 1,051	\$ 1,938	\$ 2,090
Capital Access Platforms	438	422	854	841
Anti-Financial Crime	89	75	173	147
Other Revenues	1	4	1	9
Total revenues	<u>1,433</u>	<u>1,552</u>	<u>2,966</u>	<u>3,087</u>
Transaction-based expenses:				
Transaction rebates	(444)	(529)	(931)	(1,111)
Brokerage, clearance and exchange fees	(64)	(130)	(197)	(191)
Revenues less transaction-based expenses	<u>925</u>	<u>893</u>	<u>1,838</u>	<u>1,785</u>
Operating Expenses:				
Compensation and benefits	261	247	517	501
Professional and contract services	30	29	61	64
Computer operations and data communications	56	50	110	101
Occupancy	32	25	71	52
General, administrative and other	22	34	35	55
Marketing and advertising	9	11	19	21
Depreciation and amortization	65	65	134	132
Regulatory	9	8	17	15
Merger and strategic initiatives	45	12	47	27
Restructuring charges	14	—	33	—
Total operating expenses	<u>543</u>	<u>481</u>	<u>1,044</u>	<u>968</u>
Operating income	<u>382</u>	<u>412</u>	<u>794</u>	<u>817</u>
Interest income	8	—	15	1
Interest expense	(36)	(32)	(73)	(64)
Other (loss) income	(6)	8	(7)	2
Net (loss) income from unconsolidated investees	(11)	9	3	15
Income before income taxes	<u>337</u>	<u>397</u>	<u>732</u>	<u>771</u>
Income tax provision	70	90	165	182
Net income	<u>267</u>	<u>307</u>	<u>567</u>	<u>589</u>
Net loss attributable to noncontrolling interests	—	—	1	1
Net income attributable to Nasdaq	<u>\$ 267</u>	<u>\$ 307</u>	<u>\$ 568</u>	<u>\$ 590</u>
Per share information:				
Basic earnings per share	<u>\$ 0.54</u>	<u>\$ 0.62</u>	<u>\$ 1.16</u>	<u>\$ 1.20</u>
Diluted earnings per share	<u>\$ 0.54</u>	<u>\$ 0.62</u>	<u>\$ 1.15</u>	<u>\$ 1.18</u>
Cash dividends declared per common share	<u>\$ 0.22</u>	<u>\$ 0.20</u>	<u>\$ 0.42</u>	<u>\$ 0.38</u>
Weighted-average common shares outstanding for earnings per share:				
Basic	490.8	492.2	490.4	493.7
Diluted	493.6	496.6	494.2	499.2

Nasdaq, Inc.
Revenue Detail
(in millions)
(unaudited)

	Three Months Ended		Six Months Ended	
	June 30, 2023	June 30, 2022	June 30, 2023	June 30, 2022
MARKET PLATFORMS				
Trading Services revenues	\$ 758	\$ 911	\$ 1,646	\$ 1,818
Transaction-based expenses:				
Transaction rebates	(444)	(529)	(931)	(1,111)
Brokerage, clearance and exchange fees	(64)	(130)	(197)	(191)
Trading Services revenues, net	<u>250</u>	<u>252</u>	<u>518</u>	<u>516</u>
Marketplace Technology revenues	147	140	292	272
Total Market Platforms revenues	<u>397</u>	<u>392</u>	<u>810</u>	<u>788</u>
CAPITAL ACCESS PLATFORMS				
Data and Listing Services revenues	187	183	373	365
Index revenues	129	124	239	246
Workflow and Insights revenues	122	115	242	230
Total Capital Access Platforms revenues	<u>438</u>	<u>422</u>	<u>854</u>	<u>841</u>
ANTI-FINANCIAL CRIME	89	75	173	147
OTHER REVENUES	1	4	1	9
REVENUES LESS TRANSACTION-BASED EXPENSES	<u>\$ 925</u>	<u>\$ 893</u>	<u>\$ 1,838</u>	<u>\$ 1,785</u>

Nasdaq, Inc.
Condensed Consolidated Balance Sheets
(in millions)

	June 30,	December 31,
	2023	2022
	(unaudited)	
Assets		
Current assets:		
Cash and cash equivalents	\$ 5,347	\$ 502
Restricted cash and cash equivalents	23	22
Default funds and margin deposits	7,134	7,021
Financial investments	288	181
Receivables, net	597	677
Other current assets	189	201
Total current assets	<u>13,578</u>	<u>8,604</u>
Property and equipment, net	536	532
Goodwill	8,020	8,099
Intangible assets, net	2,490	2,581
Operating lease assets	410	444
Other non-current assets	623	608
Total assets	<u>\$ 25,657</u>	<u>\$ 20,868</u>
Liabilities		
Current liabilities:		
Accounts payable and accrued expenses	\$ 199	\$ 185
Section 31 fees payable to SEC	184	243
Accrued personnel costs	156	243
Deferred revenue	558	357
Other current liabilities	140	122
Default funds and margin deposits	7,134	7,021
Short-term debt	140	664
Total current liabilities	<u>8,511</u>	<u>8,835</u>
Long-term debt	9,792	4,735
Deferred tax liabilities, net	474	456
Operating lease liabilities	427	452
Other non-current liabilities	206	226
Total liabilities	<u>19,410</u>	<u>14,704</u>
Commitments and contingencies		
Equity		
Nasdaq stockholders' equity:		
Common stock	5	5
Additional paid-in capital	1,363	1,445
Common stock in treasury, at cost	(583)	(515)
Accumulated other comprehensive loss	(2,119)	(1,991)
Retained earnings	7,569	7,207
Total Nasdaq stockholders' equity	<u>6,235</u>	<u>6,151</u>
Noncontrolling interests	12	13
Total equity	<u>6,247</u>	<u>6,164</u>
Total liabilities and equity	<u>\$ 25,657</u>	<u>\$ 20,868</u>

Nasdaq, Inc.
Reconciliation of U.S. GAAP to Non-GAAP Net Income, Diluted Earnings Per Share, Operating Income,
Operating Expenses, and Organic Impacts
(in millions, except per share amounts)
(unaudited)

	Three Months Ended		Six Months Ended	
	June 30, 2023	June 30, 2022	June 30, 2023	June 30, 2022
U.S. GAAP net income attributable to Nasdaq	\$ 267	\$ 307	\$ 568	\$ 590
Non-GAAP adjustments:				
Amortization expense of acquired intangible assets ⁽¹⁾	37	39	75	78
Merger and strategic initiatives expense ⁽²⁾	45	12	47	27
Restructuring charges ⁽³⁾	14	—	33	—
Lease asset impairments ⁽⁴⁾	5	—	23	—
Net loss (income) from unconsolidated investees ⁽⁵⁾	11	(9)	(3)	(14)
Extinguishment of debt ⁽⁶⁾	—	16	—	16
Other ⁽⁷⁾	8	(8)	(2)	2
Total non-GAAP adjustments	120	50	173	109
Non-GAAP adjustment to the income tax provision ⁽⁸⁾	(37)	(15)	(52)	(29)
Total non-GAAP adjustments, net of tax	83	35	121	80
Non-GAAP net income attributable to Nasdaq	\$ 350	\$ 342	\$ 689	\$ 670
U.S. GAAP diluted earnings per share	\$ 0.54	\$ 0.62	\$ 1.15	\$ 1.18
Total adjustments from non-GAAP net income above	0.17	0.07	0.24	0.16
Non-GAAP diluted earnings per share	\$ 0.71	\$ 0.69	\$ 1.39	\$ 1.34
Weighted-average diluted common shares outstanding for earnings per share:	493.6	496.6	494.2	499.2

(1) We amortize intangible assets acquired in connection with various acquisitions. Intangible asset amortization expense can vary from period to period due to episodic acquisitions completed, rather than from our ongoing business operations.

(2) We have pursued various strategic initiatives and completed acquisitions and divestitures in recent years which have resulted in expenses which would not have otherwise been incurred. These expenses generally include integration costs, as well as legal, due diligence and other third party transaction costs. The frequency and amount of such expenses vary significantly based on the size, timing and complexity of the transaction. For the three and six months ended June 30, 2023, these costs primarily relate to our acquisition of Adenza.

(3) 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.

(4) During the first quarter of 2023, we initiated a review of our real estate and facility capacity requirements due to our new and evolving work models. As a result, for the three and six months ended June 30, 2023, we recorded impairment charges related to our operating lease assets and leasehold improvements associated with vacating certain leased office space, which are recorded in occupancy expense and depreciation and amortization expense in our Condensed Consolidated Statements of Income.

(5) We exclude our share of the earnings and losses of our equity method investments, primarily our equity interest in the Options Clearing Corporation, or OCC and Nasdaq Private Market, LLC. This provides a more meaningful analysis of Nasdaq's ongoing operating performance or comparisons in Nasdaq's performance between periods.

(6) For the three and six months ended June 30, 2022, we recorded a loss on early extinguishment of debt. The charge for both periods is recorded in general, administrative and other expense in our Condensed Consolidated Statements of Income.

(7) We have excluded certain other charges or gains, including certain tax items, that are the result of other non-comparable events to measure operating performance. For the three and six months ended June 30, 2023 and June 30, 2022, these items primarily included investment gains and losses related to our corporate venture program. For the three and six months ended June 30, 2023, these charges also included an insurance recovery related to legal matters recorded in general, administrative and other expense and professional and contract services expense in our Condensed Consolidated Statements of Income.

(8) The non-GAAP adjustment to the income tax provision primarily includes the tax impact of each non-GAAP adjustment.

Nasdaq, Inc.
Reconciliation of U.S. GAAP to Non-GAAP Net Income, Diluted Earnings Per Share, Operating Income,
Operating Expenses, and Organic Impacts
(in millions)
(unaudited)

	Three Months Ended		Six Months Ended	
	June 30, 2023	June 30, 2022	June 30, 2023	June 30, 2022
U.S. GAAP operating income	\$ 382	\$ 412	\$ 794	\$ 817
Non-GAAP adjustments:				
Amortization expense of acquired intangible assets ⁽¹⁾	37	39	75	78
Merger and strategic initiatives expense ⁽²⁾	45	12	47	27
Restructuring charges ⁽³⁾	14	—	33	—
Lease asset impairments ⁽⁴⁾	5	—	23	—
Extinguishment of debt ⁽⁵⁾	—	16	—	16
Other ⁽⁶⁾	1	1	(10)	5
Total non-GAAP adjustments	102	68	168	126
Non-GAAP operating income	<u>\$ 484</u>	<u>\$ 480</u>	<u>\$ 962</u>	<u>\$ 943</u>
Revenues less transaction-based expenses	\$ 925	\$ 893	\$ 1,838	\$ 1,785
U.S. GAAP operating margin ⁽⁷⁾	41 %	46 %	43 %	46 %
Non-GAAP operating margin ⁽⁸⁾	52 %	54 %	52 %	53 %

(1) We amortize intangible assets acquired in connection with various acquisitions. Intangible asset amortization expense can vary from period to period due to episodic acquisitions completed, rather than from our ongoing business operations.

(2) We have pursued various strategic initiatives and completed acquisitions and divestitures in recent years which have resulted in expenses which would not have otherwise been incurred. These expenses generally include integration costs, as well as legal, due diligence and other third party transaction costs. The frequency and amount of such expenses vary significantly based on the size, timing and complexity of the transaction. For the three and six months ended June 30, 2023, these costs primarily relate to our acquisition of Adenza.

(3) 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.

(4) During the first quarter of 2023, we initiated a review of our real estate and facility capacity requirements due to our new and evolving work models. As a result, for the three and six months ended June 30, 2023, we recorded impairment charges related to our operating lease assets and leasehold improvements associated with vacating certain leased office space, which are recorded in occupancy expense and depreciation and amortization expense in our Condensed Consolidated Statements of Income.

(5) For the three and six months ended June 30, 2022, we recorded a loss on early extinguishment of debt. The charge for both periods is recorded in general, administrative and other expense in our Condensed Consolidated Statements of Income.

(6) We have excluded certain other charges or gains, including certain tax items, that are the result of other non-comparable events to measure operating performance. For the three and six months ended June 30, 2023, these items primarily included insurance recovery related to legal matters recorded in general, administrative and other expense and professional and contract services expense in our Condensed Consolidated Statements of Income.

(7) U.S. GAAP operating margin equals U.S. GAAP operating income divided by revenues less transaction-based expenses.

(8) Non-GAAP operating margin equals non-GAAP operating income divided by revenues less transaction-based expenses.

Nasdaq, Inc.
Reconciliation of U.S. GAAP to Non-GAAP Net Income, Diluted Earnings Per Share, Operating Income,
Operating Expenses, and Organic Impacts
(in millions)
(unaudited)

	Three Months Ended		Six Months Ended	
	June 30, 2023	June 30, 2022	June 30, 2023	June 30, 2022
U.S. GAAP operating expenses	\$ 543	\$ 481	\$ 1,044	\$ 968
Non-GAAP adjustments:				
Amortization expense of acquired intangible assets ⁽¹⁾	(37)	(39)	(75)	(78)
Merger and strategic initiatives expense ⁽²⁾	(45)	(12)	(47)	(27)
Restructuring charges ⁽³⁾	(14)	—	(33)	—
Lease asset impairments ⁽⁴⁾	(5)	—	(23)	—
Extinguishment of debt ⁽⁵⁾	—	(16)	—	(16)
Other ⁽⁶⁾	(1)	(1)	10	(5)
Total non-GAAP adjustments	(102)	(68)	(168)	(126)
Non-GAAP operating expenses	\$ 441	\$ 413	\$ 876	\$ 842

(1) We amortize intangible assets acquired in connection with various acquisitions. Intangible asset amortization expense can vary from period to period due to episodic acquisitions completed, rather than from our ongoing business operations.

(2) We have pursued various strategic initiatives and completed acquisitions and divestitures in recent years which have resulted in expenses which would not have otherwise been incurred. These expenses generally include integration costs, as well as legal, due diligence and other third party transaction costs. The frequency and amount of such expenses vary significantly based on the size, timing and complexity of the transaction. For the three and six months ended June 30, 2023, these costs primarily relate to our acquisition of Adenza.

(3) 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.

(4) During the first quarter of 2023, we initiated a review of our real estate and facility capacity requirements due to our new and evolving work models. As a result, for the three and six months ended June 30, 2023, we recorded impairment charges related to our operating lease assets and leasehold improvements associated with vacating certain leased office space, which are recorded in occupancy expense and depreciation and amortization expense in our Condensed Consolidated Statements of Income.

(5) For the three and six months ended June 30, 2022, we recorded a loss on early extinguishment of debt. The charge for both periods is recorded in general, administrative and other expense in our Condensed Consolidated Statements of Income.

(6) We have excluded certain other charges or gains, including certain tax items, that are the result of other non-comparable events to measure operating performance. For the three and six months ended June 30, 2023, these items primarily included insurance recovery related to legal matters recorded in general, administrative and other expense and professional and contract services expense in our Condensed Consolidated Statements of Income.

Nasdaq, Inc.
Reconciliation of U.S. GAAP to Non-GAAP Net Income, Diluted Earnings Per Share, Operating Income,
Operating Expenses, and Organic Impacts
(in millions)
(unaudited)

	Three Months Ended		Total Variance		Organic Impact		Other Impacts ⁽¹⁾	
	June 30, 2023	June 30, 2022						
Trading Services	\$ 250	\$ 252	\$ (2)	(1)%	\$ —	—%	\$ (2)	(1)%
Solutions Businesses ⁽²⁾	674	637	37	6%	36	6%	1	—%
Other	1	4	(3)	(75)%	—	—%	(3)	(75)%
Revenues less transaction-based expenses	\$ 925	\$ 893	\$ 32	4%	\$ 36	4%	\$ (4)	—%

(1) Other impacts includes acquisition, divestiture and the impact of changes in FX rates.

(2) Represents Capital Access Platforms and Anti-Financial Crime segments and the Marketplace Technology business within the Market Platforms segment.

Nasdaq, Inc.
Quarterly Key Drivers Detail
(unaudited)

	Three Months Ended		Six Months Ended	
	June 30, 2023	June 30, 2022	June 30, 2023	June 30, 2022
Market Platforms				
Annualized recurring revenues (in millions) ⁽¹⁾	\$ 516	\$ 492	\$ 516	\$ 492
Trading Services				
Equity Derivative Trading and Clearing				
<i>U.S. equity options</i>				
Total industry average daily volume (in millions)	39.2	36.7	40.8	38.3
Nasdaq PHLX matched market share	11.5 %	11.7 %	11.3 %	11.6 %
The Nasdaq Options Market matched market share	6.4 %	8.2 %	6.8 %	8.3 %
Nasdaq BX Options matched market share	3.0 %	2.1 %	3.1 %	2.1 %
Nasdaq ISE Options matched market share	6.0 %	5.4 %	5.8 %	5.6 %
Nasdaq GEMX Options matched market share	2.2 %	2.4 %	2.1 %	2.4 %
Nasdaq MRX Options matched market share	1.6 %	1.6 %	1.6 %	1.7 %
Total matched market share executed on Nasdaq's exchanges	30.7 %	31.4 %	30.7 %	31.7 %
<i>Nasdaq Nordic and Nasdaq Baltic options and futures</i>				
Total average daily volume of options and futures contracts ⁽²⁾	307,754	277,008	326,687	322,390
Cash Equity Trading				
<i>Total U.S.-listed securities</i>				
Total industry average daily share volume (in billions)	10.8	12.6	11.3	12.7
Matched share volume (in billions)	113.7	139.0	235.5	281.2
The Nasdaq Stock Market matched market share	16.3 %	16.5 %	16.1 %	16.4 %
Nasdaq BX matched market share	0.4 %	0.5 %	0.3 %	0.5 %
Nasdaq PSX matched market share	0.4 %	0.8 %	0.4 %	0.8 %
Total matched market share executed on Nasdaq's exchanges	17.1 %	17.8 %	16.8 %	17.7 %
Market share reported to the FINRA/Nasdaq Trade Reporting Facility	34.2 %	34.3 %	32.9 %	33.9 %
Total market share ⁽³⁾	51.3 %	52.1 %	49.7 %	51.6 %
<i>Nasdaq Nordic and Nasdaq Baltic securities</i>				
Average daily number of equity trades executed on Nasdaq's exchanges	687,158	948,874	739,480	1,043,461
Total average daily value of shares traded (in billions)	\$ 4.7	\$ 5.7	\$ 5.0	\$ 6.4
Total market share executed on Nasdaq's exchanges	71.4 %	72.2 %	70.1 %	72.6 %
Fixed Income and Commodities Trading and Clearing				
<i>Fixed Income</i>				
Total average daily volume of Nasdaq Nordic and Nasdaq Baltic fixed income contracts	110,498	124,727	100,730	125,246
<i>Commodities</i>				
Power contracts cleared (TWh) ⁽⁴⁾	76	115	162	250
Marketplace Technology				
Order intake (in millions) ⁽⁵⁾	\$ 90	\$ 89	\$ 122	\$ 127
Capital Access Platforms				
Annualized recurring revenues (in millions) ⁽¹⁾	\$ 1,218	\$ 1,167	\$ 1,218	\$ 1,167
<i>Initial public offerings</i>				
The Nasdaq Stock Market ⁽⁶⁾	23	38	63	108
Exchanges that comprise Nasdaq Nordic and Nasdaq Baltic	1	17	3	30
<i>Total new listings</i>				
The Nasdaq Stock Market ⁽⁶⁾	62	84	143	194
Exchanges that comprise Nasdaq Nordic and Nasdaq Baltic ⁽⁷⁾	6	25	13	44
<i>Number of listed companies</i>				
The Nasdaq Stock Market ⁽⁸⁾	4,106	4,269	4,106	4,269
Exchanges that comprise Nasdaq Nordic and Nasdaq Baltic ⁽⁹⁾	1,249	1,260	1,249	1,260
<i>Index</i>				
Number of licensed exchange traded products (ETPs)	386	374	386	374
Period end ETP assets under management (AUM) tracking Nasdaq indexes (in billions)	\$ 418	\$ 321	\$ 418	\$ 321
Quarterly average ETP assets under management (AUM) tracking Nasdaq indexes (in billions)	\$ 381	\$ 350		
TTM ⁽¹⁰⁾ net inflows ETP AUM tracking Nasdaq indexes (in billions)	\$ 25	\$ 71	\$ 25	\$ 71
TTM ⁽¹⁰⁾ net (depreciation) appreciation ETP AUM tracking Nasdaq indexes (in billions)	\$ 73	\$ (90)	\$ 73	\$ (90)
Anti-Financial Crime				
Annualized recurring revenues (in millions) ⁽¹⁾	\$ 339	\$ 288	\$ 339	\$ 288
Total signed ARR ⁽¹¹⁾	\$ 365	\$ 305	\$ 365	\$ 305

(1) Annualized Recurring Revenue, or ARR, for a given period is the annualized revenue of support services and SaaS subscription contracts. 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 during the reporting period used in calculating ARR may or may not be extended or renewed by our customers.

(2) Includes Finnish option contracts traded on Eurex for which Nasdaq and Eurex have a revenue sharing arrangement.

(3) Includes transactions executed on The Nasdaq Stock Market's, Nasdaq BX's and Nasdaq PSX's systems plus trades reported through the Financial Industry Regulatory Authority/Nasdaq Trade Reporting Facility.

(4) Transactions executed on Nasdaq Commodities or OTC and reported for clearing to Nasdaq Commodities measured by Terawatt hours (TWh).

(5) Represents the total contract value of orders signed in the period.

(6) New listings include IPOs, including issuers that switched from other listing venues, closed-end funds and separately listed ETPs. For the three months ended June 30, 2023 and 2022, IPOs included 5 and 16 SPACs, respectively. For the six months ended June 30, 2023 and 2022, IPOs included 15 and 59 SPACs, respectively.

(7) New listings include IPOs and represent companies listed on the Nasdaq Nordic and Nasdaq Baltic exchanges and companies on the alternative markets of Nasdaq First North.

(8) Number of total listings on The Nasdaq Stock Market for the six months ended June 30, 2023 and 2022 included 547 ETPs and 465 ETPs, respectively.

(9) Represents companies listed on the Nasdaq Nordic and Nasdaq Baltic exchanges and companies on the alternative markets of Nasdaq First North.

(10) Trailing 12-months.

(11) Total signed ARR includes ARR recognized as revenue in the current period as well as ARR for new contracts signed but not yet commenced.