

# Exhibit 1

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 10-Q**

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended March 31, 2024

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number: 001-38855

**Nasdaq, Inc.**

(Exact name of registrant as specified in its charter)

Delaware

52-1165937

(State or Other Jurisdiction of Incorporation or Organization)

(I.R.S. Employer Identification No.)

151 W. 42nd Street, New York, New York 10036

(Address of Principal Executive Offices) (Zip Code)

Registrant's telephone number, including area code: +1 212 401 8700

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, \$0.01 par value per share	NDAQ	The Nasdaq Stock Market
4.500% Senior Notes due 2032	NDAQ32	The Nasdaq Stock Market
0.900% Senior Notes due 2033	NDAQ33	The Nasdaq Stock Market
0.875% Senior Notes due 2030	NDAQ30	The Nasdaq Stock Market
1.75% Senior Notes due 2029	NDAQ29	The Nasdaq Stock Market

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class	Outstanding at April 24, 2024
Common Stock, \$0.01 par value per share	576,532,584 shares

## Nasdaq, Inc.

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**About this Form 10-Q**

Throughout this Form 10-Q, unless otherwise specified:

- “Nasdaq,” “we,” “us” and “our” refer to Nasdaq, Inc.
- “Nasdaq Baltic” refers to collectively, Nasdaq Tallinn AS, Nasdaq Riga, AS, and AB Nasdaq Vilnius.
- “Nasdaq BX” refers to the cash equity exchange operated by Nasdaq BX, Inc.
- “Nasdaq BX Options” refers to the options exchange operated by Nasdaq BX, Inc.
- “Nasdaq Clearing” refers to the clearing operations conducted by Nasdaq Clearing AB.
- “Nasdaq CXC” and “Nasdaq CX2” refer to the Canadian cash equity trading books operated by Nasdaq CXC Limited.
- “Nasdaq First North” refers to our alternative marketplaces for smaller companies and growth companies in the Nordic and Baltic regions.
- “Nasdaq GEMX” refers to the options exchange operated by Nasdaq GEMX, LLC.
- “Nasdaq ISE” refers to the options exchange operated by Nasdaq ISE, LLC.
- “Nasdaq MRX” refers to the options exchange operated by Nasdaq MRX, LLC.
- “Nasdaq Nordic” refers to collectively, Nasdaq Clearing AB, Nasdaq Stockholm AB, Nasdaq Copenhagen A/S, Nasdaq Helsinki Ltd, and Nasdaq Iceland hf.
- “Nasdaq PHLX” refers to the options exchange operated by Nasdaq PHLX LLC.
- “Nasdaq PSX” refers to the cash equity exchange operated by Nasdaq PHLX LLC.
- “The Nasdaq Options Market” refers to the options exchange operated by The Nasdaq Stock Market LLC.
- “The Nasdaq Stock Market” refers to the cash equity exchange and listing venue operated by The Nasdaq Stock Market LLC.

Nasdaq also provides as a tool for the reader the following list of abbreviations and acronyms that are used throughout this Quarterly Report on Form 10-Q.

2022 Revolving Credit Facility: \$1.25 billion senior unsecured revolving credit facility, which matures on December 16, 2027, which has replaced the \$1.25 billion credit facility issued in 2020

2025 Notes: \$500 million aggregate principal amount of 5.650% senior unsecured notes due June 28, 2025

2026 Notes: \$500 million aggregate principal amount of 3.850% senior unsecured notes due June 30, 2026

2028 Notes: \$1 billion aggregate principal amount of 5.350% senior unsecured notes due June 28, 2028

2029 Notes: €600 million aggregate principal amount of 1.75% senior unsecured notes due March 28, 2029

2030 Notes: €600 million aggregate principal amount of 0.875% senior unsecured notes due February 13, 2030

2031 Notes: \$650 million aggregate principal amount of 1.650% senior unsecured notes due January 15, 2031

2032 Notes: €750 million aggregate principal amount of 4.500% senior unsecured notes due February 15, 2032

2033 Notes: €615 million aggregate principal amount of 0.900% senior unsecured notes due July 30, 2033

2034 Notes: \$1.25 billion aggregate principal amount of 5.550% senior unsecured notes due February 15, 2034

2040 Notes: \$650 million aggregate principal amount of 2.500% senior unsecured notes due December 21, 2040

2050 Notes: \$500 million aggregate principal amount of 3.250% senior unsecured notes due April 28, 2050

2052 Notes: \$550 million aggregate principal amount of 3.950% senior unsecured notes due March 7, 2052

2053 Notes: \$750 million aggregate principal amount of 5.950% senior unsecured notes due August 15, 2053

2063 Notes: \$750 million aggregate principal amount of 6.100% senior unsecured notes due June 28, 2063

ARR: Annualized Recurring Revenue

ASC: Accounting Standards Codification

ASU: Accounting Standards Update

AUM: Assets Under Management

CCP: Central Counterparty

CFTC: U.S. Commodity Futures Trading Commission

ESG: Environmental, Social and Governance

EMIR: European Market Infrastructure Regulation

ESPP: Nasdaq Employee Stock Purchase Plan

ETP: Exchange Traded Product

Exchange Act: Securities Exchange Act of 1934, as amended

FASB: Financial Accounting Standards Board

FINRA: Financial Industry Regulatory Authority

IPO: Initial Public Offering

NSCC: National Securities Clearing Corporation

OCC: The Options Clearing Corporation

OTC: Over-the-Counter

PSU: Performance Share Unit

SaaS: Software as a Service

SEC: U.S. Securities and Exchange Commission



SERP: Supplemental Executive Retirement Plan

SPAC: Special Purpose Acquisition Company

SFSA: Swedish Financial Supervisory Authority

SOFR: Secured Overnight Financing Rate

S&P 500: S&P 500 Stock Index

TSR: Total Shareholder Return

U.S. GAAP: U.S. Generally Accepted Accounting Principles

U.S. Tape plans: U.S. cash equity and U.S. options industry data

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This Quarterly Report on Form 10-Q includes market share and industry data that we obtained from industry publications and surveys, reports of governmental agencies and internal company surveys. Industry publications and surveys generally state that the information they contain has been obtained from sources believed to be reliable, but we cannot assure you that this information is accurate or complete. We have not independently verified any of the data from third-party sources nor have we ascertained the underlying economic assumptions relied upon therein. Statements as to our market position are based on the most currently available market data. For market comparison purposes, The Nasdaq Stock Market data in this Quarterly Report on Form 10-Q for IPOs and new listings of equity securities (including issuers that switched from other listings venues, closed-end funds and ETPs) is based on data generated internally by us; therefore, the data may not be comparable to other publicly-available IPO data. Data in this Quarterly Report on Form 10-Q for IPOs and new listings of equity securities on the Nasdaq Nordic and Nasdaq Baltic exchanges and Nasdaq First North also is based on data generated internally by us. IPOs and new listings data is presented as of period end. While we are not aware of any misstatements regarding industry data presented herein, our estimates involve risks and uncertainties and are subject to change based on various factors. We refer you to the “Risk Factors” section in our Form 10-K for the fiscal year ended December 31, 2023 that was filed with the SEC on February 21, 2024.

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

**Forward-Looking Statements**

The SEC encourages companies to disclose forward-looking information so that investors can better understand a company's future prospects and make informed investment decisions. This Quarterly Report on Form 10-Q contains these types of statements. Words such as "may," "will," "could," "should," "anticipates," "envisions," "estimates," "expects," "projects," "intends," "plans," "believes" and words or terms of similar substance used in connection with any discussion of future expectations as to industry and regulatory developments or business initiatives and strategies, future operating results or financial performance, and other future developments are intended to identify forward-looking statements. These include, among others, statements relating to:

- our strategic direction, including changes to our corporate structure;
- the integration of acquired businesses, including accounting decisions relating thereto;
- the scope, nature or impact of acquisitions, divestitures, investments, joint ventures or other transactional activities;
- the effective dates for, and expected benefits of, ongoing initiatives, including transactional activities and other strategic, restructuring, technology, ESG, de-leveraging and capital return initiatives;
- our products and services;
- the impact of pricing changes;
- tax matters;
- the cost and availability of liquidity and capital; and
- any litigation, or any regulatory or government investigation or action, to which we are or could become a party or which may affect us and any potential settlements of litigation, regulatory or governmental investigations or actions, including with respect to our CFTC investigation.

Forward-looking statements involve risks and uncertainties. Factors that could cause actual results to differ materially from those contemplated by the forward-looking statements include, among others, the following:

- our operating results may be lower than expected;
- our ability to successfully integrate acquired businesses or divest sold businesses or assets, including the fact that any integration or transition may be more difficult, time consuming or costly than expected, and we may be unable to realize synergies from business combinations, acquisitions, divestitures or other transactional activities;
- loss of significant trading and clearing volumes or values, fees, market share, listed companies, market data customers or other customers;
- our ability to develop and grow our non-trading businesses;
- our ability to keep up with rapid technological advances, including our ability to effectively manage the development and use of artificial intelligence in certain of our products and offerings, and adequately address cybersecurity risks;

- economic, political and market conditions and fluctuations, including inflation, interest rate and foreign currency risk inherent in U.S. and international operations, and geopolitical instability;
- the performance and reliability of our technology and technology of third parties on which we rely;
- any significant systems failures or errors in our operational processes;
- our ability to continue to generate cash and manage our indebtedness; and
- adverse changes that may occur in the litigation or regulatory areas, or in the securities markets generally, or increased regulatory oversight domestically or internationally.

Most of these factors are difficult to predict accurately and are generally beyond our control. You should consider the uncertainty and any risk related to forward-looking statements that we make. These risk factors are more fully described in the "Risk Factors" section in our Form 10-K filed with the SEC on February 21, 2024. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this report. You should carefully read this entire Quarterly Report on Form 10-Q, including "Part I. Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations" and the condensed consolidated financial statements and the related notes. Except as required by the federal securities laws, we undertake no obligation to update any forward-looking statement, release publicly any revisions to any forward-looking statements or report the occurrence of unanticipated events. For any forward-looking statements contained in any document, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995.

**PART I - FINANCIAL INFORMATION**  
**Item 1. Financial Statements**  
**Nasdaq, Inc.**  
**Condensed Consolidated Balance Sheets**  
(in millions, except share and par value amounts)

	March 31, 2024 (unaudited)	December 31, 2023
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 388	\$ 453
Restricted cash and cash equivalents	21	20
Default funds and margin deposits (including restricted cash and cash equivalents of \$4,821 and \$6,645, respectively)	5,595	7,275
Financial investments	173	188
Receivables, net	925	929
Other current assets	219	231
Total current assets	7,321	9,096
Property and equipment, net	575	576
Goodwill	13,974	14,112
Intangible assets, net	7,291	7,443
Operating lease assets	400	402
Other non-current assets	706	665
Total assets	\$ 30,267	\$ 32,294
<b>Liabilities</b>		
Current liabilities:		
Accounts payable and accrued expenses	\$ 266	\$ 332
Section 31 fees payable to SEC	70	84
Accrued personnel costs	188	303
Deferred revenue	866	594
Other current liabilities	184	146
Default funds and margin deposits	5,595	7,275
Short-term debt	224	291
Total current liabilities	7,393	9,025
Long-term debt	9,765	10,163
Deferred tax liabilities, net	1,655	1,642
Operating lease liabilities	413	417
Other non-current liabilities	222	220
Total liabilities	19,448	21,467
<b>Commitments and contingencies</b>		
<b>Equity</b>		
Nasdaq stockholders' equity:		
Common stock, \$0.01 par value, 900,000,000 shares authorized, shares issued: 599,052,284 at March 31, 2024 and 598,014,520 at December 31, 2023; shares outstanding: 575,758,581 at March 31, 2024 and 575,159,336 at December 31, 2023	6	6
Additional paid-in capital	5,526	5,496
Common stock in treasury, at cost: 23,293,703 shares at March 31, 2024 and 22,855,184 shares at December 31, 2023	(611)	(587)
Accumulated other comprehensive loss	(2,044)	(1,924)
Retained earnings	7,932	7,825
Total Nasdaq stockholders' equity	10,809	10,816
Noncontrolling interests	10	11
Total equity	10,819	10,827
Total liabilities and equity	\$ 30,267	\$ 32,294

See accompanying notes to condensed consolidated financial statements.

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

	Three Months Ended March 31,	
	2024	2023
<b>Revenues:</b>		
Capital Access Platforms	\$ 479	\$ 415
Financial Technology	392	229
Market Services	794	879
Other revenues	9	10
<b>Total revenues</b>	<b>1,674</b>	<b>1,533</b>
<b>Transaction-based expenses:</b>		
Transaction rebates	(481)	(487)
Brokerage, clearance and exchange fees	(76)	(132)
<b>Revenues less transaction-based expenses</b>	<b>1,117</b>	<b>914</b>
<b>Operating expenses:</b>		
Compensation and benefits	340	256
Professional and contract services	34	32
Computer operations and data communications	67	54
Occupancy	28	39
General, administrative and other	28	14
Marketing and advertising	11	9
Depreciation and amortization	155	69
Regulatory	9	9
Merger and strategic initiatives	9	2
Restructuring charges	26	18
<b>Total operating expenses</b>	<b>707</b>	<b>502</b>
<b>Operating income</b>	<b>410</b>	<b>412</b>
Interest income	6	6
Interest expense	(108)	(36)
Other income	1	—
Net income from unconsolidated investees	3	14
<b>Income before income taxes</b>	<b>312</b>	<b>396</b>
Income tax provision	79	95
<b>Net income</b>	<b>233</b>	<b>301</b>
Net loss attributable to noncontrolling interests	1	1
<b>Net income attributable to Nasdaq</b>	<b>\$ 234</b>	<b>\$ 302</b>
<b>Per share information:</b>		
Basic earnings per share	\$ 0.41	\$ 0.62
Diluted earnings per share	\$ 0.40	\$ 0.61
Cash dividends declared per common share	\$ 0.22	\$ 0.20

See accompanying notes to condensed consolidated financial statements.

**Nasdaq, Inc.**  
**Condensed Consolidated Statements of Comprehensive Income**  
**(unaudited)**  
**(in millions)**

	Three Months Ended March 31,	
	2024	2023
<b>Net income</b>	\$ 233	\$ 301
Other comprehensive income (loss):		
Foreign currency translation losses	(117)	(21)
Income tax benefit (expense) <sup>(1)</sup>	(15)	6
Foreign currency translation, net	(132)	(15)
Net unrealized loss from cash flow hedges	(2)	—
Employee benefit plan adjustment	19	—
Employee benefit plan income tax provision	(5)	—
Employee benefit plan, net	14	—
Total other comprehensive loss, net of tax	(120)	(15)
<b>Comprehensive income</b>	113	286
Comprehensive loss attributable to noncontrolling interests	1	1
<b>Comprehensive income attributable to Nasdaq</b>	<u>\$ 114</u>	<u>\$ 287</u>

<sup>(1)</sup> Primarily relates to the tax effect of unrealized gains and losses on Euro denominated notes.

See accompanying notes to condensed consolidated financial statements.

**Nasdaq, Inc.**  
**Condensed Consolidated Statements of Changes in Stockholders' Equity**  
**(unaudited)**  
**(in millions)**

	Three Months Ended March 31,			
	2024		2023	
	Shares	\$	Shares	\$
<b>Common stock</b>	575	6	492	5
<b>Additional paid-in capital</b>				
Beginning balance		5,496		1,445
Share repurchase program	—	—	(3)	(159)
Share-based compensation	1	30	2	26
Ending balance		5,526		1,312
<b>Common stock in treasury, at cost</b>				
Beginning balance		(587)		(515)
Other employee stock activity	—	(24)	(1)	(40)
Ending balance		(611)		(555)
<b>Accumulated other comprehensive loss</b>				
Beginning balance		(1,924)		(1,991)
Other comprehensive loss		(120)		(15)
Ending balance		(2,044)		(2,006)
<b>Retained earnings</b>				
Beginning balance		7,825		7,207
Net income attributable to Nasdaq		234		302
Cash dividends declared and paid		(127)		(98)
Ending balance		7,932		7,411
<b>Total Nasdaq stockholders' equity</b>		10,809		6,167
<b>Noncontrolling interests</b>				
Beginning balance		11		13
Net activity related to noncontrolling interests		(1)		(1)
Ending balance		10		12
<b>Total Equity</b>	576	\$ 10,819	490	\$ 6,179

See accompanying notes to condensed consolidated financial statements.

**Nasdaq, Inc.**  
**Condensed Consolidated Statements of Cash Flows**  
**(unaudited)**  
**(in millions)**

	Three Months Ended March 31,	
	2024	2023
<b>Cash flows from operating activities:</b>		
Net income	\$ 233	\$ 301
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	155	69
Share-based compensation	30	26
Deferred income taxes	(2)	12
Non-cash restructuring charges	—	12
Net income from unconsolidated investees	(3)	(14)
Other reconciling items included in net income	27	16
Net change in operating assets and liabilities:		
Receivables, net	(17)	10
Other assets	(5)	7
Accounts payable and accrued expenses	(73)	(10)
Section 31 fees payable to SEC	(14)	(118)
Accrued personnel costs	(110)	(86)
Deferred revenue	274	300
Other liabilities	35	40
<b>Net cash provided by operating activities</b>	<b>530</b>	<b>565</b>
<b>Cash flows from investing activities:</b>		
Purchases of securities	(40)	(198)
Proceeds from sales and redemptions of securities	44	184
Purchases of property and equipment	(39)	(40)
Investments related to default funds and margin deposits, net <sup>(1)</sup>	(184)	(89)
Other investing activities	(13)	10
<b>Net cash used in investing activities</b>	<b>(232)</b>	<b>(133)</b>
<b>Cash flows from financing activities:</b>		
Repayments of commercial paper, net	(67)	(317)
Repayments of term loan	(340)	—
Repurchases of common stock	—	(159)
Dividends paid	(127)	(98)
Payments related to employee shares withheld for taxes	(24)	(40)
Default funds and margin deposits	(1,317)	2
Other financing activities	—	(1)
<b>Net cash used in financing activities</b>	<b>(1,875)</b>	<b>(613)</b>
Effect of exchange rate changes on cash and cash equivalents and restricted cash and cash equivalents	(311)	29
Net decrease in cash and cash equivalents and restricted cash and cash equivalents	(1,888)	(152)
Cash and cash equivalents, restricted cash and cash equivalents at beginning of period	7,118	6,994
Cash and cash equivalents, restricted cash and cash equivalents at end of period	<u>\$ 5,230</u>	<u>\$ 6,842</u>
<b>Reconciliation of Cash, Cash Equivalents and Restricted Cash and Cash Equivalents</b>		
Cash and cash equivalents	\$ 388	\$ 373
Restricted cash and cash equivalents	21	57
Restricted cash and cash equivalents (default funds and margin deposits)	4,821	6,412
<b>Total</b>	<b>\$ 5,230</b>	<b>\$ 6,842</b>
<b>Supplemental Disclosure Cash Flow Information</b>		
Interest paid	\$ 145	\$ 37
Income taxes paid, net of refund	\$ 23	\$ 18

<sup>(1)</sup> Includes purchases and proceeds from sales and redemptions related to the default funds and margin deposits of our clearing operations. For further information, see "Default Fund Contributions and Margin Deposits," within Note 14, "Clearing Operations."

See accompanying notes to condensed consolidated financial statements.

**Nasdaq, Inc.****Notes to Condensed Consolidated Financial Statements****(Unaudited)****1. ORGANIZATION AND NATURE OF OPERATIONS**

Nasdaq 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.

In the fourth quarter of 2023, following the completion of the Adenza Holdings, Inc., or Adenza, acquisition, including its two flagship solutions, AxiomSL and Calypso, we further aligned our business more closely with the foundational shifts that are driving the evolution of the global financial system. We now manage, operate and provide our products and services in three business segments: Capital Access Platforms, Financial Technology and Market Services. The divisional structure, which was implemented during the fourth quarter of 2023, is as follows:

<b>Pre-Acquisition</b>		<b>Post-Acquisition</b>	
<b>Capital Access Platforms</b>	Data & Listings Index Workflow & Insights	<b>Capital Access Platforms</b>	Data & Listings Index Workflow & Insights
<b>Anti-Financial Crime</b>	Fraud & AML Surveillance	<b>Financial Technology</b>	Financial Crime Management Technology Regulatory Technology • Surveillance • AxiomSL Capital Markets Technology • Market Technology • Trade Management Services • Calypso
<b>Market Platforms</b>	Marketplace Technology Trading Services	<b>Market Services</b>	Trading Services

**Capital Access Platforms**

Our Capital Access Platforms segment comprises Data & Listing Services, Index and Workflow & Insights.

Our Data business distributes historical and real-time market data to sell-side customers, the institutional investing community, retail online brokers, proprietary trading firms and other venues, as well as internet portals and data distributors. Our data products can enhance the transparency of market activity within our exchanges and provide critical information to professional and non-professional investors globally.

Our Listing Services business operates listing platforms in the U.S. and Europe to provide multiple global capital raising solutions for public companies. Our main listing markets are The Nasdaq Stock Market and the Nasdaq Nordic and Nasdaq Baltic exchanges. Through Nasdaq First North, our Nordic and Baltic operations also offer alternative marketplaces for smaller companies and growth companies.

As of March 31, 2024, a total of 5,223 companies listed securities on our U.S., Nasdaq Nordic, Nasdaq Baltic and Nasdaq First North exchanges. As of March 31, 2024, there were 4,020 total listings on The Nasdaq Stock Market, including 619 ETPs. The combined market capitalization in the U.S. was approximately \$29.4 trillion. In Europe, the Nasdaq Nordic and Nasdaq Baltic exchanges, together with Nasdaq First North, were home to 1,203 listed companies with a combined market capitalization of approximately \$2.2 trillion.

Our Index business develops and licenses Nasdaq-branded indices and financial products. We also license cash-settled options, futures and options on futures on our indices. As of March 31, 2024, 361 ETPs listed on 27 exchanges in over 20 countries tracked a Nasdaq index and accounted for \$519 billion in AUM.

Workflow & Insights includes our analytics and corporate solutions businesses. Our analytics business provides asset managers, investment consultants and institutional asset owners with information and analytics to make data-driven investment decisions, deploy their resources more productively, and provide liquidity solutions for private funds. Through our eVestment and Solovis solutions, we provide a suite of cloud-based solutions that help institutional investors and consultants conduct pre-investment due diligence, and monitor their portfolios post-investment. The eVestment platform also enables asset managers to efficiently distribute information about their firms and funds to asset owners and consultants worldwide.

Through our Solovis platform, endowments, foundations, pensions and family offices transform how they collect and aggregate investment data, analyze portfolio performance, model and predict future outcomes, and share meaningful portfolio insights with key stakeholders. The Nasdaq Fund Network and Nasdaq Data Link are additional platforms in our suite of investment data analytics offerings and data management tools.

Our corporate solutions business serves both public and private companies and organizations through our Investor Relations Intelligence, ESG Solutions and Governance Solutions products. Our public company clients can be companies listed on our exchanges or other U.S. and global exchanges. Our private company clients include a diverse group of organizations ranging from family-owned companies, government organizations, law firms, privately held entities, and various non-profit organizations to hospitals and healthcare systems. We help organizations enhance their ability to understand and expand their global shareholder base, improve corporate governance, and navigate the evolving ESG landscape through our suite of advanced technology, analytics, reporting and consulting services.



## Financial Technology

Our Financial Technology segment comprises Financial Crime Management Technology, Regulatory Technology and Capital Markets Technology solutions.

Financial Crime Management Technology includes our Verafin solution, a cloud-based platform to help financial institutions detect, investigate, and report money laundering and financial fraud.

Regulatory Technology comprises our surveillance and AxiomSL solutions. Our surveillance solutions are designed for banks, brokers and other market participants to assist them in complying with market abuse and integrity rules and regulations. In addition, we provide regulators and exchanges with a platform for surveillance. AxiomSL is a global leader in risk data management and regulatory reporting solutions for the financial industry, including banks, broker dealers and asset managers. Its unique enterprise data management platform delivers data lineage, risk aggregation, analytics, workflow automation, reconciliation, validation and audit functionality, as well as disclosures. AxiomSL's platform supports compliance across a wide range of global and local regulations.

Capital Markets Technology includes market technology, trade management services and Calypso. Our market technology business is a leading global technology solutions provider and partner to exchanges, clearing organizations, central securities depositories, regulators, banks, brokers, buy-side firms and corporate businesses. Our market technology solutions are utilized by leading markets in North America, Europe and Asia as well as emerging markets in the Middle East, Latin America, and Africa. Our trade management services provide market participants with a wide variety of alternatives for connecting to and accessing our markets for a fee. Our marketplaces may be accessed via a number of different protocols used for quoting, order entry, trade reporting and connectivity to various data feeds. We also provide colocation services to market participants, whereby we offer firms cabinet space and power to house their own equipment and servers within our data centers. Additionally, we offer a number of wireless connectivity offerings between select data centers using millimeter wave and microwave technology. Calypso is a leading provider of front-to-back technology solutions for the financial markets. The Calypso platform provides customers with a single platform designed from the outset to enable consolidation, innovation and growth.

## Market Services

Our Market Services segment includes revenues from equity derivatives trading, cash equity trading, Nordic fixed income trading & clearing, Nordic commodities and U.S. Tape plans data. We operate 19 exchanges across several asset classes, including derivatives, commodities, cash equity, debt, structured products and ETPs. In addition, in certain countries where we operate exchanges, we also provide clearing, settlement and central depository services. In June

2023, we entered into an agreement to sell our European energy trading and clearing business, subject to regulatory approval. Revenues from this business are reflected in Other Revenues in the Condensed Consolidated Statements of Income for all periods, and in our Corporate segment for our segment disclosures. Additionally, certain data revenues from this business that were previously included in our Capital Access Platforms segment are also reflected in Other Revenues in the Condensed Consolidated Statements of Income for all periods, and in our Corporate segment for our segment disclosures.

Our transaction-based platforms provide market participants with the ability to access, process, display and integrate orders and quotes. The platforms allow the routing and execution of buy and sell orders as well as the reporting of transactions, providing fee-based revenues.

## 2. BASIS OF PRESENTATION AND PRINCIPLES OF CONSOLIDATION

The condensed consolidated financial statements are prepared in accordance with U.S. GAAP and include the accounts of Nasdaq, its wholly-owned subsidiaries and other entities in which Nasdaq has a controlling financial interest. When we do not have a controlling interest in an entity, but exercise significant influence over the entity's operating and financial policies, such investment is accounted for under the equity method of accounting. We recognize our share of earnings or losses of an equity method investee based on our ownership percentage. See "Equity Method Investments," of Note 6, "Investments," for further discussion of our equity method investments.

The accompanying condensed consolidated financial statements reflect all adjustments which are, in the opinion of management, necessary for a fair statement of the results. These adjustments are of a normal recurring nature. All significant intercompany accounts and transactions have been eliminated in consolidation.

As permitted under U.S. GAAP, certain footnotes or other financial information can be condensed or omitted in the interim condensed consolidated financial statements. The information included in this Quarterly Report on Form 10-Q should be read in conjunction with the consolidated financial statements and accompanying notes included in Nasdaq's Form 10-K. The year-end balance sheet data was derived from the audited financial statements, but does not include all disclosures required by U.S. GAAP.

Certain prior year amounts have been reclassified to conform to the current year presentation.

### *Accounting Estimates*

In preparing our condensed consolidated financial statements, we make assumptions, judgments and estimates that can have a significant impact on our revenues, operating income and net income, as well as on the value of certain assets and liabilities in our Condensed Consolidated Balance Sheets. At least quarterly, we evaluate our assumptions, judgments and estimates, and make changes as deemed necessary.

### Recent Accounting Developments

In November 2023, the FASB issued ASU 2023-07, “Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures.” ASU 2023-07 requires disclosure of significant segment expenses that are regularly provided to the chief operating decision maker (“CODM”) and included within the segment measure of profit or loss, an amount and description of its composition for other segment items to reconcile to segment profit or loss, and the title and position of the entity’s CODM and an explanation of how the CODM uses the reported measure of segment profit or loss in assessing segment performance and deciding how to allocate resources. ASU 2023-07 will be applied retrospectively and is effective for annual reporting periods in fiscal years beginning after December 15, 2023, and interim reporting periods in fiscal years beginning after December 31, 2024. We are currently reviewing the impact that the adoption of ASU 2023-07 may have on our consolidated financial statements and disclosures.

### Subsequent Events

There have been no subsequent events through the issuance date of this Quarterly Report on Form 10-Q that would require disclosure in, or adjustment to, the condensed consolidated financial statements.

## 3. REVENUE FROM CONTRACTS WITH CUSTOMERS

### Disaggregation of Revenue

The following table summarizes the disaggregation of revenue by major product and service and by segment for the three months ended March 31, 2024 and 2023:

	Three Months Ended March 31,	
	2024	2023
	(in millions)	
<b>Capital Access Platforms</b>		
Data & Listing Services	\$ 186	\$ 185
Index	168	110
Workflow & Insights	125	120
<b>Financial Technology</b>		
Financial Crime Management Technology	64	52
Regulatory Technology	90	32
Capital Markets Technology	238	145
<b>Market Services, net</b>	237	260
<b>Other revenues</b>	9	10
<b>Revenues less transaction-based expenses</b>	<u>\$ 1,117</u>	<u>\$ 914</u>

Substantially all revenues from the Capital Access Platforms segment were recognized over time for the three months ended March 31, 2024 and 2023. For the three months ended March 31, 2024, 12.2% of Regulatory Technology revenues, related to AxiomSL, were recognized at a point in time and 11.3% of Capital Markets Technology revenues, related to Calypso, were recognized at a point in time. The remaining Financial Technology revenues were recognized over time. For the three months ended March 31, 2024 and 2023 approximately 97.3%, and 93.3%, respectively, of Market Services revenues were recognized at a point in time and 2.7%, and 6.7%, respectively, were recognized over time.

### Contract Balances

Substantially all of our revenues are considered to be revenues from contracts with customers. The related accounts receivable balances are recorded in our Condensed Consolidated Balance Sheets as receivables, which are net of allowance for doubtful accounts of \$18 million as of March 31, 2024 and December 31, 2023. There were no material upward or downward adjustments to the allowance during the three months ended March 31, 2024. We do not have obligations for warranties, returns or refunds to customers.

For the majority of our contracts with customers, except for our market technology and listing services contracts, our performance obligations range from three months to three years and there is no significant variable consideration.

Deferred revenue is the only significant contract asset or liability as of March 31, 2024. Deferred revenue represents consideration received that is yet to be recognized as revenue for unsatisfied performance obligations. Deferred revenue primarily represents our contract liabilities related to our fees for Annual and Initial Listings, Workflow & Insights, Financial Crime Management Technology, Regulatory Technology and Capital Markets Technology contracts. See Note 7, “Deferred Revenue,” for our discussion on deferred revenue balances, activity, and expected timing of recognition.

We do not provide disclosures about transaction price allocated to unsatisfied performance obligations if contract durations are less than one year. For our initial listings, the transaction price allocated to remaining performance obligations is included in deferred revenue, and therefore not included below. For our Financial Crime Management Technology, Regulatory Technology, Capital Markets Technology and Workflow & Insights contracts, the portion of transaction price allocated to unsatisfied performance obligations is presented in the table below. To the extent consideration has been received, unsatisfied performance obligations would be included in the table below as well as deferred revenue.

The following table summarizes the amount of the transaction price allocated to performance obligations that are unsatisfied, for contract durations greater than one year, as of March 31, 2024:

	Financial Crime Management Technology	Regulatory Technology	Capital Markets Technology	Workflow & Insights	Total
(in millions)					
Remainder of 2024	\$ 167	\$ 202	\$ 252	\$ 125	\$ 746
2025	223	214	260	117	814
2026	157	87	206	56	506
2027	69	50	140	26	285
2028	22	32	87	14	155
2029+	6	10	182	1	199
Total	<u>\$ 644</u>	<u>\$ 595</u>	<u>\$ 1,127</u>	<u>\$ 339</u>	<u>\$ 2,705</u>

#### 4. ACQUISITION

##### 2023 Acquisition

In June 2023, we entered into a definitive agreement to acquire Adenza, a provider of mission-critical risk management and regulatory software to the financial services industry, for \$5.75 billion in cash (subject to customary post-closing adjustments) and a fixed amount of 85.6 million shares of Nasdaq common stock, based on the volume-weighted average price per share over 15 consecutive trading days prior to signing. Nasdaq issued approximately \$5.0 billion of debt, and entered into a \$600 million term loan, and used the proceeds for the cash portion of the consideration. See “*Senior Unsecured Notes*” and “*2023 Term Loan*” in “Financing of the Adenza Acquisition” of Note 8, “Debt Obligations,” for further discussion.

On November 1, 2023, Nasdaq completed the acquisition of Adenza for a total purchase consideration of \$9,984 million, which comprises the following:

	(in millions, except price per share)
Shares of Nasdaq common stock issued	85.6
Closing price per share of Nasdaq common stock on November 1, 2023	\$ 48.71
Fair value of equity portion of the purchase consideration	\$ 4,170
Cash consideration	\$ 5,814
Total purchase consideration	<u>\$ 9,984</u>

At the closing of the transaction, the 85.6 million shares of Nasdaq common stock were issued to Thoma Bravo, the sole shareholder of Adenza, and represented approximately 15% of the outstanding shares of Nasdaq. For further discussion on the rights of common stockholders refer to “Common Stock” of Note 11, “Nasdaq Stockholders’ Equity.” Adenza is part of our Financial Technology segment.

The amounts in the table below represent the preliminary allocation of the purchase price to the acquired intangible assets, the deferred tax liability on the acquired intangible assets and other assets acquired and liabilities assumed based on their preliminary respective estimated fair values on the date of acquisition. These amounts are subject to revision during the remainder of the measurement period, a period not to exceed 12 months from the acquisition date.

Adjustments to the provisional values, which may include tax and other estimates, during the measurement period will be recorded in the reporting period in which the adjustment amounts are determined. Changes to amounts recorded as assets and liabilities may result in a corresponding adjustment to goodwill.

The excess purchase price over the net tangible and acquired intangible assets has been recorded as goodwill. The goodwill recognized is attributable primarily to expected synergies and is assigned to our Financial Technology segment.

	(in millions)
Goodwill	\$ 5,933
Acquired intangible assets	5,050
Receivables, net	236
Other net assets acquired	153
Cash and cash equivalents	48
Accrued personnel costs	(44)
Deferred revenue	(130)
Deferred tax liability on acquired intangible assets	(1,262)
Total purchase consideration	<u>\$ 9,984</u>

##### Intangible Assets

The following table presents the details of acquired intangible assets at the date of acquisition. Acquired intangible assets with finite lives are amortized using the straight-line method.

	Customer Relationships	Technology	Trade Names	Total Acquired Intangible Assets
Intangible asset value (in millions)	\$ 3,740	\$ 950	\$ 360	\$ 5,050
Discount rate used	9.5 %	8.5 %	8.5 %	
Estimated average useful life	22 years	6 years	20 years	

##### Customer Relationships

Customer relationships represent the contractual relationships with customers.

##### Methodology

Customer relationships were valued using the income approach, specifically an excess earnings method. The excess earnings method examines the economic returns contributed by the identified tangible and intangible assets of a company, and then isolates the excess return that is attributable to the intangible asset being valued.

*Discount Rate*

The discount rate used reflects the amount of risk associated with the hypothetical cash flows for the customer relationships relative to the overall business. In developing a discount rate for the customer relationships, we estimated a weighted-average cost of capital for the overall business and we utilized this rate as an input when discounting the cash flows. The resulting discounted cash flows were then tax-effected at the applicable statutory rate.

A discounted tax amortization benefit was added to the fair value of the assets under the assumption that the customer relationships would be amortized for tax purposes over a period of 15 years.

*Technology*

As part of our acquisition of Adenza, we acquired developed technology relating to AxiomSL and Calypso.

*Methodology*

The developed technology was valued using the income approach, specifically the relief-from-royalty method, which is used to estimate the cost savings that accrue to the owner of an intangible asset who would otherwise have to pay royalties or license fees on revenues earned through the use of the asset. The royalty rate is applied to the projected revenue over the expected remaining life of the intangible asset to estimate royalty savings. The net after-tax royalty savings are calculated for each year in the remaining economic life of the technology and discounted to present value.

*Discount Rate*

The discount rate used reflects the amount of risk associated with the hypothetical cash flows for the developed technology relative to the overall business as discussed above in “Customer Relationships.”

*Trade Name*

As part of our acquisition of Adenza, we acquired the AxiomSL and Calypso trade names. The trade names are recognized in the industry and carry a reputation for quality. As such, the reputation and positive recognition embodied in the trade names is a valuable asset to Nasdaq.

*Methodology*

The AxiomSL and Calypso trade names were valued using the income approach, specifically the relief-from-royalty method as discussed above in “Technology.”

*Discount Rate*

The discount rate used reflects the amount of risk associated with the hypothetical cash flows for the trade name relative to the overall business as discussed above in “Customer Relationships.”

**5. GOODWILL AND ACQUIRED INTANGIBLE ASSETS****Goodwill**

The following table presents the changes in goodwill by business segment during the three months ended March 31, 2024:

	(in millions)
<b>Capital Access Platforms</b>	
Balance at December 31, 2023	\$ 4,214
Foreign currency translation adjustments	(52)
Balance at March 31, 2024	\$ 4,162
<b>Financial Technology</b>	
Balance at December 31, 2023	\$ 7,873
Foreign currency translation adjustments	(15)
Balance at March 31, 2024	\$ 7,858
<b>Market Services</b>	
Balance at December 31, 2023	\$ 2,025
Foreign currency translation adjustments	(71)
Balance at March 31, 2024	\$ 1,954
<b>Total</b>	
Balance at December 31, 2023	\$ 14,112
Foreign currency translation adjustments	(138)
Balance at March 31, 2024	\$ 13,974

Goodwill represents the excess of purchase price over the value assigned to the net assets, including identifiable intangible assets, of a business acquired. Goodwill is allocated to our reporting units based on the assignment of the fair values of each reporting unit of the acquired company. We test goodwill for impairment at the reporting unit level annually, or in interim periods if certain events occur indicating that the carrying amount may be impaired, such as changes in the business climate, poor indicators of operating performance or the sale or disposition of a significant portion of a reporting unit. There was no impairment of goodwill for the three months ended March 31, 2024 and 2023; however, events such as prolonged economic weakness or unexpected significant declines in operating results of any of our reporting units or businesses may result in goodwill impairment charges in the future.

**Acquired Intangible Assets**

The following table presents details of our total acquired intangible assets, both finite- and indefinite-lived:

	March 31, 2024	December 31, 2023
<u>Finite-Lived Intangible Assets</u>	(in millions)	
<b>Gross Amount</b>		
Technology	\$ 1,235	\$ 1,254
Customer relationships	5,739	5,743
Trade names and other	417	417
Foreign currency translation adjustment	(218)	(194)
Total gross amount	<u>\$ 7,173</u>	<u>\$ 7,220</u>
<b>Accumulated Amortization</b>		
Technology	\$ (200)	\$ (169)
Customer relationships	(977)	(912)
Trade names and other	(26)	(21)
Foreign currency translation adjustment	136	120
Total accumulated amortization	<u>\$ (1,067)</u>	<u>\$ (982)</u>
<b>Net Amount</b>		
Technology	\$ 1,035	\$ 1,085
Customer relationships	4,762	4,831
Trade names and other	391	396
Foreign currency translation adjustment	(82)	(74)
<b>Total finite-lived intangible assets</b>	<u>\$ 6,106</u>	<u>\$ 6,238</u>
 <u><b>Indefinite-Lived Intangible Assets</b></u>		
Exchange and clearing registrations	\$ 1,257	\$ 1,257
Trade names	121	121
Licenses	52	52
Foreign currency translation adjustment	(245)	(225)
<b>Total indefinite-lived intangible assets</b>	<u>\$ 1,185</u>	<u>\$ 1,205</u>
<b>Total intangible assets, net</b>	<u>\$ 7,291</u>	<u>\$ 7,443</u>

There was no impairment of intangible assets for the three months ended March 31, 2024 and 2023.

The following table presents our amortization expense for acquired finite-lived intangible assets:

	Three Months Ended March 31,	
	2024	2023
	(in millions)	
Amortization expense	\$ 123	\$ 38

The table below presents the estimated future amortization expense (excluding the impact of foreign currency translation adjustments of \$82 million as of March 31, 2024) of acquired finite-lived intangible assets as of March 31, 2024:

	(in millions)
Remainder of 2024	\$ 371
2025	499
2026	494
2027	494
2028	460
2029+	3,870
Total	\$ 6,188

**6. INVESTMENTS**

The following table presents the details of our investments:

	March 31, 2024	December 31, 2023
	(in millions)	
Financial investments	\$ 173	\$ 188
Equity method investments	405	380
Equity securities	90	87

**Financial Investments**

Financial investments are comprised of trading securities, primarily highly rated European government debt securities, of which \$160 million as of March 31, 2024 and \$168 million as of December 31, 2023 are assets primarily utilized to meet regulatory capital requirements, mainly for our clearing operations at Nasdaq Clearing.

**Equity Method Investments**

We record our estimated pro-rata share of earnings or losses each reporting period and record any dividends as a reduction in the investment balance. As of March 31, 2024 and 2023, our equity method investments primarily included our 40.0% equity interest in OCC.

The carrying amounts of our equity method investments are included in other non-current assets in the Condensed Consolidated Balance Sheets. No impairments were recorded for the three months ended March 31, 2024 and 2023.

Net income recognized from our equity interest in the earnings and losses of these equity method investments, primarily OCC, was \$3 million and \$14 million for the three months ended March 31, 2024 and 2023, respectively.

## Equity Securities

The carrying amounts of our equity securities are included in other non-current assets in the Condensed Consolidated Balance Sheets. We elected the measurement alternative for substantially all of our equity securities as they do not have a readily determinable fair value. No material adjustments were made to the carrying value of our equity securities for the three months ended March 31, 2024 and 2023. As of March 31, 2024 and December 31, 2023, our equity securities primarily represent various strategic minority investments made through our corporate venture program.

## 7. DEFERRED REVENUE

Deferred revenue represents consideration received that is yet to be recognized as revenue. The changes in our deferred revenue during the three months ended March 31, 2024 are reflected in the following table:

	<u>Balance at</u> <u>December 31, 2023</u>	<u>Additions</u>	<u>Revenue Recognized</u>	<u>Adjustments</u>	<u>Balance at March</u> <u>31, 2024</u>
	(in millions)				
<b>Capital Access Platforms:</b>					
Initial Listings	\$ 97	\$ 8	\$ (12)	\$ (1)	92
Annual Listings	3	260	(1)	(1)	261
Workflow & Insights	180	99	(75)	—	204
<b>Financial Technology:</b>					
Financial Crime Management Technology	123	39	(22)	(4)	136
Regulatory Technology	68	17	(22)	(1)	62
Capital Markets Technology	183	42	(63)	(1)	161
<b>Other</b>	<b>21</b>	<b>13</b>	<b>(5)</b>	<b>(1)</b>	<b>28</b>
Total	\$ 675	\$ 478	\$ (200)	\$ (9)	944

In the above table:

- Additions reflect deferred revenue billed in the current period, net of recognition.
- Revenue recognized includes revenue recognized during the current period that was included in the beginning balance.
- Adjustments reflect foreign currency translation adjustments.
- Other primarily includes deferred revenue from our non-U.S. listing of additional shares fees and our Index business. These fees are included in our Capital Access Platforms segment.

As of March 31, 2024, we estimate that our deferred revenue will be recognized in the following years:

<u>Fiscal year ended:</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029+</u>	<u>Total</u>
	(in millions)						
<b>Capital Access Platforms:</b>							
Initial Listings	\$ 28	\$ 27	\$ 21	\$ 11	\$ 4	\$ 1	92
Annual Listings	261	—	—	—	—	—	261
Workflow & Insights	188	16	—	—	—	—	204
<b>Financial Technology:</b>							
Financial Crime Management Technology	124	12	—	—	—	—	136
Regulatory Technology	57	5	—	—	—	—	62
Capital Markets Technology	148	9	2	2	—	—	161
Other	16	6	4	2	—	—	28
Total	\$ 822	\$ 75	\$ 27	\$ 15	\$ 4	\$ 1	944

In the above table, 2024 represents the remaining nine months of 2024.

Deferred revenue that will be recognized beyond March 31, 2025 is included in other non-current liabilities in the Condensed Consolidated Balance Sheets. The timing of recognition of deferred revenue related to certain market technology contracts represents our best estimates as the recognition is primarily dependent upon the completion of customization and any significant modifications made pursuant to existing market technology contracts.



**8. DEBT OBLIGATIONS**

The following table presents the carrying amounts of our debt outstanding, net of unamortized debt issuance costs:

	March 31, 2024	December 31, 2023
	(in millions)	
<b>Short-term debt:</b>		
Commercial paper	\$ 224	\$ 291
<b>Long-term debt - senior unsecured notes:</b>		
2025 Notes, \$500 million, 5.650% notes due June 28, 2025	498	497
2026 Notes, \$500 million, 3.850% notes due June 30, 2026	499	499
2028 Notes, \$1 billion, 5.350% notes due June 28, 2028	992	991
2029 Notes, €600 million, 1.75% notes due March 28, 2029	644	658
2030 Notes, €600 million, 0.875% notes due February 13, 2030	643	658
2031 Notes, \$650 million, 1.650% notes due January 15, 2031	645	645
2032 Notes, €750 million, 4.500% notes due February 15, 2032	801	819
2033 Notes, €615 million, 0.900% notes due July 30, 2033	659	674
2034 Notes \$1.25 billion, 5.550% notes due February 15, 2034	1,240	1,239
2040 Notes, \$650 million, 2.500% notes due December 21, 2040	644	644
2050 Notes, \$500 million, 3.250% notes due April 28, 2050	487	487
2052 Notes, \$550 million, 3.950% notes due March 7, 2052	541	541
2053 Notes, \$750 million, 5.950% notes due August 15, 2053	738	738
2063 Notes, \$750 million, 6.100% notes due June 28, 2063	738	738
2023 Term Loan	—	339
2022 Revolving Credit Facility	(4)	(4)
<b>Total long-term debt</b>	<b>\$ 9,765</b>	<b>\$ 10,163</b>
<b>Total debt obligations</b>	<b>\$ 9,989</b>	<b>\$ 10,454</b>

**Commercial Paper Program**

Our U.S. dollar commercial paper program is supported by our 2022 Revolving Credit Facility, which provides liquidity support for the repayment of commercial paper issued through this program. See “2022 Revolving Credit Facility” below for further discussion. The effective interest rate of commercial paper issuances fluctuates as short-term interest rates and demand fluctuate. The fluctuation of these rates may impact our interest expense. As of March 31, 2024, we had \$224 million outstanding under the commercial paper program.

**Senior Unsecured Notes**

Our 2040 Notes were issued at par. All of our other outstanding senior unsecured notes were issued at a discount. As a result of the discount, the proceeds received from each issuance were less than the aggregate principal amount. As of March 31, 2024, the amounts in the table above reflect the aggregate principal amount, less the unamortized debt issuance costs, which are being accreted through interest expense over the life of the applicable notes. The accretion of these costs was \$3 million for the three months ended March 31, 2024. Our Euro denominated notes are adjusted for the impact of foreign currency translation. Our senior unsecured notes are general unsecured obligations which rank equally with all of our existing and future unsubordinated obligations and are not guaranteed by any of our subsidiaries. The senior unsecured notes were issued under indentures that, among other things, limit our ability to consolidate, merge or sell all or substantially all of our assets, create liens, and enter into sale and leaseback transactions. The senior unsecured notes may be redeemed by Nasdaq at any time, subject to a make-whole amount.

Upon a change of control triggering event (as defined in the various supplemental indentures governing the applicable notes), the terms require us to repurchase all or part of each holder’s notes for cash equal to 101% of the aggregate principal amount purchased plus accrued and unpaid interest, if any.

The 2029 Notes, 2030 Notes, 2032 Notes and 2033 Notes pay interest annually. All other notes pay interest semi-annually. The U.S senior unsecured notes coupon rates may vary with Nasdaq’s debt rating, to the extent Nasdaq is downgraded below investment grade, up to an upward rate adjustment not to exceed 2%.

**Net Investment Hedge**

Our Euro denominated notes have been designated as a hedge of our net investment in certain foreign subsidiaries to mitigate the foreign exchange risk associated with certain investments in these subsidiaries. Accordingly, the remeasurement of these notes is recorded in accumulated other comprehensive loss within Nasdaq’s stockholders’ equity in the Condensed Consolidated Balance Sheets. For the three months ended March 31, 2024, the impact of translation decreased the U.S. dollar value of our Euro denominated notes by \$62 million.

## **Financing of the Adenza Acquisition**

### ***Senior Unsecured Notes***

In June 2023, Nasdaq issued six series of notes for total proceeds of \$5,016 million, net of debt issuance costs of \$38 million, with various maturity dates ranging from 2025 to 2063. The net proceeds from these notes were used to finance the majority of the cash consideration due in connection with the Adenza acquisition. For further discussion of the Adenza acquisition, see “2023 Acquisition,” of Note 4, “Acquisition.”

### ***2023 Term Loan***

In June 2023, in connection with the financing of the Adenza acquisition, we entered into a term loan credit agreement, or the 2023 Term Loan. The 2023 Term Loan provided us with the ability to borrow up to \$600 million to finance a portion of the cash consideration for the Adenza acquisition, for repayment of certain debt of Adenza and its subsidiaries, and to pay fees, costs and expenses related to the transaction. Under the 2023 Term Loan, borrowings bear interest on the principal amount outstanding at a variable interest rate based on the SOFR plus an applicable margin that varies with Nasdaq’s credit rating. On November 1, 2023, we borrowed \$599 million, net of fees, under this term loan towards payment of the cash consideration due in connection with the Adenza acquisition. We made a partial repayment during the fourth quarter of 2023 and paid the remaining balance in the first quarter of 2024.

## **Credit Facilities**

### ***2022 Revolving Credit Facility***

In December 2022, Nasdaq amended and restated its previously issued \$1.25 billion five-year revolving credit facility, with a new maturity date of December 16, 2027. Nasdaq intends to use funds available under the 2022 Revolving Credit Facility for general corporate purposes and to provide liquidity support for the repayment of commercial paper issued through the commercial paper program. Nasdaq is permitted to repay borrowings under our 2022 Revolving Credit Facility at any time in whole or in part, without penalty.

As of March 31, 2024, no amounts were outstanding on the 2022 Revolving Credit Facility. The \$(4) million balance represents unamortized debt issuance costs which are being accreted through interest expense over the life of the credit facility.

Borrowings under the revolving credit facility and swingline borrowings bear interest on the principal amount outstanding at a variable interest rate based on either the SOFR (or a successor rate to SOFR), the base rate (as defined in the 2022 Revolving Credit Facility agreement), or other applicable rate with respect to non-dollar borrowings, plus an applicable margin that varies with Nasdaq’s debt rating. We are charged commitment fees of 0.100% to 0.250%, depending on our credit rating, whether or not amounts have been borrowed. These commitment fees are included in interest expense and were not material for the three months ended March 31, 2024 and 2023.

The 2022 Revolving Credit Facility contains financial and operating covenants. Financial covenants include a maximum leverage ratio. Operating covenants include, among other things, limitations on Nasdaq’s ability to incur additional indebtedness, grant liens on assets, dispose of assets and make certain restricted payments. The facility also contains customary affirmative covenants, including access to financial statements, notice of defaults and certain other material events, maintenance of properties and insurance, and customary events of default, including cross-defaults to our material indebtedness.

The 2022 Revolving Credit Facility includes an option for Nasdaq to increase the available aggregate amount by up to \$750 million, subject to the consent of the lenders funding the increase and certain other conditions.

### **Other Credit Facilities**

Certain of our European subsidiaries have several other credit facilities, which are available in multiple currencies, primarily to support our Nasdaq Clearing operations in Europe, as well as to provide a cash pool credit line for one subsidiary. These credit facilities, in aggregate, totaled \$180 million as of March 31, 2024 and \$191 million as of December 31, 2023 in available liquidity, none of which was utilized. Generally, these facilities each have a one-year term. The amounts borrowed under these various credit facilities bear interest on the principal amount outstanding at a variable interest rate based on a base rate (as defined in the applicable credit agreement), plus an applicable margin. We are charged commitment fees (as defined in the applicable credit agreement), whether or not amounts have been borrowed. These commitment fees are included in interest expense and were not material for the three months ended March 31, 2024 and 2023.

These facilities include customary affirmative and negative operating covenants and events of default.

### **Debt Covenants**

As of March 31, 2024, we were in compliance with the covenants of all of our debt obligations.



**9. RETIREMENT PLANS****Defined Contribution Savings Plan**

We sponsor a 401(k) plan, which is a voluntary defined contribution savings plan, for U.S. employees. Employees are immediately eligible to make contributions to the plan and are also eligible for an employer contribution match at an amount equal to 100.0% of the first 6.0% of eligible employee contributions. The following table presents the savings plan expense for the three months ended March 31, 2024 and 2023, which is included in compensation and benefits expense in the Condensed Consolidated Statements of Income:

	Three Months Ended March 31,	
	2024	2023
	(in millions)	
Savings Plan expense	\$ 5	\$ 5

**Pension and Supplemental Executive Retirement Plans**

Prior to 2024, we maintained non-contributory, defined-benefit pension plans, non-qualified SERPs for certain senior executives and other post-retirement benefit plans for eligible employees in the U.S. Most employees outside the U.S. are covered by local retirement plans or by applicable social laws. Benefits under social laws are generally expensed in the periods in which the costs are incurred.

In June 2023, we terminated our U.S. pension plan and took steps to wind down the plan and transfer the resulting liability to an insurance company which started in 2023 and was completed in 2024. These steps included settling all future obligations under our U.S. pension plan through a combination of lump sum payments to eligible, electing participants (completed in 2023) and the transfer of any remaining benefits to a third-party insurance company through a group annuity contract. In connection with the plan termination and partial settlement, a pre-tax loss of \$9 million was recorded to compensation and benefits expense in 2023. We finalized the transfer of any remaining benefits during the first quarter of 2024 and recorded an additional settlement pre-tax loss of \$23 million to compensation and benefits expense in the Condensed Consolidated Statements of Income. This was offset by a \$19 million adjustment to Other Comprehensive Income and a \$4 million cash settlement.

The total expense for these plans is included in compensation and benefits expense in the Condensed Consolidated Statements of Income:

	Three Months Ended March 31,	
	2024	2023
	(in millions)	
Retirement Plans expense	\$ 31	\$ 6

**Nonqualified Deferred Compensation Plan**

We sponsor a nonqualified plan, the Nasdaq, Inc. Deferred Compensation Plan. This plan provides certain eligible employees with the opportunity to defer a portion of their annual salary and bonus up to certain approval limits. All deferrals and associated earnings are our general unsecured obligations and were immaterial for the three months ended March 31, 2024 and 2023.

**10. SHARE-BASED COMPENSATION**

We have a share-based compensation program for employees and non-employee directors. Share-based awards granted under this program include restricted stock (consisting of restricted stock units), PSUs and stock options. For accounting purposes, we consider PSUs to be a form of restricted stock. Generally, annual employee awards are granted on or about April 1st of each year.

**Summary of Share-Based Compensation Expense**

The following table presents the total share-based compensation expense resulting from equity awards and the 15.0% discount for the ESPP for the three months ended March 31, 2024 and 2023, which is included in compensation and benefits expense in the Condensed Consolidated Statements of Income:

	Three Months Ended March 31,	
	2024	2023
	(in millions)	
Share-based compensation expense before income taxes	\$ 30	\$ 26

**Common Shares Available Under Our Equity Plan**

As of March 31, 2024, we had approximately 24.9 million shares of common stock authorized for future issuance under our Equity Plan.

**Restricted Stock**

We grant restricted stock to most employees. The grant date fair value of restricted stock awards is based on the closing stock price at the date of grant less the present value of future cash dividends. Restricted stock awards granted to employees below the manager level generally vest 33% on the first anniversary of the grant date, 33% on the second anniversary of the grant date, and the remainder on the third anniversary of the grant date. Restricted stock awards granted to employees at or above the manager level generally vest 33% on the second anniversary of the grant date, 33% on the third anniversary of the grant date, and the remainder on the fourth anniversary of the grant date.

**Summary of Restricted Stock Activity**

The following table summarizes our restricted stock activity for the three months ended March 31, 2024:

	Restricted Stock	
	Number of Awards	Weighted-Average Grant Date Fair Value
Unvested at December 31, 2023	4,209,299	\$ 51.15
Granted	147,247	55.60
Vested	(76,433)	50.34
Forfeited	(45,738)	53.73
Unvested at March 31, 2024	4,234,375	\$ 51.29

As of March 31, 2024, \$108 million of total unrecognized compensation cost related to restricted stock is expected to be recognized over a weighted-average period of 1.6 years.

**PSUs**

We grant three-year PSUs to certain eligible employees. PSUs are based on performance measures that impact the amount of shares that each PSU eligible individual receives, subject to the satisfaction of applicable market performance conditions, with a three-year cumulative performance period that vest at the end of the performance period and which settle in shares of our common stock. Compensation cost is recognized over the three-year performance period, taking into account an estimated forfeiture rate, regardless of whether the market condition is satisfied, provided that the requisite service period has been completed. Performance will be determined by comparing Nasdaq's TSR to two peer groups, each weighted 50.0%. The first peer group consists of exchange companies, and the second peer group consists of all companies in the S&P 500. Beginning in 2024, we replaced the exchange company peer group with the S&P 500 GICS 4020 Index, which is a blend of exchanges, as well as data, financial technology and banking companies to align more closely with Nasdaq's diverse business and competitors. Nasdaq's relative performance ranking against each of these groups will determine the final number of shares delivered to each individual under the program. The award issuance under this program will be between 0.0% and 200.0% of the number of PSUs granted and will be determined by Nasdaq's overall performance against both peer groups. However, if Nasdaq's TSR is negative for the three-year performance period, regardless of TSR ranking, the award issuance will not exceed 100.0% of the number of PSUs granted. We estimate the fair value of PSUs granted under the three-year PSU program using the Monte Carlo simulation model, as these awards contain a market condition.

Grants of PSUs that were issued in 2021 with a three-year performance period exceeded the applicable performance parameters. As a result, an additional 387,011 units above the original target were granted in the first quarter of 2024 and were fully vested upon issuance.

**Summary of PSU Activity**

The following table summarizes our PSU activity for the three months ended March 31, 2024:

	PSUs	
	Number of Awards	Weighted-Average Grant Date Fair Value
Unvested at December 31, 2023	2,008,322	\$ 62.86
Granted	475,323	69.90
Vested	(961,331)	73.14
Forfeited	(26,106)	62.91
Unvested at March 31, 2024	1,496,208	\$ 58.49

In the table above, the granted amount primarily includes additional awards granted based on overachievement of performance parameters.

As of March 31, 2024, the total unrecognized compensation cost related to the PSU program is \$47 million and is expected to be recognized over a weighted-average period of 1.4 years.

**Stock Options**

There were no stock option awards granted for the three months ended March 31, 2024. There were no stock options exercised for the three months ended March 31, 2024 and 2023.

A summary of our outstanding and exercisable stock options at March 31, 2024 is as follows:

	Number of Stock Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in millions)
Outstanding at March 31, 2024	1,420,323	\$ 41.79	4.9	\$ 33
Exercisable at March 31, 2024	806,451	\$ 22.23	2.8	\$ 33

As of March 31, 2024, the aggregate pre-tax intrinsic value of the outstanding and exercisable stock options in the above table was \$33 million and represents the difference between our closing stock price on March 31, 2024 of \$63.10 and the exercise price, times the number of shares that would have been received by the option holder had the option holder exercised the stock options on that date. This amount can change based on the fair market value of our common stock. As of March 31, 2024 and 2023, 0.8 million outstanding stock options were exercisable and the exercise price was \$22.23.

**ESPP**

We have an ESPP under which approximately 11.4 million shares of our common stock were available for future issuance as of March 31, 2024. Under our ESPP, employees may purchase shares having a value not exceeding 10.0% of their annual compensation, subject to applicable annual Internal Revenue Service limitations. We record compensation expense related to the 15.0% discount that is given to our employees.

**11. NASDAQ STOCKHOLDERS' EQUITY****Common Stock**

As of March 31, 2024, 900,000,000 shares of our common stock were authorized, 599,052,284 shares were issued and 575,758,581 shares were outstanding. As of December 31, 2023, 900,000,000 shares of our common stock were authorized, 598,014,520 shares were issued and 575,159,336 shares were outstanding. The holders of common stock are entitled to one vote per share, except that our certificate of incorporation limits the ability of any shareholder to vote in excess of 5.0% of the then-outstanding shares of Nasdaq common stock.

**Common Stock in Treasury, at Cost**

We account for the purchase of treasury stock under the cost method with the shares of stock repurchased reflected as a reduction to Nasdaq stockholders' equity and included in common stock in treasury, at cost in the Condensed Consolidated Balance Sheets. Shares repurchased under our share repurchase program are currently retired and canceled and are therefore not included in the common stock in treasury balance. If treasury shares are reissued, they are recorded at the average cost of the treasury shares acquired. We held 23,293,703 shares of common stock in treasury as of March 31, 2024 and 22,855,184 shares as of December 31, 2023, most of which are related to shares of our common stock withheld for the settlement of employee tax withholding obligations arising from the vesting of restricted stock and PSUs.

**Share Repurchase Program**

As of March 31, 2024, the remaining aggregate authorized amount under the existing share repurchase program was \$1.9 billion. There were no share repurchased under our share repurchase program in the first quarter of 2024.

These repurchases may be made from time to time at prevailing market prices in open market purchases, privately-negotiated transactions, block purchase techniques, an accelerated share repurchase program or otherwise, as determined by our management. The repurchases are primarily funded from existing cash balances. The share repurchase program may be suspended, modified or discontinued at any time, and has no defined expiration date.

For the three months ended March 31, 2024, we repurchased an aggregate of 438,519 shares withheld to satisfy tax obligations of the grantee upon the vesting of restricted stock and PSUs, and these repurchases are excluded from our repurchase program.

**Preferred Stock**

Our certificate of incorporation authorizes the issuance of 30,000,000 shares of preferred stock, par value \$0.01 per share, issuable from time to time in one or more series. As of March 31, 2024 and December 31, 2023, no shares of preferred stock were issued or outstanding.

**Cash Dividends on Common Stock**

During the first quarter of 2024, our board of directors declared and paid the following cash dividends:

Declaration Date	Dividend Per Common Share	Record Date	Total Amount Paid	Payment Date
(in millions)				
January 29, 2024	\$ 0.22	March 14, 2024	\$ 127	March 28, 2024
			<u>\$ 127</u>	

The total amount paid of \$127 million was recorded in retained earnings within Nasdaq's stockholders' equity in the Condensed Consolidated Balance Sheets at March 31, 2024.

In April 2024, the board of directors approved a regular quarterly cash dividend of \$0.24 per share on our outstanding common stock, which reflects an increase of 9% from our most recent quarterly cash dividend of \$0.22 per share. The dividend is payable on June 28, 2024 to shareholders of record at the close of business on June 14, 2024. The estimated aggregate payment of this dividend is \$138 million. Future declarations of quarterly dividends and the establishment of future record and payment dates are subject to approval by the board of directors.

The board of directors maintains a dividend policy with the intention to provide shareholders with regular and increasing dividends as earnings and cash flows increase.

**12. EARNINGS PER SHARE**

The following table sets forth the computation of basic and diluted earnings per share:

	Three Months Ended March 31,	
	2024	2023
(in millions, except share and per share amounts)		
<b>Numerator:</b>		
Net income attributable to common shareholders	\$ 234	\$ 302
<b>Denominator:</b>		
Weighted-average common shares outstanding for basic earnings per share	575,451,665	489,931,178
Weighted-average effect of dilutive securities:		
Weighted-average effect of dilutive securities - Employee equity awards	3,479,425	4,837,833
Weighted-average common shares outstanding for diluted earnings per share	578,931,090	494,769,011
<b>Basic and diluted earnings per share:</b>		
Basic earnings per share	\$ 0.41	\$ 0.62
Diluted earnings per share	\$ 0.40	\$ 0.61

In the table above, employee equity awards from our PSU program, which are considered contingently issuable, are included in the computation of diluted earnings per share on a weighted average basis when management determines that the applicable performance criteria would have been met if the performance period ended as of the date of the relevant computation.

Securities that were not included in the computation of diluted earnings per share because their effect was antidilutive were immaterial for the three months ended March 31, 2024 and 2023.

**13. FAIR VALUE OF FINANCIAL INSTRUMENTS**

The following tables present our financial assets and financial liabilities that were measured at fair value on a recurring basis as of March 31, 2024 and December 31, 2023.

	March 31, 2024			
	Total	Level 1	Level 2	Level 3
(in millions)				
European government debt securities	\$ 157	\$ 157	\$ —	\$ —
State-owned enterprises and municipal securities	10	—	10	—
Swedish mortgage bonds	6	—	6	—
Total assets at fair value	\$ 173	\$ 157	\$ 16	\$ —

	December 31, 2023			
	Total	Level 1	Level 2	Level 3
(in millions)				
European government debt securities	\$ 170	\$ 170	\$ —	\$ —
State-owned enterprises and municipal securities	11	—	11	—
Swedish mortgage bonds	7	—	7	—
Total assets at fair value	\$ 188	\$ 170	\$ 18	\$ —

**Financial Instruments Not Measured at Fair Value on a Recurring Basis**

Some of our financial instruments are not measured at fair value on a recurring basis but are recorded at amounts that approximate fair value due to their liquid or short-term nature. Such financial assets and financial liabilities include: cash and cash equivalents, restricted cash and cash equivalents, receivables, net, certain other current assets, accounts payable and accrued expenses, Section 31 fees payable to SEC, accrued personnel costs, commercial paper and certain other current liabilities.

We have certain investments, primarily our investment in OCC, which are accounted for under the equity method of accounting. We have elected the measurement alternative for the majority of our equity securities, which primarily represent various strategic investments made through our corporate venture program. See “Equity Method Investments,” and “Equity Securities,” of Note 6, “Investments,” for further discussion.

We also consider our debt obligations to be financial instruments. As of March 31, 2024, the majority of our debt obligations were fixed-rate obligations. We are exposed to changes in interest rates as a result of borrowings under our 2022 Revolving Credit Facility, as the interest rates on this facility have a variable rate depending on the maturity of the borrowing and the implied underlying reference rate. We are also exposed to changes in interest rates on amounts outstanding from the sale of commercial paper under our commercial paper program. The fair value of our remaining debt obligations utilizing discounted cash flow analyses for our floating rate debt, and prevailing market rates for our fixed rate debt was \$9.4 billion as of March 31, 2024 and \$10.0 billion as of December 31, 2023. The discounted cash flow analyses are based on borrowing rates currently available to us for debt with similar terms and maturities. Our commercial paper and our fixed rate and floating rate debt are categorized as Level 2 in the fair value hierarchy.

For further discussion of our debt obligations, see Note 8, “Debt Obligations.”

#### **Non-Financial Assets Measured at Fair Value on a Non-Recurring Basis**

Our non-financial assets, which include goodwill, intangible assets, and other long-lived assets, are not required to be carried at fair value on a recurring basis. Fair value measures of non-financial assets are primarily used in the impairment analysis of these assets. Any resulting asset impairment would require that the non-financial asset be recorded at its fair value. Nasdaq uses Level 3 inputs to measure the fair value of the above assets on a non-recurring basis. As of March 31, 2024 and December 31, 2023, there were no non-financial assets measured at fair value on a non-recurring basis.

### **14. CLEARING OPERATIONS**

#### **Nasdaq Clearing**

Nasdaq Clearing is authorized and supervised under EMIR as a multi-asset clearinghouse by the SFSA. Such authorization is effective for all member states of the European Union and certain other non-member states that are part of the European Economic Area, including Norway. The clearinghouse acts as the CCP for exchange and OTC trades in equity derivatives, fixed income derivatives, resale and repurchase contracts, power derivatives, emission allowance derivatives, and seafood derivatives. In June 2023, we entered into an agreement to sell our European energy trading and clearing business, subject to regulatory approval.

Through our clearing operations in the financial markets, which include the resale and repurchase market, the commodities markets, and the seafood market, Nasdaq Clearing is the legal counterparty for, and guarantees the fulfillment of, each contract cleared. These contracts are not used by Nasdaq Clearing for the purpose of trading on its own behalf. As the legal counterparty of each transaction, Nasdaq Clearing bears the counterparty risk between the purchaser and seller in the contract. In its guarantor role, Nasdaq Clearing has precisely equal and offsetting claims to and from clearing members on opposite sides of each contract, standing as the CCP on every contract cleared. In accordance with the rules and regulations of Nasdaq Clearing, default fund and margin collateral requirements are calculated for each clearing member’s positions in accounts with the CCP. See “Default Fund Contributions and Margin Deposits” below for further discussion of Nasdaq Clearing’s default fund and margin requirements.

Nasdaq Clearing maintains three member sponsored default funds: one related to financial markets, one related to commodities markets and one related to the seafood market. Under this structure, Nasdaq Clearing and its clearing members must contribute to the total regulatory capital related to the clearing operations of Nasdaq Clearing. This structure applies an initial separation of default fund contributions for the financial, commodities and seafood markets in order to create a buffer for each market’s counterparty risks. See “Default Fund Contributions” below for further discussion of Nasdaq Clearing’s default fund. A power of assessment and a liability waterfall have also been implemented to further align risk between Nasdaq Clearing and its clearing members. See “Power of Assessment” and “Liability Waterfall” below for further discussion.

#### **Default Fund Contributions and Margin Deposits**

As of March 31, 2024, clearing member default fund contributions and margin deposits were as follows:

	March 31, 2024		
	Cash Contributions	Non-Cash Contributions	Total Contributions
(in millions)			
Default fund contributions	\$ 953	\$ 150	\$ 1,103
Margin deposits	4,642	5,776	10,418
<b>Total</b>	<b>\$ 5,595</b>	<b>\$ 5,926</b>	<b>\$ 11,521</b>

Of the total default fund contributions of \$1,103 million, Nasdaq Clearing can utilize \$906 million as capital resources in the event of a counterparty default. The remaining balance of \$197 million pertains to member posted surplus balances.

Our clearinghouse holds material amounts of clearing member cash deposits which are held or invested primarily to provide security of capital while minimizing credit, market and liquidity risks. While we seek to achieve a reasonable rate of return, we are primarily concerned with preservation of capital and managing the risks associated with these deposits.

Clearing member cash contributions are maintained in demand deposits held at central banks and large, highly rated financial institutions or secured through direct investments, primarily central bank certificates and highly rated European government debt securities with original maturities primarily one year or less, reverse repurchase agreements and multilateral development bank debt securities. Investments in reverse repurchase agreements range in maturity from 2 to 32 days and are secured with highly rated government securities and multilateral development banks. The carrying value of these securities approximates their fair value due to the short-term nature of the instruments and reverse repurchase agreements.

Nasdaq Clearing has invested the total cash contributions of \$5,595 million as of March 31, 2024 and \$7,275 million as of December 31, 2023, in accordance with its investment policy as follows:

	March 31, 2024	December 31, 2023
	(in millions)	
Demand deposits	\$ 3,917	\$ 5,344
Central bank certificates	904	1,301
<b>Restricted cash and cash equivalents</b>	<b>\$ 4,821</b>	<b>\$ 6,645</b>
European government debt securities	433	306
Reverse repurchase agreements	253	209
Multilateral development bank debt securities	88	115
<b>Investments</b>	<b>\$ 774</b>	<b>\$ 630</b>
<b>Total</b>	<b>\$ 5,595</b>	<b>\$ 7,275</b>

In the table above, the change from December 31, 2023 to March 31, 2024 includes currency translation adjustments of \$323 million for restricted cash and cash equivalents and \$40 million for investments.

For the three months ended March 31, 2024 and 2023, investments related to default funds and margin deposits, net includes purchases of investment securities of \$16,745 million and \$10,813 million respectively, and proceeds from sales and redemptions of investment securities of \$16,561 million, and \$10,725 million respectively.

In the investment activity related to default fund and margin contributions, we are exposed to counterparty risk related to reverse repurchase agreement transactions, which reflect the risk that the counterparty might become insolvent and, thus, fail to meet its obligations to Nasdaq Clearing. We mitigate this risk by only engaging in transactions with high credit quality reverse repurchase agreement counterparties and by limiting the acceptable collateral under the reverse repurchase agreement to high quality issuers, primarily government securities and other securities explicitly guaranteed by a government. The value of the underlying security is monitored during the lifetime of the contract, and in the event the market value of the underlying security falls below the reverse repurchase amount, our clearinghouse may require additional collateral or a reset of the contract.

### ***Default Fund Contributions***

Required contributions to the default funds are proportional to the exposures of each clearing member. When a clearing member is active in more than one market, contributions must be made to all markets' default funds in which the member is active. Clearing members' eligible contributions may include cash and non-cash contributions. Cash contributions received are maintained in demand deposits held at central banks and large, highly rated financial institutions or invested by Nasdaq Clearing, in accordance with its investment policy, either in central bank certificates, highly rated government debt securities, reverse repurchase agreements with highly rated government debt securities as collateral, or multilateral development bank debt securities. Nasdaq Clearing maintains and manages all cash deposits related to margin collateral. All risks and rewards of collateral ownership, including interest, belong to Nasdaq Clearing. Clearing members' cash contributions are included in default funds and margin deposits in the Condensed Consolidated Balance Sheets as both a current asset and a current liability. Non-cash contributions include highly rated government debt securities that must meet specific criteria approved by Nasdaq Clearing. Non-cash contributions are pledged assets that are not recorded in the Condensed Consolidated Balance Sheets as Nasdaq Clearing does not take legal ownership of these assets and the risks and rewards remain with the clearing members. These balances may fluctuate over time due to changes in the amount of deposits required and whether members choose to provide cash or non-cash contributions.

In addition to clearing members' required contributions to the liability waterfall, Nasdaq Clearing is also required to contribute capital to the liability waterfall and overall regulatory capital as specified under its clearinghouse rules. As of March 31, 2024, Nasdaq Clearing committed capital totaling \$120 million to the liability waterfall and overall regulatory capital, in the form of government debt securities, which are recorded as financial investments in the Condensed Consolidated Balance Sheets. The combined regulatory capital of the clearing members and Nasdaq Clearing is intended to secure the obligations of a clearing member exceeding such member's own margin and default fund deposits and may be used to cover losses sustained by a clearing member in the event of a default.

### ***Margin Deposits***

Nasdaq Clearing requires all clearing members to provide collateral, which may consist of cash and non-cash contributions, to guarantee performance on the clearing members' open positions, or initial margin. In addition, clearing members must also provide collateral to cover the daily margin call if needed. See "Default Fund Contributions" above for further discussion of cash and non-cash contributions.



Similar to default fund contributions, Nasdaq Clearing maintains and manages all cash deposits related to margin collateral. All risks and rewards of collateral ownership, including interest, belong to Nasdaq Clearing and are recorded in revenues. These cash deposits are recorded in default funds and margin deposits in the Condensed Consolidated Balance Sheets as both a current asset and a current liability. Pledged margin collateral is not recorded in our Condensed Consolidated Balance Sheets as all risks and rewards of collateral ownership, including interest, belong to the counterparty.

Nasdaq Clearing marks to market all outstanding contracts and requires payment from clearing members whose positions have lost value. The mark-to-market process helps identify any clearing members that may not be able to satisfy their financial obligations in a timely manner allowing Nasdaq Clearing the ability to mitigate the risk of a clearing member defaulting due to exceptionally large losses. In the event of a default, Nasdaq Clearing can access the defaulting member's margin and default fund deposits to cover the defaulting member's losses.

#### **Regulatory Capital and Risk Management Calculations**

Nasdaq Clearing manages risk through a comprehensive counterparty risk management framework, which comprises policies, procedures, standards and financial resources. The level of regulatory capital is determined in accordance with Nasdaq Clearing's regulatory capital and default fund policy, as approved by the SFSA. Regulatory capital calculations are continuously updated through a proprietary capital-at-risk calculation model that establishes the appropriate level of capital.

As mentioned above, Nasdaq Clearing is the legal counterparty for each contract cleared and thereby guarantees the fulfillment of each contract. Nasdaq Clearing accounts for this guarantee as a performance guarantee. We determine the fair value of the performance guarantee by considering daily settlement of contracts and other margining and default fund requirements, the risk management program, historical evidence of default payments, and the estimated probability of potential default payouts. The calculation is determined using proprietary risk management software that simulates gains and losses based on historical market prices, extreme but plausible market scenarios, volatility and other factors present at that point in time for those particular unsettled contracts. Based on this analysis, excluding any liability related to the Nasdaq commodities clearing default (see discussion above), the estimated liability was nominal and no liability was recorded as of March 31, 2024.

#### **Power of Assessment**

To further strengthen the contingent financial resources of the clearinghouse, Nasdaq Clearing has power of assessment that provides the ability to collect additional funds from its clearing members to cover a defaulting member's remaining obligations up to the limits established under the terms of the clearinghouse rules. The power of assessment corresponds to 230% of the clearing member's aggregate contribution to the financial, commodities and seafood markets' default funds.

#### **Liability Waterfall**

The liability waterfall is the priority order in which the capital resources would be utilized in the event of a default where the defaulting clearing member's collateral and default fund contribution would not be sufficient to cover the cost to settle its portfolio. If a default occurs and the defaulting clearing member's collateral, including cash deposits and pledged assets, is depleted, then capital is utilized in the following amount and order:

- junior capital contributed by Nasdaq Clearing, which totaled \$40 million as of March 31, 2024;
- a loss-sharing pool related only to the financial market that is contributed to by clearing members and only applies if the defaulting member's portfolio includes interest rate swap products;
- specific market default fund where the loss occurred (i.e., the financial, commodities, or seafood market), which includes capital contributions of the clearing members on a pro-rata basis; and
- fully segregated senior capital for each specific market contributed by Nasdaq Clearing, calculated in accordance with clearinghouse rules, which totaled \$17 million as of March 31, 2024.

If additional funds are needed after utilization of the liability waterfall, or if part of the waterfall has been utilized and needs to be replenished, then Nasdaq Clearing will utilize its power of assessment and additional capital contributions will be required by non-defaulting members up to the limits established under the terms of the clearinghouse rules.

In addition to the capital held to withstand counterparty defaults described above, Nasdaq Clearing also has committed capital of \$63 million to ensure that it can handle an orderly wind-down of its operation, and that it is adequately protected against investment, operational, legal, and business risks.

**Market Value of Derivative Contracts Outstanding**

The following table presents the market value of derivative contracts outstanding prior to netting:

	March 31, 2024
	(in millions)
Commodity and seafood options, futures and forwards	\$ 42
Fixed-income options and futures	985
Stock options and futures	166
Index options and futures	62
Total	<u>\$ 1,255</u>

In the table above:

- We determined the fair value of our option contracts using standard valuation models that were based on market-based observable inputs including implied volatility, interest rates and the spot price of the underlying instrument.
- We determined the fair value of our futures contracts based upon quoted market prices and average quoted market yields.
- We determined the fair value of our forward contracts using standard valuation models that were based on market-based observable inputs including benchmark rates and the spot price of the underlying instrument.

**Derivative Contracts Cleared**

The following table presents the total number of derivative contracts cleared through Nasdaq Clearing for the three months ended March 31, 2024 and 2023:

	Three Months Ended March 31,	
	2024	2023
Commodity and seafood options, futures and forwards	56,497	48,966
Fixed-income options and futures	4,914,000	4,769,546
Stock options and futures	5,909,474	6,080,134
Index options and futures	9,311,902	11,853,151
Total	<u>20,191,873</u>	<u>22,751,797</u>

In the table above, the total volume in cleared power related to commodity contracts was 135 Terawatt hours (TWh) and 86 TWh for the three months ended March 31, 2024 and 2023, respectively.

**Resale and Repurchase Agreements Contracts Outstanding and Cleared**

The outstanding contract value of resale and repurchase agreements was \$5.0 billion and \$1.4 billion as of March 31, 2024 and 2023, respectively. The total number of resale and repurchase agreements contracts cleared was 1,264,000 and 1,220,132 for the three months ended March 31, 2024 and 2023, respectively.

**15. LEASES**

We have operating leases which are primarily real estate leases predominantly for our U.S. and European headquarters, data centers and for general office space. The following table provides supplemental balance sheet information related to Nasdaq's operating leases:

Leases	Balance Sheet Classification	March 31, 2024	December 31, 2023
(in millions)			
<b>Assets:</b>			
Operating lease assets	Operating lease assets	<u>\$ 400</u>	<u>\$ 402</u>
<b>Liabilities:</b>			
Current lease liabilities	Other current liabilities	\$ 62	\$ 62
Non-current lease liabilities	Operating lease liabilities	<u>413</u>	<u>417</u>
Total lease liabilities		<u>\$ 475</u>	<u>\$ 479</u>

The following table summarizes Nasdaq's lease cost:

	Three Months Ended March 31,	
	2024	2023
	(in millions)	
Operating lease cost	\$ 21	\$ 28
Variable lease cost	8	12
Sublease income	<u>(1)</u>	<u>(1)</u>
Total lease cost	<u>\$ 28</u>	<u>\$ 39</u>

In the table above, operating lease costs include short-term lease cost, which was immaterial.

In 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 of this ongoing review, for the three months ended March 31, 2023, we recorded impairment charges of \$17 million, of which \$10 million related to operating lease asset impairment and is included in operating lease cost in the table above, \$2 million related to exit costs and is included in variable lease cost in the table above and \$5 million related to impairment of leasehold improvements, which are recorded in depreciation and amortization expense in the Condensed Consolidated Statements of Income. We fully impaired our lease assets for locations that we vacated with no intention to sublease. Substantially all of the property, equipment and leasehold improvements associated with the vacated leased office space were fully impaired as there are no expected future cash flows for these items.



The following table reconciles the undiscounted cash flows for the following years and total of the remaining years to the operating lease liabilities recorded in our Condensed Consolidated Balance Sheets.

	March 31, 2024 (in millions)
Remainder of 2024	\$ 61
2025	70
2026	57
2027	54
2028	52
2029+	276
Total lease payments	\$ 570
Less: interest	(95)
Present value of lease liabilities	\$ 475

In the table above, interest is calculated using the interest rate for each lease. Present value of lease liabilities includes the current portion of \$62 million.

Total lease payments in the table above excludes \$89 million of legally binding minimum lease payments for leases signed but not yet commenced. The increase from 2023 related to a new lease signed for our European headquarters in the first quarter of 2024. This lease will commence in 2025 with a lease term of 10 years. These payments also include a data center lease for which we have not yet obtained full control of the leased premises.

The following table provides information related to Nasdaq's lease term and discount rate:

	March 31, 2024
Weighted-average remaining lease term (in years)	9.5
Weighted-average discount rate	3.8 %

The following table provides supplemental cash flow information related to Nasdaq's operating leases:

	Three Months Ended March 31, 2024	2023 (in millions)
Cash paid for amounts included in the measurement of operating lease liabilities	\$ 21	\$ 19
Lease assets obtained in exchange for operating lease liabilities	\$ 12	\$ 7

## 16. INCOME TAXES

### Income Tax Provision

The following table presents our income tax provision and effective tax rate:

	Three Months Ended March 31, 2024	2023 (in millions)
Income tax provision	\$ 79	\$ 95
Effective tax rate	25.3 %	24.0 %

The higher effective tax rate for the three months ended March 31, 2024, as compared to the prior year period, was primarily due to increased U.S. tax on overseas earnings. The effective tax rate may vary from period to period depending on, among other factors, the geographic and business mix of earnings and losses. These and other factors, including history of pre-tax earnings and losses, are taken into account in assessing the ability to realize deferred tax assets.

### Tax Audits

Nasdaq and its eligible subsidiaries file a consolidated U.S. federal income tax return, applicable state and local income tax returns and non-U.S. income tax returns. We are subject to examination by federal, state and local, and foreign tax authorities. Our federal income tax return is under audit for tax year 2018 and is subject to examination by the Internal Revenue Service for the years 2020 through 2022. Several state tax returns are currently under examination by the respective tax authorities for the years 2014 through 2022. Non-U.S. tax returns are subject to examination by the respective tax authorities for the years 2018 through 2023.

We regularly assess the likelihood of additional assessments by each jurisdiction and have established tax reserves that we believe are adequate in relation to the potential for additional assessments. Examination outcomes and the timing of examination settlements are subject to uncertainty. Although the results of such examinations may have an impact on our unrecognized tax benefits, we do not anticipate that such impact will be material to our condensed consolidated financial position or results of operations, but may be material to our operating results for a particular period and the effective tax rate for that period. We do not expect the settlement of any tax audits to be material in the next twelve months.

## 17. COMMITMENTS, CONTINGENCIES AND GUARANTEES

### Guarantees Issued and Credit Facilities Available

In addition to the default fund contributions and margin collateral pledged by clearing members discussed in Note 14, "Clearing Operations," we have obtained financial guarantees and credit facilities, which are guaranteed by us through counter indemnities, to provide further liquidity related to our clearing businesses. Financial guarantees issued to us totaled \$4 million as of March 31, 2024 and December 31, 2023. As discussed in "Other Credit Facilities," of Note 8, "Debt Obligations," we also have credit facilities primarily related to our Nasdaq Clearing operations, which are available in multiple currencies, and totaled \$180 million as of March 31, 2024 and \$191 million as of December 31, 2023 in available liquidity, none of which was utilized.

### **Other Guarantees**

Through our clearing operations in the financial markets, Nasdaq Clearing is the legal counterparty for, and guarantees the performance of, its clearing members. See Note 14, “Clearing Operations,” for further discussion of Nasdaq Clearing performance guarantees.

We have provided a guarantee related to lease obligations for The Nasdaq Entrepreneurial Center, Inc., which is a not-for-profit organization designed to convene, connect and engage aspiring and current entrepreneurs. This entity is not included in the condensed consolidated financial statements of Nasdaq.

We believe that the potential for us to be required to make payments under these arrangements is unlikely. Accordingly, no contingent liability is recorded in the Condensed Consolidated Balance Sheets for the above guarantees.

### **Routing Brokerage Activities**

One of our broker-dealer subsidiaries, Nasdaq Execution Services, provides a guarantee to securities clearinghouses and exchanges under its standard membership agreements, which require members to guarantee the performance of other members. If a member becomes unable to satisfy its obligations to a clearinghouse or exchange, other members would be required to meet its shortfalls. To mitigate these performance risks, the exchanges and clearinghouses often require members to post collateral, as well as meet certain minimum financial standards. Nasdaq Execution Services’ maximum potential liability under these arrangements cannot be quantified. However, we believe that the potential for Nasdaq Execution Services to be required to make payments under these arrangements is unlikely. Accordingly, no contingent liability is recorded in the Condensed Consolidated Balance Sheets for these arrangements.

### **Legal and Regulatory Matters**

#### ***CFTC Matter***

In June 2022, NASDAQ Futures, Inc. (“NFX”), a non-operational, wholly-owned subsidiary of Nasdaq, received a telephonic “Wells Notice” from the staff of the CFTC relating to certain alleged potential violations by NFX of provisions of the Commodity Exchange Act and CFTC rules thereunder during the period beginning July 2015 through October 2018. The alleged potential violations concern the accuracy of NFX’s description of one of its market maker incentive programs. The Wells Notice informed NFX that the CFTC staff has made, subject to consideration of NFX’s response, a preliminary determination to recommend that the CFTC authorize an enforcement action against NFX in connection with its former futures exchange business. Nasdaq sold NFX’s futures exchange business to a third-party in November 2019, including the portfolio of open interest in NFX contracts. During 2020, all remaining open interest in NFX contracts was migrated to other exchanges and NFX ceased operation. A Wells Notice is neither a formal charge of wrongdoing nor a final determination that

the recipient has violated any law. NFX has submitted a response to the Wells Notice that contests all aspects of the CFTC staff’s position. The CFTC staff subsequently informed us that it plans to formally recommend that the CFTC authorize a civil enforcement action. We cannot predict if or when such an action will be brought, including the scope of the claims or the remedy sought, but such action could commence at any time, and the scope of claims or remedies sought could be material. We believe that NFX would have defenses to any claims if they are the same as those alleged by the CFTC staff during the Wells Notice process. We are unable to predict the ultimate outcome of this matter or the amount or type of remedies that the CFTC may seek or obtain, but any such remedies could have a material negative effect on our operating results and reputation.

#### ***SFSA Inquiry***

In September 2023, Nasdaq Stockholm AB, a wholly-owned subsidiary of Nasdaq and the operator of the Nasdaq Stockholm exchange, received a written notification from the SFSA regarding a review initiated with regard to the obligation of Nasdaq Stockholm AB to report suspected market abuse. The review was initiated in connection with an investigation of alleged insider trading in the shares of four companies listed on the Nasdaq Stockholm exchange. The SFSA’s preliminary assessment is that Nasdaq Stockholm AB, by not reporting certain suspicious transactions in the four listed companies, breached its obligation under certain provisions of the Market Abuse Regulation and the Swedish Securities Market Act. The SFSA review remains ongoing, and Nasdaq Stockholm AB is cooperating fully, providing applicable responses and engaged in ongoing communications with the SFSA.

#### ***Other Matters***

Except as disclosed above and in our prior reports filed under the Exchange Act, we are not currently a party to any litigation or proceeding that we believe could have a material adverse effect on our business, consolidated financial condition, or operating results. However, from time to time, we have been threatened with, or named as a defendant in, lawsuits or involved in regulatory proceedings.

In the normal course of business, Nasdaq discusses matters with its regulators raised during regulatory examinations or otherwise subject to their inquiries. Management believes that censures, fines, penalties or other sanctions that could result from any ongoing examinations or inquiries will not have a material impact on its consolidated financial position or results of operations. However, we are unable to predict the outcome or the timing of the ultimate resolution of these matters, or the potential fines, penalties or injunctive or other equitable relief, if any, that may result from these matters.

**Tax Audits**

We are engaged in ongoing discussions and audits with taxing authorities on various tax matters, the resolutions of which are uncertain. Currently, there are matters that may lead to assessments, some of which may not be resolved for several years. Based on currently available information, we believe we have adequately provided for any assessments that could result from those proceedings where it is more likely than not that we will be assessed. We review our positions on these matters as they progress. See “Tax Audits,” of Note 16, “Income Taxes,” for further discussion.

**18. BUSINESS SEGMENTS**

In the fourth quarter of 2023, following the completion of the Adenza acquisition, including its two flagship solutions, AxiomSL and Calypso, we further aligned our business more closely with the foundational shifts that are driving the evolution of the global financial system. We now manage, operate and provide our products and services in three business segments: Capital Access Platforms, Financial Technology and Market Services. See Note 1, “Organization and Nature of Operations,” for further discussion of our reportable segments.

This Quarterly Report on Form 10-Q presents our results in alignment with the new corporate structure. All periods presented are restated to reflect the new structure.

Our management allocates resources, assesses performance and manages these businesses as three separate segments. We evaluate the performance of our segments based on several factors, of which the primary financial measure is operating income. Results of individual businesses are presented based on our management accounting practices and structure. Our chief operating decision maker does not review total assets or statements of income below operating income by segments as key performance metrics; therefore, such information is not presented below.

The following table presents certain information regarding our business segments for the three months ended March 31, 2024 and 2023:

	Three Months Ended March 31,	
	2024	2023
	(in millions)	
<b><u>Capital Access Platforms</u></b>		
Total revenues	\$ 479	\$ 415
Operating income	279	225
<b><u>Financial Technology</u></b>		
Total revenues	392	229
Operating income	176	88
<b><u>Market Services</u></b>		
Total revenues	794	879
Transaction-based expenses	(557)	(619)
Revenues less transaction-based expenses	237	260
Operating income	133	161
<b><u>Corporate Items</u></b>		
Total revenues	9	10
Operating loss	(178)	(62)
<b><u>Consolidated</u></b>		
Total revenues	\$ 1,674	\$ 1,533
Transaction-based expenses	(557)	(619)
Revenues less transaction-based expenses	\$ 1,117	\$ 914
Operating income	\$ 410	\$ 412

The items below are allocated to Corporate Items in our management reports as we believe they do not contribute to a meaningful evaluation of a particular segment’s ongoing operating performance. Management does not consider these items for the purpose of evaluating the performance of our segments or their managers or when making decisions to allocate resources. Therefore, we believe performance measures excluding the below items provide management with a useful representation of our segments’ ongoing activity in each period. These items, which are presented in the table below, include the following:

- *Amortization expense of acquired intangible assets:* We amortize intangible assets acquired in connection with various acquisitions. Intangible asset amortization expense can vary from period to period due to episodic acquisitions completed, rather than from our ongoing business operations. As such, if intangible asset amortization is included in performance measures, it is more difficult to assess the day-to-day operating performance of the segments, and the relative operating performance of the segments between periods.

- *Merger and strategic initiatives expense:* We have pursued various strategic initiatives and completed acquisitions and divestitures in recent years that 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 the amount of such expenses vary significantly based on the size, timing and complexity of the transaction. For the three months ended March 31, 2024, these costs primarily relate to the Adenza acquisition.
- *Restructuring charges:* In the fourth quarter of 2023, following the closing of the Adenza acquisition, our management approved, committed to and initiated a restructuring program, “Adenza Restructuring” to optimize our efficiencies as a combined organization. In October 2022, following our September 2022 announcement to realign our segments and leadership, we initiated a divisional alignment program with a focus on realizing the full potential of this structure. See Note 19, “Restructuring Charges,” for further discussion of these plans.
- *Revenues and expenses - divested businesses:* For the three months ended March 31, 2024 and 2023, these amounts include revenues and expenses related to our European power trading and clearing business, following our announcement in June 2023 to sell this business, subject to regulatory approval. Historically, these amounts were included in our Market Services and Capital Access Platforms results.
- *Other items:* We have included certain other charges or gains in corporate items, to the extent we believe they should be excluded when evaluating the ongoing operating performance of each individual segment. Other items primarily include:
  - *Lease asset impairments:* For the three months ended March 31, 2023, this included impairment charges related to our operating lease assets and leasehold improvements associated with vacating certain leased office space, which are recorded in occupancy and depreciation and amortization expense in our Condensed Consolidated Statements of Income.
  - *Legal and regulatory matters:* For the three months ended March 31, 2023, this primarily included insurance recoveries related to certain legal matters. The insurance recoveries are recorded in professional and contract services and general, administrative and other expense in the Condensed Consolidated Statements of Income.
  - *Pension settlement charge:* For the three months ended March 31, 2024, we recorded a pre-tax loss as a result of settling our U.S. pension plan. The plan was terminated and partially settled in 2023, with final settlement occurring during the first quarter of 2024. The pre-tax loss is recorded in compensation and benefits in the Condensed Consolidated Statements of Income. See Note 9, “Retirement Plans,” for further discussion.

	Three Months Ended March 31,	
	2024	2023
	(in millions)	
Revenues - divested businesses	\$ 9	\$ 10
Expenses:		
Amortization expense of acquired intangible assets	123	38
Merger and strategic initiatives expense	9	2
Restructuring charges	26	18
Lease asset impairments	—	17
Legal and regulatory matters	2	(10)
Pension Settlement	23	—
Expenses - divested businesses	4	6
Other	—	1
Total expenses	\$ 187	\$ 72
Operating loss	\$ (178)	\$ (62)

For further discussion of our segments’ results, see “Segment Operating Results,” of “Part I, Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

## 19. RESTRUCTURING CHARGES

In the fourth quarter of 2023, following the closing of the Adenza acquisition, our management approved, committed to and initiated a restructuring program, “Adenza Restructuring” to optimize our efficiencies as a combined organization. In connection with this program, we expect to incur approximately \$80 million in pre-tax charges principally related to employee-related costs, contract terminations, real estate impairments and other related costs. We expect to achieve benefits primarily in the form of expense and revenue synergies. Costs related to the 2023 Adenza Restructuring program will be recorded as restructuring charges in the Condensed Consolidated Statements of Income.

In October 2022, following our September 2022 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 \$115 million to \$145 million in pre-tax charges principally related to employee-related costs, consulting, asset impairments and contract terminations over a two-year period. Costs related to the divisional alignment program will be recorded as restructuring charges in the Condensed Consolidated Statements of Income.

The following table presents a summary of the Adenza restructuring program and our divisional alignment program charges for the three months ended March 31, 2024 and 2023 as well as total program costs incurred since the inception date of each program.

	Three Months Ended March 31,	
	2024	2023
	(in millions)	
<b>Asset impairment charges</b>		
Divisional realignment	\$ —	\$ 12
<b>Consulting services</b>		
Divisional realignment	10	3
<b>Employee-related costs</b>		
Adenza restructuring	4	—
Divisional realignment	3	3
<b>Other</b>		
Adenza restructuring	3	—
Divisional realignment	6	—
<b>Total restructuring charges</b>	<u>\$ 26</u>	<u>\$ 18</u>
<b>Total Program Costs Incurred</b>		
Adenza restructuring	\$ 17	
Divisional realignment	\$ 104	

## Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of the financial condition and results of operations of Nasdaq should be read in conjunction with our condensed consolidated financial statements and related notes included in this Form 10-Q.

### OVERVIEW

Nasdaq 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.

Our organizational structure aligns our businesses with the foundational shifts that are driving the evolution of the global financial system. In order to amplify our strategy, we aligned the Company more closely with evolving client needs into Capital Access Platforms, Financial Technology and Market Services reportable segments. All prior periods have been restated to conform to the current period presentation. See Note 18, "Business Segments," to the condensed consolidated financial statements for further discussion of our reportable segments and geographic data, as well as how management allocates resources, assesses performance and manages these businesses as three separate segments.

### First Quarter 2024 and Recent Developments

- ETP AUM linked to Nasdaq indices reached record levels, ending the first quarter at \$519 billion.
- Nasdaq maintained its leadership among exchanges in U.S. multi-listed options. In the first quarter of 2024, Nasdaq led all exchanges during the period in total volume traded for U.S. multi-listed equity options. Nasdaq also achieved record revenue in its proprietary index options franchise, driven by record trading volumes.
- In April 2024, the board of directors approved a regular quarterly cash dividend of \$0.24 per share on our outstanding common stock, which reflects an increase of 9% from our most recent quarterly cash dividend of \$0.22 per share.
- For the three months ended March 31, 2024, we returned \$127 million to shareholders through dividend payments.

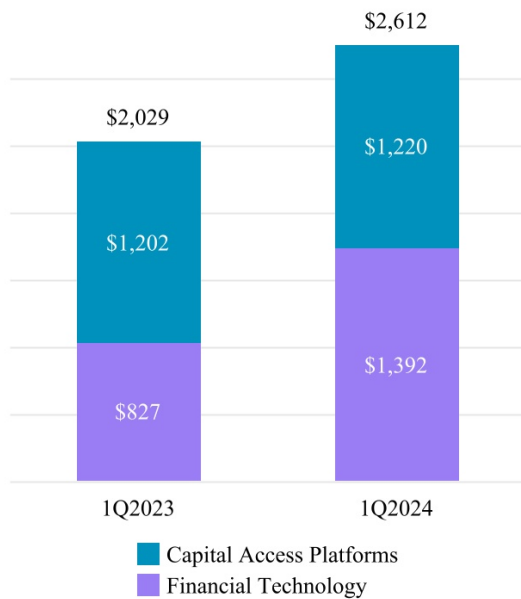
### Nasdaq's Operating Results

The following table summarizes our financial performance for the three months ended March 31, 2024 compared to the same period in 2023. The comparability of our results of operations between reported periods is impacted by the acquisition of Adenza in November 2023. See "2023 Acquisition," of Note 4, "Acquisition," to the condensed consolidated financial statements for further discussion. For a detailed discussion of our results of operations, see "Segment Operating Results" below.

	Three Months Ended March 31,		Percentage Change
	2024	2023	
(in millions, except per share amounts)			
Revenues less transaction-based expenses	\$ 1,117	\$ 914	22.2 %
Operating expenses	707	502	40.8 %
Operating income	\$ 410	\$ 412	(0.5)%
Net income attributable to Nasdaq	\$ 234	\$ 302	(22.5)%
Diluted earnings per share	\$ 0.40	\$ 0.61	(34.4)%
Cash dividends declared per common share	\$ 0.22	\$ 0.20	10.0 %

In countries with currencies other than the U.S. dollar, revenues and expenses are translated using monthly average exchange rates. Impacts on our revenues less transaction-based expenses and operating income associated with fluctuations in foreign currency are discussed in more detail under "Item 3. Quantitative and Qualitative Disclosures about Market Risk."

The following chart summarizes our ARR (in millions):



ARR for a given period is the current annualized value 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 AxiomSL and Calypso recurring revenue contracts, the amount included in ARR is consistent with the amount that we invoice the customer during the current period. Additionally, for AxiomSL and Calypso recurring revenue contracts that include annual values that increase over time, we include in ARR only the annualized value of components of the contract that are considered active as of the date of the ARR calculation. We do not include the future committed increases in the contract value as of the date of the ARR calculation. 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.

The ARR chart includes:

- Proprietary market data subscriptions and annual listing fees within our Data & Listing Services business, index data subscriptions and guaranteed minimum on futures contracts within our Index business and subscription contracts under our Workflow & Insights business.
- SaaS subscription and support contracts related to Verafin, surveillance, market technology, AxiomSL, Calypso and trade management services, excluding one-time service requests.

The following chart summarizes our quarterly annualized SaaS revenues for Solutions, which comprises our Capital Access Platforms and Financial Technology segments, for March 31, 2024 and 2023 (in millions):



### Segment Operating Results

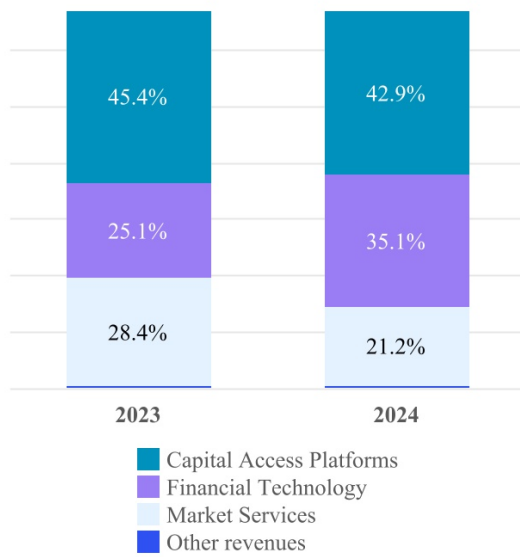
The following table presents our revenues by segment:

	Three Months Ended March 31,		Percentage Change
	2024	2023	
	(in millions)		
Capital Access Platforms	\$ 479	\$ 415	15.4 %
Financial Technology	392	229	71.2 %
Market Services	794	879	(9.7)%
Other revenues	9	10	(10.0)%
Total revenues	\$ 1,674	\$ 1,533	9.2 %
Transaction rebates	(481)	(487)	(1.2)%
Brokerage, clearance and exchange fees	(76)	(132)	(42.4)%
Total revenues less transaction-based expenses	\$ 1,117	\$ 914	22.2 %



The following chart presents our Capital Access Platforms, Financial Technology and Market Services segments as a percentage of our total revenues, less transaction-based expenses.

**Three Months Ended March 31,**



**CAPITAL ACCESS PLATFORMS**

The following table presents revenues from our Capital Access Platforms segment:

	Three Months Ended March 31,		Percentage Change
	2024	2023	
	(in millions)		
Data & Listing Services	\$ 186	\$ 185	0.5 %
Index	168	110	52.7 %
Workflow & Insights	125	120	4.2 %
Total Capital Access Platforms	<u>\$ 479</u>	<u>\$ 415</u>	15.4 %

**Data & Listing Services Revenues**

The following table presents key drivers from our Data & Listing Services business:

	Three Months Ended March 31,	
	2024	2023
<u>IPOs</u>		
The Nasdaq Stock Market	27	40
Exchanges that comprise Nasdaq Nordic and Nasdaq Baltic	1	2
<u>Total new listings</u>		
The Nasdaq Stock Market	79	81
Exchanges that comprise Nasdaq Nordic and Nasdaq Baltic	2	7
<u>Number of listed companies</u>		
The Nasdaq Stock Market	4,020	4,163
Exchanges that comprise Nasdaq Nordic and Nasdaq Baltic	1,203	1,250
	As of March 31,	
	2024	2023
ARR (in millions)	\$ 665	\$ 673

In the table above:

- Number of total listed companies on The Nasdaq Stock Market for the three months ended March 31, 2024 and 2023 included 619 and 539 ETPs, respectively. For the three months ended March 31, 2024 and 2023, IPOs included 5 and 10 SPACs, respectively.
- IPOs, new listings (which includes IPOs) and total listed companies for exchanges that comprise Nasdaq Nordic and Nasdaq Baltic represent companies listed on the Nasdaq Nordic and Nasdaq Baltic exchanges and companies listed on the alternative markets of Nasdaq First North.

Data & Listing Services revenues increased in the first quarter of 2024 compared with the same period in 2023 due to new listings and an increase in proprietary data revenues due to our international expansion, partially offset by the impact of 2023 delistings.



**Index Revenues**

The following table presents key drivers from our Index business:

	As of or Three Months Ended March 31,	
	2024	2023
Number of licensed ETPs	361	387
<b>TTM change in period end ETP AUM tracking Nasdaq indices (in billions)</b>		
Beginning balance	\$ 366	\$ 401
Net appreciation (depreciation)	124	(57)
Net impact of ETP sponsor switches	(17)	(1)
Net inflows	46	23
Ending balance	\$ 519	\$ 366
Quarterly average ETP AUM tracking Nasdaq indices (in billions)	\$ 492	\$ 341
ARR (in millions)	\$ 74	\$ 71

In the table above, TTM represents trailing twelve months.

Index revenues increased in the first quarter of 2024 compared with the same period in 2023 primarily due to higher AUM in exchange traded products linked to Nasdaq indices, strong futures capture and trading volume of contracts linked to the Nasdaq-100 Index and a \$16 million one-time item related to a legal settlement to recoup revenue.

**Workflow & Insights Revenues**

The following table presents key drivers from our Workflow & Insights business:

	As of or Three Months Ended March 31	
	2024	2023
	(in millions)	
ARR	\$ 481	\$ 458
Quarterly annualized SaaS revenues	411	386

Workflow & Insights revenues increased in the first quarter of 2024 compared with the same period in 2023 primarily due to an increase in analytics revenues. The increase was primarily due to higher Data Link sales and growth in our eVestment product offerings.

**FINANCIAL TECHNOLOGY**

The following table presents revenues from our Financial Technology segment:

	Three Months Ended March 31,		Percentage Change
	2024	2023	
	(in millions)		
Financial Crime Management Technology	\$ 64	\$ 52	23.1 %
Regulatory Technology	90	32	181.3 %
Capital Markets Technology	238	145	64.1 %
Total Financial Technology	\$ 392	\$ 229	71.2 %

**Financial Crime Management Technology Revenues**

The following table presents key drivers for Financial Crime Management Technology business:

	As of or Three Months Ended March 31	
	2024	2023
	(in millions)	
ARR and Quarterly annualized SaaS revenues	\$ 243	\$ 196

Financial Crime Management Technology revenues increased in the first quarter of 2024 compared to the same period in 2023 primarily due to an increase in demand related to new sales to existing clients and new customer acquisitions, particularly small and medium-sized businesses.

**Regulatory Technology Revenues**

The following table presents key drivers for Regulatory Technology business:

	As of or Three Months Ended March 31	
	2024	2023
	(in millions)	
ARR	\$ 328	\$ 125
Quarterly annualized SaaS revenues	168	110

Regulatory Technology revenues increased in the first quarter of 2024 compared to the same period in 2023 primarily due to the inclusion of revenues from AxiomSL due to our acquisition of Adenza.

**Capital Markets Technology Revenues**

The following table presents key drivers for Capital Markets Technology business:

	As of or Three Months Ended March 31	
	2024	2023
	(in millions)	
ARR	\$ 821	\$ 506
Quarterly annualized SaaS revenues	110	37

Capital Markets Technology revenues increased in the first quarter of 2024 compared with the same period in 2023. The increase was primarily due to the inclusion of revenues from Calypso due to our acquisition of Adenza and higher trade management services revenues mainly driven by demand for colocation and connectivity services and pricing, partially offset by lower market technology revenues related to lower professional fees.

## MARKET SERVICES

The following table presents revenues from our Market Services segment:

	Three Months Ended March 31,		Percentage Change
	2024	2023	
	(in millions)		
Market Services	\$ 794	\$ 879	(9.7)%
Transaction-based expenses:			
Transaction rebates	(481)	(487)	(1.2)%
Brokerage, clearance and exchange fees	(76)	(132)	(42.4)%
Total Market Services, net	\$ 237	\$ 260	(8.8)%

Our Market Services segment includes equity derivatives trading, cash equity trading, Nordic fixed income trading & clearing, U.S. Tape plans and other revenues. The following table presents net revenues by product from our Market Services segment:

	Three Months Ended March 31,		Percentage Change
	2024	2023	
	(in millions)		
U.S. Equity Derivative Trading	\$ 91	\$ 102	(10.8)%
Cash Equity Trading	100	103	(2.9)%
U.S. Tape plans	28	36	(22.2)%
Other	18	19	(5.3)%
Total Market Services, net	\$ 237	\$ 260	(8.8)%

In the table above, Other includes Nordic fixed income trading & clearing, Nordic derivatives and Canadian cash equities trading.

### U.S. Equity Derivative Trading

The following table presents total revenues, transaction-based expenses, and total revenues less transaction-based expenses as well as key drivers from our U.S. Equity Derivative Trading business:

	Three Months Ended March 31,		Percentage Change
	2024	2023	
	(in millions)		
U.S. Equity Derivative Trading Revenues	\$ 323	\$ 327	(1.2)%
Section 31 fees	11	23	(52.2)%
Transaction-based expenses:			
Transaction rebates	(231)	(224)	3.1 %
Section 31 fees	(11)	(23)	(52.2)%
Brokerage and clearance fees	(1)	(1)	— %
U.S. Equity derivative trading revenues, net	\$ 91	\$ 102	(10.8)%

Section 31 fees are recorded as U.S. equity derivative and cash equity trading revenues with a corresponding amount recorded in transaction-based expenses. We are assessed these fees from the SEC and pass them through to our customers in the form of incremental fees. Pass-through fees can increase or decrease due to rate changes by the SEC, our percentage of the overall industry volumes processed on our systems, and differences in actual dollar value traded. Section 31 fees decreased in the first quarter of 2024 compared with the same period in 2023 primarily due to lower average SEC fee rates. Since the amount recorded in revenues is equal to the amount recorded as Section 31 fees, there is no impact on our net revenues.

	Three Months Ended March 31,	
	2024	2023
<u>U.S. equity options</u>		
Total industry average daily volume (in millions)	43.3	42.4
Nasdaq PHLX matched market share	10.3 %	11.1 %
The Nasdaq Options Market matched market share	5.4 %	7.1 %
Nasdaq BX Options matched market share	2.2 %	3.3 %
Nasdaq ISE Options matched market share	6.3 %	5.8 %
Nasdaq GEMX Options matched market share	2.5 %	2.0 %
Nasdaq MRX Options matched market share	2.5 %	1.5 %
Total matched market share executed on Nasdaq's exchanges	29.2 %	30.8 %

U.S. equity derivative trading revenues and U.S. equity derivative trading revenues less transaction-based expenses decreased in the first quarter of 2024 compared with the same period in 2023. The decrease in U.S. equity derivative trading revenues was primarily due to lower overall matched market share executed on Nasdaq's exchanges, partially offset by a higher gross capture rate and higher industry volumes. The decrease in U.S. equity derivative trading revenues less transaction-based expenses was primarily due to lower capture and lower overall matched market share executed on Nasdaq's exchanges, partially offset by higher industry volumes.

Transaction rebates, in which we credit a portion of the execution charge to the market participant, increased in the first quarter of 2024 compared with the same period in 2023 primarily due to higher rebate capture rate and higher industry trading volumes, partially offset by lower overall U.S. matched market share executed on Nasdaq's exchanges.

### Cash Equity Trading Revenues

The following table presents total revenues, transaction-based expenses, and total revenues less transaction-based expenses as well as key drivers and other metrics from our Cash Equity Trading business:

	Three Months Ended March 31,		Percentage Change
	2024	2023	
	(in millions)		
Cash Equity Trading Revenues	\$ 350	\$ 366	(4.4)%
Section 31 fees	59	102	(42.2)%
Transaction-based expenses:			
Transaction rebates	(245)	(257)	(4.7)%
Section 31 fees	(59)	(102)	(42.2)%
Brokerage and clearance fees	(5)	(6)	(16.7)%
Cash equity trading revenues, net	\$ 100	\$ 103	(2.9)%

See the discussion in "U.S. Equity Derivative Trading" for an explanation of Section 31 fees for the first quarter of 2024 as compared with the same period in 2023. Since the amount recorded in revenues is equal to the amount recorded as Section 31 fees, there is no impact on our net revenues.

	Three Months Ended March 31,	
	2024	2023
<u>Total U.S.-listed securities</u>		
Total industry average daily share volume (in billions)	11.8	11.8
Matched share volume (in billions)	116.7	121.8
The Nasdaq Stock Market matched market share	15.7 %	15.8 %
Nasdaq BX matched market share	0.4 %	0.4 %
Nasdaq PSX matched market share	0.2 %	0.5 %
Total matched market share executed on Nasdaq's exchanges	16.3 %	16.7 %
Market share reported to the FINRA/Nasdaq Trade Reporting Facility	41.4 %	31.6 %
Total market share	57.7 %	48.3 %
<u>Nasdaq Nordic and Nasdaq Baltic securities</u>		
Average daily number of equity trades executed on Nasdaq's exchanges	666,408	787,715
Total average daily value of shares traded (in billions)	\$ 4.7	\$ 5.3
Total market share executed on Nasdaq's exchanges	71.7 %	68.9 %

In the table above, total market share includes transactions executed on The Nasdaq Stock Market's, Nasdaq BX's and Nasdaq PSX's systems plus trades reported through the FINRA/Nasdaq Trade Reporting Facility.

Cash equity trading revenues and cash equity trading revenues less transaction-based expenses decreased in the first quarter of 2024 compared with the same period in 2023 primarily due to lower overall U.S. matched market share executed on Nasdaq's exchanges.

Transaction rebates decreased in the first quarter of 2024 compared with the same period in 2023. For The Nasdaq Stock Market and Nasdaq PSX, we credit a portion of the per share execution charge to the market participant that provides the liquidity, and for Nasdaq BX, we credit a portion of the per share execution charge to the market participant that takes the liquidity. The decrease was primarily due to lower U.S. matched market share executed on Nasdaq's exchanges.

### U.S. Tape Plans

The following table presents revenues from our U.S. Tape plans business:

	Three Months Ended March 31,		Percentage Change
	2024	2023	
	(in millions)		
U.S. Tape plans	\$ 28	\$ 36	(22.2)%

U.S. Tape plans revenues decreased in the first quarter of 2024 compared with the same period in 2023 primarily due to lower industry-wide usage volume as well as the impact of one-time industry-wide adjustments.

### Other

Other includes Nordic fixed income trading and clearing, Nordic derivatives and Canadian cash equities trading. The following table presents revenue and a key driver from our Other business:

	Three Months Ended March 31,		Percentage Change
	2024	2023	
	(in millions)		
Other	\$ 18	\$ 19	(5.3)%

In the table above, other includes transaction rebates of \$5 million and \$6 million for the three months ended March 31, 2024 and 2023, respectively.

	Three Months Ended March 31,	
	2024	2023
<u>Nasdaq Nordic and Nasdaq Baltic options and futures</u>		
Total average daily volume of options and futures contracts	241,665	344,141

In the table above, Nasdaq Nordic and Nasdaq Baltic total average daily volume of options and futures contracts include Finnish option contracts traded on Eurex for which Nasdaq and Eurex have a revenue sharing arrangement. The revenue sharing arrangement ended in the fourth quarter of 2023.

Other revenues decreased in the first quarter of 2024 compared with the same period in 2023 primarily due to lower European equity derivatives trading volumes.

**OTHER REVENUES**

For the three months ended March 31, 2024 and 2023, other revenues include revenues related to our European power trading and clearing business, following our announcement in June 2023 to sell this business to the European Energy Exchange, subject to regulatory approval. Prior to June 2023, these revenues were included in our Market Services and Capital Access Platforms segments.

**EXPENSES****Operating Expenses**

The following table presents our operating expenses:

	Three Months Ended March 31,		Percentage Change
	2024	2023	
	(in millions)		
Compensation and benefits	\$ 340	\$ 256	32.8 %
Professional and contract services	34	32	6.3 %
Computer operations and data communications	67	54	24.1 %
Occupancy	28	39	(28.2)%
General, administrative and other	28	14	100.0 %
Marketing and advertising	11	9	22.2 %
Depreciation and amortization	155	69	124.6 %
Regulatory	9	9	— %
Merger and strategic initiatives	9	2	350.0 %
Restructuring charges	26	18	44.4 %
<b>Total operating expenses</b>	<b>\$ 707</b>	<b>\$ 502</b>	<b>40.8 %</b>

The increase in compensation and benefits expense for the first quarter of 2024 compared with the same period in 2023 was primarily driven by increased headcount as well as a pre-tax loss of \$23 million resulting from the finalization of the termination of our pension plan.

Headcount, including employees of non-wholly owned consolidated subsidiaries, increased to 8,568 employees as of March 31, 2024 from 6,486 as of March 31, 2023, primarily due to our acquisition of Adenza.

Professional and contract services expense remained relatively flat in the first quarter of 2024 compared with the same period in 2023.

Computer operations and data communications expense increased in the first quarter of 2024 compared with the same period in 2023 primarily due to an increase in expenses related to the inclusion of Adenza in the first quarter of 2024 and increased investment in technology, primarily higher costs related to our cloud initiatives and software.

Occupancy expense decreased in the first quarter of 2024 compared with the same period in 2023 primarily due to \$12 million in impairment charges and exit related costs recorded in the first quarter of 2023 following the abandonment of leased office space.

General, administrative and other expense increased in the first quarter of 2024 compared with the same period in 2023 primarily due to an insurance recovery related to a legal matter in the first quarter of 2023 and increased expenses related to the inclusion of Adenza in the first quarter of 2024.

Marketing and advertising expense remained relatively flat in the first quarter of 2024 compared with the same period in 2023.

Depreciation and amortization expense increased in the first quarter of 2024 compared with the same period in 2023 primarily due to an increase in amortization due to the intangible assets acquired as part of the Adenza acquisition.

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 and vary based on the size and frequency of the activities described above. The increase for the three months ended March 31, 2024 compared with the same period in 2023 primarily reflects higher expenses related to the Adenza acquisition.

Restructuring charges increased in the first quarter of 2024 compared with the same period in 2023 as a result of charges from our Adenza restructuring program. See Note 19, "Restructuring Charges," to the condensed consolidated financial statements for further discussion. By 2025, we expect to achieve benefits of the 2022 divisional alignment program through combined annual run-rate operating efficiencies and revenue synergies of approximately \$30 million annually. We expect to achieve \$80 million of net expense synergies two years following the closing of the Adenza acquisition.

**Non-operating Income and Expenses**

The following table presents our non-operating income and expenses:

	Three Months Ended March 31,		Percentage Change
	2024	2023	
	(in millions)		
Interest income	\$ 6	\$ 6	—%
Interest expense	(108)	(36)	200.0 %
Net interest expense	(102)	(30)	240.0 %
Other income	1	—	N/M
Net income from unconsolidated investees	3	14	(78.6)%
Total non-operating expense	<u>\$ (98)</u>	<u>\$ (16)</u>	512.5 %

N/M - Not meaningful

The following table presents our interest expense:

	Three Months Ended March 31,		Percentage Change
	2024	2023	
	(in millions)		
Interest expense on debt	\$ 103	\$ 35	194.3 %
Accretion of debt issuance costs and debt discount	4	1	300.0 %
Other fees	1	—	N/M
Interest expense	<u>\$ 108</u>	<u>\$ 36</u>	200.0 %

N/M - Not meaningful

Interest income remained flat in the first quarter of 2024 compared with the same period in 2023.

Interest expense increased in the first quarter of 2024 compared with the same period in 2023 primarily due to debt issued in June 2023 to finance the Adenza acquisition. See “Financing of the Adenza Acquisition,” of Note 8, “Debt Obligations,” to the condensed consolidated financial statements for further discussion.

Net income from unconsolidated investees decreased in the first quarter of 2024 compared with the same period in 2023 primarily due to lower income recognized from our equity method investment in OCC. See “Equity Method Investments,” of Note 6, “Investments,” to the condensed consolidated financial statements for further discussion.

#### Tax Matters

The following table presents our income tax provision and effective tax rate:

	Three Months Ended March 31,		Percentage Change
	2024	2023	
	(\$ in millions)		
Income tax provision	\$ 79	\$ 95	(16.8)%
Effective tax rate	25.3 %	24.0 %	

For further discussion of our tax matters, see Note 16, “Income Taxes,” to the condensed consolidated financial statements.

#### NON-GAAP FINANCIAL MEASURES

In addition to disclosing results determined in accordance with U.S. GAAP, we also provide non-GAAP net income attributable to Nasdaq and non-GAAP diluted earnings per share in this Quarterly Report on Form 10-Q. 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 our 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 comparative measures. Investors should not rely on any single financial measure when evaluating our business. This non-GAAP 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 Quarterly Report on Form 10-Q, including our condensed consolidated financial statements and the notes thereto. When viewed in conjunction with our U.S. GAAP results and the accompanying reconciliation, we believe these non-GAAP measures provide greater transparency and a more complete understanding of factors affecting our business than U.S. GAAP measures alone.

We understand that analysts and investors regularly rely on non-GAAP financial measures, such as non-GAAP net income attributable to Nasdaq and non-GAAP diluted earnings per share, to assess operating performance. We use non-GAAP net income attributable to Nasdaq and non-GAAP diluted earnings per share 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. We believe that excluding the following items from the non-GAAP net income attributable to Nasdaq provides a more meaningful analysis of Nasdaq’s ongoing operating performance and comparisons in Nasdaq’s performance between periods:

- *Amortization expense of acquired intangible assets:* We amortize intangible assets acquired in connection with various acquisitions. Intangible asset amortization expense can vary from period to period due to episodic acquisitions completed, rather than from our ongoing business operations. As such, if intangible asset amortization is included in performance measures, it is more difficult to assess the day-to-day operating performance of the businesses and the relative operating performance of the businesses between periods.
- *Merger and strategic initiatives expense:* We have pursued various strategic initiatives and completed acquisitions and divestitures in recent years that have resulted in expenses which would not have otherwise been incurred. The frequency and the amount of such expenses vary significantly based on the size, timing and complexity of the transaction. These expenses primarily include integration costs, as well as legal, due diligence and other third-party transaction costs. The increase in the first quarter of 2024 compared with the same period in 2023 primarily reflects costs related to the Adenza acquisition.

- **Restructuring charges:** In the fourth quarter of 2023, following the closing of the Adenza acquisition, our management approved, committed to and initiated a restructuring program, “Adenza Restructuring” to optimize our efficiencies as a combined organization. In October 2022, following our September 2022 announcement to realign our segments and leadership, we initiated a divisional alignment program with a focus on realizing the full potential of this structure. See Note 19, “Restructuring Charges,” to the condensed consolidated financial statements for further discussion of our Adenza restructuring program and our divisional alignment program.
- **Net income from unconsolidated investees:** We exclude our share of the earnings and losses of our equity method investments, primarily our equity interest in OCC. This provides a more meaningful analysis of Nasdaq’s ongoing operating performance or comparisons in Nasdaq’s performance between periods. See “Equity Method Investments,” of Note 6, “Investments,” to the condensed consolidated financial statements for further discussion.
- **Other items:** 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. We believe the exclusion of such amounts allows management and investors to better understand the ongoing financial results of Nasdaq. Other significant items include:
  - **Lease asset impairments:** For the first quarter of 2023, this included impairment charges related to our operating lease assets and leasehold improvements associated with vacating certain leased office space, which are recorded in occupancy and depreciation and amortization expense in our Condensed Consolidated Statements of Income.
  - **Legal and regulatory matters:** For the first quarter of 2023, this primarily included insurance recoveries related to certain legal matters. The insurance recoveries are recorded in professional and contract services and general, administrative and other expense in the Condensed Consolidated Statements of Income.
  - **Pension settlement charge:** In the first quarter of 2024, we recorded a pre-tax loss as a result of settling our U.S. pension plan. The plan was terminated and partially settled in 2023, with final settlement occurring during the first quarter of 2024. The loss is recorded in compensation and benefits in the Condensed Consolidated Statements of Income. See Note 9, “Retirement Plans,” to the condensed consolidated financial statements for further discussion.
- **Significant tax items:** The non-GAAP adjustment to the income tax provision for all periods primarily includes the tax impact of each non-GAAP adjustment.

The following table presents reconciliations between U.S. GAAP net income attributable to Nasdaq and diluted earnings per share and non-GAAP net income attributable to Nasdaq and diluted earnings per share:

	Three Months Ended March 31,	
	2024	2023
(in millions, except per share amounts)		
<b>U.S. GAAP net income attributable to Nasdaq</b>	<b>\$ 234</b>	<b>\$ 302</b>
Non-GAAP adjustments:		
Amortization expense of acquired intangible assets	123	38
Merger and strategic initiatives expense	9	2
Restructuring charges	26	18
Lease asset impairments	—	17
Net income from unconsolidated investees	(3)	(14)
Legal and regulatory matters	2	(10)
Pension settlement charge	23	—
Other	—	1
Total non-GAAP adjustments	\$ 180	\$ 52
Total non-GAAP tax adjustments	(47)	(15)
<b>Total non-GAAP adjustments, net of tax</b>	<b>\$ 133</b>	<b>\$ 37</b>
<b>Non-GAAP net income attributable to Nasdaq</b>	<b>\$ 367</b>	<b>\$ 339</b>
<b>U.S. GAAP effective tax rate</b>	<b>25.3 %</b>	<b>24.0 %</b>
Total adjustments from non-GAAP tax rate	0.3 %	0.6 %
<b>Non-GAAP effective tax rate</b>	<b>25.6 %</b>	<b>24.6 %</b>
Weighted-average common shares outstanding for diluted earnings per share	578.9	494.8
<b>U.S. GAAP diluted earnings per share</b>	<b>\$ 0.40</b>	<b>\$ 0.61</b>
Total adjustments from non-GAAP net income	0.23	0.08
<b>Non-GAAP diluted earnings per share</b>	<b>\$ 0.63</b>	<b>\$ 0.69</b>

#### LIQUIDITY AND CAPITAL RESOURCES

Historically, we have funded our operating activities and met our commitments through cash generated by operations, augmented by the periodic issuance of debt. Currently, our cost and availability of funding remain healthy. We continue to prudently assess our capital deployment strategy through balancing acquisitions, internal investments, debt repayments, and shareholder return activity, including share repurchases and dividends.



We expect that our current cash and cash equivalents combined with cash flows provided by operating activities, supplemented with our borrowing capacity and access to additional financing, including our revolving credit facility and our commercial paper program, provides us additional flexibility to meet our ongoing obligations and the capital deployment strategic actions described above, while allowing us to invest in activities and product development that support the long-term growth of our operations.

Principal factors that could affect the availability of our internally-generated funds include:

- deterioration of our revenues in any of our business segments;
- changes in regulatory and working capital requirements; and
- an increase in our expenses.

Principal factors that could affect our ability to obtain cash from external sources include:

- operating covenants contained in our credit facilities that limit our total borrowing capacity;
- credit rating downgrades, which could limit our access to additional debt;
- a significant decrease in the market price of our common stock; and
- volatility or disruption in the public debt and equity markets.

The following table summarizes selected measures of our liquidity and capital resources:

	March 31, 2024	December 31, 2023
	(in millions)	
Cash and cash equivalents	\$ 388	\$ 453
Financial investments	173	188
Working capital	(72)	71

#### **Cash and Cash Equivalents**

Cash and cash equivalents includes all non-restricted cash in banks and highly liquid investments with original maturities of 90 days or less at the time of purchase. The balance retained in cash and cash equivalents is a function of anticipated or possible short-term cash needs, prevailing interest rates, our investment policy, and alternative investment choices. As of March 31, 2024, our cash and cash equivalents of \$388 million were primarily invested in money market funds, commercial paper, municipal bonds and bank deposits.

#### **Repatriation of Cash**

Our cash and cash equivalents held outside of the U.S. in various foreign subsidiaries totaled \$206 million as of March 31, 2024 and \$236 million as of December 31, 2023. The remaining balance held in the U.S. totaled \$182 million as of March 31, 2024 and \$217 million as of December 31, 2023.

#### **Cash Flow Analysis**

The following table summarizes the changes in cash flows:

	Three Months Ended March 31,	
	2024	2023
	(in millions)	
Net cash provided by (used in):		
Operating activities	\$ 530	\$ 565
Investing activities	(232)	(133)
Financing activities	(1,875)	(613)
Effect of exchange rate changes on cash and cash equivalents and restricted cash and cash equivalents	(311)	29
Net decrease in cash and cash equivalents and restricted cash and cash equivalents	\$ (1,888)	\$ (152)
Cash and cash equivalents, restricted cash and cash equivalents at beginning of period	7,118	6,994
Cash and cash equivalents, restricted cash and cash equivalents at end of period	\$ 5,230	\$ 6,842
<b>Reconciliation of Cash, Cash Equivalents and Restricted Cash and Cash Equivalents</b>		
Cash and cash equivalents	\$ 388	\$ 373
Restricted cash and cash equivalents	21	57
Restricted cash and cash equivalents (default funds and margin deposits)	4,821	6,412
<b>Total</b>	<b>\$ 5,230</b>	<b>\$ 6,842</b>

#### **Net Cash Provided by Operating Activities**

Net cash provided by operating activities primarily consists of net income adjusted for certain non-cash items, including depreciation and amortization expense, expense associated with share-based compensation, deferred income taxes and the effects of changes in working capital. Changes in working capital include changes in accounts receivable and deferred revenue which are impacted by the timing of customer billings and related collections from our customers; accounts payable and accrued expenses due to timing of payments; accrued personnel costs, which are impacted by employee performance targets and the timing of payments related to employee bonus incentives; and Section 31 fees payable to the SEC, which is impacted by the changes in SEC fee rates and the timing of collections from customers and payments to the SEC.



Net cash provided by operating activities decreased \$35 million for the first quarter of 2024 compared with the same period in 2023. The decrease was primarily driven by changes in our operating assets and liabilities and timing of various payments and receipts of \$(53) million, partially offset by an increase of \$18 million driven by the increase in net income adjusted for certain noncash operating activities. The changes in our operating assets and liabilities primarily included higher cash outflows in accounts payable and accrued expenses, primarily due to an increase in our accrued interest and interest paid relating to the senior unsecured notes issued in June 2023 in connection with the Adenza acquisition, as well as various other increased cash outflows impacting our working capital. This was partially offset by lower cash outflows from Section 31 fees payable primarily due to a lower Section 31 fee paid in the first quarter of 2024 as compared with the same period in 2023. Non-cash charges in the first quarter of 2024 primarily included \$155 million of depreciation and amortization and \$30 million of share-based compensation.

#### *Net Cash Used in Investing Activities*

Net cash used in investing activities for the three months ended March 31, 2024 primarily related to net purchases of investments related to default funds and margin deposits of \$184 million, purchases of property and equipment of \$39 million and \$13 million from other investing activities, partially offset by proceeds from the sales and redemptions of trading securities, net, of \$4 million.

Net cash used in investing activities for the three months ended March 31, 2023 primarily related to net purchases of investments related to default funds and margin deposits of \$89 million, purchases of property and equipment of \$40 million and net purchases of trading securities of \$14 million, partially offset by proceeds of \$10 million from other investing activities.

#### *Net Cash Used in Financing Activities*

Net cash used in financing activities for the three months ended March 31, 2024 primarily related to a decrease related to our default funds and margin deposits of \$1,317 million, \$340 million relating to repayment of the 2023 Term Loan, \$127 million of dividend payments to our shareholders, \$67 million from repayments of our commercial paper, net and \$24 million of payments related to employee shares withheld for taxes.

Net cash used in financing activities for the three months ended March 31, 2023 primarily related to \$317 million from repayments of our commercial paper, net, \$159 million in repurchases of common stock, \$98 million of dividend payments to our shareholders and \$40 million of payments related to employee shares withheld for taxes.

See Note 8, “Debt Obligations,” to the condensed consolidated financial statements for further discussion of our debt obligations.

See “Share Repurchase Program,” and “Cash Dividends on Common Stock,” of Note 11, “Nasdaq Stockholders’ Equity,” to the condensed consolidated financial statements for further discussion of our share repurchase program and cash dividends declared and paid on our common stock.

#### ***Financial Investments***

Our financial investments totaled \$173 million as of March 31, 2024 and \$188 million as of December 31, 2023. Of these securities, \$160 million as of March 31, 2024 and \$168 million as of December 31, 2023 are assets primarily utilized to meet regulatory capital requirements, mainly for our clearing operations at Nasdaq Clearing. See Note 6, “Investments,” to the condensed consolidated financial statements for further discussion.

#### ***Regulatory Capital Requirements***

##### Clearing Operations Regulatory Capital Requirements

We are required to maintain minimum levels of regulatory capital for the clearing operations of Nasdaq Clearing. The level of regulatory capital required to be maintained is dependent upon many factors, including market conditions and creditworthiness of the counterparty. As of March 31, 2024, our required regulatory capital of \$120 million was primarily comprised of highly rated European government debt securities that are included in financial investments in the Condensed Consolidated Balance Sheets.

##### Broker-Dealer Net Capital Requirements

Our broker-dealer subsidiaries, Nasdaq Execution Services, NFSTX, LLC, and Nasdaq Capital Markets Advisory, are subject to regulatory requirements intended to ensure their general financial soundness and liquidity. These requirements obligate these subsidiaries to comply with minimum net capital requirements. As of March 31, 2024, the combined required minimum net capital totaled \$1 million and the combined excess capital totaled \$24 million, substantially all of which is held in cash and cash equivalents in the Condensed Consolidated Balance Sheets. The required minimum net capital is included in restricted cash and cash equivalents in the Condensed Consolidated Balance Sheets.

##### Nordic and Baltic Exchange Regulatory Capital Requirements

The entities that operate trading venues in the Nordic and Baltic countries are each subject to local regulations and are required to maintain regulatory capital intended to ensure their general financial soundness and liquidity. As of March 31, 2024, our required regulatory capital of \$35 million was primarily invested in European government bills and mortgage bonds and Icelandic government bonds that are included in financial investments in the Condensed Consolidated Balance Sheets and cash, which is included in restricted cash and cash equivalents in the Condensed Consolidated Balance Sheets.

Other Capital Requirements

We operate several other businesses which are subject to local regulation and are required to maintain certain levels of regulatory capital. As of March 31, 2024, other required regulatory capital of \$16 million, primarily related to Nasdaq Central Securities Depository, was primarily invested in European government debt securities that are included in financial investments in the Condensed Consolidated Balance Sheets.

Equity and dividendsShare Repurchase Program

See “Share Repurchase Program,” of Note 11, “Nasdaq Stockholders’ Equity,” to the condensed consolidated financial statements for further discussion of our share repurchase program.

Cash Dividends on Common Stock

The following table presents our quarterly cash dividends paid per common share on our outstanding common stock:

	2024	2023
First quarter	\$ 0.22	\$ 0.20

See “Cash Dividends on Common Stock,” of Note 11, “Nasdaq Stockholders’ Equity,” to the condensed consolidated financial statements for further discussion of the dividends.

Debt Obligations

The following table summarizes our debt obligations by contractual maturity:

	Maturity Date	March 31, 2024	December 31, 2023
<b>Short-term debt:</b>			
		(in millions)	
Commercial paper		\$ 224	\$ 291
<b>Total short-term debt</b>		<b>\$ 224</b>	<b>\$ 291</b>
<b>Long-term debt - senior unsecured notes:</b>			
2025 Notes	June 2025	\$ 498	\$ 497
2026 Notes	June 2026	499	499
2028 Notes	June 2028	992	991
2029 Notes	March 2029	644	658
2030 Notes	February 2030	643	658
2031 Notes	January 2031	645	645
2032 Notes	February 2032	801	819
2033 Notes	July 2033	659	674
2034 Notes	February 2034	1,240	1,239
2040 Notes	December 2040	644	644
2050 Notes	April 2050	487	487
2052 Notes	March 2052	541	541
2053 Notes	August 2053	738	738
2063 Notes	June 2063	738	738
2023 Term Loan	November 2026	—	339
2022 Revolving Credit Facility	December 2027	(4)	(4)
<b>Total long-term debt</b>		<b>\$ 9,765</b>	<b>\$ 10,163</b>
<b>Total debt obligations</b>		<b>\$ 9,989</b>	<b>\$ 10,454</b>

For the three months ended March 31, 2024, the weighted average interest rate on our debt obligations was approximately 4.0%. This rate can fluctuate based on changes in interest rates for our variable rate debts, changes in foreign currency exchange rates and changes in the amount and duration of outstanding debt. In December 2022, Nasdaq amended and restated its previously issued \$1.25 billion five-year revolving credit facility, with a new maturity date of December 16, 2027. In addition to the 2022 Revolving Credit Facility, we also have other credit facilities primarily to support our Nasdaq Clearing operations in Europe, as well as to provide a cash pool credit line for one subsidiary. These European credit facilities, which are available in multiple currencies, totaled \$180 million as of March 31, 2024 and \$191 million as of December 31, 2023 in available liquidity, none of which was utilized.

Financing of the Adenza Acquisition

In June 2023, Nasdaq issued six series of notes for total proceeds of \$5,016 million, net of debt issuance costs of \$38 million, with various maturity dates ranging from 2025 to 2063. The net proceeds from these notes were used to finance the majority of the cash consideration due in connection with the Adenza acquisition.

In addition, in connection with the financing of the Adenza acquisition, we entered into the 2023 Term Loan agreement. The 2023 Term Loan provided us with the ability to borrow up to \$600 million to finance a portion of the cash consideration for the Adenza acquisition and other amounts incurred in connection with this transaction. Under the 2023 Term Loan, borrowings bear interest on the principal amount outstanding at a variable interest rate based on the SOFR plus an applicable margin that varies with Nasdaq's debt rating. On November 1, 2023, we borrowed \$599 million, net of fees, under this term loan towards payment of the cash consideration due in connection with the Adenza acquisition. We made a partial repayment during the fourth quarter 2023 and paid the remaining balance in the first quarter of 2024.

As of March 31, 2024, we were in compliance with the covenants of all of our debt obligations.

See Note 8, "Debt Obligations," to the condensed consolidated financial statements for further discussion of our debt obligations.

#### **Contractual Obligations and Contingent Commitments**

Nasdaq had no significant changes to our contractual obligations and contingent commitments from those disclosed in "Part I. Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report Form 10-K that was filed with the SEC February 21, 2024.

#### **Off-Balance Sheet Arrangements**

For discussion of off-balance sheet arrangements see:

- Note 14, "Clearing Operations," to the condensed consolidated financial statements for further discussion of our non-cash default fund contributions and margin deposits received for clearing operations; and
- Note 17, "Commitments, Contingencies and Guarantees," to the condensed consolidated financial statements for further discussion of:
  - Guarantees issued and credit facilities available;
  - Other guarantees; and
  - Routing brokerage activities.

#### **Item 3. Quantitative and Qualitative Disclosures About Market Risk**

As a result of our operating, investing and financing activities, we are exposed to market risks such as interest rate risk and foreign currency exchange rate risk. We are also exposed to credit risk as a result of our normal business activities.

We have implemented policies and procedures to measure, manage, monitor and report risk exposures, which are reviewed regularly by management and the board of directors. We identify risk exposures and monitor and manage such risks on a daily basis.

We perform sensitivity analyses to determine the effects of market risk exposures. We may use derivative instruments solely to hedge financial risks related to our financial positions or risks that are incurred during the normal course of business. We do not use derivative instruments for speculative purposes.

#### ***Interest Rate Risk***

We are subject to the risk of fluctuating interest rates in the normal course of business. Our exposure to market risk for changes in interest rates relates primarily to our financial investments and debt obligations, which are discussed below.

#### **Financial Investments**

As of March 31, 2024, our investment portfolio was primarily comprised of highly rated European government debt securities, which pay a fixed rate of interest. These securities are subject to interest rate risk and the fair value of these securities will decrease if market interest rates increase. If market interest rates were to increase immediately and uniformly by a hypothetical 100 basis points from levels as of March 31, 2024, the fair value of this portfolio would decline by \$3 million.

#### **Debt Obligations**

As of March 31, 2024, substantially all of our debt obligations were fixed-rate obligations. Interest rates on certain tranches of notes are subject to adjustment to the extent our debt rating is downgraded below investment grade, as further discussed in Note 8, "Debt Obligations," to the condensed consolidated financial statements. While changes in interest rates will have no impact on the interest we pay on fixed-rate obligations, we are exposed to changes in interest rates as a result of the borrowings under our 2022 Revolving Credit Facility and our commercial paper program as these facilities have a variable interest rate. As of March 31, 2024, we have \$224 million of outstanding borrowings under our commercial paper program. A hypothetical 100 basis points increase in interest rates on our outstanding commercial paper would increase our annual interest expense by approximately \$2 million based on borrowings as of March 31, 2024.

We may utilize interest rate swap agreements to achieve a desired mix of variable and fixed rate debt.

**Foreign Currency Exchange Rate Risk**

We are subject to foreign currency exchange rate risk. Our primary transactional exposure to foreign currency denominated revenues less transaction-based expenses and operating income for the three months ended March 31, 2024 is presented in the following table:

	<u>Euro</u>	<u>Swedish Krona</u>	<u>Canadian Dollar</u>	<u>Other Foreign Currencies</u>	<u>U.S. Dollar</u>	<u>Total</u>
	(in millions, except currency rate)					
<b><u>Three Months Ended March 31, 2024</u></b>						
Average foreign currency rate to the U.S. dollar	1.086	0.096	0.742	#	N/A	N/A
Percentage of revenues less transaction-based expenses	7.5%	3.7%	0.7%	3.2%	84.9%	100.0%
Percentage of operating income	14.8%	(3.3)%	(8.5)%	(12.0)%	109.0%	100.0%
Impact of a 10% adverse currency fluctuation on revenues less transaction-based expenses	\$(8)	\$(4)	\$(1)	\$(4)	\$—	\$(17)
Impact of a 10% adverse currency fluctuation on operating income	\$(6)	\$(1)	\$(3)	\$(5)	\$—	\$(15)

# Represents multiple foreign currency rates.

N/A Not applicable.

The adverse impacts shown above should be viewed individually by currency and not in aggregate due to the correlation between changes in exchange rates for certain currencies.

Our investments in foreign subsidiaries are exposed to volatility in currency exchange rates through translation of the foreign subsidiaries' net assets or equity to U.S. dollars. Substantially all of our foreign subsidiaries operate in functional currencies other than the U.S. dollar. The financial statements of these subsidiaries are translated into U.S. dollars for consolidated reporting using a current rate of exchange, with net gains or losses recorded in accumulated other comprehensive loss within stockholders' equity in the Condensed Consolidated Balance Sheets.

Our primary exposure to net assets in foreign currencies as of March 31, 2024 is presented in the following table:

	<u>Net Assets</u>	<u>Impact of a 10% Adverse Currency Fluctuation</u>
	(in millions)	
Swedish Krona	\$ 2,829	\$ 283
Norwegian Krone	135	14
British Pound	151	15
Canadian Dollar	105	11
Australian Dollar	98	10
Euro	74	7

In the table above, Swedish Krona includes goodwill of \$2,108 million and intangible assets, net of \$467 million.

**Credit Risk**

Credit risk is the potential loss due to the default or deterioration in credit quality of customers or counterparties. We are exposed to credit risk from third parties, including customers, counterparties and clearing agents. These parties may default on their obligations to us due to bankruptcy, lack of liquidity, operational failure or other reasons. We limit our exposure to credit risk by evaluating the counterparties with which we make investments and execute agreements. For our investment portfolio, our objective is to invest in securities to preserve principal while maximizing yields, without significantly increasing risk. Credit risk associated with investments is minimized substantially by ensuring that these financial assets are placed with governments which have investment grade ratings, well-capitalized financial institutions and other creditworthy counterparties.

Our subsidiary, Nasdaq Execution Services, may be exposed to credit risk due to the default of trading counterparties in connection with the routing services it provides for our trading customers. System trades in cash equities routed to other market centers for members of our cash equity exchanges are routed by Nasdaq Execution Services for clearing to the NSCC. In this function, Nasdaq Execution Services is to be neutral by the end of the trading day, but may be exposed to intraday risk if a trade extends beyond the trading day and into the next day, thereby leaving Nasdaq Execution Services susceptible to counterparty risk in the period between accepting the trade and routing it to the clearinghouse. In this interim period, Nasdaq Execution Services is not novating like a clearing broker but instead is subject to the short-term risk of counterparty failure before the clearinghouse enters the transaction. Once the clearinghouse officially accepts the trade for novation, Nasdaq Execution Services is legally removed from trade execution risk. However, Nasdaq has membership obligations to NSCC independent of Nasdaq Execution Services' arrangements.

Pursuant to the rules of the NSCC and Nasdaq Execution Services' clearing agreement, Nasdaq Execution Services is liable for any losses incurred due to a counterparty or a clearing agent's failure to satisfy its contractual obligations, either by making payment or delivering securities. Adverse movements in the prices of securities that are subject to these transactions can increase our credit risk. However, we believe that the risk of material loss is limited, as Nasdaq Execution Services' customers are not permitted to trade on margin and NSCC rules limit counterparty risk on self-cleared transactions by establishing credit limits and capital deposit requirements for all brokers that clear with NSCC. Historically, Nasdaq Execution Services has never incurred a liability due to a customer's failure to satisfy its contractual obligations as counterparty to a system trade. Credit difficulties or insolvency, or the perceived possibility of credit difficulties or insolvency, of one or more larger or visible market participants could also result in market-wide credit difficulties or other market disruptions.

We have credit risk related to transaction and subscription-based revenues that are billed to customers on a monthly or quarterly basis, in arrears. Our potential exposure to credit losses on these transactions is represented by the receivable balances in our Condensed Consolidated Balance Sheets. We review and evaluate changes in the status of our counterparties' creditworthiness. Credit losses such as those described above could adversely affect our consolidated financial position and results of operations.

We also are exposed to credit risk through our clearing operations with Nasdaq Clearing. See Note 14, "Clearing Operations," to the condensed consolidated financial statements for further discussion. Our clearinghouse holds material amounts of clearing member cash deposits, which are held or invested primarily to provide security of capital while minimizing credit, market and liquidity risks. While we seek to achieve a reasonable rate of return, we are primarily concerned with preservation of capital and managing the risks associated with these deposits. As the clearinghouse may pass on interest revenues (minus costs) to the members, this could include negative or reduced yield due to market conditions. The following is a summary of the risks associated with these deposits and how these risks are mitigated.

- **Credit Risk.** When the clearinghouse has the ability to hold cash collateral at a central bank, the clearinghouse utilizes its access to the central bank system to minimize credit risk exposures. When funds are not held at a central bank, we seek to substantially mitigate credit risk by ensuring that investments are primarily placed in large, highly rated financial institutions, highly rated government debt instruments and other creditworthy counterparties.

- **Liquidity Risk.** Liquidity risk is the risk a clearinghouse may not be able to meet its payment obligations in the right currency, in the right place and the right time. To mitigate this risk, the clearinghouse monitors liquidity requirements closely and maintains funds and assets in a manner which minimizes the risk of loss or delay in the access by the clearinghouse to such funds and assets. For example, holding funds with a central bank where possible or investing in highly liquid government debt instruments serves to reduce liquidity risks.
- **Interest Rate Risk.** Interest rate risk is the risk that interest rates rise causing the value of purchased securities to decline. If we were required to sell securities prior to maturity, and interest rates had risen, the sale of the securities might be made at a loss relative to the latest market price. Our clearinghouse seeks to manage this risk by making short term investments of members' cash deposits. In addition, the clearinghouse investment guidelines allow for direct purchases or repurchase agreements with short dated maturities of high quality sovereign debt (for example, European government and U.S. Treasury securities), central bank certificates and multilateral development bank debt instruments.
- **Security Issuer Risk.** Security issuer risk is the risk that an issuer of a security defaults on its payment when the security matures. This risk is mitigated by limiting allowable investments and collateral under reverse repurchase agreements to high quality sovereign, government agency or multilateral development bank debt instruments.

#### Item 4. Controls and Procedures

##### *Disclosure controls and procedures.*

Nasdaq's management, with the participation of Nasdaq's Chief Executive Officer, and Executive Vice President and Chief Financial Officer, has evaluated the effectiveness of Nasdaq's disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Exchange Act) as of the end of the period covered by this report. Based upon that evaluation, Nasdaq's Chief Executive Officer and Executive Vice President and Chief Financial Officer, have concluded that, as of the end of such period, Nasdaq's disclosure controls and procedures are effective.

***Changes in internal control over financial reporting.*** There have been no changes in Nasdaq's internal control over financial reporting (as defined in Rule 13a-15(f) and Rule 15d-15(f) under the Exchange Act) that occurred during the quarter ended March 31, 2024 that have materially affected, or are reasonably likely to materially affect, Nasdaq's internal control over financial reporting.

**PART II OTHER INFORMATION****Item 1. Legal Proceedings**

For a description of our legal proceedings, if any, see “Legal and Regulatory Matters” of Note 17, “Commitments, Contingencies and Guarantees,” to the condensed consolidated financial statements, which is incorporated herein by reference.

**Item 1A. Risk Factors**

In addition to the other information set forth in this Quarterly Report on Form 10-Q, you should carefully consider the factors discussed under “Risk Factors” in our most recent Form 10-K. These risks could materially and adversely affect our business, financial condition and results of operations. These risks and uncertainties are not the only ones facing us. Additional risks and uncertainties not presently known to us or that we currently believe to be immaterial may also adversely affect our business.

**Item 2. Unregistered Sales of Equity Securities and Use of Proceeds****Issuer Purchases of Equity Securities****Share Repurchase Program**

See “Share Repurchase Program,” of Note 11, “Nasdaq Stockholders’ Equity,” to the condensed consolidated financial statements for further discussion of our share repurchase program.

**Purchases of Equity Securities by the Issuer and Affiliated Purchasers**

The table below represents repurchases made by or on behalf of us or any “affiliated purchaser” of our common stock during the fiscal quarter ended March 31, 2024:

Period	(a) Total Number of Shares Purchased	(b) Average Price Paid Per Share	(c) Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	(d) Maximum Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (in millions)
<b>January 2024</b>				
Share repurchase program	—	\$ —	—	\$ 1,890
Employee transactions	28,751	\$ 56.29	N/A	N/A
<b>February 2024</b>				
Share repurchase program	—	\$ —	—	\$ 1,890
Employee transactions	409,768	\$ 55.70	N/A	N/A
<b>March 2024</b>				
Share repurchase program	—	\$ —	—	\$ 1,890
Employee transactions	—	\$ —	N/A	N/A
<b>Total Quarter Ended March 31, 2024</b>				
Share repurchase program	—	\$ —	—	\$ 1,890
Employee transactions	438,519	\$ 55.74	N/A	N/A

In the preceding table:

- N/A - Not applicable.
- See “Share Repurchase Program,” of Note 11, “Nasdaq Stockholders’ Equity,” to the condensed consolidated financial statements for further discussion of our share repurchase program.
- Employee transactions represents shares surrendered to us to satisfy tax withholding obligations arising from the vesting of restricted stock and PSUs previously issued to employees.

**Item 3. Defaults Upon Senior Securities**

None.

**Item 4. Mine Safety Disclosures**

Not applicable.



**Item 5. Other Information**

During the three months ended March 31, 2024, none of the Company's directors or officers adopted, terminated or modified a "Rule 10b5-1 trading arrangement" or "non-Rule 10b5-1 trading arrangement" (as such terms are defined in Item 408 of Regulation S-K).

**Item 6. Exhibits****Exhibit Number**

<a href="#"><u>4.1</u></a>	<a href="#"><u>Second Amendment to Nasdaq Stockholders' Agreement, dated as of March 19, 2024, by and between Nasdaq, Inc. and Borse Dubai Limited (incorporated herein by reference to Exhibit 4.1 to the Current Report on Form 8-K filed on March 20, 2024).</u></a>
<a href="#"><u>31.1</u></a>	<a href="#"><u>Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 ("Sarbanes-Oxley").</u></a>
<a href="#"><u>31.2</u></a>	<a href="#"><u>Certification of Executive Vice President and Chief Financial Officer pursuant to Section 302 of Sarbanes-Oxley.</u></a>
<a href="#"><u>32.1</u></a>	<a href="#"><u>Certifications Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of Sarbanes-Oxley.</u></a>
101	The following materials from the Nasdaq, Inc. Quarterly Report on Form 10-Q for the quarter ended March 31, 2024, formatted in iXBRL (Inline eXtensible Business Reporting Language): (i) Condensed Consolidated Balance Sheets as of March 31, 2024 and December 31, 2023; (ii) Condensed Consolidated Statements of Income for the three months ended March 31, 2024 and 2023; (iii) Condensed Consolidated Statements of Comprehensive Income for the three months ended March 31, 2024 and 2023; (iv) Condensed Consolidated Statements of Changes in Stockholders' Equity for the three months ended March 31, 2024 and 2023; (v) Condensed Consolidated Statements of Cash Flows for the three months ended March 31, 2024 and 2023; and (vi) notes to condensed consolidated financial statements.
104	Cover Page Interactive Data File, formatted in iXBRL and contained in Exhibit 101.

**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on May 2, 2024.

Nasdaq, Inc.  
(Registrant)

**By:**

/s/ Adena T. Friedman

**Name:****Adena T. Friedman****Title:****Chief Executive Officer****Date:**

May 2, 2024

**By:**

/s/ Sarah Youngwood

**Name:****Sarah Youngwood****Title:****Executive Vice President and Chief Financial Officer****Date:**

May 2, 2024



**CERTIFICATION**

I, Adena T. Friedman, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Nasdaq, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Adena T. Friedman  
Name: Adena T. Friedman  
Title: Chief Executive Officer

Date: May 2, 2024

## CERTIFICATION

I, Sarah Youngwood, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Nasdaq, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Sarah Youngwood  
\_\_\_\_\_  
Name: Sarah Youngwood  
Title: Executive Vice President and Chief Financial Officer

Date: May 2, 2024

**Certification of CEO and CFO Pursuant to  
18 U.S.C. Section 1350  
as Adopted Pursuant to  
Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Quarterly Report on Form 10-Q of Nasdaq, Inc. (the “Company”) for the period ended March 31, 2024 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), Adena T. Friedman, as Chief Executive Officer of the Company, and Sarah Youngwood, as Executive Vice President and Chief Financial Officer of the Company, each hereby certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to the best of her knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of the operations of the Company.

	<u>/s/ Adena T. Friedman</u>
Name:	Adena T. Friedman
Title:	Chief Executive Officer
Date:	May 2, 2024
	<u>/s/ Sarah Youngwood</u>
Name:	Sarah Youngwood
Title:	Executive Vice President and Chief Financial Officer
Date:	May 2, 2024

This certification accompanies the Report pursuant to § 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002, be deemed filed by the Company for purposes of § 18 of the Securities Exchange Act of 1934, as amended.

# Exhibit 2

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## FORM 10-Q

☒ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2022

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number: 001-38855

## Nasdaq, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or Other Jurisdiction of Incorporation or Organization)

52-1165937

(I.R.S. Employer Identification No.)

151 W. 42nd Street, New York, New York 10036

(Address of Principal Executive Offices) (Zip Code)

Registrant's telephone number, including area code: +1 212 401 8700

No Changes

(Former name, former address and former fiscal year, if changed since last report)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, \$0.01 par value per share	NDAQ	The Nasdaq Stock Market
0.900% Senior Notes due 2033	NDAQ33	The Nasdaq Stock Market
0.875% Senior Notes due 2030	NDAQ30	The Nasdaq Stock Market
1.75% Senior Notes due 2029	NDAQ29	The Nasdaq Stock Market

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class	Outstanding at October 25, 2022
Common Stock, \$0.01 par value per share	491,279,526 shares

## Nasdaq, Inc.

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**About this Form 10-Q**

Throughout this Form 10-Q, unless otherwise specified:

- “Nasdaq,” “we,” “us” and “our” refer to Nasdaq, Inc.
- “Nasdaq Baltic” refers to collectively, Nasdaq Tallinn AS, Nasdaq Riga, AS, and AB Nasdaq Vilnius.
- “Nasdaq BX” refers to the cash equity exchange operated by Nasdaq BX, Inc.
- “Nasdaq BX Options” refers to the options exchange operated by Nasdaq BX, Inc.
- “Nasdaq Clearing” refers to the clearing operations conducted by Nasdaq Clearing AB.
- “Nasdaq CXC” and “Nasdaq CX2” refer to the Canadian cash equity trading books operated by Nasdaq CXC Limited.
- “Nasdaq First North” refers to our alternative marketplaces for smaller companies and growth companies in the Nordic and Baltic regions.
- “Nasdaq GEMX” refers to the options exchange operated by Nasdaq GEMX, LLC.
- “Nasdaq ISE” refers to the options exchange operated by Nasdaq ISE, LLC.
- “Nasdaq MRX” refers to the options exchange operated by Nasdaq MRX, LLC.
- “Nasdaq Nordic” refers to collectively, Nasdaq Clearing AB, Nasdaq Stockholm AB, Nasdaq Copenhagen A/S, Nasdaq Helsinki Ltd, and Nasdaq Iceland hf.
- “Nasdaq PHLX” refers to the options exchange operated by Nasdaq PHLX LLC.
- “Nasdaq PSX” refers to the cash equity exchange operated by Nasdaq PHLX LLC.
- “The Nasdaq Options Market” refers to the options exchange operated by The Nasdaq Stock Market LLC.
- “The Nasdaq Stock Market” refers to the cash equity exchange and listing venue operated by The Nasdaq Stock Market LLC.

Nasdaq also provides as a tool for the reader the following list of abbreviations and acronyms that are used throughout this Quarterly Report on Form 10-Q.

2020 Credit Facility: \$1.25 billion senior unsecured revolving credit facility, which matures on December 22, 2025

2022 Notes: \$600 million aggregate principal amount of 0.445% senior unsecured notes due December 21, 2022

2024 Notes: \$500 million aggregate principal amount of 4.25% senior unsecured notes, repaid in full and terminated in April 2022

2026 Notes: \$500 million aggregate principal amount of 3.85% senior unsecured notes due June 30, 2026

2029 Notes: €600 million aggregate principal amount of 1.75% senior unsecured notes due March 28, 2029

2030 Notes: €600 million aggregate principal amount of 0.875% senior unsecured notes due February 13, 2030

2031 Notes: \$650 million aggregate principal amount of 1.650% senior unsecured notes due January 15, 2031

2033 Notes: €615 million aggregate principal amount of 0.900% senior unsecured notes due July 30, 2033

2040 Notes: \$650 million aggregate principal amount of 2.500% senior unsecured notes due December 21, 2040

2050 Notes: \$500 million aggregate principal amount of 3.25% senior unsecured notes due April 28, 2050

2052 Notes: \$550 million aggregate principal amount of 3.950% senior unsecured notes due March 7, 2052

ARR: Annualized Recurring Revenue

ASR: Accelerated Share Repurchase

AUM: Assets Under Management

CCP: Central Counterparty

CFTC: Commodity Futures Trading Commission

EMIR: European Market Infrastructure Regulation

Equity Plan: Nasdaq Equity Incentive Plan

ESG: Environmental, Social and Governance

ESPP: Nasdaq Employee Stock Purchase Plan

ETF: Exchange Traded Fund

ETP: Exchange Traded Product

Exchange Act: Securities Exchange Act of 1934, as amended

FICC: Fixed Income and Commodities Trading and Clearing

FINRA: Financial Industry Regulatory Authority

IPO: Initial Public Offering

LIBOR: London Interbank Offered Rate

NFF: Nasdaq Financial Framework; Nasdaq's end-to-end technology solutions for market infrastructure operators, buy-side firms, sell-side firms and other non-financial markets

NPM: The NASDAQ Private Market, LLC

NSCC: National Securities Clearing Corporation

OCC: The Options Clearing Corporation

OTC: Over-the-Counter

PSU: Performance Share Unit

Reg NMS: Regulation National Market System

SaaS: Software as a Service



SEC: U.S. Securities and Exchange Commission

SERP: Supplemental Executive Retirement Plan

SFSA: Swedish Financial Supervisory Authority

S&P: Standard & Poor's

S&P 500: S&P 500 Stock Index

SPAC: Special Purpose Acquisition Company

TSR: Total Shareholder Return

U.S. GAAP: U.S. Generally Accepted Accounting Principles

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This Quarterly Report on Form 10-Q includes market share and industry data that we obtained from industry publications and surveys, reports of governmental agencies and internal company surveys. Industry publications and surveys generally state that the information they contain has been obtained from sources believed to be reliable, but we cannot assure you that this information is accurate or complete. We have not independently verified any of the data from third-party sources nor have we ascertained the underlying economic assumptions relied upon therein. Statements as to

our market position are based on the most currently available market data. For market comparison purposes, The Nasdaq Stock Market data in this Quarterly Report on Form 10-Q for IPOs is based on data generated internally by us; therefore, the data may not be comparable to other publicly-available IPO data. Data in this Quarterly Report on Form 10-Q for new listings of equity securities on The Nasdaq Stock Market is based on data generated internally by us, which includes issuers that switched from other listing venues, closed-end funds and ETPs. Data in this Quarterly Report on Form 10-Q for IPOs and new listings of equity securities on the Nasdaq Nordic and Nasdaq Baltic exchanges and Nasdaq First North also is based on data generated internally by us. IPOs and new listings data is presented as of period end. While we are not aware of any misstatements regarding industry data presented herein, our estimates involve risks and uncertainties and are subject to change based on various factors. We refer you to the "Risk Factors" section in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2022 that was filed with the SEC on May 4, 2022 and the "Risk Factors" section in our Form 10-K for the fiscal year ended December 31, 2021 that was filed with the SEC on February 23, 2022.

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.

**Forward-Looking Statements**

The SEC encourages companies to disclose forward-looking information so that investors can better understand a company's future prospects and make informed investment decisions. This Quarterly Report on Form 10-Q contains these types of statements. Words such as "may," "will," "could," "should," "anticipates," "envisions," "estimates," "expects," "projects," "intends," "plans," "believes" and words or terms of similar substance used in connection with any discussion of future expectations as to industry and regulatory developments or business initiatives and strategies, future operating results or financial performance, and other future developments are intended to identify forward-looking statements. These include, among others, statements relating to:

- our strategic direction, including anticipated changes to our corporate structure;
- the integration of acquired businesses, including accounting decisions relating thereto;
- the scope, nature or impact of acquisitions, divestitures, investments, joint ventures or other transactional activities;
- the effective dates for, and expected benefits of, ongoing initiatives, including transactional activities and other strategic, restructuring, technology, de-leveraging and capital return initiatives, including our stock split;
- our products and services;
- the impact of pricing changes;
- tax matters;
- the cost and availability of liquidity and capital; and
- any litigation, or any regulatory or government investigation or action, to which we are or could become a party or which may affect us.

Forward-looking statements involve risks and uncertainties. Factors that could cause actual results to differ materially from those contemplated by the forward-looking statements include, among others, the following:

- our operating results may be lower than expected;
- our ability to successfully integrate acquired businesses or divest sold businesses or assets, including the fact that any integration or transition may be more difficult, time consuming or costly than expected, and we may be unable to realize synergies from business combinations, acquisitions, divestitures or other transactional activities;
- loss of significant trading and clearing volumes or values, fees, market share, listed companies, market data customers or other customers;
- our ability to develop and grow our non-trading businesses, including our technology, analytics, ESG and anti-financial crime offerings;
- our ability to keep up with rapid technological advances and adequately address cybersecurity risks;

- economic, political and market conditions and fluctuations, including inflation, interest rate and foreign currency risk inherent in U.S. and international operations, and geopolitical instability arising from the Russian invasion of Ukraine;
- the performance and reliability of our technology and technology of third parties on which we rely;
- any significant error in our operational processes;
- our ability to continue to generate cash and manage our indebtedness; and
- adverse changes that may occur in the litigation or regulatory areas, or in the securities markets generally, or increased regulatory oversight domestically or internationally.

Most of these factors are difficult to predict accurately and are generally beyond our control. You should consider the uncertainty and any risk related to forward-looking statements that we make. These risk factors are more fully described in our "Risk Factors" section in our Form 10-K that was filed with the SEC on February 23, 2022, and supplemented in the "Risk Factors" section in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2022 that was filed with the SEC on May 4, 2022. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this report. You should carefully read this entire Quarterly Report on Form 10-Q, including "Part I, Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations" and the condensed consolidated financial statements and the related notes. Except as required by the federal securities laws, we undertake no obligation to update any forward-looking statement, release publicly any revisions to any forward-looking statements or report the occurrence of unanticipated events. For any forward-looking statements contained in any document, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995.

**PART I - FINANCIAL INFORMATION**  
**Item 1. Financial Statements**  
**Nasdaq, Inc.**  
**Condensed Consolidated Balance Sheets**  
**(in millions, except share and par value amounts)**

	September 30, 2022	December 31, 2021
	(unaudited)	
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 301	\$ 393
Restricted cash and cash equivalents	51	29
Default funds and margin deposits (including restricted cash and cash equivalents of \$8,882 and \$5,074, respectively)	9,507	5,911
Financial investments	129	208
Receivables, net	638	588
Other current assets	225	294
Total current assets	10,851	7,423
Property and equipment, net	518	509
Goodwill	7,946	8,433
Intangible assets, net	2,583	2,813
Operating lease assets	448	366
Other non-current assets	595	571
Total assets	<u>\$ 22,941</u>	<u>\$ 20,115</u>
<b>Liabilities</b>		
Current liabilities:		
Accounts payable and accrued expenses	\$ 189	\$ 185
Section 31 fees payable to SEC	62	62
Accrued personnel costs	205	252
Deferred revenue	415	329
Other current liabilities	158	115
Default funds and margin deposits	9,507	5,911
Short-term debt	799	1,018
Total current liabilities	11,335	7,872
Long-term debt	4,573	4,812
Deferred tax liabilities, net	470	406
Operating lease liabilities	456	386
Other non-current liabilities	223	234
Total liabilities	<u>17,057</u>	<u>13,710</u>
<b>Commitments and contingencies</b>		
<b>Equity</b>		
Nasdaq stockholders' equity:		
Common stock, \$0.01 par value, 900,000,000 shares authorized, shares issued: 512,714,970 at September 30, 2022 and 520,256,817 at December 31, 2021; shares outstanding: 491,234,455 at September 30, 2022 and 500,038,905 at December 31, 2021	5	5
Additional paid-in capital	1,408	1,949
Common stock in treasury, at cost: 21,480,515 shares at September 30, 2022 and 20,217,912 shares at December 31, 2021	(510)	(437)
Accumulated other comprehensive loss	(2,092)	(1,587)
Retained earnings	7,064	6,465
Total Nasdaq stockholders' equity	5,875	6,395
Noncontrolling interests	9	10
Total equity	5,884	6,405
Total liabilities and equity	<u>\$ 22,941</u>	<u>\$ 20,115</u>

See accompanying notes to condensed consolidated financial statements.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
<b>Revenues:</b>				
Market Technology	\$ 132	\$ 114	\$ 387	\$ 332
Investment Intelligence	284	272	851	787
Corporate Platforms	168	155	504	451
Market Services	972	811	2,892	2,813
Other revenues	1	5	10	36
<b>Total revenues</b>	<b>1,557</b>	<b>1,357</b>	<b>4,644</b>	<b>4,419</b>
<b>Transaction-based expenses:</b>				
Transaction rebates	(494)	(472)	(1,605)	(1,642)
Brokerage, clearance and exchange fees	(173)	(47)	(364)	(243)
<b>Revenues less transaction-based expenses</b>	<b>890</b>	<b>838</b>	<b>2,675</b>	<b>2,534</b>
<b>Operating expenses:</b>				
Compensation and benefits	249	230	750	700
Professional and contract services	34	36	97	101
Computer operations and data communications	50	47	150	137
Occupancy	25	27	78	81
General, administrative and other	38	42	94	66
Marketing and advertising	10	12	31	32
Depreciation and amortization	63	67	195	197
Regulatory	9	8	24	22
Merger and strategic initiatives	14	13	41	70
Restructuring charges	—	—	—	31
<b>Total operating expenses</b>	<b>492</b>	<b>482</b>	<b>1,460</b>	<b>1,437</b>
<b>Operating income</b>	<b>398</b>	<b>356</b>	<b>1,215</b>	<b>1,097</b>
Interest income	2	—	3	1
Interest expense	(32)	(33)	(96)	(95)
Net gain on divestiture of business	—	—	—	84
Other income	6	42	8	43
Net income from unconsolidated investees	8	6	23	90
<b>Income before income taxes</b>	<b>382</b>	<b>371</b>	<b>1,153</b>	<b>1,220</b>
Income tax provision	88	83	270	292
<b>Net income</b>	<b>294</b>	<b>288</b>	<b>883</b>	<b>928</b>
Net loss attributable to noncontrolling interests	—	—	1	—
<b>Net income attributable to Nasdaq</b>	<b>\$ 294</b>	<b>\$ 288</b>	<b>\$ 884</b>	<b>\$ 928</b>
<b>Per share information:</b>				
Basic earnings per share	\$ 0.60	\$ 0.57	\$ 1.79	\$ 1.87
Diluted earnings per share	\$ 0.59	\$ 0.56	\$ 1.77	\$ 1.84
Cash dividends declared per common share	\$ 0.20	\$ 0.18	\$ 0.58	\$ 0.52

See accompanying notes to condensed consolidated financial statements.

**Nasdaq, Inc.**  
**Condensed Consolidated Statements of Comprehensive Income**  
**(Unaudited)**  
**(in millions)**

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
<b>Net income</b>	\$ 294	\$ 288	\$ 883	\$ 928
Other comprehensive loss:				
Foreign currency translation losses	(155)	(45)	(428)	(112)
Income tax expense <sup>(1)</sup>	(32)	(14)	(77)	(31)
Foreign currency translation, net	(187)	(59)	(505)	(143)
<b>Comprehensive income</b>	107	229	378	785
Comprehensive loss attributable to noncontrolling interests	—	—	1	—
<b>Comprehensive income attributable to Nasdaq</b>	<u>\$ 107</u>	<u>\$ 229</u>	<u>\$ 379</u>	<u>\$ 785</u>

<sup>(1)</sup> Primarily relates to the tax effect of unrealized gains and losses on Euro denominated notes.

See accompanying notes to condensed consolidated financial statements.

**Nasdaq, Inc.**  
**Condensed Consolidated Statements of Changes in Stockholders' Equity**  
**(Unaudited)**  
**(in millions)**

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2022		2021		2022		2021	
	Shares	\$	Shares	\$	Shares	\$	Shares	\$
<b>Common stock</b>	491	5	508	5	500	5	495	5
<b>Additional paid-in capital</b>								
Beginning balance		1,382		2,432		1,949		2,544
Share repurchase program	—	—	—	—	(11)	(308)	(8)	(410)
ASR agreement <sup>(1)</sup>	—	—	(6)	(475)	—	(325)	(6)	(475)
Share-based compensation	—	26	—	23	3	76	3	66
Stock option exercises, net	—	—	—	—	—	—	—	1
Other issuances of common stock, net <sup>(2)</sup>	—	—	—	—	—	16	19	254
Ending balance		1,408		1,980		1,408		1,980
<b>Common stock in treasury, at cost</b>								
Beginning balance		(509)		(423)		(437)		(376)
Other employee stock activity	—	(1)	—	(2)	(1)	(73)	(1)	(49)
Ending balance		(510)		(425)		(510)		(425)
<b>Accumulated other comprehensive loss</b>								
Beginning balance		(1,905)		(1,452)		(1,587)		(1,368)
Other comprehensive loss		(187)		(59)		(505)		(143)
Ending balance		(2,092)		(1,511)		(2,092)		(1,511)
<b>Retained earnings</b>								
Beginning balance		6,869		6,098		6,465		5,628
Net income attributable to Nasdaq		294		288		884		928
Cash dividends declared per common share		(99)		(90)		(285)		(260)
Ending balance		7,064		6,296		7,064		6,296
<b>Total Nasdaq stockholders' equity</b>		5,875		6,345		5,875		6,345
<b>Noncontrolling interests</b>								
Beginning balance		9		11		10		3
Net activity related to noncontrolling interests		—		(1)		(1)		7
Ending balance		9		10		9		10
<b>Total Equity</b>	<u>491</u>	<u>\$ 5,884</u>	<u>502</u>	<u>\$ 6,355</u>	<u>491</u>	<u>\$ 5,884</u>	<u>502</u>	<u>\$ 6,355</u>

<sup>(1)</sup> See "ASR Agreement," of Note 11, "Nasdaq Stockholders' Equity," for further discussion.

<sup>(2)</sup> In 2021, other issuances of common stock primarily related to shares accelerated and issued upon the sale of our U.S. Fixed Income business.

See accompanying notes to condensed consolidated financial statements.

**Nasdaq, Inc.**  
**Condensed Consolidated Statements of Cash Flows**  
**(Unaudited)**  
**(in millions)**

	Nine Months Ended September 30,	
	2022	2021
<b>Cash flows from operating activities:</b>		
Net income	\$ 883	\$ 928
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	195	197
Share-based compensation	76	66
Deferred income taxes	17	94
Extinguishment of debt	16	33
Net gain on divestiture of business	—	(84)
Net income from unconsolidated investees	(23)	(90)
Other reconciling items included in net income	7	9
Net change in operating assets and liabilities, net of effects of acquisitions:		
Receivables, net	(69)	32
Other assets	41	(142)
Accounts payable and accrued expenses	27	(4)
Section 31 fees payable to SEC	—	(210)
Accrued personnel costs	(33)	(5)
Deferred revenue	86	138
Other liabilities <sup>(1)</sup>	(11)	(263)
<b>Net cash provided by operating activities</b>	<b>1,212</b>	<b>699</b>
<b>Cash flows from investing activities:</b>		
Purchases of securities	(263)	(269)
Proceeds from sales and redemptions of securities	305	266
Proceeds from divestiture of business, net of cash divested	—	190
Acquisition of businesses, net of cash and cash equivalents acquired	(41)	(2,430)
Purchases of property and equipment	(118)	(113)
Investments related to default funds and margin deposits, net <sup>(2)</sup>	44	(92)
Other investing activities	48	(84)
<b>Net cash used in investing activities</b>	<b>(25)</b>	<b>(2,532)</b>
<b>Cash flows from financing activities:</b>		
Proceeds from (repayments of) commercial paper, net	(221)	480
Repayments of borrowings under our credit commitment	(499)	(804)
Payment of debt extinguishment cost	(16)	(33)
Proceeds from issuances of debt, net of issuance costs and utilization of credit commitment	541	826
Repurchases of common stock	(308)	(410)
ASR agreement	(325)	(475)
Dividends paid	(285)	(260)
Proceeds received from employee stock activity and other issuances	16	17
Payments related to employee shares withheld for taxes	(73)	(49)
Default funds and margin deposits	5,446	489
Other financing activities	(1)	7
<b>Net cash provided by (used in) financing activities</b>	<b>4,275</b>	<b>(212)</b>
Effect of exchange rate changes on cash and cash equivalents and restricted cash and cash equivalents	(1,724)	(186)
<b>Net increase (decrease) in cash and cash equivalents and restricted cash and cash equivalents</b>	<b>3,738</b>	<b>(2,231)</b>
Cash and cash equivalents, restricted cash and cash equivalents at beginning of period	5,496	5,979
Cash and cash equivalents, restricted cash and cash equivalents at end of period	<u>9,234</u>	<u>3,748</u>
<b>Reconciliation of Cash, Cash Equivalents and Restricted Cash and Cash Equivalents</b>		
Cash and cash equivalents	\$ 301	\$ 303
Restricted cash and cash equivalents	51	29
Restricted cash and cash equivalents (default funds and margin deposits)	8,882	3,416
<b>Total</b>	<b>\$ 9,234</b>	<b>\$ 3,748</b>
<b>Supplemental Disclosure Cash Flow Information</b>		
Interest paid	\$ 83	\$ 79
Income taxes paid, net of refund <sup>(1)</sup>	\$ 204	\$ 425

<sup>(1)</sup> Includes payment of an acquired tax liability in the second quarter of 2021 related to the Verafin acquisition. See "2021 Acquisition," of Note 4, "Acquisitions and Divestiture," for further discussion.

<sup>(2)</sup> Includes purchases and proceeds from sales and redemptions related to the default funds and margin deposits of our clearing operations. For further information, see "Default Fund Contributions and Margin Deposits," within Note 14, "Clearing Operations."

See accompanying notes to condensed consolidated financial statements.



**Nasdaq, Inc.****Notes to Condensed Consolidated Financial Statements****(Unaudited)****1. ORGANIZATION AND NATURE OF OPERATIONS**

Nasdaq is a global technology company serving the capital markets and other industries. Our diverse offerings of data, analytics, software and services enable clients to optimize and execute their business vision with confidence.

We manage, operate and provide our products and services in four business segments: Market Technology, Investment Intelligence, Corporate Platforms, and Market Services.

**Market Technology**

Our Market Technology segment is a leading global technology solutions provider and partner to exchanges, clearing organizations, central securities depositories, regulators, banks, brokers, buy-side firms and corporate businesses. Our solutions are utilized by leading markets in the U.S., Europe and Asia as well as emerging markets in the Middle East, Latin America, and Africa. The Market Technology segment includes our Anti Financial Crime Technology and our Market Infrastructure Technology businesses.

Our Anti Financial Crime Technology business includes our Verafin SaaS anti-financial crime management solution that offers a cloud-based platform to help detect, investigate, and report money laundering and fraud. Verafin also offers targeted sanctions screening solutions that help banks manage sanctions, including those imposed against Russia, and is developing new capabilities to detect evasion-based typologies. Verafin has expanded its offering to crypto-native anti-financial crime solutions, providing monitoring for both traditional finance and blockchain risks. Our Nasdaq Trade Surveillance is a SaaS solution designed for brokers and other market participants, and Market Surveillance is a solution for market infrastructure operators. Both are designed to assist in complying with market rules, regulations and internal market surveillance policies. In the first quarter of 2022, we reclassified Nasdaq Risk Platform revenues from Anti Financial Crime Technology to Market Infrastructure Technology. Total Market Technology segment revenues were unchanged.

Our Market Infrastructure Technology business powers market infrastructure operators and new market clients globally, and handles a wide array of assets, including but not limited to cash equities, equity derivatives, currencies, various interest-bearing securities, commodities, energy products and digital currencies. Our solutions can also be used in the creation of new asset classes, for non-capital markets customers, including those in insurance liabilities securitization, cryptocurrencies and sports wagering.

**Investment Intelligence**

Our Investment Intelligence segment includes our Market Data, Index and Analytics businesses.

Our Market Data business sells and distributes historical and real-time market data to the sell-side, the institutional investing community, retail online brokers, proprietary trading firms, other venues, internet portals and data distributors. Our market data products can enhance transparency of market activity within our exchanges and provide critical information to professional and non-professional investors globally. Additionally, our Nasdaq Cloud Data Service provided on our Data Link data dissemination platform provides a flexible and efficient method of delivery for real-time exchange data and other financial information.

Our Index business develops and licenses Nasdaq-branded indexes. We also license cash-settled options, futures and options on futures on our indexes. As of September 30, 2022, 374 ETPs listed on 26 exchanges in over 20 countries tracked a Nasdaq index and accounted for \$311 billion in AUM.

Our Analytics business provides asset managers, investment consultants and institutional asset owners with information and analytics to make data-driven investment decisions and deploy their resources more productively. We also provide liquidity solutions for private funds. Through our eVestment offerings, we provide a suite of cloud-based solutions that help institutional investors and consultants conduct pre-investment due diligence, and monitor their portfolios post-investment. The eVestment platform also enables asset managers to efficiently distribute information about their firms and funds to asset owners and consultants worldwide. Through the Solovis platform, endowments, foundations, pensions and family offices transform how they collect and aggregate investment data, analyze portfolio performance, model and predict future outcomes, and share meaningful portfolio insights with key stakeholders. The Nasdaq Fund Network and Nasdaq Data Link are additional platforms in our suite of investment data analytics offerings and data management tools. The Nasdaq Fund Network offers fund data services that deliver transparency to investable products through the collection and dissemination of performance, net asset value, valuation, and strategy-level reference data. Nasdaq Data Link strengthens our position as a leading source for financial, economic, and alternative datasets. For investment management firms, investment banks and other investors, the platform powers data-driven decision-making for users across the globe via universal application programming interfaces, and provides for highly efficient data discovery and delivery.

## Corporate Platforms

Our Corporate Platforms segment includes our Listing Services and IR & ESG Services businesses. These businesses deliver critical capital market and ESG solutions across the lifecycle of public and private companies.

Our Listing Services business includes our U.S. and European Listing Services businesses. We operate a variety of listing platforms around the world to provide multiple global capital raising solutions for public companies. Our main listing markets are The Nasdaq Stock Market and the Nasdaq Nordic and Nasdaq Baltic exchanges. Through Nasdaq First North, our Nordic and Baltic operations also offer alternative marketplaces for smaller companies and growth companies. In July 2021, we contributed our NPM business, which was included in our Listing Services business, to a standalone, independent company, of which we own the largest minority interest, together with a consortium of third-party financial institutions. The NPM business provides liquidity solutions for private companies to enable employees, investors, and companies to execute transactions.

As of September 30, 2022, there were 4,296 total listings on The Nasdaq Stock Market, including 501 ETPs. The combined market capitalization was approximately \$19.3 trillion. In Europe, the Nasdaq Nordic and Nasdaq Baltic exchanges, together with Nasdaq First North, were home to 1,253 listed companies with a combined market capitalization of approximately \$1.5 trillion.

We also operate a U.S. Corporate Bond exchange for the listing of corporate bonds. This exchange operates pursuant to The Nasdaq Stock Market exchange license and is powered by the NFF. As of September 30, 2022, 103 corporate bonds were listed on the Corporate Bond exchange. We continue to develop the Nasdaq Sustainable Bond Network, a platform for increased transparency in the global sustainable bond markets.

Our IR & ESG Services include our portfolio of products and services that support corporations' investor relations and ESG functions. Our clients include both public and private companies and organizations. Our public company clients can be companies listed on our exchanges or other U.S. and global exchanges. Our private company clients include a diverse group of organizations ranging from family owned companies, government organizations, law firms, privately held entities, various non-profit organizations to hospitals and health care systems. We help organizations enhance their ability to understand and expand their global shareholder base, improve corporate governance, and navigate the evolving ESG landscape through our suite of advanced technology, analytics, reporting and consultative services. In June 2022, we acquired Metrio Software Inc., or Metrio, a provider of ESG data collection, analytics and reporting services based in Montreal, Canada. We plan to integrate Metrio's SaaS platform into our suite of ESG solutions.

## Market Services

Our Market Services segment includes our Equity Derivative Trading and Clearing, Cash Equity Trading, FICC and Trade Management Services businesses. We operate multiple exchanges and other marketplace facilities across several asset classes, including derivatives, commodities, cash equity, debt, structured products and ETPs. In addition, in certain countries where we operate exchanges, we also provide clearing, settlement and central depository services. In June 2022, we completed the wind-down of our Nordic broker services business.

Our transaction-based platforms provide market participants with the ability to access, process, display and integrate orders and quotes. The platforms allow the routing and execution of buy and sell orders as well as the reporting of transactions, providing fee-based revenues.

In the U.S., we operate six options exchanges and three cash equity exchanges. The Nasdaq Stock Market, the largest of our cash equities exchanges, is the largest single venue of liquidity for trading U.S.-listed cash equities.

In Canada, we operate an exchange with three independent markets for the trading of Canadian-listed securities: Nasdaq Canada CXC, Nasdaq Canada CX2 and Nasdaq Canada CXD.

In Europe, we operate exchanges in Stockholm (Sweden), Copenhagen (Denmark), Helsinki (Finland), and Reykjavik (Iceland), as well as the clearing operations of Nasdaq Clearing, as Nasdaq Nordic. We also operate exchanges in Tallinn (Estonia), Riga (Latvia) and Vilnius (Lithuania) as Nasdaq Baltic. Collectively, Nasdaq Nordic and Nasdaq Baltic offer trading in cash equities, depository receipts, warrants, convertibles, rights, fund units and ETFs, as well as trading and clearing of equity derivatives, fixed income and commodity products. We also own a majority stake in Puro.earth, a Finnish-based leading marketplace for carbon removal.

Nasdaq Fixed Income provides a wide range of products and services, such as trading and clearing, for fixed income products in Sweden, Denmark, Finland, Iceland, Estonia, Lithuania and Latvia.

Nasdaq Commodities is the brand name for Nasdaq's European commodity-related products and services. Nasdaq Commodities' offerings include derivatives in power, natural gas and carbon emission markets, seafood, electricity certificates and clearing services. These products are listed on Nasdaq Oslo ASA, except for seafood, which is listed on Fishpool, a third-party platform.

In June 2021, we sold our U.S. Fixed Income business, which included an electronic platform for the trading of U.S. Treasuries. See "2021 Divestiture" of Note 4, "Acquisitions and Divestiture," for further discussion.

Through our Trade Management Services business, we provide market participants with a wide variety of alternatives for connecting to and accessing our markets. Our marketplaces may be accessed via a number of different protocols used for quoting, order entry, trade reporting, and connectivity to various data feeds. In 2021, we launched WorkX, an upgraded version of Nasdaq Workstation, a front-end interface that allows market participants to report OTC transactions, monitor trade compliance and clear securities subject to Reg NMS. WorkX enables a seamless workflow and enhanced trade intelligence. In the Nordics we provide a similar browser based trading application called Nasdaq Nordic Trader. In addition, we offer a variety of add-on compliance tools to help firms comply with regulatory requirements.

We provide colocation services to market participants, whereby we offer firms cabinet space and power to house their own equipment and servers within our data centers. Additionally, we offer a number of wireless connectivity offerings between select data centers using millimeter wave and microwave technology.

## 2. BASIS OF PRESENTATION AND PRINCIPLES OF CONSOLIDATION

The condensed consolidated financial statements are prepared in accordance with U.S. GAAP and include the accounts of Nasdaq, its wholly-owned subsidiaries and other entities in which Nasdaq has a controlling financial interest. When we do not have a controlling interest in an entity, but exercise significant influence over the entity's operating and financial policies, such investment is accounted for under the equity method of accounting. We recognize our share of earnings or losses of an equity method investee based on our ownership percentage. See "Equity Method Investments," of Note 6, "Investments," for further discussion of our equity method investments.

The accompanying condensed consolidated financial statements reflect all adjustments which are, in the opinion of management, necessary for a fair statement of the results. These adjustments are of a normal recurring nature. All significant intercompany accounts and transactions have been eliminated in consolidation.

As permitted under U.S. GAAP, certain footnotes or other financial information can be condensed or omitted in the interim condensed consolidated financial statements. The information included in this Quarterly Report on Form 10-Q should be read in conjunction with the consolidated financial statements and accompanying notes included in Nasdaq's Form 10-K. The year-end condensed balance sheet data was derived from the audited financial statements, but does not include all disclosures required by U.S. GAAP.

Certain prior year amounts have been reclassified to conform to the current year presentation.

During the fourth quarter of 2021, we began adjusting the presentation of cash and cash equivalents held within default funds and margin deposits on the condensed consolidated statement of cash flows from operating activities, to present them as restricted cash and cash equivalents with the associated changes being included within cash flows from investing and financing activities. These balances cannot be used to satisfy operating or other liabilities. See Note 14, "Clearing Operations," for further discussion of the default funds and margin deposits.

Prior period amounts have also been adjusted to conform to current period presentation. This immaterial adjustment had no impact on our previously reported Condensed Consolidated Balance Sheets, Condensed Consolidated Statements of Income, or Condensed Consolidated Statements of Comprehensive Income. The table below presents a summary of the as reported and adjusted amounts relating to the Condensed Consolidated Statement of Cash Flows for the nine months ended September 30, 2021.

	Nine Months Ended September 30, 2021		
	As Reported	Adjustment (in millions)	Adjusted
Net cash provided by operating activities	\$ 699	\$ —	\$ 699
Net cash used in investing activities	(2,440)	(92)	(2,532)
Net cash used in financing activities	(701)	489	(212)
Effect of exchange rate changes on cash, cash equivalents, restricted cash and cash equivalents	(8)	(178)	(186)
Net decrease in cash, cash equivalents, restricted cash and cash equivalents	(2,450)	219	(2,231)
Cash, cash equivalents, restricted cash and cash equivalents at beginning of period	2,782	3,197	5,979
Cash, cash equivalents, restricted cash and cash equivalents at end of period	\$ 332	\$ 3,416	\$ 3,748
<b>Reconciliation of Cash, Cash Equivalents and Restricted Cash and Cash Equivalents</b>			
Cash and cash equivalents	\$ 303	\$ —	\$ 303
Restricted cash and cash equivalents	29	—	29
Restricted cash and cash equivalents (default funds and margin deposits)	—	3,416	3,416
<b>Total</b>	<b>\$ 332</b>	<b>\$ 3,416</b>	<b>\$ 3,748</b>

*Accounting Estimates*

In preparing our condensed consolidated financial statements, we make assumptions, judgments and estimates that can have a significant impact on our revenue, operating income and net income, as well as on the value of certain assets and liabilities in our condensed consolidated balance sheets. At least quarterly, we evaluate our assumptions, judgments and estimates, and make changes as deemed necessary.

*Stock Split Effected in the Form of a Stock Dividend*

On August 26, 2022 we effected a 3-for-1 stock split of the Company's common stock in the form of a stock dividend to shareholders of record as of August 12, 2022. The par value per share of our common stock remains \$0.01 per share. All references made with respect to a number of shares or per share amounts throughout this Quarterly Report on Form 10-Q have been retroactively adjusted to reflect the stock split.

*Subsequent Events*

There have been no subsequent events through the issuance date of this Quarterly Report on Form 10-Q that would require disclosure in, or adjustment to, the condensed consolidated financial statements.

**3. REVENUE FROM CONTRACTS WITH CUSTOMERS****Disaggregation of Revenue**

The following tables summarize the disaggregation of revenue by major product and service and by segment for the three and nine months ended September 30, 2022 and 2021:

	Three Months Ended September 30,	
	2022	2021
(in millions)		
<b><u>Market Technology</u></b>		
Anti Financial Crime Technology	\$ 77	\$ 62
Market Infrastructure Technology	55	52
<b><u>Investment Intelligence</u></b>		
Market data	104	102
Index	125	119
Analytics	55	51
<b><u>Corporate Platforms</u></b>		
Listing services	105	99
IR & ESG Services	63	56
<b><u>Market Services</u></b>		
Transaction-based trading and clearing, net	219	214
Trade management services	86	78
<b>Other revenues</b>	1	5
<b>Revenues less transaction-based expenses</b>	<u>\$ 890</u>	<u>\$ 838</u>

Substantially all revenues from the Market Technology, Investment Intelligence and Corporate Platforms segments were recognized over time for the three months ended September 30, 2022 and 2021. For the three months ended September 30, 2022 and 2021 approximately 67.6% and 69.0%, respectively, of Market Services revenues were recognized at a point in time and 32.4% and 31.0%, respectively, were recognized over time.

	Nine Months Ended September 30,	
	2022	2021
(in millions)		
<b><u>Market Technology</u></b>		
Anti Financial Crime Technology	\$ 224	\$ 163
Market Infrastructure Technology	163	169
<b><u>Investment Intelligence</u></b>		
Market data	318	310
Index	370	328
Analytics	163	149
<b><u>Corporate Platforms</u></b>		
Listing services	320	282
IR & ESG Services	184	169
<b><u>Market Services</u></b>		
Transaction-based trading and clearing, net	674	696
Trade management services	249	232
<b>Other revenues</b>	10	36
<b>Revenues less transaction-based expenses</b>	<u>\$ 2,675</u>	<u>\$ 2,534</u>

Substantially all revenues from the Market Technology, Investment Intelligence and Corporate Platforms segments were recognized over time for the nine months ended September 30, 2022 and 2021. For the nine months ended September 30, 2022 and 2021 approximately 68.9% and 70.9%, respectively, of Market Services revenues were recognized at a point in time and 31.1% and 29.1%, respectively, were recognized over time.

**Contract Balances**

Substantially all of our revenues are considered to be revenues from contracts with customers. The related accounts receivable balances are recorded in our Condensed Consolidated Balance Sheets as receivables, which are net of allowance for doubtful accounts of \$13 million as of September 30, 2022 and \$17 million as of December 31, 2021. The changes in the balance between periods were immaterial. We do not have obligations for warranties, returns or refunds to customers.

For the majority of our contracts with customers, except for our market infrastructure technology and listing services contracts, our performance obligations range from three months to three years and there is no significant variable consideration.

Deferred revenue is the only significant contract asset or liability as of September 30, 2022. Deferred revenue represents consideration received that is yet to be recognized as revenue for unsatisfied performance obligations. Deferred revenue primarily represents our contract liabilities related to our fees for Market Technology, Investment Intelligence, Annual and Initial Listings, and IR & ESG Services contracts. See Note 7, “Deferred Revenue,” for our discussion on deferred revenue balances, activity, and expected timing of recognition.

We do not have a material amount of revenue recognized from performance obligations that were satisfied in prior periods. We do not provide disclosures about transaction price allocated to unsatisfied performance obligations if contract durations are less than one year. For our initial listings the transaction price allocated to remaining performance obligations is included in deferred revenue. For our Market Technology, Analytics, and IR & ESG contracts, the portion of transaction price allocated to unsatisfied performance obligations is presented in the table below. To the extent consideration has been received, unsatisfied performance obligations would be included in the table below as well as deferred revenue.

The following table summarizes the amount of the transaction price allocated to performance obligations that are unsatisfied, for contract durations greater than one year, as of September 30, 2022:

	Market Technology	Analytics	IR & ESG Services	Total
	(in millions)			
Remainder of 2022	\$ 139	\$ 18	\$ 18	\$ 175
2023	510	60	56	626
2024	269	34	25	328
2025	154	13	5	172
2026	87	7	—	94
2027+	135	6	—	141
Total	<u>\$ 1,294</u>	<u>\$ 138</u>	<u>\$ 104</u>	<u>\$ 1,536</u>

#### 4. ACQUISITIONS AND DIVESTITURE

We completed the following acquisitions and divestiture in 2022 and 2021. Financial results of each transaction are included in our condensed consolidated financial statements from the date of each acquisition.

##### 2022 Acquisition

In June 2022, we acquired Metrio, a provider of ESG data collection, analytics and reporting services based in Montreal, Canada. We plan to integrate Metrio’s SaaS platform into our suite of ESG solutions. Metrio is part of our IR & ESG business in our Corporate Platforms segment.

##### 2021 Divestiture

In June 2021, we sold our U.S. Fixed Income business, which was part of our FICC business within our Market Services segment, to Tradeweb Markets Inc. We recognized a pre-tax gain on the sale of \$84 million, net of disposal costs. The pre-tax gain was included in net gain on divestiture of business in the Condensed Consolidated Statements of Income.

In connection with this sale, we issued approximately 6.2 million shares of Nasdaq common stock. Nasdaq used the proceeds from the sale, available tax benefits and working and clearing capital of this business, as well as other sources of cash, to repurchase shares of Nasdaq common stock to reduce the impact on earnings per share dilution from the sale. To facilitate these repurchases, in June 2021, the board of directors authorized an increase to the share repurchase program. These repurchases were completed during the second quarter of 2022. See “Share Repurchase Program,” of Note 11, “Nasdaq Stockholders’ Equity,” for further discussion.

##### 2021 Acquisition

###### *Acquisition of Verafin*

In February 2021, we completed the acquisition of Verafin, a SaaS technology provider of anti-financial crime management solutions that provides a cloud-based platform to help detect, investigate, and report money laundering and fraud, for an aggregate purchase price of \$2.75 billion, subject to certain adjustments. The \$2.75 billion purchase price includes a cash payment of \$102 million, reflected in cash from operating activities in our Condensed Consolidated Statements of Cash Flows, the release of which is subject to certain employment-related conditions over three years following the closing of the transaction. This payment was recorded as a prepaid expense and is recorded in other current and non-current assets in our Condensed Consolidated Balance Sheets and will be amortized to merger and strategic initiatives expense on a straight-line basis over a three-year period. Verafin is part of our Market Technology segment.

The amounts in the table below represent the final allocation of the purchase price. The allocation of the purchase price was subject to revision during the measurement period, a period not to exceed 12 months from the acquisition date. Adjustments to the provisional values, which may include tax and other estimates, during the measurement period are recorded in the reporting period in which the adjustment amounts are determined. In 2021, we recorded a measurement period adjustment of \$9 million. This adjustment resulted in an increase to both total net liabilities acquired and goodwill. This adjustment did not result in an impact to our Condensed Consolidated Statements of Income. The allocation of the purchase price for Verafin was finalized in the first quarter of 2022.



	(in millions)
Goodwill	\$ 1,882
Acquired Intangible Assets	815
Total Net Liabilities Acquired	(46)
Purchase Consideration	<u>\$ 2,651</u>

### ***Intangible Assets***

The following table presents the details of acquired intangible assets for Verafin at the date of acquisition. Acquired intangible assets with finite lives are amortized using the straight-line method.

	Customer Relationships	Technology	Trade Name	Total Acquired Intangible Assets
Intangible asset value (in millions)	\$ 532	\$ 246	\$ 37	\$ 815
Discount rate used	7.5 %	7.5 %	7.5 %	
Estimated average useful life	22 years	7 years	20 years	

### **Customer Relationships**

Customer relationships represent the non-contractual and contractual relationships with customers.

### ***Methodology***

Customer relationships were valued using the income approach, specifically an excess earnings method. The excess earnings method examines the economic returns contributed by the identified tangible and intangible assets of a company, and then isolates the excess return that is attributable to the intangible asset being valued.

### ***Discount Rate***

The discount rate used reflects the amount of risk associated with the hypothetical cash flows for the customer relationships relative to the overall business. In developing a discount rate for the customer relationships, we estimated a weighted-average cost of capital for the overall business and we utilized this rate as an input when discounting the cash flows. The resulting discounted cash flows were then tax-effected at the applicable statutory rate.

For our acquisition of Verafin, a discounted tax amortization benefit was added to the fair value of the assets under the assumption that the customer relationships would be amortized for tax purposes over a period of 20 years.

### ***Estimated Useful Life***

We estimate the useful life based on the historical behavior of the customers and a parallel analysis of the customers using the excess earnings method.

### **Technology**

As part of our acquisition of Verafin, we acquired developed technology.

### ***Methodology***

The developed technology was valued using the income approach, specifically the relief-from-royalty method, or RFRM. The RFRM is used to estimate the cost savings that accrue to the owner of an intangible asset who would otherwise have to pay royalties or license fees on revenues earned through the use of the asset. The royalty rate is applied to the projected revenue over the expected remaining life of the intangible asset to estimate royalty savings. The net after-tax royalty savings are calculated for each year in the remaining economic life of the technology and discounted to present value.

### ***Discount Rate***

The discount rates used reflect the amount of risk associated with the hypothetical cash flows for the developed technology relative to the overall business as discussed above in "Customer Relationships."

### ***Estimated Useful Life***

We have estimated the useful life of the Verafin technology to be 7 years.

### **Trade Name**

As part of our acquisition of Verafin, we acquired a trade name. The trade name is recognized in the industry and carries a reputation for quality. As such, the reputation and positive recognition embodied in the trade name is a valuable asset to Nasdaq.

### ***Methodology***

The Verafin trade name was valued using the income approach, specifically the RFRM as discussed above in "Technology."

### ***Discount Rate***

The discount rate used reflects the amount of risk associated with the hypothetical cash flows for the trade name relative to the overall business as discussed above in "Customer Relationships."

### ***Estimated Useful Life***

We have estimated the useful life of the Verafin trade name to be 20 years and our intention is to continue to use it in the branding of products.

### **Pro Forma Results and Acquisition-Related Costs**

The condensed consolidated financial statements for the three and nine months ended September 30, 2022 and 2021 include the financial results of the above acquisitions from the date of the acquisitions. Pro forma financial results have not been presented since these acquisitions were not material to our financial results.

Acquisition-related costs for the transactions described above were expensed as incurred and are included in merger and strategic initiatives expense in the Condensed Consolidated Statements of Income.

**5. GOODWILL AND ACQUIRED INTANGIBLE ASSETS****Goodwill**

The following table presents the changes in goodwill by business segment during the nine months ended September 30, 2022:

	(in millions)
<b>Market Technology</b>	
Balance at December 31, 2021	\$ 2,171
Foreign currency translation adjustments	(49)
Balance at September 30, 2022	\$ 2,122
<b>Investment Intelligence</b>	
Balance at December 31, 2021	\$ 2,428
Foreign currency translation adjustments	(172)
Balance at September 30, 2022	\$ 2,256
<b>Corporate Platforms</b>	
Balance at December 31, 2021	\$ 469
Goodwill acquired	40
Foreign currency translation adjustments	(38)
Balance at September 30, 2022	\$ 471
<b>Market Services</b>	
Balance at December 31, 2021	\$ 3,365
Foreign currency translation adjustments	(268)
Balance at September 30, 2022	\$ 3,097
<b>Total</b>	
Balance at December 31, 2021	\$ 8,433
Goodwill acquired	40
Foreign currency translation adjustments	(527)
Balance at September 30, 2022	\$ 7,946

As of September 30, 2022, the amount of goodwill that is expected to be deductible for tax purposes in future periods is \$20 million.

Goodwill represents the excess of purchase price over the value assigned to the net assets, including identifiable intangible assets, of a business acquired. Goodwill is allocated to our reporting units based on the assignment of the fair values of each reporting unit of the acquired company. We test goodwill for impairment at the reporting unit level annually, or in interim periods if certain events occur indicating that the carrying amount may be impaired, such as changes in the business climate, poor indicators of operating performance or the sale or disposition of a significant portion of a reporting unit. There was no impairment of goodwill for the three and nine months ended September 30, 2022 and 2021; however, events such as prolonged economic weakness or unexpected significant declines in operating results of any of our reporting units or businesses, may result in goodwill impairment charges in the future.

**Acquired Intangible Assets**

The following table presents details of our total acquired intangible assets, both finite- and indefinite-lived:

	September 30, 2022	December 31, 2021
<b>Finite-Lived Intangible Assets</b>		
	(in millions)	
<b>Gross Amount</b>		
Technology	\$ 305	\$ 295
Customer relationships	2,007	2,050
Trade names and other	60	60
Foreign currency translation adjustment	(241)	(143)
Total gross amount	\$ 2,131	\$ 2,262
<b>Accumulated Amortization</b>		
Technology	\$ (87)	\$ (54)
Customer relationships	(753)	(711)
Trade names and other	(15)	(11)
Foreign currency translation adjustment	134	81
Total accumulated amortization	\$ (721)	\$ (695)
<b>Net Amount</b>		
Technology	\$ 218	\$ 241
Customer relationships	1,254	1,339
Trade names and other	45	49
Foreign currency translation adjustment	(107)	(62)
Total finite-lived intangible assets	\$ 1,410	\$ 1,567
<b>Indefinite-Lived Intangible Assets</b>		
Exchange and clearing registrations	\$ 1,257	\$ 1,257
Trade names	121	121
Licenses	52	52
Foreign currency translation adjustment	(257)	(184)
Total indefinite-lived intangible assets	\$ 1,173	\$ 1,246
Total intangible assets, net	\$ 2,583	\$ 2,813

There was no impairment of indefinite-lived intangible assets for the three and nine months ended September 30, 2022 and 2021.



The following table presents our amortization expense for acquired finite-lived intangible assets:

	Three Months Ended September 30,	
	2022	2021
	(in millions)	
Amortization expense	\$ 38	\$ 40
	Nine Months Ended September 30,	
	2022	2021
	(in millions)	
Amortization expense	\$ 116	\$ 116

The table below presents the estimated future amortization expense (excluding the impact of foreign currency translation adjustments of \$107 million as of September 30, 2022) of acquired finite-lived intangible assets as of September 30, 2022:

	(in millions)
Remainder of 2022	\$ 40
2023	159
2024	153
2025	151
2026	148
2027+	866
Total	\$ 1,517

## 6. INVESTMENTS

The following table presents the details of our investments:

	September 30, 2022	December 31, 2021
	(in millions)	
Financial investments	\$ 129	\$ 208
Equity method investments	\$ 384	\$ 363
Equity securities	\$ 75	\$ 67

### Financial Investments

Financial investments are comprised of trading securities, primarily highly rated European government debt securities, of which \$118 million as of September 30, 2022 and \$162 million as of December 31, 2021, are assets primarily utilized to meet regulatory capital requirements, mainly for our clearing operations at Nasdaq Clearing.

### Equity Method Investments

We record our estimated pro-rata share of earnings or losses each reporting period and record any dividends as a reduction in the investment balance. As of September 30, 2022 and 2021, our equity method investments primarily included our 40.0% equity interest in OCC.

The carrying amounts of our equity method investments are included in other non-current assets in the Condensed Consolidated Balance Sheets. No impairments were recorded for the three and nine months end September 30, 2022 and 2021.

Net income recognized from our equity interest in the earnings and losses of these equity method investments, primarily OCC, was \$8 million for the three months ended September 30, 2022, \$6 million for the three months ended September 30, 2021, \$23 million for the nine months ended September 30, 2022 and \$90 million for the nine months ended September 30, 2021. For the nine months ended September 30, 2022, lower equity interest in the earnings of OCC, as compared to 2021, was primarily driven by a reduction in the clearing fee rate that OCC charges its customers, partially offset by elevated U.S. industry trading volumes.

## Equity Securities

The carrying amounts of our equity securities are included in other non-current assets in the Condensed Consolidated Balance Sheets. We elected the measurement alternative for substantially all of our equity securities as they do not have a readily determinable fair value. No material adjustments were made to the carrying value of our equity securities for the three and nine months ended September 30, 2022 and 2021. As of September 30, 2022 and December 31, 2021, our equity securities primarily represent various strategic investments made through our corporate venture program as well as investments acquired through various acquisitions.

## 7. DEFERRED REVENUE

Deferred revenue represents consideration received that is yet to be recognized as revenue. The changes in our deferred revenue during the nine months ended September 30, 2022 are reflected in the following table:

	Balance at December 31, 2021	Additions	Revenue Recognized	Adjustments	Balance at September 30, 2022
	(in millions)				
Market Technology	\$ 117	\$ 100	\$ (102)	\$ (6)	\$ 109
Investment Intelligence	106	92	(90)	—	108
Corporate Platforms:					
Initial Listing	145	24	(41)	(4)	124
Annual Listings	2	91	(1)	(2)	90
IR & ESG Services	57	56	(49)	(2)	62
Other	21	7	(7)	(4)	17
Total	\$ 448	\$ 370	\$ (290)	\$ (18)	\$ 510

In the above table:

- Additions primarily reflect deferred revenue billed in the current period, net of recognition.
- Revenue recognized includes revenue recognized during the current period that was included in the beginning balance.
- Adjustments reflect foreign currency translation adjustments.
- Other primarily includes deferred revenue from non-U.S. listing of additional shares fees. Listing of additional shares fees are included in our Listing Services business.

As of September 30, 2022, we estimate that our deferred revenue will be recognized in the following years:

Fiscal year ended:	2022	2023	2024	2025	2026	2027+	Total
	(in millions)						
Market Technology	\$ 54	\$ 54	\$ 1	\$ —	\$ —	\$ —	\$ 109
Investment Intelligence	49	59	—	—	—	—	108
Corporate Platforms:							
Initial Listings	11	39	29	20	16	9	124
Annual Listings	90	—	—	—	—	—	90
IR & ESG Services	32	30	—	—	—	—	62
Other	3	6	5	3	—	—	17
Total	\$ 239	\$ 188	\$ 35	\$ 23	\$ 16	\$ 9	\$ 510

In the above table, 2022 represents the remaining three months of 2022.

The timing of recognition of deferred revenue related to certain market infrastructure technology contracts is primarily dependent upon the completion of customization and any significant modifications made pursuant to existing market technology contracts. As such, as it relates to market technology revenues, the timing represents our best estimate.

## 8. DEBT OBLIGATIONS

The following table presents the changes in the carrying amount of our debt obligations during the nine months ended September 30, 2022:

	December 31, 2021	Additions	Payments, Foreign Currency Translation and Accretion	September 30, 2022
	(in millions)			
Short-term debt:				
Commercial paper	\$ 420	\$ 2,898	\$ (3,119)	\$ 199
2022 Notes	598	—	2	600
2024 Notes	499	—	(499)	—
Total short-term debt	\$ 1,517	\$ 2,898	\$ (3,616)	\$ 799
Long-term debt - senior unsecured notes:				
2026 Notes	498	—	—	498
2029 Notes	676	—	(93)	583
2030 Notes	676	—	(93)	583
2050 Notes	486	—	—	486
2031 Notes	643	—	1	644
2040 Notes	644	—	—	644
2033 Notes	694	—	(97)	597
2052 Notes	—	541	—	541
2020 Credit Facility	(4)	—	1	(3)
Total long-term debt	\$ 4,313	\$ 541	\$ (281)	\$ 4,573
Total debt obligations	\$ 5,830	\$ 3,439	\$ (3,897)	\$ 5,372

In the table above, the 2024 Notes were reclassified to short-term debt as of March 31, 2022.

The long-term debt senior unsecured notes in the table above, and discussion below, are listed based on their issuance date.

### Commercial Paper Program

Our U.S. dollar commercial paper program is supported by our 2020 Credit Facility which provides liquidity support for the repayment of commercial paper issued through this program. See “2020 Credit Facility” below for further discussion. The effective interest rate of commercial paper issuances fluctuates as short term interest rates and demand fluctuate. The fluctuation of these rates may impact our interest expense.

In January 2022, we issued commercial paper to partially fund our ASR agreement. See “ASR Agreement,” of Note 11, “Nasdaq Stockholders' Equity.” As of September 30, 2022, we had \$199 million outstanding under our commercial paper program.

**Senior Unsecured Notes**

Our 2022 and 2040 Notes were issued at par. All of our other outstanding senior unsecured notes were issued at a discount. As a result of the discount, the proceeds received from each issuance were less than the aggregate principal amount. As of September 30, 2022, the amounts in the table above reflect the aggregate principal amount, less the unamortized debt discount and the unamortized debt issuance costs, which are being accreted through interest expense over the life of the applicable notes. For our Euro denominated notes, the “Payments, Foreign Currency Translation and Accretion” column also includes the impact of foreign currency translation. Our senior unsecured notes are general unsecured obligations which rank equally with all of our existing and future unsubordinated obligations and are not guaranteed by any of our subsidiaries. The senior unsecured notes were issued under indentures that, among other things, limit our ability to consolidate, merge or sell all or substantially all of our assets, create liens, and enter into sale and leaseback transactions. The senior unsecured notes may be redeemed by Nasdaq at any time, subject to a make-whole amount.

Upon a change of control triggering event (as defined in the various supplemental indentures governing the applicable notes), the terms require us to repurchase all or part of each holder’s notes for cash equal to 101% of the aggregate principal amount purchased plus accrued and unpaid interest, if any.

***Early Extinguishment of 2024 Notes***

In May 2014, Nasdaq issued the 2024 Notes, which paid interest semiannually at a rate of 4.25% per annum. In April 2022, we primarily used the net proceeds from the 2052 Notes to repay in full and redeem our 2024 Notes. For further discussion see “2052 Notes” below. In connection with the early extinguishment of the 2024 Notes, in April 2022 we recorded a pre-tax charge of \$16 million, which primarily includes a make-whole redemption price premium.

***2026 Notes***

In June 2016, Nasdaq issued the 2026 Notes, which pay interest semi-annually at a rate of 3.85% per annum until June 30, 2026. Such interest rate may vary with Nasdaq’s debt rating, to the extent Nasdaq is downgraded below investment grade, up to a rate not to exceed 5.85%.

***2029 Notes***

In April 2019, Nasdaq issued the 2029 Notes, which pay interest annually at a rate of 1.75% per annum until March 28, 2029. Such interest rate may vary with Nasdaq’s debt rating, to the extent Nasdaq is downgraded below investment grade, up to a rate not to exceed 3.75%.

The 2029 Notes have been designated as a hedge of our net investment in certain foreign subsidiaries to mitigate the foreign exchange risk associated with certain investments in these subsidiaries. The decrease in the carrying amount of \$93 million noted in the “Payments, Foreign Currency Translation and Accretion” column in the table above primarily reflects the remeasurement of the 2029 Notes into U.S. dollars and is recorded in accumulated other comprehensive loss within Nasdaq’s stockholders’ equity in the Condensed Consolidated Balance Sheets as of September 30, 2022.

***2030 Notes***

In February 2020, Nasdaq issued the 2030 Notes, which pay interest annually at a rate of 0.875% in arrears, which began on February 13, 2021.

The 2030 Notes were designated as a hedge of our net investment in certain foreign subsidiaries to mitigate the foreign exchange risk associated with certain investments in these subsidiaries. The decrease in the carrying amount of \$93 million noted in the “Payments, Foreign Currency Translation and Accretion” column in the table above primarily reflects the remeasurement of the 2030 Notes into U.S. dollars and is recorded in accumulated other comprehensive loss within Nasdaq’s stockholders’ equity in the Condensed Consolidated Balance Sheets as of September 30, 2022.

***2050 Notes***

In April 2020, Nasdaq issued the 2050 Notes, which pay interest semi-annually at a rate of 3.25% per annum until April 28, 2050. Such rate may vary with Nasdaq’s debt rating, to the extent Nasdaq is downgraded below investment grade, up to a rate not to exceed 5.25%.

***2022, 2031 and 2040 Notes***

In December 2020, Nasdaq issued the 2022, 2031 and 2040 Notes. The net proceeds were used to partially fund the acquisition of Verafin. For further discussion of the acquisition of Verafin, see “2021 Acquisition,” of Note 4, “Acquisitions and Divestiture.”

***2022 Notes***

The 2022 Notes pay interest semi-annually in arrears, which began on June 21, 2021. The interest rate of 0.445% may vary with Nasdaq’s debt rating, to the extent Nasdaq is downgraded below investment grade, up to a rate not to exceed 2.445%.

***2031 Notes***

The 2031 Notes pay interest semi-annually in arrears, which began on January 15, 2021. The interest rate of 1.650% may vary with Nasdaq’s debt rating, to the extent Nasdaq is downgraded below investment grade, up to a rate not to exceed 3.65%.

**2040 Notes**

The 2040 Notes pay interest semi-annually in arrears, which began on June 21, 2021. The interest rate of 2.500% may vary with Nasdaq's debt rating, to the extent Nasdaq is downgraded below investment grade, up to a rate not to exceed 4.50%.

**2033 Notes**

In July 2021, Nasdaq issued the 2033 Notes, which pay interest annually in arrears, at a rate of 0.900%, beginning on July 30, 2022.

The 2033 Notes have been designated as a hedge of our net investment in certain foreign subsidiaries to mitigate the foreign exchange risk associated with certain investments in these subsidiaries. The decrease in the carrying amount of \$97 million noted in the "Payments, Foreign Currency Translation and Accretion" column in the table above primarily reflects the remeasurement of the 2033 Notes into U.S. dollars and is recorded in accumulated other comprehensive loss within Nasdaq stockholders' equity in the Condensed Consolidated Balance Sheets as of September 30, 2022.

**2052 Notes**

In March 2022, Nasdaq issued \$550 million aggregate principal amount of 3.950% senior notes due in 2052, which pay interest semi-annually in arrears, beginning on September 7, 2022. The interest rate of 3.950% may vary with Nasdaq's debt rating, to the extent Nasdaq is downgraded below investment grade, up to a rate not to exceed 5.950%. The net proceeds from the 2052 Notes was \$541 million after deducting the underwriting discount and expenses of the offering. We used the net proceeds from the 2052 Notes to redeem all of the 2024 Notes in April 2022.

**Credit Facilities****2020 Credit Facility**

In December 2020, Nasdaq entered into the 2020 Credit Facility, which replaced a former credit facility and consists of a \$1.25 billion five-year revolving credit facility (with sublimits for non-dollar borrowings, swingline borrowings and letters of credit). Nasdaq intends to use funds available under the 2020 Credit Facility for general corporate purposes and to provide liquidity support for the repayment of commercial paper issued through the commercial paper program. Nasdaq is permitted to repay borrowings under our 2020 Credit Facility at any time in whole or in part, without penalty.

As of September 30, 2022, no amounts were outstanding on the 2020 Credit Facility. The \$(3) million balance represents unamortized debt issuance costs which are being accreted through interest expense over the life of the credit facility.

Borrowings under the revolving credit facility and swingline borrowings bear interest on the principal amount outstanding at a variable interest rate based on either the LIBOR (or a successor rate to LIBOR), the base rate (as defined in the credit agreement), or other applicable rate with respect to non-dollar borrowings, plus an applicable margin that varies with Nasdaq's debt rating. We are charged commitment fees of 0.125% to 0.350%, depending on our credit rating, whether or not amounts have been borrowed. These commitment fees are included in interest expense and were not material for the three and nine months ended September 30, 2022 and 2021.

The 2020 Credit Facility contains financial and operating covenants. Financial covenants include a maximum leverage ratio. Operating covenants include, among other things, limitations on Nasdaq's ability to incur additional indebtedness, grant liens on assets, dispose of assets and make certain restricted payments. The facility also contains customary affirmative covenants, including access to financial statements, notice of defaults and certain other material events, maintenance of properties and insurance, and customary events of default, including cross-defaults to our material indebtedness.

The 2020 Credit Facility includes an option for Nasdaq to increase the available aggregate amount by up to \$625 million, subject to the consent of the lenders funding the increase and certain other conditions.

**Other Credit Facilities**

Certain of our European subsidiaries have several other credit facilities, which are available in multiple currencies, primarily to support our Nasdaq Clearing operations in Europe, as well as to provide a cash pool credit line for one subsidiary. These credit facilities, in aggregate, totaled \$173 million as of September 30, 2022 and \$212 million as of December 31, 2021 in available liquidity, none of which was utilized. Generally, these facilities each have a one year term. The amounts borrowed under these various credit facilities bear interest on the principal amount outstanding at a variable interest rate based on a base rate (as defined in the applicable credit agreement), plus an applicable margin. We are charged commitment fees (as defined in the applicable credit agreement), whether or not amounts have been borrowed. These commitment fees are included in interest expense and were not material for the three and nine months ended September 30, 2022 and 2021.

These facilities include customary affirmative and negative operating covenants and events of default.

**Debt Covenants**

As of September 30, 2022, we were in compliance with the covenants of all of our debt obligations.

## 9. RETIREMENT PLANS

### Defined Contribution Savings Plan

We sponsor a 401(k) which is a voluntary defined contribution savings plan, for U.S. employees. Employees are immediately eligible to make contributions to the plan and are also eligible for an employer contribution match at an amount equal to 100.0% of the first 6.0% of eligible employee contributions. Savings plan expense for the three and nine months ended September 30, 2022 and 2021, which is included in compensation and benefits expense in the Condensed Consolidated Statements of Income:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(in millions)			
Savings Plan expense	\$ 4	\$ 3	\$ 13	\$ 11

### Pension and Supplemental Executive Retirement Plans

We maintain non-contributory, defined-benefit pension plans, non-qualified SERPs for certain senior executives and other post-retirement benefit plans for eligible employees in the U.S. Our pension plans and SERPs are frozen. Future service and salary for all participants do not count toward an accrual of benefits under the pension plans and SERPs. Most employees outside the U.S. are covered by local retirement plans or by applicable social laws. Benefits under social laws are generally expensed in the periods in which the costs are incurred. The total expense for these plans for the three and nine months ended September 30, 2022 and 2021, which is included in compensation and benefits expense in the Condensed Consolidated Statements of Income:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(in millions)			
Retirement Plans expense	\$ 6	\$ 7	\$ 18	\$ 20

### Nonqualified Deferred Compensation Plan

In June 2022, we established the Nasdaq, Inc. Nonqualified Deferred Compensation Plan. This plan provides certain eligible employees with the opportunity to defer a portion of their annual salary and bonus up to certain approval limits. All deferrals and associated earnings are our general unsecured obligations and were immaterial for the three and nine months ended September 30, 2022.

## 10. SHARE-BASED COMPENSATION

We have a share-based compensation program for employees and non-employee directors. Share-based awards granted under this program include restricted stock (consisting of restricted stock units), PSUs and stock options. For accounting purposes, we consider PSUs to be a form of restricted stock. Generally, annual employee awards are granted on April 1st of each year.

### Summary of Share-Based Compensation Expense

The following table presents the total share-based compensation expense resulting from equity awards and the 15.0% discount for the ESPP for the three and nine months ended September 30, 2022 and 2021, which is included in compensation and benefits expense in the Condensed Consolidated Statements of Income:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(in millions)			
Share-based compensation expense before income taxes	\$ 26	\$ 23	\$ 76	\$ 66

### Common Shares Available Under Our Equity Plan

As of September 30, 2022, we had approximately 26.4 million shares of common stock authorized for future issuance under our Equity Plan.

### Restricted Stock

We grant restricted stock to most employees. The grant date fair value of restricted stock awards is based on the closing stock price at the date of grant less the present value of future cash dividends. Restricted stock awards granted to employees below the manager level generally vest 33.3% on the first anniversary of the grant date, 33.3% on the second anniversary of the grant date, and 33.3% on the third anniversary of the grant date. Restricted stock awards granted to employees at or above the manager level generally vest 33.3% on the second anniversary of the grant date, 33.3% on the third anniversary of the grant date, and 33.3% on the fourth anniversary of the grant date.

### Summary of Restricted Stock Activity

The following table summarizes our restricted stock activity for the nine months ended September 30, 2022:

	Restricted Stock	
	Number of Awards	Weighted-Average Grant Date Fair Value
Unvested at January 1, 2022	4,399,020	\$ 35.39
Granted	1,660,389	57.34
Vested	(1,440,663)	30.29
Forfeited	(221,049)	41.75
Unvested at September 30, 2022	4,397,697	\$ 45.02

As of September 30, 2022, \$119 million of total unrecognized compensation cost related to restricted stock is expected to be recognized over a weighted-average period of 1.8 years.

## PSUs

PSUs are based on performance measures that impact the amount of shares that each recipient will receive upon vesting. Prior to April 1, 2020, we had two performance-based PSU programs for certain officers, a one-year performance-based program and a three-year cumulative performance-based program that focuses on TSR. Effective April 1, 2020, to better align the equity programs for eligible officers, the one-year performance-based program was eliminated and all eligible officers now participate in the three-year cumulative performance-based program. While the performance periods are complete for all PSUs granted under the one-year performance-based program, some shares underlying these PSUs have not vested.

### One-Year PSU Program

The grant date fair value of PSUs under the one-year performance-based program was based on the closing stock price at the date of grant less the present value of future cash dividends. Under this program, an eligible employee received a target grant of PSUs, but could have received from 0.0% to 150.0% of the target amount granted, depending on the achievement of performance measures. These awards vest ratably on an annual basis over a three-year period commencing with the end of the one-year performance period. Compensation cost is recognized over the performance period and the three-year vesting period based on the probability that such performance measures will be achieved, taking into account an estimated forfeiture rate.

### Three-Year PSU Program

Under the three-year performance-based program, each eligible individual receives PSUs, subject to market conditions, with a three-year cumulative performance period that vest at the end of the performance period. Compensation cost is recognized over the three-year performance period, taking into account an estimated forfeiture rate, regardless of whether the market condition is satisfied, provided that the requisite service period has been completed. Performance will be determined by comparing Nasdaq's TSR to two peer groups, each weighted 50.0%. The first peer group consists of exchange companies, and the second peer group consists of all companies in the S&P 500. Nasdaq's relative performance ranking against each of these groups will determine the final number of shares delivered to each individual under the program. The award issuance under this program will be between 0.0% and 200.0% of the number of PSUs granted and will be determined by Nasdaq's overall performance against both peer groups. However, if Nasdaq's TSR is negative for the three-year performance period, regardless of TSR ranking, the award issuance will not exceed 100.0% of the number of PSUs granted. We estimate the fair value of PSUs granted under the three-year PSU program using the Monte Carlo simulation model, as these awards contain a market condition.

Grants of PSUs that were issued in 2019 with a three-year performance period exceeded the applicable performance parameters. As a result, an additional 867,921 units above the original target were granted in the first quarter of 2022 and were fully vested upon issuance.

The following weighted-average assumptions were used to determine the weighted-average fair values of the PSU awards granted under the three-year PSU program for the nine months ended September 30, 2022 and 2021:

	Nine Months Ended September 30,	
	2022	2021
Weighted-average risk free interest rate	2.55 %	0.31 %
Expected volatility	30.33 %	30.11 %
Weighted-average grant date share price	\$ 60.64	\$ 50.28
Weighted-average fair value at grant date	\$ 63.50	\$ 68.72

In the table above, the risk-free interest rate for periods within the expected life of the award is based on the U.S. Treasury yield curve in effect at the time of grant; and we use historic volatility for PSU awards issued under the three-year PSU program, as implied volatility data could not be obtained for all the companies in the peer groups used for relative performance measurement within the program.

In addition, the annual dividend assumption utilized in the Monte Carlo simulation model is based on Nasdaq's dividend yield at the date of grant.



**Summary of PSU Activity**

The following table summarizes our PSU activity for the nine months ended September 30, 2022:

	PSUs			
	One-Year Program		Three-Year Program	
	Number of Awards	Weighted-Average Grant Date Fair Value	Number of Awards	Weighted-Average Grant Date Fair Value
Unvested at January 1, 2022	149,202	\$ 28.01	2,292,372	\$ 45.01
Granted	—	—	1,471,092	45.29
Vested	(7,044)	28.06	(1,735,842)	32.57
Forfeited	(2,670)	28.06	(71,376)	50.21
Unvested at September 30, 2022	139,488	\$ 28.01	1,956,246	\$ 56.08

In the table above, the granted amount under the three year program reflects additional awards granted based on overachievement of performance parameters.

As of September 30, 2022, total unrecognized compensation cost related to the one-year PSU program is immaterial and is expected to be recognized over a weighted-average period of 1.0 year. For the three-year PSU program, \$52 million of total unrecognized compensation cost is expected to be recognized over a weighted-average period of 1.5 years.

**Stock Options**

In January 2022, in connection with a new five year employment agreement, our President and Chief Executive Officer received an aggregate of 613,872 performance-based non-qualified stock options, which will vest as follows:

- 50% will vest contingent upon the achievement of certain performance conditions; and
- 50% will vest five years after the grant date, subject to continued employment through such date.

The fair value of stock options are estimated using the Black-Scholes option-pricing model. These options expire 10 years after the date of grant. There were no stock option awards granted for the nine months ended September 30, 2021.

A summary of stock option activity for the nine months ended September 30, 2022 is as follows:

	Number of Stock Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in millions)
Outstanding at December 31, 2021	806,451	\$ 22.23	5.0	\$ 39
Granted	613,872	67.49		
Outstanding at September 30, 2022	1,420,323	\$ 41.79	6.4	\$ 28
Exercisable at September 30, 2022	806,451	\$ 22.23	4.3	\$ 28

The net cash proceeds from the exercise of 73,227 stock options for the nine months ended September 30, 2021 was \$1 million. The total pre-tax intrinsic value of stock options exercised was \$3 million for the nine months ended September 30, 2021.

As of September 30, 2022, the aggregate pre-tax intrinsic value of the outstanding and exercisable stock options in the above table was \$28 million and represents the difference between our closing stock price on September 30, 2022 of \$56.68 and the exercise price, times the number of shares that would have been received by the option holder had the option holder exercised the stock options on that date. This amount can change based on the fair market value of our common stock. As of September 30, 2021, 0.8 million outstanding stock options were exercisable and the weighted-average exercise price was \$22.23.

**ESPP**

We have an ESPP under which approximately 12.3 million shares of our common stock were available for future issuance as of September 30, 2022. Under our ESPP, employees may purchase shares having a value not exceeding 10.0% of their annual compensation, subject to applicable annual Internal Revenue Service limitations. We record compensation expense related to the 15.0% discount that is given to our employees, which totaled \$1 million for both the three months ended September 30, 2022 and 2021 and \$6 million for both the nine months ended September 30, 2022 and 2021.

**11. NASDAQ STOCKHOLDERS' EQUITY****Common Stock**

As of September 30, 2022, 900,000,000 shares of our common stock were authorized, 512,714,970 shares were issued and 491,234,455 shares were outstanding. As of December 31, 2021, 900,000,000 shares of our common stock were authorized, 520,256,817 shares were issued and 500,038,905 shares were outstanding. The holders of common stock are entitled to one vote per share, except that our certificate of incorporation limits the ability of any shareholder to vote in excess of 5.0% of the then-outstanding shares of Nasdaq common stock.



**Common Stock in Treasury, at Cost**

We account for the purchase of treasury stock under the cost method with the shares of stock repurchased reflected as a reduction to Nasdaq stockholders' equity and included in common stock in treasury, at cost in the Condensed Consolidated Balance Sheets. Shares repurchased under our share repurchase program are currently retired and canceled and are therefore not included in the common stock in treasury balance. If treasury shares are reissued, they are recorded at the average cost of the treasury shares acquired. We held 21,480,515 shares of common stock in treasury as of September 30, 2022 and 20,217,912 shares as of December 31, 2021, most of which are related to shares of our common stock withheld for the settlement of employee tax withholding obligations arising from the vesting of restricted stock and PSUs.

**Share Repurchase Program**

As of September 30, 2022, the remaining aggregate authorized amount under the existing share repurchase program was \$293 million.

These repurchases may be made from time to time at prevailing market prices in open market purchases, privately-negotiated transactions, block purchase techniques, an accelerated share repurchase program or otherwise, as determined by our management. The repurchases are primarily funded from existing cash balances. The share repurchase program may be suspended, modified or discontinued at any time, and has no defined expiration date.

The following is a summary of our share repurchase activity, excluding the repurchases done through our ASR agreement described below, reported based on settlement date, for the nine months ended September 30, 2022:

	Nine Months Ended September 30, 2022
Number of shares of common stock repurchased	5,465,595
Average price paid per share	\$ 56.26
Total purchase price (in millions)	\$ 308

In the table above, the number of shares of common stock repurchased excludes an aggregate of 1,262,603 shares withheld upon the vesting of restricted stock and PSUs for the nine months ended September 30, 2022.

As discussed above in "Common Stock in Treasury, at Cost," shares repurchased under our share repurchase program are currently retired and cancelled.

**ASR Agreement**

In January 2022, we entered into an ASR agreement to repurchase \$325 million of common stock. We received a total delivery of 5,629,161 shares of common stock and completed the ASR program during the first quarter of 2022.

**Preferred Stock**

Our certificate of incorporation authorizes the issuance of 90,000,000 shares of preferred stock, par value \$0.01 per share, issuable from time to time in one or more series. As of September 30, 2022 and December 31, 2021, no shares of preferred stock were issued or outstanding.

**Stock Split**

See "Stock Split Effected in the Form of a Stock Dividend," of Note 2, "Basis of Presentation and Principles of Consolidation."

**Cash Dividends on Common Stock**

During the nine months ended September 30, 2022, our board of directors declared and paid the following cash dividends:

Declaration Date	Dividend Per Common Share	Record Date	Total Amount Paid	Payment Date
(in millions)				
January 26, 2022	\$ 0.18	March 11, 2022	\$ 88	March 25, 2022
April 20, 2022	0.20	June 10, 2022	98	June 24, 2022
July 19, 2022	0.20	September 16, 2022	99	September 30, 2022
			<u>\$ 285</u>	

The total amount paid of \$285 million was recorded in retained earnings within Nasdaq's stockholders' equity in the Condensed Consolidated Balance Sheets at September 30, 2022.

In October 2022, the board of directors approved a regular quarterly cash dividend of \$0.20 per share on our outstanding common stock. The dividend is payable on December 16, 2022 to shareholders of record at the close of business on December 2, 2022. The estimated aggregate payment of this dividend is \$98 million. Future declarations of quarterly dividends and the establishment of future record and payment dates are subject to approval by the board of directors.

The board of directors maintains a dividend policy with the intention to provide stockholders with regular and increasing dividends as earnings and cash flows increase.

**12. EARNINGS PER SHARE**

The following table sets forth the computation of basic and diluted earnings per share:

	Three Months Ended September 30,	
	2022	2021
(in millions, except share and per share amounts)		
<b>Numerator:</b>		
Net income attributable to common shareholders	\$ 294	\$ 288
<b>Denominator:</b>		
Weighted-average common shares outstanding for basic earnings per share	491,228,889	503,077,107
Weighted-average effect of dilutive securities:		
Employee equity awards	5,110,197	7,462,926
Weighted-average common shares outstanding for diluted earnings per share	496,339,086	510,540,033
<b>Basic and diluted earnings per share:</b>		
Basic earnings per share	\$ 0.60	\$ 0.57
Diluted earnings per share	\$ 0.59	\$ 0.56

	Nine Months Ended September 30,	
	2022	2021
(in millions, except share and per share amounts)		
<b>Numerator:</b>		
Net income attributable to common shareholders	\$ 884	\$ 928
<b>Denominator:</b>		
Weighted-average common shares outstanding for basic earnings per share	492,803,274	496,520,577
Weighted-average effect of dilutive securities:		
Employee equity awards	5,351,675	7,222,452
Weighted-average common shares outstanding for diluted earnings per share	498,154,949	503,743,029
<b>Basic and diluted earnings per share:</b>		
Basic earnings per share	\$ 1.79	\$ 1.87
Diluted earnings per share	\$ 1.77	\$ 1.84

In the table above, employee equity awards from our PSU program, which are considered contingently issuable, are included in the computation of diluted earnings per share on a weighted average basis when management determines that the applicable performance criteria would have been met if the performance period ended as of the date of the relevant computation.

Securities that were not included in the computation of diluted earnings per share because their effect was antidilutive were immaterial for both the three and nine months ended September 30, 2022 and 2021.

**13. FAIR VALUE OF FINANCIAL INSTRUMENTS**

The following tables present our financial assets and financial liabilities that were measured at fair value on a recurring basis as of September 30, 2022 and December 31, 2021.

	September 30, 2022			
	Total	Level 1	Level 2	Level 3
(in millions)				
European government debt securities	\$ 103	\$ 103	\$ —	\$ —
Corporate debt securities	7	—	7	—
Swedish mortgage bonds	19	—	19	—
Total assets at fair value	\$ 129	\$ 103	\$ 26	\$ —

	December 31, 2021			
	Total	Level 1	Level 2	Level 3
(in millions)				
European government debt securities	\$ 144	\$ 144	\$ —	\$ —
Corporate debt securities	20	—	20	—
State-owned enterprises and municipal securities	11	—	11	—
Swedish mortgage bonds	21	—	21	—
Time deposits	12	—	12	—
Total assets at fair value	\$ 208	\$ 144	\$ 64	\$ —

**Financial Instruments Not Measured at Fair Value on a Recurring Basis**

Some of our financial instruments are not measured at fair value on a recurring basis but are recorded at amounts that approximate fair value due to their liquid or short-term nature. Such financial assets and financial liabilities include: cash and cash equivalents, restricted cash and cash equivalents, receivables, net, certain other current assets, accounts payable and accrued expenses, Section 31 fees payable to SEC, accrued personnel costs, commercial paper and certain other current liabilities.

Our investment in OCC is accounted for under the equity method of accounting. We have elected the measurement alternative for the majority of our equity securities, which primarily represent various strategic investments made through our corporate venture program. See “Equity Method Investments,” and “Equity Securities,” of Note 6, “Investments,” for further discussion.

We also consider our debt obligations to be financial instruments. As of September 30, 2022, the majority of our debt obligations were fixed-rate obligations. We are exposed to changes in interest rates as a result of borrowings under our 2020 Credit Facility, as the interest rates on this facility have a variable rate depending on the maturity of the borrowing and the implied underlying reference rate. As of September 30, 2022, we had no outstanding borrowings under our 2020 Credit Facility. We are also exposed to changes in interest rates as a result of the amounts outstanding from the sale of commercial paper under our commercial paper program. As of September 30, 2022, we had \$199 million outstanding under our commercial paper program. The fair value of our remaining debt obligations utilizing discounted cash flow analyses for our floating rate debt, and prevailing market rates for our fixed rate debt was \$4.3 billion as of September 30, 2022 and \$5.9 billion as of December 31, 2021. The discounted cash flow analyses are based on borrowing rates currently available to us for debt with similar terms and maturities. The fair value of our commercial paper as of September 30, 2022 approximated the carrying value since the rates of interest on this short-term debt approximated market rates. Our commercial paper and our fixed rate and floating rate debt are categorized as Level 2 in the fair value hierarchy.

For further discussion of our debt obligations, see Note 8, “Debt Obligations.”

#### **Non-Financial Assets Measured at Fair Value on a Non-Recurring Basis**

Our non-financial assets, which include goodwill, intangible assets, and other long-lived assets, are not required to be carried at fair value on a recurring basis. Fair value measures of non-financial assets are primarily used in the impairment analysis of these assets. Any resulting asset impairment would require that the non-financial asset be recorded at its fair value. Nasdaq uses Level 3 inputs to measure the fair value of the above assets on a non-recurring basis. As of September 30, 2022 and December 31, 2021, there were no non-financial assets measured at fair value on a non-recurring basis.

### **14. CLEARING OPERATIONS**

#### **Nasdaq Clearing**

Nasdaq Clearing is authorized and supervised under EMIR as a multi-asset clearinghouse by the SFSA. Such authorization is effective for all member states of the European Union and certain other non-member states that are part of the European Economic Area, including Norway. The clearinghouse acts as the CCP for exchange and OTC trades in equity derivatives, fixed income derivatives, resale and repurchase contracts, power derivatives, emission allowance derivatives, and seafood derivatives.

Through our clearing operations in the financial markets, which include the resale and repurchase market, the commodities markets, and the seafood market, Nasdaq Clearing is the legal counterparty for, and guarantees the fulfillment of, each contract cleared. These contracts are not used by Nasdaq Clearing for the purpose of trading on its own behalf. As the legal counterparty of each transaction, Nasdaq Clearing bears the counterparty risk between the purchaser and seller in the contract. In its guarantor role, Nasdaq Clearing has precisely equal and offsetting claims to and from clearing members on opposite sides of each contract, standing as the CCP on every contract cleared. In accordance with the rules and regulations of Nasdaq Clearing, default fund and margin collateral requirements are calculated for each clearing member's positions in accounts with the CCP. See “Default Fund Contributions and Margin Deposits” below for further discussion of Nasdaq Clearing's default fund and margin requirements.

Nasdaq Clearing maintains three member sponsored default funds: one related to financial markets, one related to commodities markets and one related to the seafood market. Under this structure, Nasdaq Clearing and its clearing members must contribute to the total regulatory capital related to the clearing operations of Nasdaq Clearing. This structure applies an initial separation of default fund contributions for the financial, commodities and seafood markets in order to create a buffer for each market's counterparty risks. See “Default Fund Contributions” below for further discussion of Nasdaq Clearing's default fund. A power of assessment and a liability waterfall have also been implemented to further align risk between Nasdaq Clearing and its clearing members. See “Power of Assessment” and “Liability Waterfall” below for further discussion.

#### **Nasdaq Commodities Clearing Default**

In September 2018, a member of the Nasdaq Clearing commodities market defaulted due to the inability to post sufficient collateral to cover increased margin requirements for the positions of the relevant member, which had experienced losses due to sharp adverse movements in the Nordic - German power market spread. Nasdaq Clearing followed default procedures and offset the future market risk on the defaulting member's positions.

In December 2018, the SFSA initiated a review of Nasdaq Clearing. In January 2021, the SFSA issued a warning combined with an administrative fine of approximately \$27 million (SEK 300 million) to Nasdaq Clearing based on its review. Nasdaq Clearing appealed the SFSA's decision to the Administrative Court. In December 2021, the court rejected Nasdaq Clearing's appeal and upheld the decision of the SFSA. In January 2022, Nasdaq Clearing appealed this decision to the Administrative Court of Appeal. The most recent hearing took place in October 2022 and we expect to receive the decision by the end of 2022. While we continue to firmly believe in the merit of our appeal, due to the decision by the Administrative Court, we have determined it is appropriate to record an accrual for the full amount of the administrative fine issued by the SFSA. The charge was included in regulatory expense in our Consolidated Statements of Income for the year ended December 31, 2021.

#### Default Fund Contributions and Margin Deposits

As of September 30, 2022, clearing member default fund contributions and margin deposits were as follows:

	September 30, 2022		
	Cash Contributions	Non-Cash Contributions	Total Contributions
	(in millions)		
Default fund contributions	\$ 1,149	\$ 108	\$ 1,257
Margin deposits	8,358	8,807	17,165
Total	\$ 9,507	\$ 8,915	\$ 18,422

Of the total default fund contributions of \$1,257 million, Nasdaq Clearing can utilize \$1,196 million as capital resources in the event of a counterparty default. The remaining balance of \$61 million pertains to member posted surplus balances.

Our clearinghouse holds material amounts of clearing member cash deposits which are held or invested primarily to provide security of capital while minimizing credit, market and liquidity risks. While we seek to achieve a reasonable rate of return, we are primarily concerned with preservation of capital and managing the risks associated with these deposits.

Clearing member cash contributions are maintained in demand deposits held at central banks and large, highly rated financial institutions or secured through direct investments, primarily central bank certificates and highly rated European government debt securities with original maturities primarily 1 year or less, reverse repurchase agreements and multilateral development bank debt securities. Investments in reverse repurchase agreements range in maturity from 3 days to 28 days and are secured with highly rated government securities and multilateral development banks. The carrying value of these securities approximates their fair value due to the short-term nature of the instruments and reverse repurchase agreements.

Nasdaq Clearing has invested the total cash contributions of \$9,507 million as of September 30, 2022 and \$5,911 million as of December 31, 2021, in accordance with its investment policy as follows:

	September 30, 2022	December 31, 2021
(in millions)		
Demand deposits	\$ 7,944	\$ 3,061
Central bank certificates	938	2,013
<b>Restricted cash and cash equivalents</b>	<b>\$ 8,882</b>	<b>\$ 5,074</b>
European government debt securities	360	414
Reverse repurchase agreements	99	152
Multilateral development bank debt securities	166	271
<b>Investments</b>	<b>\$ 625</b>	<b>\$ 837</b>
<b>Total</b>	<b>\$ 9,507</b>	<b>\$ 5,911</b>

In the preceding table, the change from December 31, 2021 to September 30, 2022 includes currency translation adjustments of \$1,682 million for restricted cash and cash equivalents and \$168 million for investments.

For the nine months ended September 30, 2022 and 2021 investments related to default funds and margin deposits, net includes purchases of investment securities of \$35,019 million and \$29,103 million, respectively, and proceeds from sales and redemptions of investment securities of \$35,083 million and \$29,030 million, respectively.

In the investment activity related to default fund and margin contributions, we are exposed to counterparty risk related to reverse repurchase agreement transactions, which reflect the risk that the counterparty might become insolvent and, thus, fail to meet its obligations to Nasdaq Clearing. We mitigate this risk by only engaging in transactions with high credit quality reverse repurchase agreement counterparties and by limiting the acceptable collateral under the reverse repurchase agreement to high quality issuers, primarily government securities and other securities explicitly guaranteed by a government. The value of the underlying security is monitored during the lifetime of the contract, and in the event the market value of the underlying security falls below the reverse repurchase amount, our clearinghouse may require additional collateral or a reset of the contract.

#### Default Fund Contributions

Required contributions to the default funds are proportional to the exposures of each clearing member. When a clearing member is active in more than one market, contributions must be made to all markets' default funds in which the member is active. Clearing members' eligible contributions may include cash and non-cash contributions. Cash contributions received are maintained in demand deposits held at central banks and large, highly rated financial institutions or invested by Nasdaq Clearing, in accordance with its investment policy, either in central bank certificates, highly rated government debt securities, reverse repurchase

agreements with highly rated government debt securities as collateral, or multilateral development bank debt securities. Nasdaq Clearing maintains and manages all cash deposits related to margin collateral. All risks and rewards of collateral ownership, including interest, belong to Nasdaq Clearing. Clearing members' cash contributions are included in default funds and margin deposits in the Condensed Consolidated Balance Sheets as both a current asset and a current liability. Non-cash contributions include highly rated government debt securities that must meet specific criteria approved by Nasdaq Clearing. Non-cash contributions are pledged assets that are not recorded in the Condensed Consolidated Balance Sheets as Nasdaq Clearing does not take legal ownership of these assets and the risks and rewards remain with the clearing members. These balances may fluctuate over time due to changes in the amount of deposits required and whether members choose to provide cash or non-cash contributions. Assets pledged are held at a nominee account in Nasdaq Clearing's name for the benefit of the clearing members and are immediately accessible by Nasdaq Clearing in the event of a default. In addition to clearing members' required contributions to the liability waterfall, Nasdaq Clearing is also required to contribute capital to the liability waterfall and overall regulatory capital as specified under its clearinghouse rules. As of September 30, 2022, Nasdaq Clearing committed capital totaling \$121 million to the liability waterfall and overall regulatory capital, in the form of government debt securities, which are recorded as financial investments in the Condensed Consolidated Balance Sheets. The combined regulatory capital of the clearing members and Nasdaq Clearing is intended to secure the obligations of a clearing member exceeding such member's own margin and default fund deposits and may be used to cover losses sustained by a clearing member in the event of a default.

#### ***Margin Deposits***

Nasdaq Clearing requires all clearing members to provide collateral, which may consist of cash and non-cash contributions, to guarantee performance on the clearing members' open positions, or initial margin. In addition, clearing members must also provide collateral to cover the daily margin call if needed. See "Default Fund Contributions" above for further discussion of cash and non-cash contributions.

Similar to default fund contributions, Nasdaq Clearing maintains and manages all cash deposits related to margin collateral. All risks and rewards of collateral ownership, including interest, belong to Nasdaq Clearing and are recorded in revenues. These cash deposits are recorded in default funds and margin deposits in the Condensed Consolidated Balance Sheets as both a current asset and a current liability. Pledged margin collateral is not recorded in our Condensed Consolidated Balance Sheets as all risks and rewards of collateral ownership, including interest, belong to the counterparty. Assets pledged are held at a nominee account in Nasdaq Clearing's name for the benefit of the

clearing members and are immediately accessible by Nasdaq Clearing in the event of a default.

Nasdaq Clearing marks to market all outstanding contracts and requires payment from clearing members whose positions have lost value. The mark-to-market process helps identify any clearing members that may not be able to satisfy their financial obligations in a timely manner allowing Nasdaq Clearing the ability to mitigate the risk of a clearing member defaulting due to exceptionally large losses. In the event of a default, Nasdaq Clearing can access the defaulting member's margin and default fund deposits to cover the defaulting member's losses.

#### **Regulatory Capital and Risk Management Calculations**

Nasdaq Clearing manages risk through a comprehensive counterparty risk management framework, which is comprised of policies, procedures, standards and financial resources. The level of regulatory capital is determined in accordance with Nasdaq Clearing's regulatory capital and default fund policy, as approved by the SFSA. Regulatory capital calculations are continuously updated through a proprietary capital-at-risk calculation model that establishes the appropriate level of capital.

As mentioned above, Nasdaq Clearing is the legal counterparty for each contract cleared and thereby guarantees the fulfillment of each contract. Nasdaq Clearing accounts for this guarantee as a performance guarantee. We determine the fair value of the performance guarantee by considering daily settlement of contracts and other margining and default fund requirements, the risk management program, historical evidence of default payments, and the estimated probability of potential default payouts. The calculation is determined using proprietary risk management software that simulates gains and losses based on historical market prices, extreme but plausible market scenarios, volatility and other factors present at that point in time for those particular unsettled contracts. Based on this analysis, excluding any liability related to the Nasdaq commodities clearing default (see discussion above), the estimated liability was nominal and no liability was recorded as of September 30, 2022.

#### **Power of Assessment**

To further strengthen the contingent financial resources of the clearinghouse, Nasdaq Clearing has power of assessment that provides the ability to collect additional funds from its clearing members to cover a defaulting member's remaining obligations up to the limits established under the terms of the clearinghouse rules. The power of assessment corresponds to 230.0% of the clearing member's aggregate contribution to the financial, commodities and seafood markets' default funds.



**Liability Waterfall**

The liability waterfall is the priority order in which the capital resources would be utilized in the event of a default where the defaulting clearing member's collateral and default fund contribution would not be sufficient to cover the cost to settle its portfolio. If a default occurs and the defaulting clearing member's collateral, including cash deposits and pledged assets, is depleted, then capital is utilized in the following amount and order:

- junior capital contributed by Nasdaq Clearing, which totaled \$37 million as of September 30, 2022;
- a loss-sharing pool related only to the financial market that is contributed to by clearing members and only applies if the defaulting member's portfolio includes interest rate swap products;
- specific market default fund where the loss occurred (i.e., the financial, commodities, or seafood market), which includes capital contributions of the clearing members on a pro-rata basis; and
- fully segregated senior capital for each specific market contributed by Nasdaq Clearing, calculated in accordance with clearinghouse rules, which totaled \$20 million as of September 30, 2022.

If additional funds are needed after utilization of the liability waterfall, or if part of the waterfall has been utilized and needs to be replenished, then Nasdaq Clearing will utilize its power of assessment and additional capital contributions will be required by non-defaulting members up to the limits established under the terms of the clearinghouse rules.

During 2022 Nasdaq Clearing has updated its recovery plan and rule book by introducing additional recovery tools, in line with the new European Union regulations on a framework for the recovery and resolution of central counterparties, which became effective during 2022.

In addition to the capital held to withstand counterparty defaults described above, Nasdaq Clearing also has committed capital of \$64 million to ensure that it can handle an orderly wind-down of its operation, and that it is adequately protected against investment, operational, legal, and business risks.

**Market Value of Derivative Contracts Outstanding**

The following table presents the market value of derivative contracts outstanding prior to netting:

	September 30, 2022	
	(in millions)	
Commodity and seafood options, futures and forwards	\$	1,217
Fixed-income options and futures		2,209
Stock options and futures		227
Index options and futures		74
<b>Total</b>	<b>\$</b>	<b>3,727</b>

In the table above:

- We determined the fair value of our option contracts using standard valuation models that were based on market-based observable inputs including implied volatility, interest rates and the spot price of the underlying instrument.
- We determined the fair value of our futures contracts based upon quoted market prices and average quoted market yields.
- We determined the fair value of our forward contracts using standard valuation models that were based on market-based observable inputs including benchmark rates and the spot price of the underlying instrument.

**Derivative Contracts Cleared**

The following table presents the total number of derivative contracts cleared through Nasdaq Clearing for the nine months ended September 30, 2022 and 2021:

	Nine Months Ended September 30,	
	2022	2021
Commodity and seafood options, futures and forwards	249,227	432,188
Fixed-income options and futures	17,233,036	17,010,664
Stock options and futures	13,737,846	15,217,832
Index options and futures	34,191,390	27,311,122
<b>Total</b>	<b>65,411,499</b>	<b>59,971,806</b>

In the table above, the total volume in cleared power related to commodity contracts was 337 Terawatt hours (TWh) and 632 TWh for the nine months ended September 30, 2022 and 2021, respectively.

**Resale and Repurchase Agreements Contracts Outstanding and Cleared**

The outstanding contract value of resale and repurchase agreements was \$2.7 billion as of September 30, 2022 and the total number of resale and repurchase agreements contracts cleared was 4,835,371 for the nine months ended September 30, 2022.

**15. LEASES**

We have operating leases which are primarily real estate leases predominantly for our U.S. and European headquarters, data centers and for general office space. The following table provides supplemental balance sheet information related to Nasdaq's operating leases:

Leases	Balance Sheet Classification	September 30, 2022	December 31, 2021
(in millions)			
<b>Assets:</b>			
Operating lease assets	Operating lease assets	\$ 448	\$ 366
<b>Liabilities:</b>			
Current lease liabilities	Other current liabilities	\$ 54	\$ 37
Non-current lease liabilities	Operating lease liabilities	456	386
Total lease liabilities		\$ 510	\$ 423

The following table summarizes Nasdaq's lease cost:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
(in millions)				
Operating lease cost	\$ 18	\$ 21	\$ 56	\$ 63
Variable lease cost	8	7	24	21
Sublease income	(1)	(1)	(3)	(3)
Total lease cost	\$ 25	\$ 27	\$ 77	\$ 81

In the table above, operating lease costs include short-term lease cost, which was immaterial.

The following table reconciles the undiscounted cash flows for each of the first five years and total of the remaining years to the operating lease liabilities recorded in our Condensed Consolidated Balance Sheets.

	September 30, 2022
	(in millions)
Remainder of 2022	\$ 18
2023	70
2024	68
2025	54
2026	50
2027+	358
Total lease payments	618
Less: interest	(108)
Present value of lease liabilities	\$ 510

In the table above, interest is calculated using the interest rate for each lease. Present value of lease liabilities include the current portion of \$54 million.

Total lease payments in the table above exclude \$46 million of legally binding minimum lease payments for leases signed but not yet commenced.

The following table provides information related to Nasdaq's lease term and discount rate:

	September 30, 2022
Weighted-average remaining lease term (in years)	10.7
Weighted-average discount rate	3.5 %

The following table provides supplemental cash flow information related to Nasdaq's operating leases:

	Nine Months Ended September 30,	
	2022	2021
(in millions)		
Cash paid for amounts included in the measurement of operating lease liabilities	\$ 47	\$ 57
Lease assets obtained in exchange for operating lease liabilities	\$ 130	\$ 47

**16. INCOME TAXES****Income Tax Provision**

The following table presents our income tax provision and effective tax rate:

	Three Months Ended September 30,	
	2022	2021
(in millions)		
Income tax provision	\$ 88	\$ 83
Effective tax rate	23.0 %	22.4 %
	Nine Months Ended September 30,	
	2022	2021
(in millions)		
Income tax provision	\$ 270	\$ 292
Effective tax rate	23.4 %	23.9 %

The higher effective tax rate for the three months ended September 30, 2022 was primarily due to return-to-provision adjustments recorded in 2021. The lower effective tax rate for the nine months ended September 30, 2022 was primarily due to the income tax effect on the geographic mix of earnings. The effective tax rate may vary from period to period depending on, among other factors, the geographic and business mix of earnings and losses. These same and other factors, including history of pre-tax earnings and losses, are taken into account in assessing the ability to realize deferred tax assets.

President Biden signed into law the Inflation Reduction Act of 2022 on August 16, 2022. Nasdaq does not currently expect any material impact to our financial statements or our effective tax rate.



**Tax Audits**

Nasdaq and its eligible subsidiaries file a consolidated U.S. federal income tax return, applicable state and local income tax returns and non-U.S. income tax returns. We are subject to examination by federal, state and local, and foreign tax authorities. Our Federal income tax returns for the years 2018 through 2020 are subject to examination by the Internal Revenue Service. Several state tax returns are currently under examination by the respective tax authorities for the years 2012 through 2020. Non-U.S. tax returns are subject to examination by the respective tax authorities for the years 2016 through 2021.

We regularly assess the likelihood of additional assessments by each jurisdiction and have established tax reserves that we believe are adequate in relation to the potential for additional assessments. Examination outcomes and the timing of examination settlements are subject to uncertainty. Although the results of such examinations may have an impact on our unrecognized tax benefits, we do not anticipate that such impact will be material to our condensed consolidated financial position or results of operations, but may be material to our operating results for a particular period and the effective tax rate for that period. We do not expect the settlement of any tax audits to be material in the next twelve months.

**17. COMMITMENTS, CONTINGENCIES AND GUARANTEES****Guarantees Issued and Credit Facilities Available**

In addition to the default fund contributions and margin collateral pledged by clearing members discussed in Note 14, "Clearing Operations," we have obtained financial guarantees and credit facilities, which are guaranteed by us through counter indemnities, to provide further liquidity related to our clearing businesses. Financial guarantees issued to us totaled \$4 million as of September 30, 2022 and \$5 million December 31, 2021. As discussed in "Other Credit Facilities," of Note 8, "Debt Obligations," we also have credit facilities primarily related to our Nasdaq Clearing operations, which are available in multiple currencies, and totaled \$173 million as of September 30, 2022 and \$212 million as of December 31, 2021 in available liquidity, none of which was utilized.

**Other Guarantees**

Through our clearing operations in the financial markets, Nasdaq Clearing is the legal counterparty for, and guarantees the performance of, its clearing members. See Note 14, "Clearing Operations," for further discussion of Nasdaq Clearing performance guarantees.

We have provided a guarantee related to lease obligations for The Nasdaq Entrepreneurial Center, Inc., which is a not-for-profit organization designed to convene, connect and engage aspiring and current entrepreneurs. This entity is not included in the condensed consolidated financial statements of Nasdaq.

We believe that the potential for us to be required to make payments under these arrangements is unlikely. Accordingly, no contingent liability is recorded in the Condensed Consolidated Balance Sheets for the above guarantees.

**Routing Brokerage Activities**

One of our broker-dealer subsidiaries, Nasdaq Execution Services, provides a guarantee to securities clearinghouses and exchanges under its standard membership agreements, which require members to guarantee the performance of other members. If a member becomes unable to satisfy its obligations to a clearinghouse or exchange, other members would be required to meet its shortfalls. To mitigate these performance risks, the exchanges and clearinghouses often require members to post collateral, as well as meet certain minimum financial standards. Nasdaq Execution Services' maximum potential liability under these arrangements cannot be quantified. However, we believe that the potential for Nasdaq Execution Services to be required to make payments under these arrangements is unlikely. Accordingly, no contingent liability is recorded in the Condensed Consolidated Balance Sheets for these arrangements.

**Legal and Regulatory Matters*****Armenian Stock Exchange Investigation***

As disclosed in our prior filings with the SEC, a former non-U.S. subsidiary of Nasdaq, NASDAQ OMX Armenia OJSC, operated the Armenian Stock Exchange and the Central Depository of Armenia, which are regulated by the Central Bank of Armenia under Armenian law. In accordance with the requirements of Armenian law, Mellat Bank SB CJSC, an Armenian entity that is designated under Executive Order 13382, was a market participant on the Armenian Stock Exchange and, as a result, paid participation and transaction fees to the Armenian Stock Exchange during the period from 2012-2014. In 2014, we voluntarily self-disclosed this matter to the U.S. Department of Treasury's Office of Foreign Assets Control, or OFAC, and received authorization from OFAC to continue, if necessary, certain activities pertaining to Mellat Bank SB CJSC in Armenia in a limited manner. In 2015, Nasdaq sold a majority of its ownership of Nasdaq OMX Armenia OJSC, with the remaining minority interest sold in 2018.

OFAC has been conducting an inquiry into the Armenian Stock Exchange matter described above and in our prior filings since 2016, and during the first quarter of 2021, we were advised that OFAC is considering a civil monetary penalty in connection with that matter. We are currently in discussions with OFAC.

While we believe our decision to voluntarily self-report this issue and our continued cooperation with OFAC, along with the permit we received from OFAC in connection with our transactions involving the Armenian Stock Exchange, will be mitigating factors with respect to the matter, any monetary fines or restrictions may nonetheless be material to our financial results in the period in which they are imposed. We cannot currently predict when our discussions with OFAC will conclude or the amount of any potential penalties imposed. Accordingly, we are unable to reasonably estimate any potential loss or range of loss and we have not accrued for a loss contingency.

#### ***CFTC Matter***

In June 2022, NASDAQ Futures, Inc. (“NFX”), a non-operational, wholly-owned subsidiary of Nasdaq, received a telephonic “Wells Notice” from the staff of the CFTC relating to certain alleged potential violations by NFX of provisions of the Commodity Exchange Act and CFTC rules thereunder during the period beginning July 2015 through October 2018. The Wells Notice informed NFX that the CFTC staff has made, subject to consideration of NFX’s response, a preliminary determination to recommend that the CFTC authorize an enforcement action against NFX in connection with its former futures exchange business. Nasdaq sold NFX’s futures exchange business to a third-party in November 2019, including the portfolio of open interest in NFX contracts. During 2020, all remaining open interest in NFX contracts was migrated to other exchanges and NFX ceased operation. NFX has submitted a response to the Wells Notice to contest the staff’s position. A Wells Notice is neither a formal charge of wrongdoing nor a final determination that the recipient has violated any law. Accordingly, we are unable to reasonably estimate any potential loss or range of loss, and therefore, we have not accrued for a loss contingency.

#### ***Nasdaq Commodities Clearing Default***

In December 2021, we recorded a charge related to an administrative fine issued by the SFSA associated with the default which occurred in 2018. The charge was included in regulatory expense in our Consolidated Statements of Income for the year ended December 31, 2021. See “Nasdaq Commodities Clearing Default,” of Note 14, “Clearing Operations,” for further information.

#### ***Other Matters***

Except as disclosed above and in prior reports filed under the Exchange Act, we are not currently a party to any litigation or proceeding that we believe could have a material adverse effect on our business, consolidated financial condition, or operating results. However, from time to time, we have been threatened with, or named as a defendant in, lawsuits or involved in regulatory proceedings.

In the normal course of business, Nasdaq discusses matters with its regulators raised during regulatory examinations or otherwise subject to their inquiries. Management believes that censures, fines, penalties or other sanctions that could result from any ongoing examinations or inquiries will not have a material impact on its consolidated financial position or results of operations. However, we are unable to predict the outcome or the timing of the ultimate resolution of these matters, or the potential fines, penalties or injunctive or other equitable relief, if any, that may result from these matters.

#### **Tax Audits**

We are engaged in ongoing discussions and audits with taxing authorities on various tax matters, the resolutions of which are uncertain. Currently, there are matters that may lead to assessments, some of which may not be resolved for several years. Based on currently available information, we believe we have adequately provided for any assessments that could result from those proceedings where it is more likely than not that we will be assessed. We review our positions on these matters as they progress. See “Tax Audits,” of Note 16, “Income Taxes,” for further discussion.

### **18. BUSINESS SEGMENTS**

We manage, operate and provide our products and services in four business segments: Market Technology, Investment Intelligence, Corporate Platforms and Market Services. See Note 1, “Organization and Nature of Operations,” for further discussion of our reportable segments.

In September 2022, we announced that we will be evolving the structure of our reportable segments. Our current reportable segments will be organized into the following three segments: Market Platforms, Capital Access Platforms and Anti-Financial Crime, which aligns to our new divisional structure, and will take effect by the end of the fourth quarter of 2022. We intend to publish our fourth quarter and full year 2022 results, as well as all future reporting, in alignment with the new corporate structure. All periods presented will be restated to reflect the new structure.

Our management allocates resources, assesses performance and manages our businesses as four separate segments. We evaluate the performance of our segments based on several factors, of which the primary financial measure is operating income. Results of individual businesses are presented based on our management accounting practices and structure. Our chief operating decision maker does not review total assets or statements of income below operating income by segments as key performance metrics; therefore, such information is not presented below.

The following table presents certain information regarding our business segments for the three months ended September 30, 2022 and 2021:

	Three Months Ended September 30,			
	2022		2021	
<u>Market Technology</u>	(in millions)			
Total revenues	\$	132	\$	114
Operating income		20		10
<u>Investment Intelligence</u>				
Total revenues		284		272
Operating income		183		177
<u>Corporate Platforms</u>				
Total revenues		168		155
Operating income		74		65
<u>Market Services</u>				
Total revenues		972		811
Transaction-based expenses		(667)		(519)
Revenues less transaction-based expenses		305		292
Operating income		196		185
<u>Corporate Items</u>				
Total revenues		1		5
Operating loss		(75)		(81)
<u>Consolidated</u>				
Total revenues	\$	1,557	\$	1,357
Transaction-based expenses		(667)		(519)
Revenues less transaction-based expenses	\$	890	\$	838
Operating income	\$	398	\$	356

The following table presents certain information regarding our business segments for the nine months ended September 30, 2022 and 2021:

	Nine Months Ended September 30,			
	2022		2021	
<u>Market Technology</u>	(in millions)			
Total revenues	\$	387	\$	332
Operating income		41		26
<u>Investment Intelligence</u>				
Total revenues		851		787
Operating income		553		509
<u>Corporate Platforms</u>				
Total revenues		504		451
Operating income		225		187
<u>Market Services</u>				
Total revenues		2,892		2,813
Transaction-based expenses		(1,969)		(1,885)
Revenues less transaction-based expenses		923		928
Operating income		590		608
<u>Corporate Items</u>				
Total revenues		10		36
Operating loss		(194)		(233)
<u>Consolidated</u>				
Total revenues	\$	4,644	\$	4,419
Transaction-based expenses		(1,969)		(1,885)
Revenues less transaction-based expenses	\$	2,675	\$	2,534
Operating income	\$	1,215	\$	1,097

Certain amounts are allocated to corporate items in our management reports as we believe they do not contribute to a meaningful evaluation of a particular segment's ongoing operating performance. These items, which are presented in the table below, include the following:

- *Amortization expense of acquired intangible assets:* We amortize intangible assets acquired in connection with various acquisitions. Intangible asset amortization expense can vary from period to period due to episodic acquisitions completed, rather than from our ongoing business operations. As such, if intangible asset amortization is included in performance measures, it is more difficult to assess the day-to-day operating performance of the segments, and the relative operating performance of the segments between periods. Management does not consider intangible asset amortization expense for the purpose of evaluating the performance of our segments or their managers or when making decisions to allocate resources. Therefore, we believe performance measures excluding intangible asset amortization expense provide management with a useful representation of our segments' ongoing activity in each period.

- *Merger and strategic initiatives expense:* We have pursued various strategic initiatives and completed acquisitions and divestitures in recent years that 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 the amount of such expenses vary significantly based on the size, timing and complexity of the transaction. Management does not consider merger and strategic initiatives expense for the purpose of evaluating the performance of our segments or their managers or when making decisions to allocate resources. Therefore, we believe performance measures excluding merger and strategic initiatives expense provide management with a useful representation of our segments' ongoing activity in each period.
- *Restructuring charges:* We initiated the transition of certain technology platforms to advance our strategic opportunities as a technology and analytics provider and continue the realignment of certain business areas. See Note 19, "Restructuring Charges," for further discussion of our 2019 restructuring plan. We believe performance measures excluding restructuring charges provide management with a useful representation of our segments' ongoing activity in each period.
- *Revenues and expenses - divested/contributed businesses:* For the nine months ended September 30, 2022 and for the three and nine months ended September 30, 2021 we have included the revenues and expenses related to our Nordic broker services business for which we completed the wind-down in June 2022. For the nine months ended September 30, 2021, we have included in corporate items the revenues and expenses of our U.S. Fixed Income business, which was previously included in our Market Services and Investment Intelligence results. See "2021 Divestiture," of Note 4, "Acquisitions and Divestiture," for further discussion of this divestiture. Additionally, other revenues related to a transitional services agreement associated with a divested business are included in corporate items. Also included are the revenues and expenses associated with the NPM business, which we contributed in July 2021 to a standalone, independent company, of which we own the largest minority interest together with a consortium of third-party financial institutions. Prior to July 2021, these revenues were previously included in our Corporate Platforms results.
- *Other items:* We have included certain other charges or gains in corporate items, to the extent we believe they should be excluded when evaluating the ongoing operating performance of each individual segment. For the three and nine months ended September 30, 2022 other items include an accrual related to a legal matter. For the nine months ended September 30, 2022, and for the three and nine months ended September 30, 2021, other items primarily include a loss on extinguishment of debt.

The above charges are recorded in general, administrative and other expense, unless otherwise noted, in our Condensed Consolidated Statements of Income.

The following table summarizes our Corporate Items:

	Three Months Ended September 30,	
	2022	2021
(in millions)		
Revenues - divested/contributed businesses	\$ 1	\$ 5
Expenses:		
Amortization expense of acquired intangible assets	\$ 38	\$ 40
Merger and strategic initiatives expense	14	13
Extinguishment of debt	—	33
Expenses - divested/contributed businesses	1	1
Other	23	(1)
Total expenses	76	86
Operating loss	\$ (75)	\$ (81)

	Nine Months Ended September 30,	
	2022	2021
(in millions)		
Revenues - divested/contributed businesses	\$ 10	\$ 36
Expenses:		
Amortization expense of acquired intangible assets	116	116
Merger and strategic initiatives expense	41	70
Restructuring charges	—	31
Extinguishment of debt	16	33
Expenses - divested/contributed businesses	3	14
Other	28	5
Total expenses	204	269
Operating loss	\$ (194)	\$ (233)

For further discussion of our segments' results, see "Segment Operating Results," of "Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations."

**19. RESTRUCTURING CHARGES**

In September 2019, we initiated the transition of certain technology platforms to advance the Company's strategic opportunities as a technology and analytics provider and continue the realignment of certain business areas. In connection with these restructuring efforts, we retired certain elements of our market infrastructure and technology product offerings as we implement NFF and other technologies internally and externally. This represented a fundamental shift in our strategy and technology as well as executive realignment. In June 2021, we completed our 2019 restructuring plan and recognized total pre-tax charges of \$118 million over a two-year period. Total pre-tax charges related primarily to non-cash items such as asset impairments and accelerated depreciation, and third-party consulting costs. Severance and employee-related charges were also incurred.

The following table presents a summary of the 2019 restructuring plan charges in the Condensed Consolidated Statements of Income for the nine months ended September 30, 2021 which primarily consisted of consulting services, asset impairment charges primarily related to capitalized software that was retired, and accelerated depreciation expense on certain assets as a result of a decrease in their useful life.

	Nine Months Ended September 30, 2021	
	(in millions)	
Asset impairment charges and accelerated depreciation expense	\$	4
Consulting services		19
Severance and employee-related costs		1
Other		7
Total restructuring charges	\$	31

**Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations**

The following discussion and analysis of the financial condition and results of operations of Nasdaq should be read in conjunction with our condensed consolidated financial statements and related notes included in this Form 10-Q.

**OVERVIEW**

Nasdaq is a global technology company serving the capital markets and other industries. Our diverse offerings of data, analytics, software and services enables clients to optimize and execute their business vision with confidence.

We manage, operate and provide our products and services in four business segments: Market Technology, Investment Intelligence, Corporate Platforms and Market Services.

**Third Quarter 2022 and Recent Developments****Dividends on Common Stock**

- On August 26, 2022, we effected a 3-for-1 stock split of the Company's common stock in the form of a stock dividend to shareholders of record as of August 12, 2022. The par value per share of our common stock remains \$0.01 per share. All references made with respect to a number of shares or per share amounts throughout this Quarterly Report on Form 10-Q have been retroactively adjusted to reflect the stock split
- For the three months ended September 30, 2022, we returned \$99 million to shareholders through dividend payments.
- In October 2022, the board of directors approved a regular quarterly cash dividend of \$0.20 per share on our outstanding common stock.

**Share Repurchase Program**

- As of September 30, 2022, the remaining amount authorized for repurchases under our share repurchase program was \$293 million.

**Corporate Highlights**

- In September 2022, we announced that we will be evolving the structure of our reportable segments. Our current reportable segments will be organized into the following three segments: Market Platforms, Capital Access Platforms and Anti-Financial Crime, which aligns to our new divisional structure, and will take effect by the end of the fourth quarter of 2022. We intend to publish our fourth quarter and full year 2022 results, as well as all future reporting, in alignment with the new corporate structure.
- In September 2022, we announced our planned launch of a new Digital Assets business to power the digital asset ecosystem. The launch underpins Nasdaq's ambition to advance and help facilitate broader institutional participation in digital assets by providing trusted and institutional-grade solutions, focused on enhanced custody, liquidity and integrity. Nasdaq Digital Assets will initially develop an advanced custody solution. Nasdaq's offering is subject to regulatory approval in applicable jurisdictions. Additionally, we expanded our anti-financial crime technology with new coverage for the cryptocurrency ecosystem, including a comprehensive suite of crypto-specific detection capabilities.
- The Nasdaq Stock Market led U.S. exchanges for IPOs during the third quarter of 2022. The Nasdaq Stock Market IPO win rate was 90% in the third quarter of 2022, including 35 IPOs (28 operating companies and 7 SPACs).
- In the three and nine months ended September 30, 2022, Nasdaq led all exchanges during the period in total volume traded for multiply-listed equity options. In addition, our trade management services business set a quarterly record for revenues.



## Financial Summary

The following tables summarize our financial performance for the three and nine months ended September 30, 2022 when compared to the same periods in 2021. The comparability of our results of operations between reported periods is impacted by the acquisition of Verafin in February 2021. See “2021 Acquisition,” of Note 4, “Acquisitions and Divestiture,” to the condensed consolidated financial statements for further discussion. For a detailed discussion of our results of operations, see “Segment Operating Results” below.

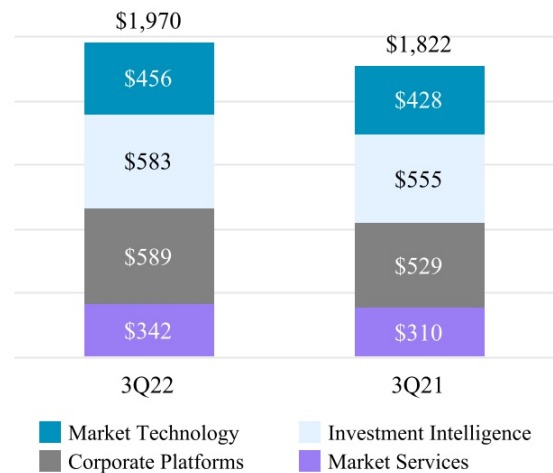
	Three Months Ended September 30,		Percentage Change
	2022	2021	
(in millions, except per share amounts)			
Revenues less transaction-based expenses	\$ 890	\$ 838	6.2 %
Operating expenses	492	482	2.1 %
Operating income	398	356	11.8 %
Net income attributable to Nasdaq	\$ 294	\$ 288	2.1 %
Diluted earnings per share	\$ 0.59	\$ 0.56	5.4 %
Cash dividends declared per common share	\$ 0.20	\$ 0.18	11.1 %

	Nine Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions, except per share amounts)		
Revenues less transaction-based expenses	\$ 2,675	\$ 2,534	5.6 %
Operating expenses	1,460	1,437	1.6 %
Operating income	1,215	1,097	10.8 %
Net income attributable to Nasdaq	\$ 884	\$ 928	(4.7)%
Diluted earnings per share	\$ 1.77	\$ 1.84	(3.8)%
Cash dividends declared per common share	\$ 0.58	\$ 0.52	11.5 %

In countries with currencies other than the U.S. dollar, revenues and expenses are translated using monthly average exchange rates. Impacts on our revenues less transaction-based expenses and operating income associated with fluctuations in foreign currency are discussed in more detail under “Item 3. Quantitative and Qualitative Disclosures about Market Risk.”

## Nasdaq's Operating Results

The following chart summarizes our ARR (in millions):



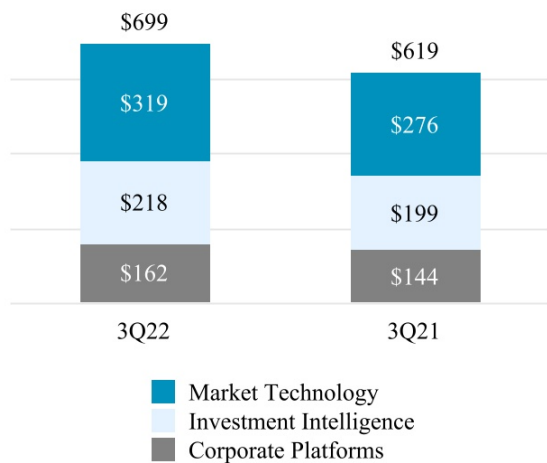
ARR for a given period is the annualized revenue derived from subscription contracts with a defined contract value. This excludes contracts that are not recurring, are one-time in nature, or where the contract value fluctuates based on defined metrics. ARR is one of our key performance metrics to assess 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.

The ARR chart includes:

- Active Market Technology support and SaaS subscription contracts.
- Proprietary market data and index data subscriptions as well as subscription contracts for eVestment, Solovis, NDW Research Platform, Nasdaq Fund Network and Nasdaq Data Link. It also includes guaranteed minimum on futures contracts within the Index business.
- U.S. and Nordic annual listing fees, IR and ESG products, including subscription contracts for IR Insight, board portals and OneReport, as well as IR advisory services.
- Trade Management Services business, excluding one-time service requests.



The following chart summarizes our quarterly annualized SaaS revenues for our Solutions Segments, which is comprised of the Market Technology, Investment Intelligence and Corporate Platforms segments, for the three months ended September 30, 2022 and 2021 (in millions):



### Segment Operating Results

The following table presents our revenues by segment, transaction-based expenses for our Market Services segment and total revenues less transaction-based expenses:

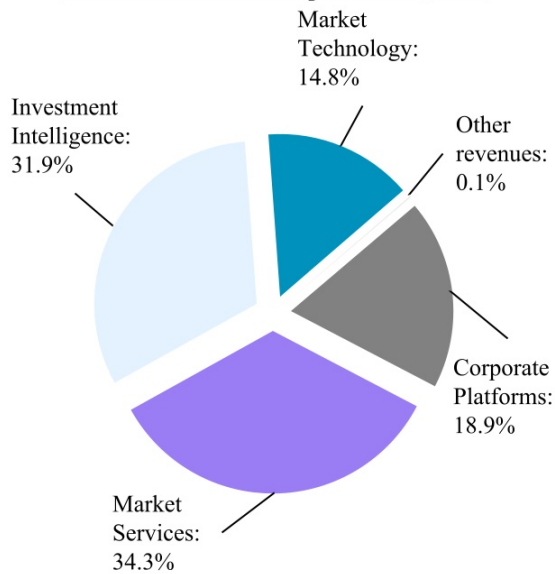
	Three Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions)		
Market Technology	\$ 132	\$ 114	15.8 %
Investment Intelligence	284	272	4.4 %
Corporate Platforms	168	155	8.4 %
Market Services	972	811	19.9 %
Other revenues	1	5	(80.0)%
Total revenues	\$ 1,557	\$ 1,357	14.7 %
Transaction rebates	(494)	(472)	4.7 %
Brokerage, clearance and exchange fees	(173)	(47)	268.1 %
Total revenues less transaction-based expenses	\$ 890	\$ 838	6.2 %

	Nine Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions)		
Market Technology	\$ 387	\$ 332	16.6 %
Investment Intelligence	851	787	8.1 %
Corporate Platforms	504	451	11.8 %
Market Services	2,892	2,813	2.8 %
Other revenues	10	36	(72.2)%
Total revenues	4,644	4,419	5.1 %
Transaction rebates	(1,605)	(1,642)	(2.3)%
Brokerage, clearance and exchange fees	(364)	(243)	49.8 %
Total revenues less transaction-based expenses	\$ 2,675	\$ 2,534	5.6 %

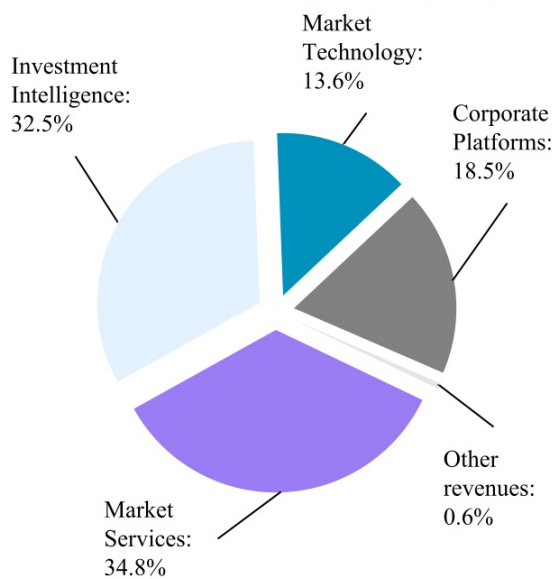
The following charts present our Market Technology, Investment Intelligence, Corporate Platforms and Market Services segments as a percentage of our total revenues, less transaction-based expenses.

**Percentage of Revenues Less Transaction-based Expenses by Segment for the:**

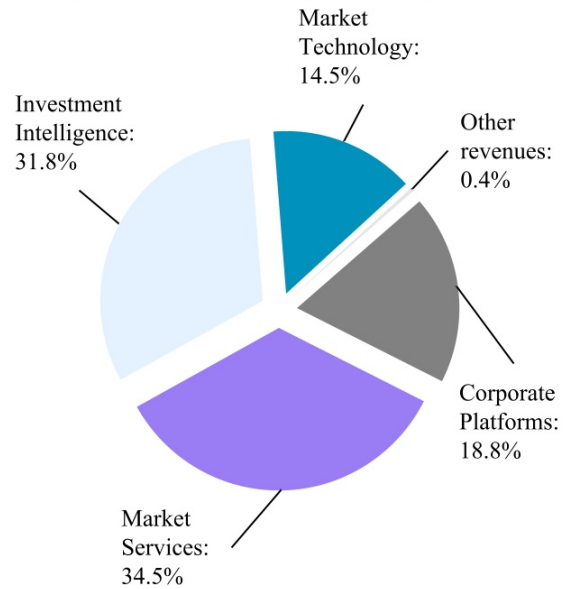
**Three Months Ended September 30, 2022**



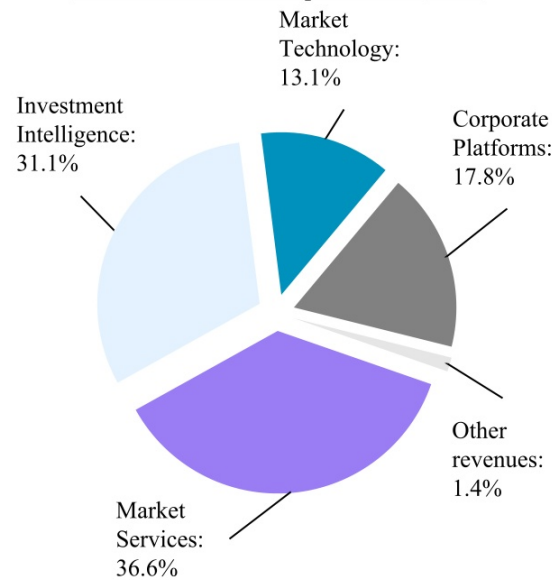
**Three Months Ended September 30, 2021**



**Nine Months Ended September 30, 2022**



**Nine Months Ended September 30, 2021**



**MARKET TECHNOLOGY**

The following tables present revenues and key drivers from our Market Technology segment:

	Three Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions)		
Anti Financial Crime Technology	\$ 77	\$ 62	24.2 %
Market Infrastructure Technology	55	52	5.8 %
Total Market Technology	\$ 132	\$ 114	15.8 %

	Nine Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions)		
Anti Financial Crime Technology	\$ 224	\$ 163	37.4 %
Market Infrastructure Technology	163	169	(3.6)%
Total Market Technology	\$ 387	\$ 332	16.6 %

	Three Months Ended September 30,	
	2022	2021
	(in millions)	
Order intake (in millions)	\$ 59	\$ 76
ARR	456	428
Quarterly annualized SaaS revenues	319	276
	Nine Months Ended September 30,	
	2022	2021
	(in millions)	
Order intake	\$ 209	\$ 236

In the tables above, order intake is the total contract value of orders signed during the period, excluding Verafin. ARR and SaaS revenues include Verafin.

**Anti Financial Crime Technology Revenues**

Anti-financial crime technology revenues increased in the three and nine months ended September 30, 2022 compared with the same periods in 2021 primarily due to increased demand for fraud and anti-money laundering solutions.

**Market Infrastructure Technology Revenues**

Market infrastructure technology revenues increased in the three months ended September 30, 2022 compared with the same period in 2021 primarily due to higher professional services fees and higher SaaS revenues, partially offset by lower support licensing revenues. Market infrastructure technology revenues decreased in the nine months ended September 30, 2022 compared with the same period in 2021 primarily due to the unfavorable impact of changes in foreign exchange rates and the successful completion of a significant long-term contract, partially offset by growth in SaaS revenues.

**INVESTMENT INTELLIGENCE**

The following tables present revenues and key drivers from our Investment Intelligence segment:

	Three Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions)		
Market Data	\$ 104	\$ 102	2.0 %
Index	125	119	5.0 %
Analytics	55	51	7.8 %
Total Investment Intelligence	\$ 284	\$ 272	4.4 %

	Nine Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions)		
Market Data	\$ 318	\$ 310	2.6 %
Index	370	328	12.8 %
Analytics	163	149	9.4 %
Total Investment Intelligence	\$ 851	\$ 787	8.1 %

	As of or Three Months Ended September 30,	
	2022	2021
Number of licensed ETPs	374	347
<b>TTM change in period end ETP AUM tracking Nasdaq indexes (in billions)</b>		
Beginning balance	\$ 361	\$ 313
Net (depreciation) appreciation	(106)	87
Net impact of ETP sponsor switches	—	(92)
Net inflows	56	53
Ending balance	\$ 311	\$ 361
ARR (in millions)	\$ 583	\$ 555
Quarterly annualized SaaS revenues (in millions)	\$ 218	\$ 199

In the table above, TTM represents trailing twelve months.

**Market Data Revenues**

Market data revenues increased in the three and nine months ended September 30, 2022 compared with the same periods in 2021 primarily due to an increase in proprietary data revenues driven by higher international demand, partially offset by an unfavorable impact from changes in foreign exchange rates.

**Index Revenues**

Index revenues increased in the three and nine months ended September 30, 2022 compared with the same periods in 2021 primarily due to higher licensing revenues from futures trading linked to the Nasdaq-100 Index, partially offset by lower AUM in ETPs linked to Nasdaq indexes. The increase in the nine months ended September 30, 2022 also reflects higher licensing revenues resulting from higher average AUM in ETPs linked to Nasdaq indexes.

**Analytics Revenues**

Analytics revenues increased in the three and nine months ended September 30, 2022 compared with the same periods in 2021 primarily due to strong net retention and new sales.

**CORPORATE PLATFORMS**

The following tables present revenues and key drivers from our Corporate Platforms segment:

	Three Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions)		
Listing Services	\$ 105	\$ 99	6.1 %
IR & ESG Services	63	56	12.5 %
Total Corporate Platforms	\$ 168	\$ 155	8.4 %
	Nine Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions)		
Listing Services	\$ 320	\$ 282	13.5 %
IR & ESG Services	184	169	8.9 %
Total Corporate Platforms	\$ 504	\$ 451	11.8 %

	As of or Three Months Ended September 30,	
	2022	2021
<b><u>IPOs</u></b>		
The Nasdaq Stock Market	35	147
Exchanges that comprise Nasdaq Nordic and Nasdaq Baltic	3	25
<b><u>Total new listings</u></b>		
The Nasdaq Stock Market	98	223
Exchanges that comprise Nasdaq Nordic and Nasdaq Baltic	9	28
<b><u>Number of listed companies</u></b>		
The Nasdaq Stock Market	4,296	3,990
Exchanges that comprise Nasdaq Nordic and Nasdaq Baltic	1,253	1,170
ARR (in millions)	\$ 589	\$ 529
Quarterly annualized SaaS revenues (in millions)	\$ 162	\$ 144

	As of or Nine Months Ended September 30,	
	2022	2021
<b><u>IPOs</u></b>		
The Nasdaq Stock Market	143	557
Exchanges that comprise Nasdaq Nordic and Nasdaq Baltic	33	111
<b><u>Total new listings</u></b>		
The Nasdaq Stock Market	292	734
Exchanges that comprise Nasdaq Nordic and Nasdaq Baltic	53	132

In the tables above:

- The Nasdaq Stock Market new listings include IPOs, including issuers that switched from other listing venues and separately listed ETPs. For the three months ended September 30, 2022 and 2021, IPOs included 7 and 67 SPACs, respectively. For the nine months ended September 30, 2022 and 2021, IPOs included 66 and 310 SPACs, respectively.
- Exchanges that comprise Nasdaq Nordic and Nasdaq Baltic 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.
- Number of total listed companies on The Nasdaq Stock Market at period end includes 501 ETPs as of September 30, 2022 and 430 ETPs as of September 30, 2021.
- Number of total listed companies on the exchanges that comprise Nasdaq Nordic and Nasdaq Baltic represents companies listed on these exchanges and companies on the alternative markets of Nasdaq First North.

**Listing Services Revenues**

Listing services revenues increased in the three and nine months ended September 30, 2022 compared with the same periods in 2021 primarily due to higher U.S. annual listing fees, driven mainly by an increase in the number of issuers compared to the prior year period, partially offset by the unfavorable impact of changes in foreign exchange rates.

**IR & ESG Services Revenues**

IR & ESG Services revenues increased in the three and nine months ended September 30, 2022 compared with the same periods in 2021 primarily due to higher adoption and stronger retention across the breadth of investor relations and ESG advisory offerings.

**MARKET SERVICES****Equity Derivative Trading and Clearing Revenues**

The following tables present total revenues, transaction-based expenses, and total revenues less transaction-based expenses as well as key drivers from our Equity Derivative Trading and Clearing business:

	Three Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions)		
Equity Derivative Trading and Clearing Revenues	\$ 357	\$ 330	8.2 %
Transaction-based expenses:			
Transaction rebates	(222)	(220)	0.9 %
Brokerage, clearance and exchange fees	(28)	(5)	460.0 %
Equity derivative trading and clearing revenues less transaction-based expenses	\$ 107	\$ 105	1.9 %
	Nine Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions)		
Equity Derivative Trading and Clearing Revenues	\$ 1,032	\$ 1,114	(7.4)%
Transaction-based expenses:			
Transaction rebates	(660)	(770)	(14.3)%
Brokerage, clearance and exchange fees	(49)	(31)	58.1 %
Equity derivative trading and clearing revenues less transaction-based expenses	\$ 323	\$ 313	3.2 %

In the tables above, brokerage, clearance and exchange fees includes Section 31 fees of \$26 million in the three months ended September 30, 2022, \$4 million in the three months ended September 30, 2021, \$46 million in the nine months ended September 30, 2022 and \$26 million in the nine months ended September 30, 2021. Section 31 fees are recorded as equity derivative trading and clearing revenues with a corresponding amount recorded in transaction-based expenses.

	Three Months Ended September 30,	
	2022	2021
<u>U.S. equity options</u>		
Total industry average daily volume (in millions)	37.0	35.5
Nasdaq PHLX matched market share	11.2 %	12.1 %
The Nasdaq Options Market matched market share	8.3 %	8.1 %
Nasdaq BX Options matched market share	3.9 %	1.6 %
Nasdaq ISE Options matched market share	5.5 %	6.0 %
Nasdaq GEMX Options matched market share	2.1 %	2.7 %
Nasdaq MRX Options matched market share	1.6 %	1.8 %
Total matched market share executed on Nasdaq's exchanges	32.6 %	32.3 %

Nasdaq Nordic and Nasdaq Baltic options and futures

Total average daily volume of options and futures contracts	267,137	241,653
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	Nine Months Ended September 30,	
	2022	2021
<u>U.S. equity options</u>		
Total industry average daily volume (in millions)	37.9	36.7
Nasdaq PHLX matched market share	11.4 %	12.6 %
The Nasdaq Options Market matched market share	8.3 %	8.2 %
Nasdaq BX Options matched market share	2.7 %	1.1 %
Nasdaq ISE Options matched market share	5.6 %	6.6 %
Nasdaq GEMX Options matched market share	2.3 %	4.9 %
Nasdaq MRX Options matched market share	1.7 %	1.5 %
Total matched market share executed on Nasdaq's exchanges	32.0 %	34.9 %
<u>Nasdaq Nordic and Nasdaq Baltic options and futures</u>		
Total average daily volume of options and futures contracts	303,095	286,794

In the tables above, Nasdaq Nordic and Nasdaq Baltic total average daily volume of options and futures contracts include Finnish option contracts traded on Eurex for which Nasdaq and Eurex have a revenue sharing arrangement.

Equity derivative trading and clearing revenues increased in the three months ended September 30, 2022 compared with the same period in 2021 primarily due to higher Section 31 pass-through fee revenue, higher U.S. industry trading volumes and higher U.S. matched market share executed on Nasdaq's exchanges, partially offset by lower gross capture rate. Equity derivative trading and clearing revenues decreased in the nine months ended September 30, 2022 compared with the same period in 2021 primarily due to lower U.S. matched market share executed on Nasdaq's exchanges and lower gross capture rate, partially offset by higher U.S. industry trading volumes and higher Section 31 pass-through fee revenue.

Equity derivative trading and clearing revenues less transaction-based expenses increased in the three and nine months ended September 30, 2022 compared with the same periods in 2021 primarily due to higher U.S. and European industry trading volumes. The increase in the nine months ended September 30, 2022 was also driven by higher U.S. capture rates and lower transaction rebates, partially offset by lower U.S. matched market share executed on Nasdaq's exchanges.

Section 31 fees are recorded as equity derivative trading and clearing revenues with a corresponding amount recorded as brokerage, clearance and exchange fees in the Condensed Consolidated Statements of Income. In the U.S., we are assessed these fees from the SEC and pass them through to our customers in the form of incremental fees. Pass-through fees can increase or decrease due to rate changes by the SEC, our percentage of the overall industry volumes processed on our systems, and differences in actual dollar value traded. Since the amount recorded in revenues is equal to the amount recorded as brokerage, clearance and exchange fees, there is no impact on our revenues less transaction-based expenses. Section 31 fees increased in the three and nine months ended September 30, 2022 compared with same periods in 2021 primarily due to higher average SEC fee rates, following the increase in SEC 31 fee rates in May 2022.

Transaction rebates, in which we credit a portion of the execution charge to the market participant, remained relatively flat in three months ended September 30, 2022 and decreased in the nine months ended September 30, 2022 compared with the same periods in 2021. The decrease in the nine months ended September 30, 2022 was primarily due to lower overall U.S. matched market share executed on Nasdaq's exchanges and lower rebate capture rate, partially offset by higher U.S. and European industry trading volumes.

### Cash Equity Trading Revenues

The following tables present total revenues, transaction-based expenses, and total revenues less transaction-based expenses as well as key drivers and other metrics from our Cash Equity Trading business:

	Three Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions)		
Cash Equity Trading Revenues	\$ 514	\$ 390	31.8 %
Transaction-based expenses:			
Transaction rebates	(272)	(252)	7.9 %
Brokerage, clearance and exchange fees	(145)	(42)	245.2 %
Cash equity trading revenues less transaction-based expenses	\$ 97	\$ 96	1.0 %
	Nine Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions)		
Cash Equity Trading Revenues	\$ 1,570	\$ 1,423	10.3 %
Transaction-based expenses:			
Transaction rebates	(945)	(872)	8.4 %
Brokerage, clearance and exchange fees	(315)	(212)	48.6 %
Cash equity trading revenues less transaction-based expenses	\$ 310	\$ 339	(8.6) %

In the tables above, brokerage, clearance and exchange fees includes Section 31 fees of \$140 million in the three months ended September 30, 2022, \$35 million in the three months ended September 30, 2021, \$296 million in the nine months ended September 30, 2022 and \$187 million in the nine months ended September 30, 2021. Section 31 fees are recorded as cash equity trading revenues with a corresponding amount recorded in transaction-based expenses.



	Three Months Ended September 30,	
	2022	2021
<b><u>Total U.S.-listed securities</u></b>		
Total industry average daily share volume (in billions)	10.9	9.8
Matched share volume (in billions)	119.9	106.5
The Nasdaq Stock Market matched market share	15.9 %	15.9 %
Nasdaq BX matched market share	0.5 %	0.5 %
Nasdaq PSX matched market share	0.8 %	0.6 %
Total matched market share executed on Nasdaq's exchanges	17.2 %	17.0 %
Market share reported to the FINRA/Nasdaq Trade Reporting Facility	36.9 %	34.3 %
Total market share	54.1 %	51.3 %
<b><u>Nasdaq Nordic and Nasdaq Baltic securities</u></b>		
Average daily number of equity trades executed on Nasdaq's exchanges	784,672	989,688
Total average daily value of shares traded (in billions)	\$ 4.3	\$ 5.7
Total market share executed on Nasdaq's exchanges	71.1 %	76.3 %
	Nine Months Ended September 30,	
	2022	2021
<b><u>Total U.S.-listed securities</u></b>		
Total industry average daily share volume (in billions)	12.1	11.6
Matched share volume (in billions)	401.2	373.3
The Nasdaq Stock Market matched market share	16.3 %	15.8 %
Nasdaq BX matched market share	0.5 %	0.6 %
Nasdaq PSX matched market share	0.8 %	0.7 %
Total matched market share executed on Nasdaq's exchanges	17.6 %	17.1 %
Market share reported to the FINRA/Nasdaq Trade Reporting Facility	34.8 %	35.0 %
Total market share	52.4 %	52.1 %
<b><u>Nasdaq Nordic and Nasdaq Baltic securities</u></b>		
Average daily number of equity trades executed on Nasdaq's exchanges	953,090	1,033,316
Total average daily value of shares traded (in billions)	\$ 5.6	\$ 6.4
Total market share executed on Nasdaq's exchanges	72.1 %	77.4 %

In the tables above, total market shares includes transactions executed on The Nasdaq Stock Market's, Nasdaq BX's and Nasdaq PSX's systems plus trades reported through the FINRA/Nasdaq Trade Reporting Facility.

Cash equity trading revenues increased in the three and nine months ended September 30, 2022 compared with the same periods in 2021 primarily due to higher Section 31 pass-through fee revenue, higher U.S. industry trading volumes and higher U.S. matched market share executed on Nasdaq's exchanges, partially offset by lower gross capture rate, lower European market share and an unfavorable impact of changes in foreign exchange rates.

Cash equity trading revenues less transaction-based expenses increased in the three months ended September 30, 2022 compared with the same period in 2021 primarily due to higher U.S. industry trading volumes and capture rate, partially offset by the unfavorable impact of changes in foreign exchange rates and lower European industry trading volumes. Cash equity trading revenues less transaction-based expenses decreased in the nine months ended September 30, 2022 compared with the same period in 2021 primarily due to lower capture rate, the unfavorable impact of changes in foreign exchange rates and lower European market share, partially offset by higher U.S. industry trading volumes and higher U.S. matched market share executed on Nasdaq's exchanges.

Similar to equity derivative trading and clearing, in the U.S. we record Section 31 fees as cash equity trading revenues with a corresponding amount recorded as brokerage, clearance and exchange fees in the Condensed Consolidated Statements of Income. We assess these fees from the SEC and pass them through to our customers in the form of incremental fees. Since the amount recorded as revenues is equal to the amount recorded as brokerage, clearance and exchange fees, there is no impact on our revenues less transaction-based expenses. Section 31 fees increased in the three and nine months ended September 30, 2022 compared with the same periods in 2021 primarily due to higher average SEC fee rates.

Transaction rebates increased in the three and nine months ended September 30, 2022 compared with the same periods in 2021. For The Nasdaq Stock Market and Nasdaq PSX, we credit a portion of the per share execution charge to the market participant that provides the liquidity, and for Nasdaq BX, we credit a portion of the per share execution charge to the market participant that takes the liquidity. The increase was primarily due to higher U.S. industry volumes and higher U.S. matched market share executed on Nasdaq's exchanges. The increase in the three months ended September 30, 2022 was partially offset by lower rebate capture rate.



**FICC Revenues**

The following tables present revenues from our FICC business:

	Three Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions)		
FICC Revenues	\$ 15	\$ 13	15.4 %
	Nine Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions)		
FICC Revenues	\$ 41	\$ 44	(6.8)%

FICC revenues increased in the three months ended September 30, 2022 compared with the same period in 2021 primarily due to higher collateral management services revenues, partially offset by the unfavorable impact of changes in foreign exchange rates and lower commodities products revenues. FICC revenues decreased in the nine months ended September 30, 2022 compared with the same period in 2021 primarily due to the unfavorable impact of changes in foreign exchange rates and lower commodities products revenues, partially offset by higher collateral management services revenues.

**Trade Management Services Revenues**

The following tables present revenues and key drivers from our Trade Management Services business:

	Three Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions)		
Trade Management Services Revenues	\$ 86	\$ 78	10.3 %
	Nine Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions)		
Trade Management Services Revenues	\$ 249	\$ 232	7.3 %
	Three Months Ended September 30,		
	2022	2021	
	(in millions)		
ARR	\$ 342	\$ 310	

Trade management services revenues increased in the three and nine months ended September 30, 2022 compared with the same periods in 2021 primarily due to higher demand for connectivity and infrastructure services.

**OTHER REVENUES**

For the nine months ended September 30, 2022 and the three and nine months ended September 30, 2021, other revenues include revenues related to our Nordic broker services business for which we completed the wind-down in June 2022. For the three and nine months ended September 30, 2022, other revenues also include a transitional services agreement associated with a divested business. For the nine months ended September 30, 2021, other revenues include the revenues associated with our U.S. Fixed Income business, which was sold in June 2021. Prior to the sale date, these revenues were included in our Market Services and Investment Intelligence segments. See “2021 Divestiture,” of Note 4, “Acquisitions and Divestiture,” to the condensed consolidated financial statements for further discussion of this divestiture. Additionally, other revenues include revenues associated with the NPM business which we contributed in July 2021 to a standalone, independent company, of which we own the largest minority interest, together with a consortium of third-party financial institutions. Prior to July 2021, these revenues were included in our Corporate Platforms segment.

**EXPENSES****Operating Expenses**

The following tables present our operating expenses:

	Three Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions)		
Compensation and benefits	\$ 249	\$ 230	8.3 %
Professional and contract services	34	36	(5.6)%
Computer operations and data communications	50	47	6.4 %
Occupancy	25	27	(7.4)%
General, administrative and other	38	42	(9.5)%
Marketing and advertising	10	12	(16.7)%
Depreciation and amortization	63	67	(6.0)%
Regulatory	9	8	12.5 %
Merger and strategic initiatives	14	13	7.7 %
<b>Total operating expenses</b>	<b>\$ 492</b>	<b>\$ 482</b>	<b>2.1 %</b>
	Nine Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions)		
Compensation and benefits	\$ 750	\$ 700	7.1 %
Professional and contract services	97	101	(4.0)%
Computer operations and data communications	150	137	9.5 %
Occupancy	78	81	(3.7)%
General, administrative and other	94	66	42.4 %
Marketing and advertising	31	32	(3.1)%
Depreciation and amortization	195	197	(1.0)%
Regulatory	24	22	9.1 %
Merger and strategic initiatives	41	70	(41.4)%
Restructuring charges	—	31	(100.0)%
<b>Total operating expenses</b>	<b>\$ 1,460</b>	<b>\$ 1,437</b>	<b>1.6 %</b>

The increase in compensation and benefits expense in the three and nine months ended September 30, 2022 compared with the same periods in 2021 was primarily driven by continued investment in employees to drive growth and inflationary pressures, partially offset by a favorable impact from foreign exchange rates. The favorable impact from foreign exchange rates was \$13 million and \$30 million for the three and nine months ended September 30, 2022, respectively.

Headcount increased to 6,300 employees as of September 30, 2022 from 5,764 as of September 30, 2021 primarily due to growth in various businesses.

Professional and contract services expense decreased in the three and nine months ended September 30, 2022 compared with the same periods in 2021 primarily due to a favorable impact from foreign exchange rates and a decrease in legal fees.

Computer operations and data communications expense increased in the three and nine months ended September 30, 2022 compared with the same periods in 2021 primarily due to higher software costs and higher costs related to new cloud initiatives.

Occupancy expense decreased in the three and nine months ended September 30, 2022 compared with the same periods in 2021 primarily due to a favorable impact from foreign exchange rates.

General, administrative and other expense decreased in the three months ended September 30, 2022 compared with the same period in 2021 due to a pre-tax charge recorded in the three months ended September 30, 2021 in connection with the early extinguishment of our 2023 notes, partially offset by an accrual related to a legal matter and higher travel costs in 2022. The increase in the nine months ended September 30, 2022 compared with the same period in 2021 was primarily due to an accrual related to a legal matter and higher travel costs.

Marketing and advertising decreased in the three and nine months ended September 30, 2022 compared with the same periods in 2021, reflecting lower IPO activity.

Depreciation and amortization expense decreased in the three and nine months ended September 30, 2022 compared with the same periods in 2021 due to a favorable impact from foreign exchange rates.

Regulatory expense increased in the three and nine months ended September 30, 2022 compared with the same periods in 2021 due to increased volumes.

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 and will vary based on the size and frequency of the activities described above.

See Note 19, “Restructuring Charges,” to the condensed consolidated financial statements for further discussion of our 2019 restructuring plan and charges associated with this plan.

### Non-operating Income and Expenses

The following table presents our non-operating income and expenses:

	Three Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions)		
Interest income	\$ 2	\$ —	N/M
Interest expense	(32)	(33)	(3.0)%
Net interest expense	(30)	(33)	(9.1)%
Other income	6	42	(85.7)%
Net income from unconsolidated investees	8	6	33.3 %
Total non-operating income (expenses)	\$ (16)	\$ 15	(206.7)%
	Nine Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions)		
Interest income	\$ 3	\$ 1	200.0 %
Interest expense	(96)	(95)	1.1 %
Net interest expense	(93)	(94)	(1.1)%
Net gain on divestiture of business	—	84	(100.0)%
Other income	8	43	(81.4)%
Net income from unconsolidated investees	23	90	(74.4)%
Total non-operating income (expenses)	\$ (62)	\$ 123	(150.4)%

N/M Not meaningful.

The following table presents our interest expense:

	Three Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions)		
Interest expense on debt	\$ 30	\$ 30	— %
Accretion of debt issuance costs and debt discount	1	2	(50.0)%
Other fees	1	1	— %
Interest expense	\$ 32	\$ 33	(3.0)%
	Nine Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions)		
Interest expense on debt	\$ 89	\$ 87	2.3 %
Accretion of debt issuance costs and debt discount	5	6	(16.7)%
Other fees	2	2	— %
Interest expense	\$ 96	\$ 95	1.1 %

Interest income increased in the three and nine months ended September 30, 2022 compared with the same periods in 2021 primarily due to an increase in interest rates.

Interest expense remained relatively flat in the three and nine months ended September 30, 2022.

The net gain on divestiture of business in the nine months ended September 30, 2021 relates to the sale of our U.S. Fixed Income business, which was part of our FICC business within our Market Services segment, to Tradeweb. We recognized a pre-tax gain on the sale of \$84 million, net of disposal costs. See “2021 Divestiture,” of Note 4, “Acquisitions and Divestiture,” to the condensed consolidated financial statements for further discussion.

Other income decreased in the three and nine months ended September 30, 2022 compared with the same periods in 2021 primarily due to gains from strategic investments related to our corporate venture program in the prior year.

Net income from unconsolidated investees decreased in the three and nine months ended September 30, 2022 compared with the same periods in 2021 primarily due to a decrease in income recognized from our equity method investment in OCC. See “Equity Method Investments,” of Note 6, “Investments,” to the condensed consolidated financial statements for further discussion.

**Tax Matters**

The following table presents our income tax provision and effective tax rate:

	Three Months Ended September 30,		Percentage Change
	2022	2021	
	(\$ in millions)		
Income tax provision	\$ 88	\$ 83	6.0 %
Effective tax rate	23.0 %	22.4 %	
	Nine Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions)		
Income tax provision	\$ 270	\$ 292	(7.5)%
Effective tax rate	23.4 %	23.9 %	

For further discussion of our tax matters, see Note 16, "Income Taxes," to the condensed consolidated financial statements.

**NON-GAAP FINANCIAL MEASURES**

In addition to disclosing results determined in accordance with U.S. GAAP, we also provide non-GAAP net income attributable to Nasdaq and non-GAAP diluted earnings per share. 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 our 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 comparative measures. Investors should not rely on any single financial measure when evaluating our business. This non-GAAP 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 Quarterly Report on Form 10-Q, including our condensed consolidated financial statements and the notes thereto. When viewed in conjunction with our U.S. GAAP results and the accompanying reconciliation, we believe these non-GAAP measures provide greater transparency and a more complete understanding of factors affecting our business than U.S. GAAP measures alone.

We understand that analysts and investors regularly rely on non-GAAP financial measures, such as non-GAAP net income attributable to Nasdaq and non-GAAP diluted earnings per share, to assess operating performance. We use non-GAAP net income attributable to Nasdaq and non-GAAP diluted earnings per share 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. We believe that excluding the following items from the non-GAAP net income attributable to Nasdaq provides a more meaningful analysis of Nasdaq's ongoing operating performance and comparisons in Nasdaq's performance between periods:

- *Amortization expense of acquired intangible assets:* We amortize intangible assets acquired in connection with various acquisitions. Intangible asset amortization expense can vary from period to period due to episodic acquisitions completed, rather than from our ongoing business operations. As such, if intangible asset amortization is included in performance measures, it is more difficult to assess the day-to-day operating performance of the businesses, the relative operating performance of the businesses between periods, and the earnings power of Nasdaq.
- *Merger and strategic initiatives expense:* We have pursued various strategic initiatives and completed acquisitions and divestitures in recent years that have resulted in expenses which would not have otherwise been incurred. The frequency and the amount of such expenses vary significantly based on the size, timing and complexity of the transaction. These expenses primarily include integration costs, as well as legal, due diligence and other third-party transaction costs.

- *Restructuring charges:* We initiated the transition of certain technology platforms to advance our strategic opportunities as a technology and analytics provider and continue the realignment of certain business areas. See Note 19, “Restructuring Charges,” to the condensed consolidated financial statements for further discussion of our 2019 restructuring plan, which was completed in June 2021. Charges associated with this plan represented a fundamental shift in our strategy and technology as well as executive realignment.
- *Net income from unconsolidated investee:* See “Equity Method Investments,” of Note 6, “Investments,” to the condensed consolidated financial statements for further discussion. Our income on our investment in OCC may vary significantly compared to prior periods due to the changes in OCC's capital management policy.
- *Other items:* 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 nine months ended September 30, 2022, other items include an accrual related to a legal matter. For the nine months ended September 30, 2022, and for the three and nine months ended September 30, 2021, other items include a loss on extinguishment of debt. These charges were included in general, administrative and other expense in our Condensed Consolidated Statements of Income. For the nine months ended September 30, 2022 and 2021, other items also include net gains and losses from strategic investments entered into through our corporate venture program included in other income in our Condensed Consolidated Statements of Income. For the nine months ended September 30, 2021, other items also included a net gain on divestiture of businesses, which represents our pre-tax net gain of \$84 million on the sale of our U.S. Fixed Income business.
- *Significant tax items:* The non-GAAP adjustment to the income tax provision for the three and nine months ended September 30, 2022 and 2021 primarily includes the tax impact of each non-GAAP adjustment. In addition, for the three and nine months ended September 30, 2021, the non-GAAP adjustment to the income tax provision includes adjustments related to return-to-provision.

The following tables present reconciliations between U.S. GAAP net income attributable to Nasdaq and diluted earnings per share and non-GAAP net income attributable to Nasdaq and diluted earnings per share:

	Three Months Ended September 30,	
	2022	2021
	(in millions, except per share amounts)	
<b>U.S. GAAP net income attributable to Nasdaq</b>	\$ 294	\$ 288
Non-GAAP adjustments:		
Amortization expense of acquired intangible assets	38	40
Merger and strategic initiatives expense	14	13
Net income from unconsolidated investee	(8)	(6)
Extinguishment of debt	—	33
Other	17	(42)
Total non-GAAP adjustments	61	38
Total non-GAAP tax adjustments	(20)	(23)
<b>Total non-GAAP adjustments, net of tax</b>	41	15
<b>Non-GAAP net income attributable to Nasdaq</b>	\$ 335	\$ 303
<b>U.S. GAAP effective tax rate</b>	23.0 %	22.4 %
Total adjustments from non-GAAP tax rate	1.4 %	3.5 %
<b>Non-GAAP effective tax rate</b>	24.4 %	25.9 %
Weighted-average common shares outstanding for diluted earnings per share	496.3	510.5
<b>U.S. GAAP diluted earnings per share</b>	\$ 0.59	\$ 0.56
Total adjustments from non-GAAP net income	0.09	0.03
<b>Non-GAAP diluted earnings per share</b>	\$ 0.68	\$ 0.59

	Nine Months Ended September 30,	
	2022	2021
	(in millions, except per share amounts)	
<b>U.S. GAAP net income attributable to Nasdaq</b>	\$ 884	\$ 928
Non-GAAP adjustments:		
Amortization expense of acquired intangible assets	116	116
Merger and strategic initiatives expense	41	70
Restructuring charges	—	31
Net income from unconsolidated investee	(23)	(88)
Extinguishment of debt	16	33
Net gain on divestiture of business	—	(84)
Other	19	(37)
Total non-GAAP adjustments	169	41
Total non-GAAP tax adjustments	(48)	(24)
<b>Total non-GAAP adjustments, net of tax</b>	121	17
<b>Non-GAAP net income attributable to Nasdaq</b>	\$ 1,005	\$ 945
<b>U.S. GAAP effective tax rate</b>	23.4 %	23.9 %
Total adjustments from non-GAAP tax rate	0.7 %	1.2 %
<b>Non-GAAP effective tax rate</b>	24.1 %	25.1 %
Weighted-average common shares outstanding for diluted earnings per share	498.2	503.7
<b>U.S. GAAP diluted earnings per share</b>	\$ 1.77	\$ 1.84
Total adjustments from non-GAAP net income	0.25	0.04
<b>Non-GAAP diluted earnings per share</b>	\$ 2.02	\$ 1.88

## LIQUIDITY AND CAPITAL RESOURCES

Historically, we have funded our operating activities and met our commitments through cash generated by operations, augmented by the periodic issuance of our common stock and debt. Currently, our cost and availability of funding remain healthy. We continue to prudently assess our capital deployment strategy through balancing acquisitions, internal investments, debt repayments, and shareholder return activity, including share repurchases and dividends.

In the near term, we expect that our operations and the availability under our revolving credit facility and commercial paper program will provide sufficient cash to fund our operating expenses, capital expenditures, debt repayments, any share repurchases, and any dividends.

The value of various assets and liabilities, including cash and cash equivalents, receivables, accounts payable and accrued expenses, the current portion of long-term debt, and commercial paper, can fluctuate from month to month. Working capital (calculated as current assets less current liabilities) was \$(484) million as of September 30, 2022, compared with \$(449) million as of December 31, 2021, a decrease of \$35 million. The decrease was primarily driven by a net decrease in our current assets (decreases in cash and cash equivalents, financial investments and other current assets, partially offset by increases in receivables, net and restricted cash and cash equivalents) and a net increase in our current liabilities (increases in deferred revenue and other current liabilities, partially offset by decreases in short-term debt and accrued personnel costs).

Principal factors that could affect the availability of our internally-generated funds include:

- deterioration of our revenues in any of our business segments;
- changes in regulatory and working capital requirements; and
- an increase in our expenses.

Principal factors that could affect our ability to obtain cash from external sources include:

- operating covenants contained in our credit facilities that limit our total borrowing capacity;
- credit rating downgrades, which could limit our access to additional debt;
- a significant decrease in the market price of our common stock; and
- volatility or disruption in the public debt and equity markets.

The following table summarizes our financial assets:

	September 30, 2022		December 31, 2021	
	(in millions)			
Cash and cash equivalents	\$	301	\$	393
Financial investments		129		208
Total financial assets	\$	430	\$	601

### Cash and Cash Equivalents

Cash and cash equivalents includes all non-restricted cash in banks and highly liquid investments with original maturities of 90 days or less at the time of purchase. The balance retained in cash and cash equivalents is a function of anticipated or possible short-term cash needs, prevailing interest rates, our investment policy, and alternative investment choices. As of September 30, 2022, our cash and cash equivalents of \$301 million were primarily invested in money market funds, commercial paper and bank deposits. In the long-term, we may use both internally generated funds and external sources to satisfy our debt obligations and other long-term liabilities. Cash and cash equivalents as of September 30, 2022 decreased \$92 million from December 31, 2021.



Repatriation of Cash

Our cash and cash equivalents held outside of the U.S. in various foreign subsidiaries totaled \$224 million as of September 30, 2022 and \$266 million as of December 31, 2021. The remaining balance held in the U.S. totaled \$77 million as of September 30, 2022 and \$127 million as of December 31, 2021.

Unremitted earnings of certain subsidiaries outside of the U.S. are used to finance our international operations and are considered to be indefinitely reinvested.

Cash Flow Analysis

The following table summarizes the changes in cash flows:

	Nine Months Ended September 30,		Percentage Change
	2022	2021	
	(in millions)		
Net cash provided by (used in):			
Operating activities	\$ 1,212	\$ 699	73.4 %
Investing activities	(25)	(2,532)	(99.0)%
Financing activities	4,275	(212)	(2116.5)%
Effect of exchange rate changes on cash and cash equivalents and restricted cash and cash equivalents	(1,724)	(186)	826.9 %
Net increase (decrease) in cash and cash equivalents and restricted cash and cash equivalents	3,738	(2,231)	(267.5)%
Cash and cash equivalents, restricted cash and cash equivalents at beginning of period	5,496	5,979	(8.1)%
Cash and cash equivalents, restricted cash and cash equivalents at end of period	\$ 9,234	\$ 3,748	146.4 %
<b>Reconciliation of Cash, Cash Equivalents and Restricted Cash and Cash Equivalents</b>			
Cash and cash equivalents	\$ 301	\$ 303	(0.7)%
Restricted cash and cash equivalents	51	29	75.9 %
Restricted cash and cash equivalents (default funds and margin deposits)	8,882	3,416	160.0 %
<b>Total</b>	<b>\$ 9,234</b>	<b>\$ 3,748</b>	<b>146.4 %</b>

We have adjusted prior period presentation of opening and ending amounts of cash, cash equivalents, and restricted cash and cash equivalents in our condensed consolidated statements of cash flows to include restricted cash and cash equivalents related to the default funds and margin deposits. See Note 2, "Summary of Significant Accounting Policies," to the condensed consolidated financial statements for further discussion of this adjustment.

Net Cash Provided by Operating Activities

Net cash provided by operating activities primarily consists of net income adjusted for certain non-cash items such as: depreciation and amortization expense of property and equipment; amortization expense of acquired finite-lived intangible assets; expense associated with share-based compensation; deferred income taxes; expense associated with extinguishment of debt; and net income from unconsolidated investees.

Net cash provided by operating activities is also impacted by the effects of changes in operating assets and liabilities such as: accounts receivable and deferred revenue which are impacted by the timing of customer billings and related collections from our customers; accounts payable and accrued expenses due to timing of payments; accrued personnel costs, which are impacted by employee performance targets and the timing of payments related to employee bonus incentives; and Section 31 fees payable to the SEC, which is impacted by the changes in SEC fee rates and the timing of collections from customers and payments to the SEC.

Net cash provided by operating activities increased \$513 million for the nine months ended September 30, 2022 compared with the same period in 2021. The increase was primarily driven by cash payments made in the second quarter of 2021 related to the acquisition of Verafin, including a tax obligation paid on behalf of Verafin of \$221 million and a cash payment of \$102 million, the release of which is subject to certain employment-related conditions over three years following the closing of the acquisition of Verafin. Section 31 fees payable to the SEC also contributed to the increase due to higher SEC fee rates in 2022. The remaining change was primarily due to other fluctuations in our working capital.

Net Cash Used in Investing Activities

Net cash used in investing activities for the nine months ended September 30, 2022 primarily related to purchases of property and equipment of \$118 million and \$41 million cash used for acquisitions, net of cash and cash equivalents acquired, partially offset by proceeds of \$48 million from other investing activities, net purchases of investments related to default funds and margin deposits of \$44 million and net proceeds from sales and redemptions of securities of \$42 million.

Net cash used in investing activities for the nine months ended September 30, 2021 primarily related to \$2,430 million of cash used for acquisitions, net of cash and cash equivalents acquired of \$221 million which was utilized to satisfy an acquisition-related tax obligation on behalf of Verafin, \$113 million of purchases of property and equipment, net purchases of investments related to default funds and margin deposits of \$92 million and other investing activities of \$84 million, partially offset by proceeds from the divestiture of a business, net of cash divested \$190 million.

Net Cash Provided by Financing Activities

Net cash provided by financing activities for the nine months ended September 30, 2022 primarily related to an increase in default funds and margin deposits of \$5,446 million and proceeds of \$541 million from the issuances of long-term-debt, partially offset by \$499 million extinguishment of our 2024 Notes, \$325 million of repurchases of common stock pursuant to the ASR agreement, \$308 million in other repurchases of common stock, \$285 million of dividend payments to our shareholders and \$221 million repayment of our commercial paper, net.



Net cash used in financing activities for the nine months ended September 30, 2021 primarily related to repayment of borrowings under our credit commitment and debt obligations of \$804 million, \$475 million of repurchases pursuant to the ASR agreement, \$410 million in repurchases of common stock, and \$260 million of dividend payments to our shareholders, partially offset by proceeds of \$826 million from the issuances of long-term-debt and utilization of credit commitment, an increase in default funds and margin deposits of \$489 million and \$480 million of proceeds from issuances of commercial paper, net.

See Note 4, “Acquisitions and Divestiture,” to the condensed consolidated financial statements for further discussion of our acquisitions and divestiture.

See Note 8, “Debt Obligations,” to the condensed consolidated financial statements for further discussion of our debt obligations.

See “ASR Agreement,” “Share Repurchase Program,” and “Cash Dividends on Common Stock,” of Note 11, “Nasdaq Stockholders’ Equity,” to the condensed consolidated financial statements for further discussion of our ASR agreement, share repurchase program and cash dividends paid on our common stock.

#### ***Financial Investments***

Our financial investments totaled \$129 million as of September 30, 2022 and \$208 million as of December 31, 2021. Of these securities, \$118 million as of September 30, 2022 and \$162 million as of December 31, 2021 are assets primarily utilized to meet regulatory capital requirements, mainly for our clearing operations at Nasdaq Clearing. See Note 6, “Investments,” to the condensed consolidated financial statements for further discussion.

#### ***Regulatory Capital Requirements***

##### Clearing Operations Regulatory Capital Requirements

We are required to maintain minimum levels of regulatory capital for the clearing operations of Nasdaq Clearing. The level of regulatory capital required to be maintained is dependent upon many factors, including market conditions and creditworthiness of the counterparty. As of September 30, 2022, our required regulatory capital of \$121 million was comprised of highly rated European government debt securities that are included in financial investments and restricted cash and cash equivalents in the Condensed Consolidated Balance Sheets.

##### Broker-Dealer Net Capital Requirements

Our broker-dealer subsidiaries, Nasdaq Execution Services, NFSTX, LLC, and Nasdaq Capital Markets Advisory, are subject to regulatory requirements intended to ensure their general financial soundness and liquidity. These requirements obligate these subsidiaries to comply with minimum net capital requirements. As of September 30, 2022, the combined required minimum net capital totaled \$1 million and the combined excess capital totaled \$21 million, substantially all of which is held in cash and cash equivalents in the Condensed Consolidated Balance Sheets. The required minimum net capital is included in restricted cash and cash equivalents in the Condensed Consolidated Balance Sheets.

##### Nordic and Baltic Exchange Regulatory Capital Requirements

The entities that operate trading venues in the Nordic and Baltic countries are each subject to local regulations and are required to maintain regulatory capital intended to ensure their general financial soundness and liquidity. As of September 30, 2022, our required regulatory capital of \$31 million was primarily invested in European government debt securities, European mortgage bonds and Icelandic government bonds that are included in financial investments in the Condensed Consolidated Balance Sheets and cash, which is included in restricted cash and cash equivalents in the Condensed Consolidated Balance Sheets.

##### Other Capital Requirements

We operate several other businesses, which are subject to local regulation and are required to maintain certain levels of regulatory capital. As of September 30, 2022, other required regulatory capital of \$10 million, primarily related to Nasdaq Central Securities Depository, was primarily invested in European government debt securities that are included in financial investments and cash, which is included in restricted cash and cash equivalents in the Condensed Consolidated Balance Sheets.

#### ***Equity and dividends***

##### Share Repurchase Program

See “Share Repurchase Program,” of Note 11, “Nasdaq Stockholders’ Equity,” to the condensed consolidated financial statements for further discussion of our share repurchase program.

##### ASR Agreement

See “ASR Agreement,” of Note 11, “Nasdaq Stockholders’ Equity,” to the condensed consolidated financial statements for further discussion of our ASR agreement.

Cash Dividends on Common Stock

The following table presents our quarterly cash dividends paid per common share on our outstanding common stock:

	2022	2021
First quarter	\$ 0.18	\$ 0.16
Second quarter	0.20	0.18
Third quarter	0.20	0.18
Total	<u>\$ 0.58</u>	<u>\$ 0.52</u>

See “Cash Dividends on Common Stock,” of Note 11, “Nasdaq Stockholders’ Equity,” to the condensed consolidated financial statements for further discussion of the dividends.

Debt Obligations

The following table summarizes our debt obligations by contractual maturity:

Maturity Date	September 30, 2022	December 31, 2021
(in millions)		
<b>Short-term debt:</b>		
Commercial paper	\$ 199	\$ 420
2022 Notes December 2022	600	598
2024 Notes June 2024	—	499
<b>Total short-term debt</b>	<u>\$ 799</u>	<u>\$ 1,517</u>
<b>Long-term debt - senior unsecured notes:</b>		
2020 Credit Facility December 2025	(3)	(4)
2026 Notes June 2026	498	498
2029 Notes March 2029	583	676
2030 Notes February 2030	583	676
2031 Notes January 2031	644	643
2033 Notes July 2033	597	694
2040 Notes December 2040	644	644
2050 Notes April 2050	486	486
2052 Notes March 2052	541	—
<b>Total long-term debt</b>	<u>\$ 4,573</u>	<u>\$ 4,313</u>
<b>Total debt obligations</b>	<u>\$ 5,372</u>	<u>\$ 5,830</u>

In the table above, the 2024 Notes were reclassified to short-term debt as of March 31, 2022, and were repaid in April 2022.

In addition to the 2020 Credit Facility, we also have other credit facilities primarily to support our Nasdaq Clearing operations in Europe, as well as to provide a cash pool credit line for one subsidiary. These credit facilities, which are available in multiple currencies, totaled \$173 million as of September 30, 2022 and \$212 million as of December 31, 2021 in available liquidity, none of which was utilized.

As of September 30, 2022, we were in compliance with the covenants of all of our debt obligations.

See Note 8, “Debt Obligations,” to the condensed consolidated financial statements for further discussion of our debt obligations.

Contractual Obligations and Contingent Commitments

There were no significant changes to our contractual obligations and contingent commitments from those disclosed in “Part I. Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our Annual Report Form 10-K that was filed with the SEC February 23, 2022.

Off-Balance Sheet Arrangements

For discussion of off-balance sheet arrangements see:

- Note 14, “Clearing Operations,” to the condensed consolidated financial statements for further discussion of our non-cash default fund contributions and margin deposits received for clearing operations; and
- Note 17, “Commitments, Contingencies and Guarantees,” to the condensed consolidated financial statements for further discussion of:
  - Guarantees issued and credit facilities available;
  - Other guarantees;
  - Routing brokerage activities;
  - Legal and regulatory matters; and
  - Tax audits.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

As a result of our operating, investing and financing activities, we are exposed to market risks such as interest rate risk and foreign currency exchange rate risk. We are also exposed to credit risk as a result of our normal business activities.

We have implemented policies and procedures to measure, manage, monitor and report risk exposures, which are reviewed regularly by management and the board of directors. We identify risk exposures and monitor and manage such risks on a daily basis.

We perform sensitivity analyses to determine the effects of market risk exposures. We may use derivative instruments solely to hedge financial risks related to our financial positions or risks that are incurred during the normal course of business. We do not use derivative instruments for speculative purposes.

Interest Rate Risk

We are subject to the risk of fluctuating interest rates in the normal course of business. Our exposure to market risk for changes in interest rates relates primarily to our financial investments and debt obligations, which are discussed below.

Financial Investments

As of September 30, 2022, our investment portfolio was primarily comprised of highly rated European government debt securities, which pay a fixed rate of interest. These securities are subject to interest rate risk and the fair value of these securities will decrease if market interest rates increase. If market interest rates were to increase immediately and uniformly by a hypothetical 100 basis points from levels as of September 30, 2022, the fair value of this portfolio would have declined by \$3 million.

Debt Obligations

As of September 30, 2022, the majority of our debt obligations were fixed-rate obligations. Interest rates on certain tranches of notes are subject to adjustment to the extent our debt rating is downgraded below investment grade, as further discussed in Note 8, "Debt Obligations," to the condensed consolidated financial statements. While changes in interest rates will have no impact on the interest we pay on fixed-rate obligations, we are exposed to changes in interest rates as a result of the borrowings under our 2020 Credit Facility, as this facility has a variable interest rate. We are also exposed to changes in interest rates as a result of the amounts outstanding from the sale of commercial paper under our commercial paper program, which have variable interest rates. As of September 30, 2022, we had principal amounts outstanding of \$199 million of commercial paper and no amounts outstanding under our 2020 Credit Facility. A hypothetical 100 basis points increase in interest rates on our outstanding commercial paper would increase our annual interest expense by approximately \$2 million based on borrowings as of September 30, 2022.

We may utilize interest rate swap agreements to achieve a desired mix of variable and fixed rate debt.

Foreign Currency Exchange Rate Risk

We are subject to foreign currency exchange rate risk. Our primary transactional exposure to foreign currency denominated revenues less transaction-based expenses and operating income for the three and nine months ended September 30, 2022 is presented in the following tables:

	Euro	Swedish Krona	Other Foreign Currencies	U.S. Dollar	Total
(in millions, except currency rate)					
<b>Three Months End September 30, 2022</b>					
Average foreign currency rate to the U.S. dollar	1.007	0.095	#	N/A	N/A
Percentage of revenues less transaction-based expenses	5.9 %	4.4 %	3.9 %	85.8 %	100.0 %
Percentage of operating income	8.5 %	(2.4)%	(10.5)%	104.4 %	100.0 %
Impact of a 10% adverse currency fluctuation on revenues less transaction-based expenses	\$ (5)	\$ (4)	\$ (3)	\$ —	\$ (12)
Impact of a 10% adverse currency fluctuation on operating income	\$ (3)	\$ (1)	\$ (4)	\$ —	\$ (8)

	Euro	Swedish Krona	Other Foreign Currencies	U.S. Dollar	Total
(in millions, except currency rate)					
<b>Nine Months Ended September 30, 2022</b>					
Average foreign currency rate to the U.S. dollar	1.065	0.101	#	N/A	N/A
Percentage of revenues less transaction-based expenses	6.1 %	5.3 %	4.2 %	84.4 %	100.0 %
Percentage of operating income	9.2 %	(2.5)%	(10.2)%	103.5 %	100.0 %
Impact of a 10% adverse currency fluctuation on revenues less transaction-based expenses	\$ (16)	\$ (14)	\$ (11)	\$ —	\$ (41)
Impact of a 10% adverse currency fluctuation on operating income	\$ (11)	\$ (3)	\$ (12)	\$ —	\$ (26)

# Represents multiple foreign currency rates.

N/A Not applicable.

Our investments in foreign subsidiaries are exposed to volatility in currency exchange rates through translation of the foreign subsidiaries' net assets or equity to U.S. dollars. Substantially all of our foreign subsidiaries operate in functional currencies other than the U.S. dollar. The financial statements of these subsidiaries are translated into U.S. dollars for consolidated reporting using a current rate of exchange, with net gains or losses recorded in accumulated other comprehensive loss within stockholders' equity in the Condensed Consolidated Balance Sheets.

Our primary exposure to net assets in foreign currencies as of September 30, 2022 is presented in the following table:

	Net Assets	Impact of a 10% Adverse Currency Fluctuation
	(in millions)	
Swedish Krona	\$ 2,748	\$ 275
British Pound	149	15
Norwegian Krone	133	13
Canadian Dollar	153	15
Australian Dollar	101	10
Euro	38	4

In the table above, Swedish Krona includes goodwill of \$2,027 million and intangible assets, net of \$470 million.

### **Credit Risk**

Credit risk is the potential loss due to the default or deterioration in credit quality of customers or counterparties. We are exposed to credit risk from third parties, including customers, counterparties and clearing agents. These parties may default on their obligations to us due to bankruptcy, lack of liquidity, operational failure or other reasons. We limit our exposure to credit risk by evaluating the counterparties with which we make investments and execute agreements. For our investment portfolio, our objective is to invest in securities to preserve principal while maximizing yields, without significantly increasing risk. Credit risk associated with investments is minimized substantially by ensuring that these financial assets are placed with governments which have investment grade ratings, well-capitalized financial institutions and other creditworthy counterparties.

Our subsidiary, Nasdaq Execution Services, may be exposed to credit risk due to the default of trading counterparties in connection with the routing services it provides for our trading customers. System trades in cash equities routed to other market centers for members of our cash equity exchanges are routed by Nasdaq Execution Services for clearing to the NSCC. In this function, Nasdaq Execution Services is to be neutral by the end of the trading day, but may be exposed to intraday risk if a trade extends beyond the trading day and into the next day, thereby leaving Nasdaq Execution Services susceptible to counterparty risk in the period between accepting the trade and routing it to the clearinghouse. In this interim period, Nasdaq Execution Services is not novating like a clearing broker but instead is subject to the short-term risk of counterparty failure before the clearinghouse enters the transaction. Once the

clearinghouse officially accepts the trade for novation, Nasdaq Execution Services is legally removed from trade execution risk. However, Nasdaq has membership obligations to NSCC independent of Nasdaq Execution Services' arrangements.

Pursuant to the rules of the NSCC and Nasdaq Execution Services' clearing agreement, Nasdaq Execution Services is liable for any losses incurred due to a counterparty or a clearing agent's failure to satisfy its contractual obligations, either by making payment or delivering securities. Adverse movements in the prices of securities that are subject to these transactions can increase our credit risk. However, we believe that the risk of material loss is limited, as Nasdaq Execution Services' customers are not permitted to trade on margin and NSCC rules limit counterparty risk on self-cleared transactions by establishing credit limits and capital deposit requirements for all brokers that clear with NSCC. Historically, Nasdaq Execution Services has never incurred a liability due to a customer's failure to satisfy its contractual obligations as counterparty to a system trade. Credit difficulties or insolvency, or the perceived possibility of credit difficulties or insolvency, of one or more larger or visible market participants could also result in market-wide credit difficulties or other market disruptions.

We have credit risk related to transaction and subscription-based revenues that are billed to customers on a monthly or quarterly basis, in arrears. Our potential exposure to credit losses on these transactions is represented by the receivable balances in our Condensed Consolidated Balance Sheets. We review and evaluate changes in the status of our counterparties' creditworthiness. Credit losses such as those described above could adversely affect our condensed consolidated financial position and results of operations.

We also are exposed to credit risk through our clearing operations with Nasdaq Clearing. See Note 14, "Clearing Operations," to the condensed consolidated financial statements for further discussion. Our clearinghouse holds material amounts of clearing member cash deposits, which are held or invested primarily to provide security of capital while minimizing credit, market and liquidity risks. While we seek to achieve a reasonable rate of return, we are primarily concerned with preservation of capital and managing the risks associated with these deposits. As the clearinghouse may pass on interest revenues (minus costs) to the members, this could include negative or reduced yield due to market conditions. The following is a summary of the risks associated with these deposits and how these risks are mitigated.

- **Credit Risk.** When the clearinghouse has the ability to hold cash collateral at a central bank, the clearinghouse utilizes its access to the central bank system to minimize credit risk exposures. When funds are not held at a central bank, we seek to substantially mitigate credit risk by ensuring that investments are primarily placed in large, highly rated financial institutions, highly rated government debt instruments and other creditworthy counterparties.

- **Liquidity Risk.** Liquidity risk is the risk a clearinghouse may not be able to meet its payment obligations in the right currency, in the right place and the right time. To mitigate this risk, the clearinghouse monitors liquidity requirements closely and maintains funds and assets in a manner which minimizes the risk of loss or delay in the access by the clearinghouse to such funds and assets. For example, holding funds with a central bank where possible or investing in highly liquid government debt instruments serves to reduce liquidity risks.
- **Interest Rate Risk.** Interest rate risk is the risk that interest rates rise causing the value of purchased securities to decline. If we were required to sell securities prior to maturity, and interest rates had risen, the sale of the securities might be made at a loss relative to the latest market price. Our clearinghouse seeks to manage this risk by making short term investments of members' cash deposits. In addition, the clearinghouse investment guidelines allow for direct purchases or repurchase agreements with short dated maturities of high quality sovereign debt (for example, European government and U.S. Treasury securities), central bank certificates and multilateral development bank debt instruments.
- **Security Issuer Risk.** Security issuer risk is the risk that an issuer of a security defaults on its payment when the security matures. This risk is mitigated by limiting allowable investments and collateral under reverse repurchase agreements to high quality sovereign, government agency or multilateral development bank debt instruments.

#### **Item 4. Controls and Procedures**

**Disclosure controls and procedures.** Nasdaq's management, with the participation of Nasdaq's President and Chief Executive Officer, and Executive Vice President and Chief Financial Officer, has evaluated the effectiveness of Nasdaq's disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Exchange Act) as of the end of the period covered by this report. Based upon that evaluation, Nasdaq's President and Chief Executive Officer and Executive Vice President and Chief Financial Officer, have concluded that, as of the end of such period, Nasdaq's disclosure controls and procedures are effective.

**Changes in internal control over financial reporting.** There have been no changes in Nasdaq's internal control over financial reporting (as defined in Rule 13a-15(f) and Rule 15d-15(f) under the Exchange Act) that occurred during the quarter ended September 30, 2022 that have materially affected, or are reasonably likely to materially affect, Nasdaq's internal control over financial reporting.

## **PART II. OTHER INFORMATION**

### **Item 1. Legal Proceedings**

For a description of our legal proceedings, if any, see "Legal and Regulatory Matters - Litigation," of Note 17, "Commitments, Contingencies and Guarantees," to the condensed consolidated financial statements, which is incorporated herein by reference.

### **Item 1A. Risk Factors**

In addition to the other information set forth in this Quarterly Report on Form 10-Q, you should carefully consider the factors discussed under "Risk Factors" in our most recent Form 10-K and Quarterly Report on Form 10-Q for the quarter ended March 31, 2022. These risks could materially and adversely affect our business, financial condition and results of operations. These risks and uncertainties are not the only ones facing us. Additional risks and uncertainties not presently known to us or that we currently believe to be immaterial may also adversely affect our business. As of the date of this Form 10-Q, there have been no material changes to the risk factors described in our most recent Form 10-K, as supplemented by our Quarterly Report on Form 10-Q for the quarter ended March 31, 2022.

### **Item 2. Unregistered Sales of Equity Securities and Use of Proceeds**

#### **Issuer Purchases of Equity Securities**

##### **Share Repurchase Program**

See "Share Repurchase Program," of Note 11, "Nasdaq Stockholders' Equity," to the condensed consolidated financial statements for further discussion of our share repurchase program.

**Purchases of Equity Securities by the Issuer and Affiliated Purchasers**

The table below represents repurchases made by or on behalf of us or any “affiliated purchaser” of our common stock during the fiscal quarter ended September 30, 2022. All references made to share or per share amounts have been retroactively adjusted to reflect the effects of the stock split:

Period	(a) Total Number of Shares Purchased	(b) Average Price Paid Per Share	(c) Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	(d) Maximum Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (in millions)
<b>July 2022</b>				
Share repurchase program	—	\$ —	—	\$ 293
Employee transactions	13,716	\$ 56.05	N/A	N/A
<b>August 2022</b>				
Share repurchase program	—	\$ —	—	\$ 293
Employee transactions	603	\$ 60.95	N/A	N/A
<b>September 2022</b>				
Share repurchase program	—	\$ —	—	\$ 293
Employee transactions	3,584	\$ 63.26	N/A	N/A
<b>Total Quarter Ended September 30, 2022</b>				
Share repurchase program	—	\$ —	—	\$ 293
Employee transactions	17,903	\$ 57.66	N/A	N/A

In the preceding table:

- N/A - Not applicable.
- See “Share Repurchase Program,” of Note 11, “Nasdaq Stockholders’ Equity,” to the condensed consolidated financial statements for further discussion of our share repurchase program.
- Employee transactions represents shares surrendered to us to satisfy tax withholding obligations arising from the vesting of restricted stock and PSUs previously issued to employees.

**Item 3. Defaults Upon Senior Securities**

None.

**Item 4. Mine Safety Disclosures**

Not applicable.

**Item 5. Other Information**

None.

**Item 6. Exhibits**

Exhibit Number	
<a href="#"><u>31.1</u></a>	<a href="#"><u>Certification of President and Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (“Sarbanes-Oxley”).</u></a>
<a href="#"><u>31.2</u></a>	<a href="#"><u>Certification of Executive Vice President and Chief Financial Officer pursuant to Section 302 of Sarbanes-Oxley.</u></a>
<a href="#"><u>32.1</u></a>	<a href="#"><u>Certifications Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of Sarbanes-Oxley.</u></a>
101	The following materials from the Nasdaq, Inc. Quarterly Report on Form 10-Q for the quarter ended September 30, 2022, formatted in iXBRL (Inline eXtensible Business Reporting Language): (i) Condensed Consolidated Balance Sheets as of September 30, 2022 and December 31, 2021; (ii) Condensed Consolidated Statements of Income for the three and nine months end September 30, 2022 and 2021; (iii) Condensed Consolidated Statements of Comprehensive Income for the three and nine months end September 30, 2022 and 2021; (iv) Condensed Consolidated Statements of Changes in Stockholders' Equity for the three and nine months end September 30, 2022 and 2021; (v) Condensed Consolidated Statements of Cash Flows for the nine months end September 30, 2022 and 2021; and (vi) notes to condensed consolidated financial statements.
104	Cover Page Interactive Data File, formatted in iXBRL and contained in Exhibit 101.



**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Nasdaq, Inc.  
(Registrant)

**By:** /s/ Adena T. Friedman  
**Name:** **Adena T. Friedman**  
**Title:** **President and Chief Executive Officer**  
**Date:** November 2, 2022

**By:** /s/ Ann M. Dennison  
**Name:** **Ann M. Dennison**  
**Title:** **Executive Vice President and Chief Financial Officer**  
**Date:** November 2, 2022



**CERTIFICATION**

I, Adena T. Friedman, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Nasdaq, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Adena T. Friedman  
\_\_\_\_\_  
Name: Adena T. Friedman  
Title: President and Chief Executive Officer

Date: November 2, 2022

## CERTIFICATION

I, Ann M. Dennison, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Nasdaq, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Ann M. Dennison  
\_\_\_\_\_  
Name: Ann M. Dennison  
Title: Executive Vice President and Chief Financial Officer

Date: November 2, 2022

**Certification of CEO and CFO Pursuant to  
18 U.S.C. Section 1350  
as Adopted Pursuant to  
Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Quarterly Report on Form 10-Q of Nasdaq, Inc. (the “Company”) for the period ended September 30, 2022 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), Adena T. Friedman, as President and Chief Executive Officer of the Company, and Ann M. Dennison, as Executive Vice President and Chief Financial Officer of the Company, each hereby certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to the best of her knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of the operations of the Company.

	<u>/s/ Adena T. Friedman</u>
Name:	Adena T. Friedman
Title:	President and Chief Executive Officer
Date:	November 2, 2022
	<u>/s/ Ann M. Dennison</u>
Name:	Ann M. Dennison
Title:	Executive Vice President and Chief Financial Officer
Date:	November 2, 2022

This certification accompanies the Report pursuant to § 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002, be deemed filed by the Company for purposes of § 18 of the Securities Exchange Act of 1934, as amended.

# Exhibit 3

# Nasdaq Global Data Agreement

## Introduction and Instructions:

This document is for an applicant intending to receive a data feed containing quotation and/or trade information or other data from Nasdaq, Inc. and its subsidiaries and affiliates (collectively “**Nasdaq**”). This introduction page is intended solely for informational purposes and should not be considered as an agreement or an amendment to any agreement with Nasdaq.

The Information (as that term is defined herein) can be received directly from Nasdaq, through an approved Nasdaq extranet or through an authorized data feed provider or Redistributor. An applicant who intends to receive Information directly from Nasdaq may also be required to procure the necessary communications lines via an approved Nasdaq extranet or other provider. Applicants must follow the procedures outlined in the applicable [Nasdaq Data Policies](#) accessible via the Nasdaq Trader website ([http://nasdaqtrader.com/Trader.aspx?id=GDP\\_Ops](http://nasdaqtrader.com/Trader.aspx?id=GDP_Ops)).

In the United States, Nasdaq may maintain a registration with the Securities and Exchange Commission (“**SEC**”) as a registered securities information processor pursuant to Section 11A of the Securities Exchange Act of 1934 (the “**Exchange Act**”). Outside the U.S., Nasdaq may likewise be subject to regulatory obligations of a Financial Services Authority (“**FSA**”) in Sweden, the United Kingdom or elsewhere. As such, Nasdaq is obligated to offer terms that are not unreasonably discriminatory between applicants, Distributors and Recipients, subject to such orders, rules or regulations as the SEC or an applicable FSA may adopt. For Information disseminated from Nasdaq Markets in the United States, Nasdaq will not make any changes to the Agreement that are inconsistent with Section 6(b) of the Exchange Act and undertaking #5 in [www.sec.gov/litigation/admin/3437538.txt](http://www.sec.gov/litigation/admin/3437538.txt). For Information disseminated from European data centers, Nasdaq will similarly adhere to all statutory and regulatory obligations.

In order to receive data feeds, the applicant must complete the following:

### 1). Nasdaq Global Data Agreement - Summary (“GDA Summary”):

The Nasdaq GDA Summary references the following documents, and Distributors are required to adhere to the terms of these documents per the GDA Summary:

- Nasdaq Global Data Agreement — Summary
- Nasdaq Global Data Agreement — Terms and Conditions
- Nasdaq Global Data Price List
- Nasdaq Requirements

### 2). Nasdaq Global Data Agreement Execution.

Applicants interested in receiving information services must execute **one (1) copy** of the Nasdaq Global Data Agreement accessible on the Nasdaq Trader website. Execution entails having an authorized officer sign in the name of the applicant organization.

After completion of the above documents, submit the signed copy of the entire Global Data Agreement (Summary and Terms and Conditions) to [DataOps@nasdaq.com](mailto:DataOps@nasdaq.com).

If your firm prefers to mail the documents, please use the following address:

#### **Nasdaq Global Data Products**

805 King Farm Boulevard, Rockville, MD 20850 USA

Phone US Office: +1 301 978 5307 or European Office: +45 33 93 33 66

Fax: +1 301 978 5295

Please allow a minimum of **two (2) weeks** for Nasdaq to process your submission.

Please direct questions to [DataOps@nasdaq.com](mailto:DataOps@nasdaq.com) or +1 301 978 5307 or +45 33 93 33 66.



# Nasdaq Global Data Agreement Summary

This Agreement is made by and between Nasdaq, Inc., a Delaware limited liability company whose principal place of business is located at 151 W. 42<sup>nd</sup> Street, New York, New York 10036, and the Distributor, as identified below.

WHEREAS, Nasdaq has developed a System which enables eligible individuals or entities to receive certain Information, as that term is more fully defined herein, relating to a) eligible securities or other financial instruments, markets, products, vehicles, indicators or devices; b) persons regulated by, or to activities of, Nasdaq; c) information, data and services offered by Nasdaq from other sources; or d) other information and data from Nasdaq; and

WHEREAS, Distributor, representing that it is eligible to do so, is desirous of receiving the Information; and

WHEREAS, Distributor, acknowledges that different terms may apply to the receipt of different Information, depending on the Nasdaq Market that is the source of the Information, as further set forth herein.

NOW THEREFORE, in consideration of the premises and the mutual covenants and conditions herein contained, the parties, intending to be legally bound, agree as follows:

## 1. General Definitions; European Market Definitions and Interpretation.

**1.1 General Terms.** The following terms, when used in this Agreement, shall have the meanings set out below:

**"Agreement"** shall mean this Nasdaq Global Data Agreement - Summary, together with the Nasdaq Global Data Agreement - Terms & Conditions, the Attachments, as added to, deleted from or amended from time-to-time.

**"Affiliate"** shall mean any individual, corporation, company, partnership, limited partnership, limited liability company, trust, association or other entity that, directly or indirectly through one or more intermediaries, controls, is controlled by or is under common control with such party.

**"Attachments"** shall mean any attachments, addenda, cover sheets, amendments and materials referenced herein, including, but not limited to, the Nasdaq Requirements, as any of these items may be added to, deleted from or amended from time-to-time.

**"Distributor"** shall mean Distributor and its Affiliates, as identified in writing to Nasdaq.

**"European Markets"** shall mean Nasdaq Stockholm AB, Nasdaq Oslo ASA, Nasdaq Helsinki Ltd, Nasdaq Copenhagen A/S, Nasdaq Tallinn AS, Nasdaq Riga AS AB Nasdaq Vilnius and Nasdaq Iceland hf.

**"Information"** shall mean certain data and other data disseminated that has been collected, validated, processed and recorded by the System or other sources made available for transmission to and receipt from either a Redistributor or from Nasdaq relating to: a) eligible securities or other financial instruments, markets, products, vehicles, indicators or devices; b) activities of a Nasdaq Company; c) other information and data from a Nasdaq Company. Information also includes any element of Information as used or processed in such a way that the Information can be identified, recalculated or re-engineered from the processed Information or that the processed Information can be used as a substitute for Information.

**"Nasdaq Markets"** shall mean the regulated securities and options exchange subsidiaries of Nasdaq and other unregulated subsidiaries of Nasdaq, including, but not limited to, The NASDAQ Stock Market ("NASDAQ"), the European Markets, Nasdaq BX ("BX"), Nasdaq PHLX ("PHLX"), and the Philadelphia Board of Trade ("PBOT"). The Nasdaq Markets are each a **"Nasdaq Market."**

**"Nasdaq Requirements"** shall mean (i) the rules, regulations, interpretations, decisions, opinions, orders and other requirements of the SEC or an FSA, as may be applicable based upon the Nasdaq Market from which the Information is received ; (ii) the rules and regulations, disciplinary decision and rule interpretations applicable to Nasdaq Markets (iii) the Nasdaq Markets' decisions, policies, interpretations, operating procedures, specifications, requirements and other documentation that is regulatory or technical in nature (including, but not limited to, user guides) published on the NASDAQ Trader website located at [www.NASDAQTrader.com](http://www.NASDAQTrader.com) or another website accessible by and made known to Distributor; and (iv) all other applicable laws, statutes, rules, regulations, orders, decisions, interpretations, opinions and other requirements, whether promulgated by the United States, England, Sweden or any other applicable jurisdiction (including in the area of intellectual property); and (v) the successors, as they may exist at the time, of the components of the Nasdaq Requirements.



**“Nasdaq”** shall collectively mean Nasdaq, Inc., a Delaware corporation and its subsidiaries and Affiliates.

**“Nasdaq Trader”** shall mean the website located at [www.NASDAQTrader.com](http://www.NASDAQTrader.com) or its successor site(s).

**“System”** shall mean any system Nasdaq has developed for the creation and/or dissemination of Information.

**“Glossary of Terms”** included in Nasdaq Global Data Agreement - Terms and Conditions. Other capitalized terms shall have the meaning set out in the Glossary of Terms.

**1.2 European Market Definitions & Interpretation.** Where, and to the extent that, the Distributor is licensing, distributing or otherwise using Information under this Agreement from any European Markets (or any other Nasdaq market under the jurisdiction of the European Securities and Markets Authority, or its successor), then the term “Distributor” within the Agreement or otherwise referenced in any Nasdaq Requirements shall be replaced with the term “Customer”. For this purpose, **“Customer”** shall be defined as the natural and/or legal person who signs the Agreement with Nasdaq and is invoiced for the European Market data fees (if applicable). Additionally, for purposes of the European Markets, the Agreement shall be deemed a so-called ‘market data license agreement’.

## **2. Scope of Agreement.**

**2.1** Nasdaq grants to Distributor a worldwide, non-exclusive, non-transferable license to receive use, process and store the Information during the term of this Agreement only for the purpose of providing the Information in accordance with the Nasdaq Requirements and approved by Nasdaq and not for any purpose inconsistent with the terms of this Agreement. Distributor may not sell, lease, furnish or otherwise permit or provide access to the Information in any manner not previously approved by Nasdaq in writing.

**2.2** Distributor accepts the terms and conditions of this Agreement and guarantees and accepts full responsibility for the actions or inactions of all of its Affiliates under this Agreement as if such action or inaction were that of Distributor.

**2.3** Nothing in this Agreement will create or be deemed to create a partnership or agency relationship between the parties to the Agreement.

## **3. Term and Termination.**

**3.1** The original term of this Agreement shall commence on the earlier of (i) the date of this Agreement or (ii) the date the Information is provided but not earlier than January 1, 2009.

**3.2** Unless this Agreement is otherwise terminated, the term shall continue until this Agreement is terminated by at least ninety (90) days prior written notice by Nasdaq or by at least thirty (30) days prior written notice by Distributor, with expiry effective at the end of a calendar month.

**3.3** Either party shall have the right to terminate this Agreement in accordance with the provisions of the Nasdaq Global Data Agreement Terms and Conditions.

## **4. Entire Agreement, Modifications.**

**4.1** This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof, and supersedes all prior negotiations, communications, writings and understandings.

**4.2** Either party may only modify this Agreement in accordance with the provisions of the Nasdaq Global Data Agreement - Terms and Conditions. Nasdaq is obligated to offer terms that are not unreasonably discriminatory between applicants and Distributors and Recipients, subject to such orders, rules or regulations of the SEC or an FSA, and as such, Nasdaq will not agree to any material term, condition or provision more favorable to a third party, than such material terms, conditions and provisions applicable to Distributor. For Information disseminated from Nasdaq Markets based in the United States and subject to SEC oversight, Nasdaq will not make any changes to the Agreement that are inconsistent with Section 6(b) of the Exchange Act and undertaking #5 in [www.sec.gov/litigation/admin/3437538.txt](http://www.sec.gov/litigation/admin/3437538.txt). For Information disseminated from another Nasdaq Market, Nasdaq will similarly adhere to all applicable regulatory obligations of an FSA.

## **5. Affiliates.**

If this Agreement will be applicable to an Affiliate, Distributor must submit a list of any such Affiliate(s) to Nasdaq. By submitting the names of its Affiliate(s), Distributor agrees that the contact information set forth herein shall be deemed to

be the contact information for each Affiliate and that DISTRIBUTOR SHALL ASSUME ALL RESPONSIBILITY FOR AND WILL HOLD HARMLESS AND INDEMNIFY Nasdaq AGAINST ANY ACTION OR INACTION BY AN AFFILIATE AS IF SUCH ACTION OR INACTION WERE THAT OF DISTRIBUTOR, AND, DISTRIBUTOR AND ITS AFFILIATE(S) SHALL BE JOINTLY AND SEVERALLY LIABLE FOR ALL ACTIONS AND/OR INACTIONS OF THE OTHER(S). All of the rights and licenses granted to Distributor under this Agreement will apply to such Affiliates(s) to the same extent as applicable to Distributor.

## 6. Assignment.

**6.1** This Agreement shall inure to the benefit of and shall be binding upon the parties hereto and their respective permitted successors or assigns.

**6.2** Neither party shall assign this Agreement (including by operation of law) without the prior written consent of the other party, and such consent not to be unreasonably withheld, provided however, that: (a) Nasdaq may assign this Agreement in part or in whole to one of its Affiliates or subsidiaries, without the prior written consent of the other party; and (b) Distributor may assign this Agreement in whole (but, for the avoidance of doubt, not any of the Attachments) to one of its Affiliates or subsidiaries, without the prior written consent of Nasdaq, provided that Distributor is not currently in breach of this Agreement or delinquent in any fees owed.

## 7. Governing Law; Construction.

For Information received, this Agreement shall be deemed to have been made in the jurisdiction of the applicable Nasdaq Market as detailed in Appendix 1.

## 8. Notices; Notification of Changes.

**a.** All notices and other communications (except for invoices) required to be given in writing under this Agreement shall be directed to the signatories or, in the alternative, to the individuals identified in subsections (I) and (II) below. Nasdaq may also post the applicable notice or other communication on the NASDAQ Trader website (or successor thereto) and any such notice shall not be required to be directed to the signatories or individual identified in subsection (I). Distributor may update Subsection (I) upon notice to Nasdaq.

**b.** Notices shall be deemed to have been duly given by any one (or more) of the following methods,:

- (i)** upon actual receipt (or date of first refusal) by the parties, or
- (ii)** upon constructive receipt (or date of first refusal) if sent by certified mail, return receipt requested, or any other delivery method that actually obtains a signed delivery receipt, to the following addresses or to such other address as any party hereto shall hereafter specify by prior written notice to the other party or parties below, or
- (iii)** upon posting the notice or other communication on the NASDAQ Trader website or a successor site, or
- (iv)** upon receipt, if a valid email address is provided and remains current, Nasdaq may give notice to or communicate with Distributor by email addressed to the persons identified in subsection (a) or to such other email address or persons as Distributor shall hereafter specify by prior written notice. By providing an email address, Distributor agrees that any receipt received by Nasdaq from Distributor's service provider or internet computer server indicating that the email was received shall be deemed proof that Distributor received the message. If Distributor cannot see or print all or any portion of the message, Distributor agrees that it is Distributor's responsibility to contact Nasdaq at +1 301 978 5307.

**(I) If to Distributor:**

Contact Name: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Telephone #: \_\_\_\_\_

Fax #: \_\_\_\_\_

Email: \_\_\_\_\_

With, in the event of notices of dispute or default, a required copy to:

\_\_\_\_\_

**(II) If to Nasdaq:**

Nasdaq, Inc.

805 King Farm Boulevard

Rockville, MD 20850

USA

Phone: +1 301 978 5307, #2 or +45 33 93 33 66

[DataOps@nasdaq.com](mailto:DataOps@nasdaq.com)

With, in the event of notices of default or dispute, a required copy to:

**Nasdaq, Inc.** Office of General

Counsel Attn: Contracts Group

805 King Farm Boulevard

Rockville, MD 20850

IN WITNESS WHEREOF, the parties hereto have caused this Agreement, and the Terms and Conditions attached hereto and incorporated by reference, to be executed by their duly authorized officers.

**Distributor:** \_\_\_\_\_

(PRINT NAME OF FIRM)

By: \_\_\_\_\_

(SIGNATURE)

Name of

Signatory: \_\_\_\_\_

(PRINT NAME OF SIGNATORY)

Title: \_\_\_\_\_

(AUTHORIZED OFFICER)

Date: \_\_\_\_\_

**Distributor's Principal Place of Business:**

\_\_\_\_\_

**Identification of Distributor:**

a) type of entity, i.e., corporation, limited partnership, general partnership, sole proprietorship, etc.:

\_\_\_\_\_

b) state or country of incorporation or registration, if applicable:

\_\_\_\_\_

[Nasdaq, Inc. on behalf of Nasdaq and the Nasdaq Markets](#)

Signature: \_\_\_\_\_

Name of

Signatory: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



# Nasdaq Global Data Agreement Terms & Conditions

## 1. DEFINITIONS.

- (a) **"Act"** shall mean the Securities Exchange Act of 1934, applicable only to Information disseminated from a Nasdaq Market in the United States.
- (b) **"Claims or Losses"** shall mean any and all direct liabilities, obligations, losses, damages, penalties, claims, actions, suits, judgments, and reasonable costs and expenses of whatever nature, whether incurred by or issued against a Party, including, without limitation: (i) indirect, special, punitive, consequential, or incidental loss or damage (including, but not limited to, trading losses, loss of anticipated profits, loss by reason of shutdown in operation or increased expenses of operation, or other indirect loss or damage); and (ii) reasonable administrative costs, litigation costs, and auditors' and attorneys' fees, both in-house and outside counsel, and related disbursements.
- (c) **"Nasdaq Confidential Information"** shall mean the confidential information, data, or techniques that, in the course of performance of the Agreement, Distributor may obtain from Nasdaq.
- (d) **"Data Feed Recipient"** shall mean any Recipient outside of Distributor that (i) receives Information from the Distributor and (ii) for which the Distributor cannot substantially control the Information for the purpose of reporting usage or qualification.
- (e) **"Derived Data"** shall mean any information generated in whole or in part from the Information such that the information generated cannot be reverse engineered to recreate the Information, or be used to create other data that is recognizable as a reasonable substitute for such Information.
- (f) **"Distributor Invoiced Recipient"** shall mean any Recipient that, per Nasdaq's decision, are charged or assessed by Distributor for the Information.
- (g) **"Distributor's Service"** shall mean the goods or services provided by Distributor, whether internally or externally, which is based on or uses the Information or of which the Information is apart.
- (h) **"Distributor's System"** shall mean one or more of Distributor's systems which meet the specifications (including, but not limited to, interface and operational requirements) set forth by Nasdaq through which Distributor accesses the Information and distributes Distributor's Service.
- (i) **"External Recipient"** shall mean any Recipient not affiliated with the Distributor that receives Information where the Distributor can substantially control the Information for the purpose of reporting usage or qualification.
- (j) **"FINRA"** shall mean the Financial Industry Regulatory Association.
- (k) **"FSA"** shall mean a Financial Services Authority in Sweden, the United Kingdom, or other jurisdiction other than the United States.
- (l) **"Internal Recipient"** shall mean any Recipient affiliated with the Distributor that receives Information where the Distributor can substantially control the Information for the purpose of reporting usage or qualification.
- (m) **"Nasdaq Invoiced Recipients"** shall mean any Recipient that Nasdaq chooses to invoice, as distinguished from Distributor Invoiced Recipients.
- (n) **"Nasdaq Specifications"** shall mean the specifications, as the same may be amended from time to time with which Distributor's System must comply, which specifications are available from Nasdaq upon request.
- (o) **"Other Information"** shall have the meaning given to it in Section 4(a) of this Agreement.
- (p) **"Recipient"** shall mean any natural person, proprietorship, corporation, partnership, or other entity whatsoever that receives Information from the Distributor.

- (q) **“Redistributor”** shall mean another distributor (i) from which Distributor receives the Information and (ii) for which such distributor cannot substantially control the Information received by the Distributor for the purposes of reporting usage and qualification.
- (r) **“Service Facilitator”** is a natural person, proprietorship, corporation, partnership, or other entity whatsoever receiving Information from Distributor for the sole purpose of facilitating dissemination of Information through Distributor’s Service in accordance with the terms and conditions of this Agreement.
- (s) **“Third Party Information Providers”** shall mean those individuals and entities that provide information, goods and services to Nasdaq in connection with the creation of the Information. Such information, goods and services shall be included in the definition of Information.

## 2. AGREEMENT TO PROVIDE INFORMATION; COMPLIANCE WITH NASDAQ DATA REQUIREMENTS; DISTRIBUTOR WARRANTY.

Until this Agreement is terminated, cancelled or rescinded pursuant to its terms, Nasdaq agrees to provide to Distributor, either directly or from a Redistributor, on the terms and conditions set forth herein, the Information, as described in this Agreement or in the Nasdaq Requirements, that Distributor requests and to which Distributor is eligible to receive under the Nasdaq Requirements. Distributor warrants that it will only use the Information, in compliance with this Agreement.

## 3. NASDAQ’S SYSTEM, CHARGES.

Distributor acknowledges and agrees that nothing in this Agreement constitutes an undertaking by Nasdaq to continue: (a) the Information, the System, or any aspect of either, in the present form or configuration or under the current Nasdaq Specifications or with the current Distributor’s System; or (b) to use existing communications facilities. Nasdaq, in its sole discretion, may make changes, modifications and/or deletions other than routine modifications, additions or deletions, from time to time, (a) to the Information, the System, or any aspect of either; (b) to the Nasdaq Specifications; (c) to its communications facilities; or (d) to Nasdaq’s decisions, policies, operating procedures, requirements, and other documentation (including, but not limited to, user guides). Nasdaq shall undertake reasonable efforts to notify Distributor with at least thirty (30) days notice of any non-material changes and at least ninety (90) days notice of any material modification, addition or deletion, except to the extent a shorter period is (a) otherwise permitted herein, (b) required due to a malfunction in the System or Information or other emergency situation that necessitates modifications, additions or deletions on an accelerated basis or otherwise precludes such advance notice; or (iii) required pursuant to an order of a court, an arbitrator, or a regulatory agency. Notwithstanding the foregoing, any changes in the charges for, or associated with, the Information may be made on thirty (30) days notice to Distributor, but Nasdaq shall make commercially reasonable efforts to provide at least ninety (90) days notice to Distributor. **Receipt or use of the Information after the applicable notice period for any modification, addition or deletion shall constitute acceptance of the Information, the System, the Nasdaq Specifications, or other decisions, policies, operating procedures, requirements, or other documentation as so changed.**

## 4. LICENSE TO USE INFORMATION, PROPRIETARY RIGHTS.

(a) If the interface with the System or usage of Information identified by Distributor in accordance with the Nasdaq Requirements enables Distributor to receive information for which Distributor has not been authorized (**“Other Information”**) or if Nasdaq otherwise inadvertently transmits Other Information to Distributor, Distributor shall notify Nasdaq and Distributor shall not knowingly furnish or knowingly permit to be furnished such Other Information to any third party or other place. Nasdaq shall have the right to monitor Distributor’s usage of Information to ensure compliance with this Section including through manual and/or auto extraction of Information from Distributor’s System or Service notwithstanding any terms of service or other agreement governing such Distributor’s System or Service. If Nasdaq becomes aware of the fact that Distributor is receiving or distributing such Other Information, Nasdaq shall so notify Distributor. If Distributor knowingly so furnishes the Other Information to any third party or to any other place, or knowingly permits the Other Information to be so furnished, or otherwise knowingly makes use of the Other Information, Distributor shall be liable to Nasdaq pursuant to this Agreement for the Other Information, including, but not limited to, for charges for the Other Information. Distributor is considered to have knowingly furnished or used the Other Information if Distributor intentionally undertakes to interface with the System or otherwise uses the Information other than as identified by Distributor in accordance with the Nasdaq Requirements or undertakes any efforts to market Distributor’s Service that is based on, uses or intentionally distributes the Other Information or of which the

Other Information is a part. If knowingly received, Other Information shall be considered as Information for all other purposes under this Agreement.

**(b)** Distributor represents and warrants that the usage of Information identified by Distributor in accordance with the Nasdaq Requirements, including, but not limited to, the data processing equipment, software, and communications facilities related thereto, is true, complete and not misleading. Recipients are authorized to receive and use the Information only for the purposes set forth in the applicable Nasdaq Requirements. Any use of the Information by Distributor or Recipients, including, but not limited to, retransmission or reprocessing, unless expressly described in in accordance with the Nasdaq Requirements, is prohibited, and such approval shall not be unreasonably withheld.

**(c)** Should Distributor desire to make any use of the Information (including, but not limited to, developing or communicating derivative information based upon the Information, retransmission, redistribution, reproduction or calculation of indices) in any manner not provided in accordance with the Nasdaq Requirements, Distributor may do so by submitting a revised usage of Information and only with prior written approval by Nasdaq of such use and upon payment of the fees applicable to the use approved.

**(d)** Distributor shall be entitled to change the display format identified by Distributor in accordance with the Nasdaq Requirements; *provided that*: for a material change (i) Distributor shall notify Nasdaq, describing such change in reasonable detail, as soon as reasonably practicable or within fifteen (15) days after implementation of any such change; and (ii) Distributor believes in good faith that such change complies with the Nasdaq Requirements. Distributor shall not be required to notify Nasdaq of non-material changes. Distributor will attribute source as set forth in the Nasdaq Requirements. Distributor shall not remove or alter any intellectual property ownership and/or identification notices found within the Information except with Nasdaq's prior written approval.

**(e)** Distributor agrees (i) not to format, display, or alter the information or data received through and from the Information in violation of Nasdaq Requirements, including, but not limited to, Nasdaq's Specifications; (ii) not to affect materially the integrity of the Information; (iii) not to alter the Information in any manner that adversely affects its accuracy or integrity; and (iv) not to render the Information inaccurate, unfair, uninformative, fictitious, misleading, or discriminatory. Distributor represents that it will not interfere with or adversely affect any of the component parts or processes of the Information or the System, or any use thereof by any other authorized individuals or entities, or the distribution or operation of the Information or the System. If Distributor becomes aware of any unauthorized use by a Recipient, Distributor shall notify Nasdaq immediately of such use.

**(f)** Distributor may use, on its premises, the Information in connection with use identified by Distributor in accordance with the Nasdaq Requirements, without charge (except for any taxes, charges or assessments (other than taxes imposed on the net income of Nasdaq) by any foreign or domestic national, state, provincial or local government bodies, or subdivisions thereof, and any penalties or interest relating to the provision of the Information to Distributor), for advertisement, demonstration, product development, technical operations, monitoring of data quality and customer service. Distributor may also make limited use, off its premises, of the Information, as part of the Distributor's Service, for sales and marketing purposes (including, but not limited to, use at trade shows) and for demonstration purposes to potential clients. Upon request, Distributor shall provide Nasdaq or its designee with information about, and demonstrate, such non-fee liable uses. All other provisions of this Agreement shall remain applicable, including, without limitation, audit by Nasdaq. Use of the Information by Distributor for securities transactions or to support the trading of securities by Distributor's clients shall be considered a fee-labile use.

**(g)** Each Distributor that provides data predominantly to External Recipients agrees that during the term of this Agreement, and upon request from Nasdaq, will provide at no cost to Nasdaq, two (2) subscriptions to Distributor's Service together with the equipment, if equipment is required to receive the Information, used to receive and to display or communicate the Distributor's Service and the related telecommunications facilities. Nasdaq represents and agrees that such subscriptions will be used solely for purposes of monitoring the Information and demonstrating Distributor's Service. Upon request, Distributor will make available marketing materials and user guides for all components of the Distributor's Service that include the Information.

**(h)** Distributor shall take reasonable security precautions to prevent unauthorized individuals or entities from gaining access to the Information. Distributor shall comply with all reasonable security specifications or requirements of Nasdaq in order to prevent the Information from being improperly used or accessed or from being improperly taken. Distributor shall notify Nasdaq promptly upon any breach in security procedures related to the Information of which it becomes aware.



(i) Distributor acknowledges and agrees that, as between the two parties, subject to Section 4(j) below, Nasdaq has proprietary rights in the Information and data that (i) originates on or relates to trading on any of the Nasdaq Markets; (ii) relates to activities that are regulated or operated by one or more of the Nasdaq Markets, (iii) Nasdaq derives from Information and data that originates on or relates to any Nasdaq Market, and (iv) compilation or other rights in information and data that Nasdaq gathers from other sources pursuant to separate agreements with those sources. Subject to Section 4(j) below, all Information, including without limitation any and all intellectual property rights inherent therein or appurtenant thereto, shall, as between the two parties, be and remain the sole and exclusive property of Nasdaq. Distributor shall not, by act or omission, diminish or impair in any manner the acquisition, maintenance, and full enjoyment by Nasdaq, its licensees, transferees and assignees, of the proprietary rights of Nasdaq in the Information and System. Distributor acknowledges and agrees that Third Party Information Providers have exclusive proprietary rights in their respective information and data and services.

(j) Notwithstanding anything contained herein or the Nasdaq Requirements: (a) Nasdaq makes no proprietary claim to any Derived Data; (b) Nasdaq acknowledges that Distributor retains all ownership and other rights associated with data that Distributor or Distributor's agent enters into the Service and/or the System as more fully reflected in the separate agreement between Nasdaq and Distributor ("**Distributor's Data**"); and (c) No provision in this agreement shall impair any right, interest or use of Distributor's Data granted by operation of SEC Rules or any other rule or law.

(k) Recipients may, on a non-continuous basis, furnish limited amounts of the Information to clients in written advertisements, correspondence or other literature or during voice telephonic conversations not entailing computerized voice, automated information inquiry systems or similar technologies.

## 5. PAYMENT; TAXES.

(a) Distributor agrees to pay to Nasdaq or Nasdaq's designee the then effective charges as set forth in the Nasdaq Requirements, provided on [www.NASDAQTrader.com](http://www.NASDAQTrader.com), or by notice, including, but not limited to, all applicable deposits and communications, facilities, electronic fund transfer fees, interest and late fees and/or penalties (including, but not limited to, charges incurred after termination, cancellation, or rescission). Distributor agrees to pay the amounts accurately invoiced by Nasdaq, including monthly adjustments for updated reporting. Unless otherwise set forth in the Nasdaq Requirements, Distributor shall remit the charges no later than fifteen (15) days after the end of the calendar month for which charges are incurred. Distributor shall pay Nasdaq, on demand or upon invoice, interest on any amounts due Nasdaq pursuant to this Agreement which are not paid within sixty (60) days after the applicable due date. Interest shall accrue at a rate equal to the lesser of (i) nine percent (9%) per annum or (ii) the maximum amount permitted by applicable law, for the period commencing per for the period commencing sixty (60) days after the applicable due date and ending upon receipt of payment to Nasdaq. Nothing in this Agreement shall prevent Distributor from separately charging its Recipients for the Distributor's Service.

(b) Unless another form of billing is otherwise set forth in the Nasdaq Requirements, all Recipients shall be either Distributor Invoiced Recipient or Nasdaq Invoiced Recipients; provided Recipients of Information from European Markets must be Distributor Invoiced Recipients. Distributor is not required to actually invoice Distributor Invoiced Recipients, but, in any event, Distributor shall be responsible for the charges associated with the Distributor Invoiced Recipients. Distributor shall bear all risk of non-payment by Distributor Invoiced Recipients or by Recipients for whom Distributor is responsible for the charges. Nasdaq will bear the risk of non-payment by Nasdaq Invoiced Recipients. Distributor shall reasonably cooperate with Nasdaq in any lawful efforts by Nasdaq to collect unpaid charges due Nasdaq from current or former Nasdaq Invoiced Recipients. Distributor may choose to pay Nasdaq any charges due on behalf of any Recipient. Upon Distributor's payment to Nasdaq on behalf of any Recipient of any charges due hereunder, Distributor shall be subrogated to any and all rights of Nasdaq to recover such charges.

(c) In addition, for Distributor Invoiced Recipients, Distributor shall pay any taxes, including, but not limited to, any VAT, charges or assessments (other than taxes imposed on the net income of Nasdaq) by any foreign or domestic national, state, provincial or local government bodies, or subdivisions thereof relating to the provision of the Information pursuant to this Agreement, and any related penalties or interest. In addition, if Distributor or any Distributor Invoiced Recipients is required by applicable law to deduct or withhold any such tax, charge or assessment from the amounts due Nasdaq, then such amounts due shall be increased so that the net amount actually received by Nasdaq after the deduction or withholding of any such tax, charge or assessment, will equal one hundred percent (100%) of the charges that are owed.

(d) All payments for Nasdaq Information products shall be made in immediately available funds, in the currency specified by



Nasdaq by a check to Nasdaq, by electronic funds transfer to an institution of Nasdaq's choosing or by any other form of payment as specified by Nasdaq in Appendix 1.

## 6. DISTRIBUTOR REPORTING.

(a) Distributor shall comply with the applicable reporting requirements of Nasdaq as set forth in this Agreement and the Nasdaq Requirements. Unless otherwise set forth in the Nasdaq Requirements, Distributor shall use reasonable efforts to provide such reporting within fifteen (15) days of the end of the applicable reporting period set forth by Nasdaq in the Nasdaq Requirements but Nasdaq shall not consider such reporting to be late until forty-five (45) days after the due date.

(b) Distributor is limited to a sixty (60) calendar-day grace period in which to revise or correct its original usage reporting in order to obtain retroactive credits. The grace period begins on the due date of the original usage report, but is extended to the next business day if the last day of the grace period coincides with a market holiday or weekend day. Nasdaq will not provide Distributor with back credits for original or revised reporting received after the end of the grace period. Revised reporting could include, but is not limited to, reclassification of Recipients, reporting of usage under alternative pricing structures and correction of errors by Distributor. This Section 6 does not limit Distributor's liability to Nasdaq for underreporting of usage.

## 7. DISTRIBUTOR AUDIT.

(a) From time to time, and no more than once in any twelve (12) month period unless necessary due to suspected non-compliance with the material provisions of this Agreement, Nasdaq may cause Distributor's (i) records relating to the Information, (ii) reports and payments relating to the Information, and (iii) all instruments, systems, services, platforms and apparatus used in connection with the receipt and/or use of the Information, to be reviewed by Nasdaq personnel and/or auditors of Nasdaq's choice. For avoidance of doubt, any such Nasdaq personnel or auditors shall not access, examine, observe, review or in any way gain disclosure to any information of Distributor, which is protected under applicable banking secrecy regulations. The audit shall be scheduled upon reasonable notice to Distributor, during Nasdaq Market normal business hours, and conducted in locations where, as applicable, Distributor's records are kept, where Distributor's platforms or systems are located, and/or where Distributor uses the Information. Nasdaq shall respect Distributor security policies while performing the audit. Nasdaq will make reasonable efforts to provide at least four (4) weeks advance written notice of the audit, unless the audit is scheduled due to suspected material non-compliance. Distributor shall promptly provide information or materials in response to any request for information relating to the Information. Distributor shall make available for examination all records, reports, payments, and supporting documentation, and Distributor's platforms and systems and Distributor's Service necessary in the judgment of the Nasdaq audit personnel to reach a conclusion as to the accuracy and completeness of: (i) Distributor's reports to Nasdaq, (ii) the payments connected therewith, (iii) the description provided by Distributor in accordance with the Nasdaq Requirements and (iv) compliance with this Agreement and the Nasdaq Requirements.

(b) Nasdaq shall endeavor to ensure that, where reasonably practicable, Distributor is provided with a preliminary audit response within ninety (90) days following the completion of any audit. Nasdaq shall discuss the outcome of any such preliminary audit response in good faith with Distributor or, at Distributor's election, with Distributor's designee.

(c) After receipt of the preliminary audit response, Distributor may then elect, at Distributor's sole discretion and at the Distributor's sole expense, to conduct a subsequent review to determine the magnitude of the non-compliance. This subsequent review shall be completed and submitted to Nasdaq within ninety (90) days after the preliminary audit response is received by Distributor.

(d) If Nasdaq and Distributor are not able to reach agreement concerning the preliminary audit response nor the subsequent review within ninety (90) days of Distributor's receipt of the preliminary audit response, provided that Nasdaq has proceeded with such examination and audit in good faith in accordance with the provisions hereof, then Nasdaq's determination (the "Final Audit") shall be deemed conclusive.

(e) If the Final Audit determines there is underreporting, underpayment or other financial non-compliance with this Agreement (and/or discloses additional underreported or underpaid amounts or other financial non-compliance), then such amounts shall be remitted to Nasdaq, together with applicable interest as detailed in Section 5(a) within sixty (60) days of the completion of the Final Audit. If Distributor fails to remit such additional amounts to Nasdaq by the end of this sixty (60) day cure period, Nasdaq may, in its discretion at any time, with prior notice to Distributor, terminate as provided in Section 9 of this Agreement. Distributor's liability shall be limited to unpaid fees, together with interest, for the three (3) years preceding the earlier of the

date that Distributor, Distributor's auditors or Nasdaq first knew or determined that such underreporting, underpayment or other financial noncompliance has occurred, plus any costs and expenses as set forth in Section 7(f) below, provided such underreporting, underpaying or other financial non-compliance is a result of a good faith error by Distributor. If the Final Audit discloses an overpayment, then Nasdaq will apply the overpayment for the sixty (60) days prior to the end of the period being reviewed as a credit against amounts due from Distributor.

(f) If any underreporting, underpayment or other Distributor financial non-compliance is found to be equal to or greater than ten percent (10%) of the applicable reported number for any audited or unaudited period referred to herein, Distributor shall, in addition to remitting the fees and applicable interest due relative to such underreporting, underpayment or other financial non-compliance, reimburse Nasdaq, as per Section 5 of this Agreement for any audit, legal or administrative costs and expenses incurred to detect and rectify such underreporting, underpayment or other financial non-compliance, *provided, however*, that such costs and expenses are incurred in good faith and are not unreasonable given the amount of work necessary to detect and determine the extent of, and the actual amount of, such underreporting, underpayment or other financial non-compliance.

(g) If the Final Audit reveals any material errors or omissions in the use identified by Distributor in accordance with the Nasdaq Requirements, and/or other material non-financial non-compliance with the Nasdaq Requirements, Distributor shall submit an updated use description and/or any other applicable materials demonstrating compliance with the Nasdaq Requirements, where reasonably practicable, within ninety (90) days after receipt of the preliminary audit response. If Distributor fails to demonstrate compliance during this cure period, Nasdaq may, in its discretion at any time, with prior notice to Distributor, terminate as provided in Section 9 of this Agreement.

(h) If Distributor's payment of fees for Information is fixed, Nasdaq will, in lieu of a Distributor Audit, request relevant information or documentation related to Distributor's use of the Information; provided, however, that Nasdaq shall retain the right, with reasonable Notice to Distributor, during normal business hours, to conduct a Distributor Audit on a Confidential basis of any relevant documentation of Distributor to ensure that Distributor's use of the Information conforms to the Nasdaq Requirements. Such Distributor Audit may only take place once per calendar year and only if such Distributor Audit is deemed reasonably necessary by Nasdaq due to suspected non-compliance by Distributor with the material provisions of this Agreement.

## 8. QUALIFICATION REQUIREMENTS; DISTRIBUTOR INDEMNIFICATION.

(a) Except as otherwise set forth in this Agreement, Distributor shall only furnish, or cause or permit to be furnished, all or any part of the Information to a Recipient who, at the time of receipt thereof, is of a type qualified (as set forth in the Nasdaq Requirements) to receive the Information from Distributor. Distributor agrees that Nasdaq may have different qualification requirements for different Recipients, including, but not limited to different Recipients of different types of Distributor's Services.

(b) All Data Feed Recipients must enter into a Nasdaq Global Data Agreement. For all other External Recipients, Distributor shall have a legally valid and enforceable contract with such External Recipient that (i) governs the accounts held by External Recipients with the Distributor through which the External Recipient is entitled to access the Information, including any limitations on an External Recipient's right to redistribute the Information, and (ii) includes the disclaimer detailed below or a substantially similar disclaimer. Distributor shall indemnify Nasdaq and all of its officers, directors, employees, agents and Third Party Information Providers (collectively, the "**Nasdaq Indemnified Parties**") against any assertion of claims or losses relating against the Nasdaq Indemnified Parties made by an External Recipient who receives the Information from Distributor (or any person relying upon the Information received by such a Recipient) arising from Distributor's election to distribute Information to such External Recipient.

*"© <Insert applicable year> Nasdaq, Inc. All Rights Reserved. The information, data, analysis and Information contained herein (i) include the proprietary information of Nasdaq, Inc. and applicable Nasdaq Market, (ii) are subject to applicable Nasdaq Requirements ([http://nasdaqtrader.com/Trader.aspx?id=GDP\\_Ops](http://nasdaqtrader.com/Trader.aspx?id=GDP_Ops)); (iii) may not be copied or further disseminated except as specifically authorized by Nasdaq, (iv) do not constitute investment advice, (v) are provided solely for informational purposes and (vi) Nasdaq makes no warranties including that the information is complete, accurate or timely. **Nasdaq and Nasdaq Market bear no liability with respect to the data, analysis and Information.**"*

(c) Distributor may use a Service Facilitator to facilitate the dissemination of Information in Distributor's Service, provided that Distributor has a legally valid and enforceable contract with such Service Facilitator, prior to distributing any Information to any Service Facilitator, that: (i) includes all limitations on the Service Facilitator's right to redistribute the Information; and (ii)

protects Nasdaq and the Indemnified Parties to the same extent as if the Service Facilitator had signed a Nasdaq Global Data Agreement with Nasdaq directly. Distributor shall indemnify the Nasdaq Indemnified Parties against any assertion of claims or losses relating against the Nasdaq Indemnified Parties made by a Service Facilitator who receives the Information from Distributor.

**(d)** If any Recipient fails to comply with any of the conditions, terms or provisions of this Agreement applicable to Recipients, its agreement with Nasdaq and/or Distributor for the Information, or any other agreement between Recipient and Nasdaq, or has made any representation in any such agreement which was or has become untrue, then Distributor shall, within five (5) business days after receipt of notice from Nasdaq of such failure or untruth, cease providing the Information to such Recipient and shall, within ten (10) business days following the receipt of such notice, confirm such cessation by notice to Nasdaq. Distributor shall be solely responsible for the acts and omissions of Internal Recipients. If a Recipient is to be terminated under this clause, then Nasdaq will request all Distributors to cease providing Information to such Recipients.

## 9. TERM AND TERMINATION.

**(a)** Notwithstanding the foregoing, this Agreement may be terminated by:

**(i)** either party following material breach of this Agreement by the other, upon not less than thirty (30) days prior written notice to the breaching party, unless, if the breach is capable of being cured, the breach is cured within the notice period;

**(ii)** either party, immediately, in the event that the other party becomes insolvent; or the other party makes an assignment for the benefit of creditors; or the other party does not pay its debts as they become due or admits its inability to pay its debts when due; or the other party files or has filed against it any petition under any provision of the Bankruptcy Act or an application for a receiver, trustee, or custodian is made by anyone or other party becomes the subject of any proceedings of bankruptcy, insolvency, reorganization, dissolution, receivership, liquidation or arrangement, adjustment, or composition with creditors;

**(iii)** Nasdaq, immediately, in the event that the Distributor is not permitted or not able to receive or Nasdaq is prevented from disseminating the Information, or any part thereof; or any representation, warranty or certification made by Distributor in this Agreement or in any other document furnished by Distributor is, as of the time made or furnished, materially false or misleading; Distributor proceeds with a proposed action which would result in a default of its obligations or covenants under this Agreement or in a breach of any representation, warranty or certification, which is material to the Nasdaq Markets for regulatory, commercial or other reasons, made by Distributor in connection herewith, after Nasdaq has notified Distributor that such proposed action would constitute a default hereunder Distributor; Nasdaq may terminate for cause Distributor's receipt of any other service or product provided by or on behalf of Nasdaq; or Nasdaq, in its sole reasonable discretion, determines that any failure on the part of the Distributor to comply with this Agreement has or is likely to have a materially adverse impact on the operation or performance of the System, Information or a Nasdaq Market or likely to cause disproportionate harm to Nasdaq's interests should termination be delayed;

**(iv)** Nasdaq, upon not less than thirty (30) days prior written notice, in the event that any representation, warranty or certification made by Distributor in the Agreement or in any other document furnished by Distributor becomes untrue or inaccurate and is not made true or accurate within the notice period.

**(v)** Nasdaq, upon not less than ninety (90) days prior written notice, should it determine that it will cease providing the same type of Information to all other eligible individuals or entities that were receiving the same type of Information as Distributor.

**(vi)** Distributor, upon not less than thirty (30) days prior written notice, should Distributor determine that it cannot implement additional security requirements requested by Nasdaq under Section 4(h).

**(b)** Distributor acknowledges and agrees that the exercise by Nasdaq of the remedies set forth herein for failure of Distributor to pay all charges, taxes, or assessments related to its receipt of the Information shall not be deemed or considered to be, and, to the extent permitted by applicable law, Distributor waives any right to represent or assert that any such exercise constitutes, an act or omission or any improper denial or limitation of access to any Information or facility operated by Nasdaq as

contemplated in: (i) Section 11A of the Act; (ii) any other provision of the Act; (iii) any rule or regulation adopted pursuant to the Act; (iv) any FSA regulation; or (v) any other applicable statutory obligation.

(c) The right of termination set forth herein is in addition to any other remedy at law or in equity, consistent with this Agreement, that is available to one party (including any individual Nasdaq Market) with respect to a breach by the other and is in addition to anything otherwise set forth herein.

#### **10. REQUIREMENTS OF SELF-REGULATORY ORGANIZATION; ACTIONS TO BE TAKEN IN FULFILLMENT OF STATUTORY OBLIGATIONS.**

Distributor acknowledges that Nasdaq may be under certain restrictions when offering the Information, as detailed in Appendix 1.

#### **11. CONFIDENTIALITY; DATA PROCESSING.**

(a) Under this Agreement, Nasdaq shall keep confidential the Distributor's records, reports and payments that it or its designee has reviewed or audited, and any other Distributor information or material reasonably considered to be of a confidential nature (whether or not designated as such), as well as any and all information received in connection with this Agreement, including but not limited to, business, financial, operational, product, service and other information. Distributor acknowledges that it may also obtain Nasdaq Confidential Information. All such confidential information shall be deemed confidential upon disclosure to the recipient and any related confidential oral or written information shall be deemed confidential upon disclosure to the recipient. Subject to Section 11(b) (i), the recipient shall use such confidential information solely for use consistent with the purposes of this Agreement; shall hold such confidential information in confidence; and shall not use, disclose, copy, or publish any such confidential information without the prior written approval of the other party except as otherwise set forth herein. The recipient shall take reasonable security precautions, at least as great as the precautions it takes to protect its own confidential information, but no less than reasonable care, to keep confidential the Confidential Information of the disclosing party. The recipient shall notify the disclosing party immediately upon discovery of any unauthorized use or disclosure of confidential information, and will cooperate with disclosing party in every reasonable way to help disclosing party regain possession of the confidential information and prevent its further unauthorized use or disclosure. The parties acknowledge that monetary damages may not be a sufficient remedy for unauthorized disclosure of confidential information, and that disclosing party shall be entitled, without waiving any other rights or remedies, to such injunctive or equitable relief as may be deemed proper by a court of competent jurisdiction.

(b) Nasdaq or the Distributor may disclose confidential information to the extent: (i) demanded by a court, arbitrator or government agency with regulatory jurisdiction over one or more of the Nasdaq Markets or over Distributor or any judicial or government order; (ii) necessary to fulfill any Nasdaq or Distributor regulatory responsibility, including any responsibility over members and associated persons under the Act; or (iii) necessary for Nasdaq and its employees, directors, and other agents to use consistent with the purposes of this Agreement. The duties in this Section 11 do not apply to data, information or techniques that are: (A) lawfully within a party's possession prior to the date of this Agreement and not under a duty of non-disclosure; (B) voluntarily disclosed to a party by a third-party so long as the party does not know that the third-party has breached any obligation not to reveal such data, information or techniques; (C) developed by a party independently of the disclosure; or (D) is or subsequently becomes publicly available without recipient's breach of any obligation owed disclosing party. All confidential information is and shall remain the property of the disclosing party. By disclosing confidential information to recipient, disclosing party does not grant any express or implied right to recipient to or under any patents, copyrights, trademarks, or trade secret information except as otherwise provided herein.

(c) Nasdaq shall not disclose its audit findings to any third parties (other than to its directors, independent consultants/subcontractors who are subject to confidentiality obligations or as otherwise set forth herein) and all information learned in connection with an audit shall constitute Distributor's confidential information. However, nothing herein shall prevent Nasdaq from using the audit findings to the extent the findings are used in the aggregate with other information and such aggregation does not (i) specifically identify Distributor or (ii) create a context where Distributor's identity may be reasonably inferred.

(d) In the course of providing the services to Distributor or in the submission of applicable reporting pursuant to the Agreement, Nasdaq may Process Personal Data as part of the services or in support of its rights (including, but not limited to, its

audit and usage review rights) under this Agreement. Distributor shall provide to Nasdaq such Personal Data as reasonably requested by Nasdaq to perform the Services and enforce its rights (including, but not limited to, its audit and usage review rights) under this Agreement. The Parties agree to comply with provisions of the Data Processing Addendum (<http://www.nasdaqtrader.com/content/AdministrationSupport/AgreementsData/GDA-DPA.pdf>) with respect to any Personal Data Processed by Nasdaq, each acting reasonably and in good faith. With respect to individuals' whose Personal Data is Processed by Nasdaq, the current publicly-posted Privacy Policy (<http://nasdaqtrader.com/Trader.aspx?id=Privacy>) shall apply to such Processing. Distributor agrees to refer any individual whose Personal Data may be processed by Nasdaq to the Privacy Policy with respect to the individual's rights with respect to such Processing by Nasdaq. Terms not otherwise defined in this Agreement shall be defined in the Data Processing Addendum.

## **12. NASDAQ WARRANTIES; DISCLAIMERS OF WARRANTIES.**

NASDAQ WILL MAKE COMMERCIALLY REASONABLE EFFORTS TO OFFER THE INFORMATION AS PROMPTLY AND AS ACCURATELY AS IS REASONABLY PRACTICABLE. NOTWITHSTANDING THE FOREGOING, DISTRIBUTOR ACKNOWLEDGES AND AGREES THAT THE INFORMATION AND ANY AND ALL MATERIAL RELATED TO THE INFORMATION, INCLUDING, BUT NOT LIMITED TO, THE SPECIFICATIONS, ARE BEING PROVIDED "AS IS" WITH NO WARRANTIES OTHER THAN THOSE WARRANTIES EXPRESSLY SET FORTH IN THE DISTRIBUTOR AGREEMENT. IN THE EVENT THAT THE INFORMATION IS NOT AVAILABLE AS A RESULT OF A FAILURE BY NASDAQ TO PERFORM ITS OBLIGATIONS UNDER THIS AGREEMENT, NASDAQ WILL ENDEAVOR, GIVING DUE REGARD FOR THE COST, TIME, AND EFFECT ON OTHER USERS, TO CORRECT ANY SUCH FAILURE. IN THE EVENT THAT THE INFORMATION IS NOT AVAILABLE, IS INTERRUPTED, IS INCOMPLETE OR IS NOT ACCURATE OR IS OTHERWISE MATERIALLY AFFECTED FOR A CONTINUOUS PERIOD OF FOUR (4) HOURS OR MORE DURING THE TIME THAT NASDAQ REGULARLY TRANSMITS THE INFORMATION, OR FOR MORE THAN A TOTAL DURATION OF TWELVE (12) HOURS IN A SINGLE CALENDAR MONTH DURING THE TIME THAT NASDAQ REGULARLY TRANSMITS THE INFORMATION DURING A SINGLE CALENDAR MONTH, DUE TO THE FAULT OF NASDAQ (EXCEPT FOR A REASON PERMITTED IN THE AGREEMENT), DISTRIBUTOR'S OR ANY OTHER INDIVIDUAL'S OR ENTITY'S EXCLUSIVE REMEDY AGAINST NASDAQ SHALL BE, AT DISTRIBUTOR'S OPTION, EITHER A PRORATED CREDIT OR A PRORATED REFUND OF ANY MONIES DUE TO NASDAQ FROM DISTRIBUTOR (LESS MONIES REFUNDED OR CREDITED TO DISTRIBUTOR'S RECIPIENTS) FOR THE INFORMATION AT ISSUE FOR THE PERIOD AT ISSUE. SUCH CREDIT OR REFUND SHALL BE REQUESTED BY WRITTEN NOTICE TO NASDAQ WITH ALL PERTINENT DETAILS INCLUDED. IN THOSE CASES WHERE DISTRIBUTOR RECEIVES SAID CREDIT OR REFUND ON BEHALF OF ITS RECIPIENTS, DISTRIBUTOR SHALL PROMPTLY PROVIDE THE SAME CREDIT OR REFUND ON BEHALF OF NASDAQ TO DISTRIBUTOR INVOICED RECIPIENTS. BEYOND THE WARRANTIES STATED IN THIS SECTION, THERE ARE NO OTHER WARRANTIES OF ANY KIND, EXPRESS, IMPLIED OR STATUTORY (INCLUDING, WITHOUT LIMITATION, TIMELINESS, TRUTHFULNESS, SEQUENCE, COMPLETENESS, ACCURACY, FREEDOM FROM INTERRUPTION, ANY IMPLIED WARRANTIES ARISING FROM TRADE USAGE, COURSE OF DEALING, OR COURSE OF PERFORMANCE, OR THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE).

## **13. LIMITATION OF LIABILITY.**

(A) EXCEPT FOR CLAIMS ARISING FROM NASDAQ'S WILLFUL MISCONDUCT, AND/OR NASDAQ'S INDEMNIFICATION AND/OR CONFIDENTIALITY OBLIGATIONS AS SET FORTH IN THIS AGREEMENT, NASDAQ AND ITS THIRD PARTY INFORMATION PROVIDERS SHALL NOT BE LIABLE TO DISTRIBUTOR OR TO ANY OTHER PERSON FOR TRADING LOSSES, LOSS OF ANTICIPATED PROFITS, LOSS BY REASON OF SHUTDOWN IN OPERATION OR FOR INCREASED EXPENSES OF OPERATION, OR FOR INDIRECT, SPECIAL, PUNITIVE, CONSEQUENTIAL, OR INCIDENTAL LOSS OR DAMAGE OF ANY NATURE ARISING FROM ANY CAUSE WHATSOEVER, EVEN IF NASDAQ AND/OR ITS THIRD PARTY INFORMATION PROVIDERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. EXCEPT FOR CLAIMS ARISING FROM DISTRIBUTOR'S WILLFUL MISCONDUCT, AND/OR DISTRIBUTOR'S INDEMNIFICATION AND/OR CONFIDENTIALITY OBLIGATIONS AS SET FORTH IN THIS AGREEMENT, DISTRIBUTOR SHALL NOT BE LIABLE FOR INDIRECT, SPECIAL, PUNITIVE, CONSEQUENTIAL, OR INCIDENTAL LOSS OR DAMAGE OF ANY NATURE ARISING FROM ANY CAUSE WHATSOEVER, EVEN IF DISTRIBUTOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

(B) NASDAQ SHALL NOT BE LIABLE TO DISTRIBUTOR OR TO ANY OTHER PERSON FOR ANY UNAVAILABILITY, INTERRUPTION, DELAY, INCOMPLETENESS, OR INACCURACY OF THE INFORMATION THAT LASTS LESS THAN FOUR (4) CONTINUOUS HOURS DURING THE TIME THAT NASDAQ REGULARLY TRANSMITS THE INFORMATION, OR FOR LESS THAN TWELVE (12) HOURS DURING THE TIME THAT NASDAQ REGULARLY TRANSMITS THE INFORMATION DURING A SINGLE CALENDAR MONTH OR IF



THE INFORMATION IS MATERIALLY AFFECTED FOR LESS THAN FOUR (4) CONTINUOUS HOURS DURING THE TIME THAT NASDAQ REGULARLY TRANSMITS THE INFORMATION.

(C) EXCEPT WHERE NASDAQ IS INDEMNIFYING THE DISTRIBUTOR AS SET FORTH IN THIS AGREEMENT AND/OR IS IN BREACH OF ITS CONFIDENTIALITY OBLIGATIONS UNDER THIS AGREEMENT, IF NASDAQ OR ANY NASDAQ COMPANY IS FOR ANY REASON HELD LIABLE TO DISTRIBUTOR, OR TO ANY OTHER PERSON, FOR CLAIMS ARISING FROM THE INFORMATION, WHETHER IN TORT OR IN CONTRACT, THE LIABILITY OF NASDAQ WITHIN A SINGLE YEAR OF THIS AGREEMENT (FROM THE EFFECTIVE DATE OF THIS AGREEMENT) IS LIMITED TO AN AMOUNT OF DISTRIBUTOR'S DIRECT DAMAGES THAT IS ACTUALLY INCURRED BY DISTRIBUTOR IN REASONABLE RELIANCE, AND WHICH AMOUNT DOES NOT EXCEED, AT DISTRIBUTOR'S OPTION, A MONTH'S CREDIT OR A MONTH'S REFUND OF THE AVERAGE MONTHLY AMOUNT PAID Nasdaq, CALCULATED OVER THE TWELVE (12) MONTHS PRECEDING THE CLAIM. THIS SUBSECTION SHALL NOT RELIEVE NASDAQ FROM LIABILITY FOR DAMAGES THAT RESULT FROM ITS OWN GROSS NEGLIGENCE OR WILLFUL TORTIOUS MISCONDUCT, OR FROM PERSONAL INJURY OR WRONGFUL DEATH CLAIMS.

(D) THE DISTRIBUTOR AND NASDAQ UNDERSTAND AND AGREE THAT THE PRICING FOR THE INFORMATION REASONABLY REFLECTS THE ALLOCATION OF RISK AND LIMITATION OF LIABILITY SET FORTH IN THIS SECTION.

(E) NASDAQ SHALL NOT BE LIABLE TO DISTRIBUTOR OR TO ANY OTHER PERSON FOR THE UNAVAILABILITY, INTERRUPTION, DELAY, INCOMPLETENESS OR INACCURACY OF INFORMATION FROM NASDAQ'S THIRD PARTY INFORMATION PROVIDERS.

(F) NASDAQ SHALL NOT BE LIABLE TO DISTRIBUTOR OR TO ANY OTHER PERSON FOR THE UNAVAILABILITY, INTERRUPTION, DELAY, INCOMPLETENESS OR INACCURACY OF INFORMATION OR DATA RECEIVED FROM A REDISTRIBUTOR OR FOR ANY ACTS OR OMISSIONS OF A REDISTRIBUTOR.

#### 14. FORCE MAJEURE.

Notwithstanding any other term or condition of this Agreement, none of Nasdaq, its Third Party Information Providers (but not other distributors) or Distributor shall be obligated to perform or observe its respective obligations under this Agreement (except for regulatory obligations) if prevented or hindered from doing so by any circumstances found to be beyond its reasonable control.

#### 15. INDEMNIFICATION.

(a) Distributor shall defend, be liable to, indemnify, and hold the Nasdaq Indemnified Parties harmless from and against, any and all Claims or Losses imposed on or asserted against any of the Nasdaq Indemnified Parties by third parties to the extent that the Claims and Losses result from or relate to: (i) failure of Distributor, its employees, independent consultants/subcontractors, directors, and other agents to comply with the terms and conditions of this Agreement; (ii) failure of Recipients to comply with the terms and conditions of Nasdaq required agreements for the Information if Distributor has failed to notify Nasdaq of such non-compliance within ten (10) days after Distributor knows of such non-compliance, unless such Recipient is party to a Nasdaq Global Data Agreement; (iii) any assertion of Claims or Losses relating to the subject matter or existence of this Agreement against the Nasdaq Indemnified Parties made by a Recipient (or any person relying upon the Information received by such Recipient), unless such Recipient is party to a Nasdaq Global Data Agreement, excluding any such assertion relating to acts or omissions of Nasdaq; (iv) any assertion of Claims or Losses against the Nasdaq Indemnified Parties by Recipients relating to Nasdaq's exercise of its remedies against Recipients pursuant to this Agreement excluding any such assertion relating to acts or omissions of Nasdaq, unless such Recipient is party to a Nasdaq Global Data Agreement; (v) breach of any warranty by Distributor; (vi) any defense or participation by the Nasdaq Indemnified Parties in any action, suit, arbitration, or judicial or administrative proceeding involving any Claims or Losses described in this section, or (vii) the receipt or use of the Information (including representations about the Information) by Distributor, its employees, directors, and other agents contrary to the provisions of this Agreement.

(b) Distributor's obligation to defend and indemnify under this Section 15(a) above shall be conditioned on the following (but any limits on Distributor's obligations are only to the extent that Nasdaq's failure to comply with the following has caused a material harm to Distributor's ability to defend and indemnify): (i) Nasdaq shall promptly notify Distributor in writing of the claim, action or allegation (but, in any event, in a time frame that does not prejudice the rights of Distributor or Nasdaq); (ii) Nasdaq shall cooperate fully with Distributor in the defense thereof and Distributor shall be liable to Nasdaq for Nasdaq's

reasonable expenses (excluding reimbursement for the time value of Nasdaq employees, directors, and/or other agents in providing such cooperation); (iii) Distributor shall have sole control of the defense and all related settlement negotiations, but, upon Nasdaq's request, shall apprise Nasdaq of the status of any proceedings or negotiations. Distributor shall have a right to defend provided that Distributor demonstrates to Nasdaq's reasonable satisfaction that it is financially able to defend such action and pay any judgment or settlement and counsel retained by Distributor is reasonably satisfactory to Nasdaq, and Nasdaq shall not reasonably withhold or delay its approval with respect to such matters. Distributor shall not settle any action against Nasdaq that in any way restricts or impairs Nasdaq's intellectual property rights.

(c) Nasdaq shall defend, be liable to, indemnify, and hold Distributor, its employees, directors, other agents, and Affiliates ("Distributor's Indemnified Parties") harmless from and against any and all Claims and Losses imposed on or asserted against Distributor's Indemnified Parties by a third party that the Information or Services as provided by Nasdaq infringes or misappropriates any patent, trade secret, copyright or other proprietary rights of any person, save to the extent that such infringement or misappropriation is attributable to a breach of this Agreement by Distributor. Nasdaq's obligation to defend and indemnify under this subsection shall be conditioned on the following (but any limits on Nasdaq's obligations are only to the extent that Distributor's failure to comply with the following has caused a material harm to Nasdaq's ability to defend and indemnify): (i) Distributor shall promptly notify Nasdaq in writing of the claim, action or allegation (but, in any event, in a time frame that does not prejudice the rights of Distributor or Nasdaq); (ii) Distributor shall cooperate fully with Nasdaq in the defense thereof and Nasdaq shall be liable to Distributor for Distributor's reasonable expenses (excluding reimbursement for the time value of Distributor's employees, directors, other agents and affiliates in providing such cooperation); and (iii) Nasdaq shall have sole control of the defense and all related settlement negotiations, but upon Distributor's request, shall apprise Distributor of the status of any proceedings or negotiations.

(d) Nasdaq shall not have the obligation to defend, indemnify and hold Distributor's Indemnified Parties for any and all Claims and Losses imposed on, incurred by or asserted against Distributor, its employees, directors, other agents and affiliates by any fully adjudicated and non-appealable judgment or Nasdaq negotiated settlement as a result of any allegation of infringement or misappropriation if the System, Information or any specifications have not been used in accordance with this Agreement which resulted in such infringement or misappropriation or if Distributor uses the System, Information or any specifications after Nasdaq notifies Distributor of a potential or actual infringement claim or to the extent it is based on use of a superseded version of the System, Information or any specifications if such infringement or misappropriation would have been avoided by use of the current version of the System, Information or specifications or if the infringement or misappropriation claim, action, or allegation is the result of the combination, operation, or use of the System furnished timely to Distributor by Nasdaq, Information or any specifications with hardware, software or materials if such infringement or misappropriation would have been avoided by the use of the System, Information or any specifications without such hardware, software or materials.

(e) In the event of a claim, action or allegation of infringement or misappropriation or if, in Nasdaq's opinion, such a claim, action or allegation is likely to occur or if the use of the System, Information or any specifications is enjoined because of infringement or misappropriation, Nasdaq may, at its sole option and expense, (i) procure for Distributor the right to continue using the System, Information or any specifications; (ii) replace or modify the System, Information or any specifications to be non-infringing, and require the return of the potentially infringing or misappropriating items, if applicable, without liability to Distributor or any other person; or (iii) terminate this Agreement immediately without liability to Distributor or any other person.

(f) This section and Section 8 set forth the entire liability and the exclusive remedy of Nasdaq for the infringement or misappropriation of intellectual property.

## 16. NO GOVERNMENT RIGHTS.

This Agreement neither grants nor is intended to grant, directly or through Distributor, to any governmental entity or agency any rights in technical data (including, but not limited to, software) as set forth in FAR Subpart 27.4 or any other regulation. Any such rights of a governmental entity or agency in technical data (including, but not limited to, software) shall be determined by a separate written agreement with NASDAQ.

## 17. CORPORATE NAMES; PROPRIETARY RIGHTS.

Distributor acknowledges and agrees that the Nasdaq has proprietary rights in certain names, including, but not limited to the names and trademarks of the Nasdaq, Inc. and the Nasdaq Markets and Distributor shall not use these names in any way that



would infringe upon such names and shall not use these names in any advertising or marketing materials, except with Nasdaq's prior written consent. Distributor acknowledges and agrees that Nasdaq has proprietary rights in certain trademarks, servicemarks, copyrights or patents, registered or unregistered, and Distributor shall not use these trademarks, servicemarks, copyrights or patents, registered or unregistered, in any way that would infringe upon such marks, copyrights or patents. Nasdaq acknowledges and agrees that Distributor has proprietary rights in Distributor's name and Nasdaq shall not use Distributor's name in any way that would infringe upon such name and shall not use the name in any advertising or marketing materials, without Distributor's prior written consent, which consent may be withheld in Distributor's sole discretion, or subject to another agreement between the parties. Nasdaq acknowledges and agrees that Distributor has proprietary rights in certain trademarks, servicemarks, copyrights or patents, registered or unregistered, and Nasdaq shall not use these trademarks, servicemarks, copyrights or patents, registered or unregistered, in any way that would infringe upon such marks, copyrights or patents.

#### **18. SUBSEQUENT PARTIES; LIMITED RELATIONSHIP.**

Nothing in this Agreement, express or implied, is intended to or shall (a) confer on any person other than the parties hereto, or their respective permitted successors or assigns, any rights to remedies under or by reason of this Agreement; (b) constitute the parties hereto partners or participants in a joint venture; or (c) appoint one party the agent of the other.

#### **19. ENTIRE AGREEMENT.**

All personal pronouns used in this Agreement, whether used in the masculine, feminine or neuter gender, shall include all other genders, if and where applicable. The use of the singular in the Agreement shall include the plural, and vice versa. Section headings are included for convenience only and are not to be used to construe or interpret this Agreement. All references contained herein to sections or subsections shall refer to the sections or subsections of this Agreement, unless specific reference is made to the sections or subsections of another document.

#### **20. CLAIM TIME LIMIT.**

In no event shall any claim, dispute, controversy or other matter arising pursuant to this Agreement (other than claims for financial non-compliance arising from an audit performed in accord with the provisions of Section 7 above) be made against Nasdaq, Distributor, or any person claiming by or through either Nasdaq or Distributor, later than three (3) years after the claim, dispute, controversy or other matter in question has arisen.

#### **21. WAIVER OF CLAIMS.**

Nasdaq, Distributor, any person claiming by or through Nasdaq and/or Distributor and their respective employees, directors, and other agents expressly waive any claims, disputes, controversies, and other matters not brought within the period set forth above.

#### **22. AMENDMENT; WAIVER; SEVERABILITY, LOCAL LAW.**

(a) Except as may otherwise be set forth in this Agreement, Nasdaq may alter any term or condition of this Agreement on ninety (90) days notice to Distributor, and any use of the Information after such date is deemed acceptance of the new term or condition. The means of notifying Distributor of such new term or condition may include, but not be limited to, emailing such term or condition to Distributor or posting such alteration on the Nasdaq Trader website or a successor site shall be as per the Summary, Section 8. No failure on the part of Nasdaq or Distributor to exercise, no delay in exercising, and no course of dealing with respect to any right, power, or privilege under the Agreement shall operate as a waiver thereof, nor shall any single or partial exercise of any such right, power, or privilege preclude any other or further exercise thereof or the exercise of any other right, power, or privilege under this Agreement.

(b) Nasdaq will respect local banking legislation or other government legislation that Distributor is legally obligated to comply. Further, if any of the provisions of this Agreement, or application thereof to any individual, entity or circumstance, shall to any extent be held invalid or unenforceable, the remainder of this Agreement, or the application of such terms or provisions to individuals, entities, or circumstances other than those as to which they are held invalid or unenforceable, shall not be affected thereby and each such term and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

(c) The parties shall not commit, authorize or permit any action which would cause either party and/or any of its Affiliates to be in violation of any applicable anti-bribery law or regulation. Each party agrees that it will neither offer or give, or agree to give, to any employee, representative or third party acting on behalf of the other party, nor accept, or agree to accept from any

employee, representative or third party acting on behalf of the other Party, any unlawful payment, compensation or remuneration, be it monetary or other thing of value, in connection with the negotiation, execution, conclusion, or the performance of this Agreement. The parties shall promptly notify each other if they become aware of any breach of this provision, and either party may terminate this Agreement with immediate effect in the event of such a breach by the other party.

**(d)** In the event of a conflict between these Terms and Conditions and the Summary or the Introduction and Instructions, the terms of these Terms and Conditions shall apply.

### **23. SURVIVAL OF PROVISIONS.**

The terms of Sections 1, 4 (i), 5, 6, 7, 11, 12, 13, 15, 16, 17, 18, 20 and 21 shall survive the completion of performance or any termination of this Agreement.

### **24. COUNTERPARTS.**

This Agreement may be executed in one or more counterparts, which shall each be considered an original, but all of which together shall constitute one and the same Agreement.



# Nasdaq Global Data Agreement Appendix 1

**1. INFORMATION.** Nasdaq offers Information from the following Nasdaq Markets and may offer Information from other Nasdaq Markets or other entities, a full list of which is available on [www.NASDAQTrader.com](http://www.NASDAQTrader.com). Your receipt of data from another Nasdaq Market, even if not set forth below, will constitute your acceptance of this Agreement's applicable terms and conditions with respect to such data.

Legal Entity and Principal Place of Business	Entity Type	Funds	Governing Laws
<a href="#">Nasdaq, Inc.</a> 151 W. 42 <sup>nd</sup> Street New York, New York 10036 USA	Delaware Corporation	US Dollars	This Agreement shall be construed and enforced in accordance with, and the validity and performance hereof shall be governed by, the laws of the State of New York, without reference to principles of conflicts of laws thereof. Any dispute that cannot be amicably settled that arises out of this Agreement shall be referred to arbitration and shall be conducted in accordance with the rules of the American Arbitration Association. All such proceedings shall be held in New York City, NY, and shall be conducted in the English language, which shall also be the language of the documents.
<a href="#">NASDAQ Information LLC</a> 151 W. 42 <sup>nd</sup> Street New York, New York 10036 USA	Delaware Corporation	US Dollars	This Agreement shall be construed and enforced in accordance with, and the validity and performance hereof shall be governed by, the laws of the State of New York, without reference to principles of conflicts of laws thereof. Any dispute that cannot be amicably settled that arises out of this Agreement shall be referred to arbitration and shall be conducted in accordance with the rules of the American Arbitration Association. All such proceedings shall be held in New York City, NY, and shall be conducted in the English language, which shall also be the language of the documents.
<a href="#">NASDAQ Nordic LTD</a> Fabianinkatu 14, FI-00131 Helsinki FINLAND	Finnish company	Euros	This Agreement shall be governed by and construed in accordance with the laws of Finland. Any dispute that cannot be amicably settled that arises out of this Agreement shall be referred to arbitration and shall be conducted in accordance with the rules for expedited arbitrations of the Arbitration Institute of the Stockholm Chamber of Commerce. All such proceedings shall be held in Stockholm, and shall be conducted in the English language, which shall also be the language of the documents.
<a href="#">NASDAQ BX</a> 151 W. 42 <sup>nd</sup> Street New York, New York 10036 USA	Delaware Corporation	US Dollars	This Agreement shall be construed and enforced in accordance with, and the validity and performance hereof shall be governed by, the laws of the State of New York, without reference to principles of conflicts of laws thereof. Any dispute that cannot be amicably settled that arises out of this Agreement shall be referred to arbitration and shall be conducted in accordance with the rules of the American Arbitration Association. All such proceedings shall be held in New York City, NY, and shall be conducted in the English language, which shall also be the language of the documents.
<a href="#">NASDAQ PHLX</a> FMC Tower, Level 8 2929 Walnut Street Philadelphia, PA 19104 USA	Delaware Corporation	US Dollars	This Agreement shall be construed and enforced in accordance with, and the validity and performance hereof shall be governed by, the laws of the State of New York, without reference to principles of conflicts of laws thereof. Any dispute that cannot be amicably settled that arises out of this Agreement shall be referred to arbitration and shall be conducted in accordance with the rules of the American Arbitration Association. All such proceedings shall be held in New York City, NY, and shall be conducted in the English language, which shall also be the language of the documents.

<p>NASDAQ Oslo ASA</p> <p>Vollsveien 19 PO Box 373 NO-1326 Lysaker NORWAY</p>	<p>Norwegian Company</p>	<p>Euros</p>	<p>This Agreement shall be governed by and construed in accordance with the laws of Norway. Any dispute that cannot be amicably settled that arises out of this Agreement shall be referred to arbitration and shall be conducted in accordance with the Norwegian Arbitration Act 2004. Unless the parties agree otherwise such proceedings shall be held in Oslo, and shall be conducted in the English language, which shall also be the language of the documents. The proceedings as well as the verdict shall be confidential between the parties, except for information which a party is required to disclose by virtue of law or governmental order.</p>
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## 2. Requirements of Self-Regulatory Organization; Actions To Be Taken In Fulfillment of Statutory Obligations.

(a) Distributor acknowledges that in the United States: (i) several of the Nasdaq Markets are registered with the SEC as national securities exchanges pursuant to Section 6 of the Act, and FINRA is registered with the SEC as a national securities association pursuant to 15A of the Act; (ii) FINRA and Nasdaq have a statutory obligation to protect investors and the public interest, and to ensure that quotation information supplied to investors and the public is fair and informative, and not discriminatory, fictitious or misleading; (iii) Section 19(g)(1) of the Act mandates that FINRA and Nasdaq comply with the Nasdaq Requirements;

(iv) Nasdaq has jurisdiction to enforce compliance with certain of the Nasdaq Requirements; (v) FINRA has jurisdiction to enforce compliance with certain of the Nasdaq Requirements; and (vi) Nasdaq is obligated to offer terms that are not unreasonably discriminatory between Distributors, subject to applicable Nasdaq Requirements. Accordingly, Distributor agrees that Nasdaq, when required to do so in fulfillment of its statutory obligations, may, temporarily or permanently, unilaterally condition, modify or terminate the right of any or all individuals or entities to receive or use the Information. Nasdaq shall undertake reasonable efforts to notify Distributor of any such condition, modification or termination, and Distributor shall promptly comply with any such notice within such period of time as may be determined in good faith by Nasdaq to be necessary, consistent with its statutory obligations. Any person that receives such a notice shall have available to it such procedural protections as are provided to it by the Act and the applicable rules thereunder.

(b) Distributor acknowledges that, in Europe, Nasdaq is obligated to offer terms that are not unreasonably discriminatory between Distributors, subject to applicable Nasdaq Requirements. Nasdaq when required to do so in fulfillment of its statutory obligations, may, temporarily or permanently, unilaterally condition, modify or terminate the right of any and all individuals or entities to receive or use the Information. NASDAQ shall notify the Distributor of any such condition, modification or termination, and the Distributor shall promptly comply with any such notice within such period of time as may be determined in good faith by Nasdaq to be necessary, consistent with its statutory obligations. If the Distributor receives such notice, it will have available to it all procedural protections provided to it by statute and any applicable regulatory rules.

(c) If Distributor is a member of a Nasdaq Market, then Distributor expressly acknowledges and agrees that (i) this Agreement does not limit or reduce in any way Distributor's obligations and responsibilities as a member of any applicable Nasdaq Market; (ii) this Agreement does not in any way alter the procedures or standards generally applicable to disciplinary or other actions taken by Nasdaq to enforce compliance with, or impose sanctions for violations of, the Nasdaq Requirements; and (iii) the nonpayment of amounts due under this Agreement could result in the suspension or cancellation of Distributor's membership in a Nasdaq Market in accordance with the Nasdaq Requirements.



# Nasdaq Global Data Agreement Appendix 2

Nasdaq may offer Web Access Information via a Nasdaq website. If Distributor receives such Information, the below terms shall apply.

## 1. DEFINITIONS

- (a) **"Web Access Information"** means services that enable Distributor to receive certain Information through a Nasdaq website.
- (b) **"Security Administrator"** means a security contact person designated by Distributor to Nasdaq in writing.
- (c) **"Security Device"** means any passwords, Internal Recipient identification numbers, certificates or other form(s) of authentication or security used in connection with the Service as defined below. Security Device may include third party software.
- (d) **"Service"** means any Nasdaq services that enable Distributor to receive Web Access Information.

## 2. SERVICE; DISTRIBUTOR OBLIGATIONS

- (a) Security Devices may be provided to Distributor in connection with the provision of Service.
- (b) Distributor shall designate to Nasdaq at least one Security Administrator along with a clear explanation of such a person's scope of authority related to the Service. Nasdaq may request clarification of the Security Administrator or object to the Security Administrator for any reason.
- (c) Distributor is required to ensure Security Administrators and Internal Subscribers adhere to the Nasdaq Requirements. Distributor shall be responsible, under regulation, contract, tort or otherwise, for all actions or omission of a Security Administrator an Internal Recipient (including those that would have been performed by a Security Administrator or an Internal Recipient had one been name at the time.)
- (d) Distributor shall not reverse engineer, decode, decompile, attempt to tamper with, evade, discover the method of operations or defeat and Security Device provided for use with the Service. If applicable law authorizes Distributor to perform certain types of reverse engineering or the like and declares unenforceable contractual obligations that conflict with that law, then Distributor may only perform such reverse engineering or the like as is expressly allowed by, and in strict compliance with, such law.
- (e) Distributor shall comply, at its expense, with all reasonable security specifications or instructions of Nasdaq, in order to prevent the Service from being improperly used or accessed or the Web Access Information from being improperly take from any Recipient's place of business and/or residence of business.
- (f) If Distributor actually knows or discovers weakness in or about any particular reach of any Security Device provide for use with the Service to the extent such information is not generally known to the public, Distributor shall immediately notify Nasdaq.

## 3. VIRUS NOTIFICATION AND RISK

Distributor acknowledges that it is possible to contract a virus or similar "disease" by using the Internet or material downloaded from it. Websites are inherently not as secure or reliable an environment as computers connected by dedicated lines and have been, in the past vulnerable, to attack by hackers and third parties. Distributor should obtain, use and update virus-checking software routinely when Distributor is using Information or data obtained from the Internet. While Nasdaq cannot assure Distributor that the Service will be virus- or problem-free, Nasdaq will make commercially reasonable efforts to ensure the Service is virus-free. By using the Service, Distributor agrees to assume the risk of any unavailability, interruption, delay, incompleteness or inaccuracy of the Service.

## 4. THIRD PARTY SOFTWARE

Nasdaq may provide Distributor with certain third-party software in connection with Distributors use of the Service. Distributor agrees to use the software only in connection with its use of the Service and agrees to comply with all relevant United States export restrictions. Distributor's sole remedy against Nasdaq for any errors or defects in third-party software (including, but not limited to, intellectual property infringement claims) shall be to cease using such software and return the software to Nasdaq. The third-party software is provided "as is" without warranty of any kind, although Nasdaq may, where applicable, pass through any warranties it obtains from its third-party software suppliers. Nasdaq shall not be liable for any errors or defects in any third-party's software (including claims of infringement).

# Exhibit 4





## US EQUITIES AND OPTIONS DATA POLICIES

**Under the terms of the Nasdaq Global Data Agreement, Distributors of Nasdaq information must adhere to the following Nasdaq Data Policies. Nasdaq will update these policies periodically, and interim updates will be communicated via Nasdaq Data News.**

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# 1. PRICING CLARIFICATIONS

## OVERVIEW

The below clarifications are intended to clarify certain fees within each market. The policies below are in effect unless otherwise noted on the price list published on [NasdaqTrader](#).

Pricing Clarifications:	
Distributor Fees	<p>The External Distributor Fee for a data product generally includes the Internal Distributor Fee for that data product, and the Real Time Administrative Fee or Access fee includes the Delayed Administrative Fee for the Information received (for details see <a href="#">NasdaqTrader</a>).</p> <p><b>EXCEPTIONS:</b></p> <p>Nasdaq TotalView ITCH FPGA (field programmable gate array): An Internal and External Distributor of Nasdaq TotalView ITCH FPGA must pay both the Internal and External Distributor fee for TotalView ITCH FPGA.</p> <p>Distributors looking to recreate the BBO portion of Nasdaq Basic, BX BBO, and/or PSX BBO products from an existing TotalView connection may do so for Display purposes from Nasdaq, BX, and/or PSX TotalView and will be required to submit the <a href="#">Nasdaq BBO from TotalView Form</a>.</p> <p>Distributors that distribute Nasdaq Last Sale or Nasdaq Last Sale Plus, but due to redistributor limitations have to receive Nasdaq Basic, must submit the <a href="#">Nasdaq Last Sale / Nasdaq Last Sale (Plus) only Declaration Form</a>. The Distributor acknowledges through this declaration that additional fees will apply if Nasdaq Basic is distributed.</p>
Administration Fee	<p>Nasdaq currently assesses an Administration Fee for certain information provided to Distributors both internal and external. Distributors will be invoiced for the appropriate Administration Fee upon approval, please refer to the below links for details:</p> <p style="text-align: center;">U.S. DATA PRODUCTS FEE SCHEDULE</p> <p>For Distributors of Nasdaq Information, the Administration Fee varies based on which data sets are received by the Distributor, and whether the data is received on a real-time or delayed basis. All Nasdaq proprietary exchange data received directly from Nasdaq is deemed real-time information; data received by a Redistributor may be considered delayed.</p>
BX Options	One Distributor Fee allows access to both the BX Options Depth of Market and BX Options Top of Market feed, while Subscriber fees are assessed individually for each feed.
The Nasdaq Options Market	The unit of count for the Nasdaq Options Market data feeds is based on a per Subscriber basis and not per User. Every device should be counted according to the policy definition for a Subscriber.

Net Order Imbalance Snapshot (NOIS)	Nasdaq exempts Recipients of Net Order Imbalance Snapshot (NOIS) from the Nasdaq Subscriber fees and Distributor fees for NOIS/Nasdaq TotalView. NOIS consists of specifically scheduled messages as a subset of the Order Imbalance Indicator. The messages as well as the timing of messages are optimized for newswire services. Please contact Nasdaq to obtain this service or to discuss alternate use cases.
Nasdaq Data-On-Demand	Nasdaq prohibits external distribution of Nasdaq Data-On-Demand data unless distributed via a controlled product.

## 2. TERMINOLOGY & UNIT OF COUNT

### OVERVIEW

Except where specifically detailed otherwise in this policy document, distribution of Nasdaq Information is to be measured, controlled and recorded by using the Interrogation Device or Subscriber as the Unit of Count.

Terminology	Definition	Unit of count
Subscriber also referred to as Interrogation Device, Controlled Device, Device, or Access	A device, computer terminal, automated service, or unique user identification and password combination that is not shared and prohibits simultaneous access, and which is capable of accessing Exchange Information; "Interrogation Device," "Device" or "Access" have the same meaning as Subscriber. For any device, computer terminal, automated service, or unique user identification and password combination that is shared or allows simultaneous access, Subscriber shall mean the number of such simultaneous accesses.	The Number of physical Devices or the Number of Unique User IDs and Password combinations that are not shared by multiple people and cannot simultaneously log-on with multiple instances or to multiple Devices.  Distributors are to report the total number of Subscribers with the potential to access the Information, unless the Distributor is able to technically track actual usage for each Subscriber.
Per Query	Retrieval by a Subscriber of Nasdaq Information that is updated with action by Subscriber; each unrequested or pushed update of price(s) or quote(s) must be recorded (see Pricing clarifications above for additional details)	Any displayed quote requested or pushed
Direct Access	a telecommunications interface with Nasdaq for receiving Nasdaq data or receiving a Nasdaq Data Feed (either raw or normalized) within the Nasdaq co-location facility or receiving Nasdaq data via an Extranet access provider or other such provider that is fee-liable under Equity 7, Section 125.	Equipment Configurations or Direct Circuit Connections; and Data Feed Subscribers
Data Feed	Any uncontrolled transmission of Nasdaq Information in which the Distributor does not control both the entitlements and the display of the Information.	The number of Data Feed Subscriber(s)
User	A natural person that receives Exchange Information.	Each natural person

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Website	One or more public internet uniform resource locator(s) (URL) with a single commercial brand or identity	Each unique Website with access to Nasdaq Information. Nasdaq reserves the right to determine whether any URL or group of URLs should be regarded as separate Websites for fee purposes.
Delay Interval	A period of time after which Information becomes Delayed Information, as specified by Nasdaq. Please refer to the following pages for the Delay Intervals.	Some products are eligible for a Delay Interval, and after such time the data may be fee-liable or free, depending upon the product. Note that Nasdaq does not offer reduced pricing for all products, some products are listed as not eligible for a Delay Interval below, and the Real-Time fees apply.
Per Television Household	A residential address at which a "Household" is able to access a broadcast with Nasdaq Information. Household populations must be validated by a third-party vendor or ratings agency approved by Nasdaq, at Nasdaq's sole discretion.	The number of households capable of receiving Nasdaq Information.
Unique Devices or Per Device	The number of unique Devices accessing a website or mobile application. Distributors restricting access to the Distributor's service may not report on a "per Device" basis; they must select either the "per user" or "per query". Access restriction refers to restrictions on content, not simply a user name and password requirement (please speak with your Nasdaq representative for additional detail).	the number of "Unique Devices"
Trading Platform	Any execution platform operated as or by a registered National Securities Exchange (as defined in Section 3(a) (1) of the Exchange Act), an Alternative Trading System (as defined in Rule 300(a) of Regulation ATS), or an Electronic Communications Network (as defined by Rule 600(b) (23) of Regulation NMS).	Per Trading platform
Display Usage	Any method of accessing Exchange Information that involves the display of such data on a screen or other mechanism designed for access or use by a natural person or persons.	

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Non-Display	Any method of accessing Exchange Information other than Display Usage.	The greater of either: (a) the number of Subscribers that can modify the application in real-time, or (b) the number of Devices [usually servers] that receive the information
<b>Other Frequently Used Terminology</b>		
Distributor	An entity and its affiliates, as identified in the Nasdaq Global Data Agreement (or any successor agreement), that executes such an Agreement and has access to Exchange Information.	
Information or Data	Any data or information that has been collected, validated, processed and/or recorded by the Exchange and made available for transmission relating to: (i) eligible securities or other financial instruments, markets, products, vehicles, indicators or devices; (ii) activities of the Exchange; or (iii) other information or data from the Exchange. Information includes, but is not limited to, any element of information used or processed in such a way that Exchange Information or a substitute for such Information can be identified, recalculated or re-engineered from the processed information.	
Data Feed Subscriber	Shall mean any Recipient outside of Distributor that (i) receives Nasdaq Information from the Distributor and (ii) for which the Distributor cannot substantially control Nasdaq Information for the purpose of reporting usage or qualification.	
External	Distribution of Nasdaq Information outside of the Distributor's entity as defined by GDA.	
Indirect Access	Any method of accessing Exchange Information other than Direct Access.	
Recipient	Any natural person, proprietorship, corporation, partnership, or other entity whatever that has access to Exchange Information.	

### 3. DERIVED DATA

#### OVERVIEW

Derived Data is any information generated in whole or in part from Exchange Information such that the information generated cannot be reverse engineered to recreate Exchange Information or be used to create other data that is recognizable as a reasonable substitute for such Exchange Information. In combination with the above definition, examples of Derived Data include but are not limited to (contact your representative for additional clarity):

swaps	swaptions	volume only data
spread bets	contracts for difference	volume weighted price (VWAP)

Data Product	Description
Nasdaq U.S. Basic	Derived Data that is created and distributed externally only to Non-Professional Subscribers is fee-labile as part of the payment of the Nasdaq U.S. Basic Derived Data Fee. Derived data distributed to Professional Subscribers is fee-labile at the regular per Subscriber or User rate. (See Hosted Data Solutions for additional obligations regarding Nasdaq U.S. Basic Derived Data).
Nasdaq All US Exchange Information	Derived Data that contains price data is generally fee-labile at the underlying product rates. Distributors of Nasdaq U.S. Information may provide the following single security Derived Data products free of charge: <ul style="list-style-type: none"> <li>• Volume-only Data</li> <li>• Volume-Weighted Price Data</li> </ul>

#### NOTES

**Note 1:** Any firm that receives a real-time Data Feed is at least required to pay the Internal Distributor fee for receipt of a real-time Data Feed with Derived Information.

**Note 2:** Single security financial instruments supported by the Exchange or financial instruments that track financial instruments one for one are fee liable at the underlying rates.

**Note 3:** Creation of multiple security information, such as an index, is exempt from subscriber fees. However, the Distributor must report the Non-Display devices; please see the Non-Display policy for guidance on how to report.

### 4. DELAYED DATA

#### OVERVIEW

Nasdaq permits Distributors to delay certain Information. Currently, if a data product is eligible for delayed pricing, and the data is delayed as per the Delayed Data Policy, there may not be a charge for the usage of the delayed data, depending upon the product selected. For Distributors providing delayed Information, Nasdaq requires that an appropriate delay message be provided to Subscribers, including wall boards, tickers, mobile devices and audio announcements on voice response services. The delay message must prominently appear on all displays containing Delayed Data, such as at or near the top of the page. In the case of a ticker, the delay message should be interspersed with the market data at least every 90 seconds.

Examples of appropriate delayed messages are as follows:

- "Data Delayed 15 minutes"
- "Data Delayed 24 hours"
- "Del-15", "Data Delayed until Midnight CET"

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**DELAY INTERVALS:**

Data Type	Description
Real-Time	Information disseminated prior to the Delay Interval. Uncontrolled Products require prior approval.
Delayed	Information disseminated after the Delay Interval. Nasdaq currently recognizes the following Delay Intervals, which apply to individual products: <ul style="list-style-type: none"> <li>• 15 minutes</li> <li>• 24 hours</li> <li>• Midnight Local Time (local time 11:59:59 PM where the information is released)</li> <li>• Not Eligible for Delayed Pricing</li> </ul> Note the Midnight Local Time refers to the time zone where the Information is originally distributed from Nasdaq.
End-of-Day	Information from the current day that is disseminated after the market has closed for the current day and after the Delay Interval (unless otherwise noted).

**REAL-TIME DATA**

- Data Disseminated prior to the Delayed Timeframe for any product
- Prior Approval Required for Uncontrolled Products

**DELAYED TIMEFRAME:  
15 MINUTES**

- Data Disseminated at least 15 minutes after Nasdaq releases the information
- Prior Approval Required for Uncontrolled Products

**DELAYED TIME FRAME: MIDNIGHT LOCAL  
TIME  
[Time-Zone Specific]**

- Data Disseminated after midnight local time [11:59:59 PM] where the information is released
- No Prior Approval Required for Uncontrolled Products , see Product Specific Notes below for exceptions

**DELAY TIMEFRAME:  
24 HOURS**

- Data Disseminated at least 24 hours after Nasdaq releases the information
- No Prior Approval Required for Uncontrolled Products , see Product Specific Notes below for exceptions

**DELAY TIMEFRAME:  
END-OF-DAY**

- Data Disseminated after market close on the day Nasdaq releases the information **and** after the Delayed Data Timeframe for the associated product
- No Prior Approval Required for Uncontrolled Products , see Product Specific Notes below for exceptions

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Distributor may systematically delay certain information per the specified Delay Interval after which the distribution of the Information may not be fee-liable and may not need to be reported to Nasdaq on a monthly basis.

#### DATA FEED AGREEMENTS: END-OF-DAY DATA FEEDS

Typically, Distributors that provide End-of-Day Information, held until after the Delay Interval, if applicable, on an Uncontrolled Product are not currently required to obtain a Nasdaq Global Data Agreement from such Data feed Recipients. Nasdaq's waiver of the agreement requirements does not limit the Distributor's indemnification obligations as per the agreement.

A Distributor that redistributes the following products is currently not required to have the Recipient sign a GDA:

1. Daily List/Fundamental Data

The below table outlines delay times for each respective product. For questions, please contact your Account Manager.

Product	Product Description	Delay Interval
The Nasdaq Stock Market	Nasdaq TotalView	Midnight LT
	Nasdaq Level 2	Midnight LT
	Nasdaq Basic	15 Minutes
	Nasdaq Last Sale (NLS)	15 Minutes
	NLS Plus	15 Minutes
	NLS-Nasdaq Trades FilterView	15 Minutes
	NLS-TRF Trades FilterView	15 Minutes
	Nasdaq Net Order Imbalance Snapshot (NOIS)	Midnight LT
	NOIView FilterView	Midnight LT
	Nasdaq MatchView	Per Exchange
	Nasdaq TotalView (Glimpse)	Midnight LT
	NOIView FilterView	Midnight LT
	BX TotalView [ITCH, GLIMPSE]	Midnight LT

	BX Basic	15 Minutes
	BX Last Sale (BLS)	15 Minutes
	BX TotalView [GLIMPSE]	Midnight LT
	BX Historical ITCH	Not Eligible
	BX MatchView	Per Exchange
PSX	PSX TotalView [ITCH, GLIMPSE]	Midnight LT
	PSX Basic	15 Minutes
	PSX Last Sale (PLS)	15 Minutes
	PSX Historical ITCH	Not Eligible
	PSX MatchView	Per Exchange
	PSX Glimpse	24 hours
Nasdaq Web-Based Reports	Nasdaq Historical TotalView-ITCH	Not Eligible
	BX Historical TotalView-ITCH	Not Eligible
	PSX Historical TotalView-ITCH	Not Eligible
	Nasdaq Data-On-Demand	Not Eligible
	Nasdaq Market Replay	Not Eligible
	Nasdaq Daily List	24 hours
	Nasdaq Short Interest Report	Not Eligible
	Nasdaq Short Sale Volume Reports	24 hours
	Nasdaq Fundamental Data	24 hours

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	Nasdaq Daily Share Volume	Not Eligible
	Historical PHLX Orders	Not Eligible
	Historical ITTO	Not Eligible
	PHLX Options Trade Outline (PHOTO) Historical Intraday	Not Eligible
	PHLX Options Trade Outline (PHOTO) Historical End-of-Day	Not Eligible
	Nasdaq Options Trade Outline (NOTO) Historical Intraday	Not Eligible
	Nasdaq Options Trade Outline (NOTO) Historical End-of-Day	Not Eligible
	Nasdaq ISE Open/Close Trade Profile Historical Intraday	Not Eligible
	Nasdaq ISE Open/Close Trade Profile Historical End-of-Day	Not Eligible
	Nasdaq GEMX Open/Close Trade Profile Historical Intraday	Not Eligible
	Nasdaq GEMX Open/Close Trade Profile Historical End-of-Day	Not Eligible
PHLX	PHLX Depth of Market	Midnight LT
	PHLX Orders	Midnight LT
	Top Of PHLX Options (TOPO)	Midnight LT
	Top Of PHLX Options (TOPO) Plus Orders	Midnight LT
	PHLX Options Trade Outline (PHOTO) Intraday	Not Eligible
	PHLX Options Trade Outline (PHOTO) End-of-Day	Not Eligible
	PHLX Historical PHLX Orders	Not Eligible
	PHLX PHOTO Historical	Not Eligible

The Nasdaq Options Market	Best of Nasdaq Options (BONO)	15 Minutes
	Nasdaq Options Trade Outline (NOTO)	Not Eligible
	Nasdaq ITCH To Trade Options (ITTO) [ITTO, ITTO GLIMPSE]	Midnight LT
	Options-Nasdaq Options Trade Outline (NOTO) Intraday	Not Eligible
	Options-NOTO End-of-Day	Not Eligible
BX Options	BX Options Depth of Market (BX Depth)	Midnight LT
	BX Top of Market (BX Top)	15 Minutes
Nasdaq ISE	Nasdaq ISE Depth of Market	Midnight LT
	Nasdaq ISE Top Quote	15 Minutes
	Nasdaq ISE Order	Midnight LT
	Nasdaq ISE Spread	15 Minutes
	Nasdaq ISE Trade	15 Minutes
	Nasdaq ISEE Select XML Feed	15 Minutes
	Nasdaq ISE Open/Close Trade Profile Intraday	Not Eligible
	Nasdaq ISE Open/Close Trade Profile End-of-Day	Not Eligible
Nasdaq GEMX	Nasdaq GEMX Depth of Market	Midnight LT
	Nasdaq GEMX Top Quote	15 Minutes
	Nasdaq GEMX Order	Midnight LT
	Nasdaq GEMX Trade	15 Minutes

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	Nasdaq GEMX Open/Close Trade Profile Intraday	Not Eligible
	Nasdaq GEMX Open/Close Trade Profile End-of-Day	Not Eligible
Nasdaq MRX	Nasdaq MRX Depth of Market	Midnight LT
	Nasdaq MRX Top Quote	15 Minutes
	Nasdaq MRX Order	Midnight LT
	Nasdaq MRX Trade	15 Minutes

\*Please be advised that trade types "OTC-Loan Payment" and "OTC-Primary Transaction" are not transaction data and not included in the delayed interval.

## 5. PROFESSIONALS AND NON-PROFESSIONALS

### DEFINITIONS

<b>Non-Professional Subscriber</b>	Any natural person who is <b>NOT</b> : (a) registered or qualified in any capacity with the SEC, the Commodities Futures Trading Commission, any state securities agency, any securities exchange or association or any commodities or futures contract market or association; (b) engaged as an "investment advisor" as that term is defined in Section 202(a)(11) of the Investment Advisors Act of 1940 (whether or not registered or qualified under that Act); or (c) employed by a bank or other organization exempt from registration under federal or state securities laws to perform functions that would require registration or qualification if such functions were performed for an organization not so exempt.
<b>Professional Subscriber</b>	All other persons who do <b>not</b> meet the definition of Non-Professional User.

**Person** — Any natural person, proprietorship, corporation, partnership or other entity whatsoever.

**Subscriber** — When it appears alone, the word "Subscriber" encompasses all Non-Professional and Professional Subscribers. All Subscribers are deemed to be Professional unless they are qualified as Non-Professional Subscribers.

**Non-Professional Subscriber** — For the Non-Professional Subscriber, Information is licensed only for personal use. By representing that a Subscriber is a Non- Professional Subscriber, or by continuing to receive Information at a Non-Professional rate, the Subscriber is affirming that it meets the definition of Non-Professional Subscriber as set forth above. A Non-Professional Subscriber shall comply promptly with any reasonable request from Nasdaq for information regarding the Non-Professional Subscriber's receipt, processing, display and redistribution of Information.

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**Professional Subscriber** — For the Professional Subscriber, Information is licensed for the internal business use of that Subscriber. Professional Subscribers may, on a non-continuous basis, furnish limited amounts of Information to customers in written advertisements, correspondence or other literature or during voice telephonic conversations not entailing computerized voice, automated information inquiry systems or similar technologies. Upon request, a Professional Subscriber shall make its premises available to Nasdaq for physical inspection of the Subscriber's service or of the Subscriber's use of the Information (including review of any records regarding use of or access to the Information and the number and locations of all devices that receive Information), all at reasonable times, upon reasonable notice, to ensure compliance with this policy. Note, all Internal use by an organization is Professional.

From time to time, the category of a particular subscriber may change. This would occur, for example, when a Professional retires and no longer provides services in a Professional capacity, as discussed below. Distributors should update their categorization of particular Subscribers as either Professional or Non-Professional on a regular basis to ensure accurate reporting.

### **GUIDANCE FOR NON-PROFESSIONALS: NATURAL PERSONS**

The chart below provides specific examples of Professional and Non-Professional usage:

Affiliation	Licensee	Usage	Status
Securities Professional (employee/contractor/subcontractor)	Organization or Individual	Business purposes or personal reasons	Professional
Non-securities Professional (employee/contractor/subcontractor)	Organization	Business purposes or personal reasons	Professional
Non-securities Professional associated with a Non-commercial organization	Individual	Business purposes	Professional
Non-securities Professional	Individual	Personal reasons	Non-Professional
Non-securities Professional associated with a Non-commercial organization	Individual	Personal reasons	Non-Professional

#### **Subcontractors/Independent Contractors:**

Nasdaq's definition of Non-Professional Subscriber requires that the Non-Professional Subscriber be a natural person. Subcontractors and independent contractors signing in their capacity as a subcontractor or independent contractor of the contracting firm are not natural persons. Individuals maintaining an employment, business or commercial relationship are considered extensions of the organization. Examples of organizational use include, but are not limited to, subcontractors, independent contractors, profit sharing partners, commission sharing partners and/or any use involving an employment relationship.

#### **Trading Authorization:**

Nasdaq's definition of Non-Professional Subscriber requires Distributors to separately determine the Professional or Non-Professional status of each individual accessing Nasdaq Information. In some instances, multiple individuals may have access to a single account. Distributors must separately report each Subscriber accessing the account (unless the account is shared using the same user id and password). In some cases, Distributors provide access to the account to a person designated by the Subscriber, via a Trading Authorization Form or a similar document. For each person designated by the Subscriber, the Distributor must report such persons as Non-Professional or Professional, as applicable. Please note that the account itself cannot be considered a Non-Professional Subscriber, nor can any staff paid to support the account activities be considered a Non-Professional Subscriber (i.e., registered investment advisors, attorneys, accountants, etc.).

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## **GUIDANCE FOR NON-PROFESSIONALS: ORGANIZATIONS**

Individual Subscribers associated with certain organizations may be able to access Non-Professional rates. To obtain the Non-Professional rates for qualifying Subscribers associated with non-commercial organizations, please follow the guidance below, and contact your account manager if you have questions.

Individuals associated with certain non-commercial organizations (i.e., family investment trusts, investment clubs, etc.) may be permitted to access Nasdaq Information at Non-Professional rates. Note that the organization itself cannot be considered a Non-Professional Subscriber, nor can any staff paid to support the organization's activities (i.e., attorneys, accountants, administrative staff, etc.) For example, if the organization is established exclusively to manage accounts of an individual or the individual's immediate family, the Subscriber associated with that organization may qualify for Non-Professional rates. In addition, non-commercial organizations solely owned by an individual and members of their immediate family (who themselves are Non-Professionals) utilizing the market data solely for their own personal investing may qualify for Non-Professional rates.

Details regarding specific instances of non-commercial organizational use are below:

### **Trusts**

Certain individuals associated with Trusts may qualify for Nasdaq Information at Non-Professional rates, as shown in the following charts.

Questions regarding Trusts	Discussion
May the trust itself qualify as a Non-Professional?	No, the Trust is an organization, and by definition only natural persons can qualify as Non-Professionals. A single, unpaid natural person associated with the Trust, who qualifies as a Non-Professional Subscriber, may be reported as a Non-Professional Subscriber if the reporting includes the name of the person. The name of the Trust may also be reported, but a report that includes only the name of the Trust would be qualified as a Professional.
May a trustee qualify as a Non-Professional?	Yes, if the Trustee is an unpaid natural person who qualifies as a Non-Professional Subscriber.
May trustees who receive compensation qualify as Non-Professionals?	No.
May trustees who receive professional assistance qualify as Non-Professionals?	No.
May a beneficiary of the trust qualify as a Non-Professional?	Yes, if the Beneficiary is an unpaid natural person who qualifies as a Non-Professional Subscriber.
May multiple beneficiaries qualify as Non-Professionals?	Yes, if the Beneficiaries are unpaid natural persons who qualify as Non-Professional Subscribers.

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## Investment Clubs

Certain individuals associated with Investment Clubs may access Nasdaq Information at Non-Professional rates as shown in the below chart.

Questions regarding Investment Clubs	Discussion
May Investment Club members qualify as Non-Professionals?	Yes, if the Investment Club member is an unpaid natural person who qualifies as a Non-Professional Subscriber.

## Retired and Inactive Professionals

Certain Retired and Inactive Professionals may access Nasdaq Information at Non-Professional rates as shown in the below chart.

Questions regarding Retired and Inactive Professionals	Discussion
Do Retired Professionals qualify as Non-Professionals?	Yes, Retired Professionals no longer providing services in a Professional capacity may qualify as Non-Professionals if listed as Not-Registered with FINRA. To continue to receive the Non-Professional rates, Subscribers must re-verify their Non-Professional status semi- annually.
Do Non-working Professionals qualify as Non-Professionals?	Yes, Professionals no longer providing services may qualify as Non-Professionals if listed as Not-Registered with FINRA. To continue to receive the Non-Professional rates, Subscribers must re-verify their Non-Professional status semi-annually.

## Large Traders

Certain Large Traders may access Nasdaq Information at Non-Professional rates as shown in the below chart.

Questions regarding Large Traders	Discussion
Are Large Traders always qualified as Professionals?	If a large trader otherwise meets the definition of “Non-Professional Subscriber,” the large trader does not lose his or her “Non-Professional Subscriber” status merely because he or she falls within SEC Rule 13h-1(a)’s definition of “large” trader.

## 6. ENTERPRISE LICENSES

### OVERVIEW

The Enterprise License options may not be available to all firms. Distributors may still be liable for the applicable distributor fees. For some products, there may be a minimum subscription length. Fees outlined below are monthly and apply per Distributor unless otherwise noted. For additional information, please contact your Account Manager for details.

Enterprise #	Enterprise Description
Nasdaq Stock Market 1	<p><b>U.S. NASDAQ DEPTH [TOTALVIEW/LEVEL 2] DISPLAY PROFESSIONAL AND NON-PROFESSIONAL [INTERNAL &amp; EXTERNAL]:</b> Permits Distributor to provide Nasdaq Depth through any electronic system approved by Nasdaq to Professional and Non-Professional Subscribers who are natural persons and with whom the broker-dealer has a brokerage relationship. In addition to the Enterprise License fee, the applicable subscriber fees still apply.</p> <ul style="list-style-type: none"> <li>Distributors are exempt from payment of the Enhanced Display Solutions Distributor Fee.</li> </ul> <p><u>Price: 25,000 USD PER MONTH + Subscriber fees of 60 USD or 9 USD per month for professionals or non-professionals respectively.</u></p>

Nasdaq Stock Market 2	<p><b>U.S. NASDAQ DEPTH [TOTALVIEW/LEVEL 2] DISPLAY PROFESSIONAL AND NON-PROFESSIONAL[EXTERNAL]:</b></p> <p>Permits Distributor to provide Nasdaq Depth through any electronic system approved by Nasdaq to an unlimited number of Professional and Non-Professional Subscribers who are natural persons and with whom the broker-dealer has a brokerage relationship. Use of the data obtained through this license by any Professional Subscriber shall be limited to the context of the brokerage relationship between that person and the broker-dealer. A Professional Subscriber who obtains data under this subsection may not use that data within the scope of any professional engagement. A separate enterprise license would be required for each discrete electronic system that is approved by Nasdaq and used by the broker-dealer. The enterprise license would allow distribution through the approved electronic system but would not cover distribution through any Distributor other than the broker-dealer obtaining the license and any approved system. The broker-dealer must also report the number of Subscribers receiving Nasdaq Depth under the license to Nasdaq at least once per calendar year.</p> <p>This license entitles Distributors to an exemption of the fees related to the Enhanced Display Solutions (Distributor and Subscriber Fees).</p> <p><u>Price: 500,000 USD</u></p>
Nasdaq Stock Market 3	<p><b>U.S. NASDAQ DEPTH [TOTALVIEW/ LEVEL 2] NON-DISPLAY PROFESSIONAL [INTERNAL]:</b></p> <p>Permits Distributor to include unlimited use in internal Non-Display applications for Nasdaq Depth. No external use is permitted under this license.</p> <p><u>Price: 75,000 USD</u></p>
Nasdaq Stock Market 4	<p><b>U.S. NASDAQ DEPTH ENHANCED DISPLAY SOLUTION [EXTERNAL]:</b> Permits Distributor to distribute to an unlimited number of Professional Enhanced Display Solutions Subscribers for a monthly fee of \$76 for TotalView/Level 2, Notwithstanding the Distributor fees for the right to offer EDS solutions.</p> <p><u>Price: 33,500 USD + Subscriber fees of 76 USD</u></p>
Nasdaq Stock Market 5	<p><b>U.S. NASDAQ BASIC [INTERNAL &amp; EXTERNAL]:</b> Permits Distributor to provide Nasdaq Basic through any electronic system approved by Nasdaq to an unlimited number of Professional and Non- Professional Subscribers who are natural persons and with whom the broker-dealer has a brokerage relationship. A broker-dealer that purchases this enterprise license will also have the right to distribute Nasdaq Basic under the terms set forth under Nasdaq Basic Digital Media Enterprise License. Use of the data obtained through this license by any Professional Subscriber shall be limited to the context of the brokerage relationship between that person and the broker-dealer, except that a Distributor may make Nasdaq Basic data obtained through this license available to up to and including 4,500 internal Subscribers operating on an electronic system approved by Nasdaq, which may be used by Professional Users employed by the broker-dealer in support of brokerage services to investors; any distribution to over 4,500 internal Subscribers, or any usage by Professional Users not in support of brokerage services to investors on an approved</p>

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	<p>platform, would be subject to any applicable fees set forth on Nasdaqtrader.com. A Professional User who obtains Nasdaq Basic data through a brokerage relationship with the broker-dealer may not use that data within the scope of any professional engagement. A separate enterprise license would be required for each discrete electronic system that is approved by Nasdaq and used by the broker-dealer. The enterprise license would allow distribution through the approved electronic system, but would not cover distribution through any Distributor other than the broker-dealer obtaining the license and any approved system. The broker-dealer must also pay the Distributor Fee for Nasdaq Basic and report the number of Subscribers receiving Nasdaq Basic under this license that are used by: (i) Professional and Non-Professional Users in a brokerage relationship at least once per calendar year; and (ii) Professional Users employed by the broker-dealer on a monthly basis.</p> <p><u>Price: 100,000 USD</u></p>
Nasdaq Stock Market 6	<p><b>U.S. NASDAQ BASIC PROFESSIONAL [INTERNAL]:</b> Permits Distributor who is a broker-dealer to distribute Nasdaq Basic to Internal Subscribers. The broker-dealer must obtain a separate enterprise license for each External Distributor that controls display of the product if it wishes such External Distributor to be covered by an enterprise license rather than per-Subscriber fees. A broker-dealer that purchases an enterprise license under this provision may also receive, at no additional charge, access to Nasdaq Last Sale data for its own stock price and the stock price of up to ten of its competitors or peers, for display use on the broker-dealer's internal website. Distributors are required to apply for or cancel this Enterprise License in writing with their Account Manager. Monthly summary reporting may be required for specific setups.</p> <p><u>Price: 155,000 USD</u></p>
Nasdaq Stock Market 7	<p><b>U.S. NASDAQ LAST SALE [EXTERNAL]:</b> A Distributor may purchase an enterprise license to distribute Nasdaq Last Sale data to the General Investing Public for Display Usage to an unlimited number of Users or Devices, including, but not limited to, television distribution. To be eligible for the enterprise license, Nasdaq Last Sale must be distributed on platform(s) controlled by the Distributor and pre-approved by Nasdaq as providing the Distributor with a reasonable basis to conclude that all Users of such Information are either Non-Professionals or Professionals whom the Distributor has no reason to believe are using Nasdaq Last Sale in their professional capacity. A Distributor that inadvertently exceeds \$41,500 in Per User, Per Query or Per Device fees may purchase the enterprise license for the month(s) in which fees exceeded \$41,500 without pre-approval.</p> <p><u>Price: 41,500 USD</u></p>
Nasdaq Stock Market 8	<p><b>U.S. NASDAQ BASIC, TOTALVIEW and NLS [INTERNAL AND EXTERNAL]:</b></p> <p>Permits Distributor who is a broker-dealer or an Investment Adviser to pay a monthly enterprise license fee of \$600,000 to distribute, for Display Usage only, Depth-of-Book data and Nasdaq Basic</p>

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	<p>to an unlimited number of internal and external Recipients, to be used only in the context of a brokerage relationship with a broker-dealer or an engagement with an Investment Adviser, as well as the right to distribute Nasdaq Basic under the terms set forth under Nasdaq Basic Digital Media Enterprise License. Platforms distributing such information shall be pre-approved by the Exchange as reasonably designed to meet the requirements of the license including but not limited to security measures to prohibit unauthorized distribution. The monthly enterprise license fee shall be in lieu of Subscriber Fees for Depth-of-Book data, User Fees for Nasdaq Basic, Distribution Model fees for the General Investing Public for NLS, and NLS Plus fees, whether such fees are paid directly to the Exchange or indirectly through another Distributor.</p> <p>Alternatively, a Distributor eligible for this enterprise license may purchase a full twelve months of the license in advance for a monthly fee of \$500,000, which may be paid in monthly installments. After the initial period, the annual enterprise license shall automatically renew for additional periods of twelve (12) months unless either Party provides notice of its intent not to renew the service a minimum of ninety (90) days prior to the end of the existing license. Notwithstanding any other provision of the policy of the Global Data Agreement, neither Party shall have the right to terminate the service for convenience, including pursuant to Section 8(iii) of the Summary to the Global Data Agreement.</p> <p><u>Price: 500,000 USD with twelve-month commitment; or 600,000 USD month to month</u></p>
Nasdaq Stock Market 9	<p><b>NASDAQ MARKET REPLAY [INTERNAL OR EXTERNAL]:</b> Permits Distributor to distribute the data internally or externally to Professional or Non-Professional subscribers.</p> <p><u>Price: 25,000 USD</u></p>
Nasdaq Stock Market 10	Reserved
Nasdaq Stock Market 11	<p><b>U.S. NASDAQ BASIC DIGITAL MEDIA LICENSE DISPLAY [EXTERNAL]:</b> Permits a Distributor to distribute all or part of Nasdaq Basic for Display Usage to the general investing public. Information may be made available via television, websites, mobile devices, or any other unrestricted means of transmission for Display Usage, to an unlimited number of Users. Data may only be used for informational and non-trading purposes. To be eligible for the enterprise license, Nasdaq Basic may only be distributed on a platform that is pre-approved by the Exchange as providing the External Distributor with a reasonable basis to conclude that all Users of such Information are either Non-Professionals or Professionals whom the Distributor has no reason to believe are using Nasdaq Basic in their professional capacity.</p> <p><u>Price: 100,000 USD</u></p>
Nasdaq Options Market 1	<p><b>NASDAQ ITCH-TO-TRADE OPTIONS (ITTO) AND/OR BEST OF NASDAQ OPTIONS (BONO) NON-DISPLAY [INTERNAL]:</b> Permits Distributor to include unlimited internal non-display use of ITTO and BONO separately or combined.</p> <p><u>Price: 10,000 USD</u></p>

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PSX 1	<p><b>U.S. NASDAQ PSX DEPTH [PSX TOTALVIEW] NON-DISPLAY PROFESSIONAL [INTERNAL]:</b> Permits distributor unlimited use in Internal non-display applications for PSX TotalView [Nasdaq, NYSE, and Regional Issues].</p> <p><u>Price 17,000 USD</u></p>
BX 1	<p><b>U.S. NASDAQ BX DEPTH [BX TOTALVIEW] NON-DISPLAY PROFESSIONAL [INTERNAL]:</b> Permits Distributor to include unlimited use in Internal non-display applications for BX TotalView [Nasdaq, NYSE, and Regional Issues].</p> <p><u>Price: 20,000 USD</u></p>
BX Options 1	<p><b>BX OPTIONS DEPTH OF MARKET NON-DISPLAY [INTERNAL]:</b> Permits Distributor to make use of the data via Non-Display applications for internal use only.</p> <p><u>Price: 2,500 USD</u></p>
BX Options 2	<p><b>BX OPTIONS DEPTH OF MARKET AND/OR BX OPTIONS TOP OF MARKET NON-DISPLAY [INTERNAL]:</b> Permits Distributor to provide data to an unlimited number of Non-Display devices for internal use only without any Subscriber charges associated with those devices. License covers both BX Options Top of Market and BX Options Depth of Market data</p> <p><u>Price: 2,500 USD</u></p>

## 7. NON-DISPLAY USAGE POLICY

### OVERVIEW

Non-Display usage is any method of accessing Exchange Information other than Display Usage. Non-Display Usage is a means of accessing Nasdaq data that involves automated access or use by a machine, without access or use of a Display by a natural person or persons.

Devices [or servers] used in the transportation, dissemination, aggregation, normalization, or storage (collectively, “distribution”) of data are not necessarily fee-liable, but the Distributor should be able to identify such Devices that exist within the market data infrastructure and how many Devices are used for distribution, separate and apart from Devices that are used for other purposes, as illustrated by the examples below.



## NON-DISPLAY

Non-Display fees and reporting requirements vary depending upon the Nasdaq data product. Non-Display Policy and Unit of Count Policy, however, is consistent across all Nasdaq data products with respect to:

- The number of Subscribers that can modify the application in real-time; or
- The number of Devices (usually servers) that receive and benefit from the information, this includes, but is not limited to, servers or devices that run computations or creates derived data.

Distributors should have a quantifiable and auditable procedure in place to count Devices. For clarification purposes, the following categories of Devices should be reported as fee-liable unless otherwise excluded by exchange rules or policies:

- Blade server (a type of server)
- Rack server
- FPGA may not necessarily be a server, but if FPGA is run on a server that server may be fee-liable.

For the purposes of Unit of Count, Nasdaq does not include the following types of Devices to determine whether a fee is applied for Non-Display usage:

- “Cores” – Nasdaq understands that Devices may utilize multiple cores or processors to handle market data and trading. If two or more cores sit on the same physical Device, Nasdaq would require the Distributor to report one Subscriber.
- GPU, Xeon Phi cards, memory or chassis linked to a server utilizing these hardware Devices that is already counted

Examples of fee-liable Non-Display can be found at the following links:

[Data News #2015 – 9](#) Provides clarification for Non-Display Policy, including examples of what is not fee liable for Non-Display. Additional examples of exclusions are:

- Storage of information that is not used until after the applicable delay interval
- Support of a data feed for data quality purposes, but any trading support is always fee liable
- Cloud servers used for messaging for example for moving data from a co-location facility to the cloud and vice versa

## OTHER NON DISPLAY QUESTIONS

If your firm is unsure about a specific use case, please submit your use case to your Nasdaq Sales Representative for a determination at any time. For avoidance of doubt, Non-Display is fee-liable regardless of whether the Order Management System, Execution Management System, or trading infrastructure is:

- A virtual system or located in the cloud;
- Installed locally within a datacenter;
- Enterprise; or
- Locally on an individual’s desktop or Device.

If your firm utilizes Nasdaq Information in accordance with the Non-Display clarification above, please contact Nasdaq.

## 8. UNIT OF COUNT: SYSTEM CLASSIFICATIONS

### OVERVIEW

The Unit of Count may differ, depending upon the information received and the method of distribution. Please use the below guidelines for submitting Units of Count, Reportable Units or similar to Nasdaq. All Units of Count used by a Distributor or a Distributor's Group must be identified in the Nasdaq System Application. Nasdaq recognizes the following types of System Types or Applications.

### UNIT OF COUNT: UNCONTROLLED PRODUCTS

An Uncontrolled Product is defined by Nasdaq as any uncontrolled distribution of Nasdaq Information to Subscribers. If the Distributor cannot control both the entitlements and the display of the Information, then the system will be considered an Uncontrolled Product.

#### NASDAQ CURRENTLY OFFERS THE FOLLOWING UNCONTROLLED PRODUCTS:

- UP1. Data Feed
- UP2. Managed Data Solution [MDS]

### UNIT OF COUNT: CONTROLLED PRODUCTS

A Controlled Product is defined by Nasdaq as any controlled distribution of Nasdaq Information to Subscribers. If the Distributor controls both the entitlements and the display of the Information, then the system will be considered a Controlled Product.

#### NASDAQ CURRENTLY OFFERS THE FOLLOWING CONTROLLED PRODUCTS:

- CP1. Subscriber [Controlled Device/Access]
- CP2. Hosted Solution
- CP3: Enhanced Data Solution [EDS]

### THE UNCONTROLLED AND CONTROLLED PRODUCTS ARE DESCRIBED IN THE NEXT FEW SECTIONS

## A. UP1. DATA FEED

Data Product	Type Offered
All Nasdaq Information	Display or Non-Display

A Data feed is defined by Nasdaq as any uncontrolled distribution of Nasdaq Information. Any firm receiving a Data feed (Recipient) is recognized as a Distributor by Nasdaq.

All Data Feeds — including internally or externally distributed, real-time or delayed, snapshot or streaming, Direct or Indirect — must be approved by Nasdaq prior to initiation of service. This approval process creates a direct relationship between the Recipient and Nasdaq. This direct relationship is essential to ensuring the correct display of the information, an effective entitlement process and a timely reporting process of the market data usage. After Distributors are granted permission to provide Data feeds, each individual Recipient of a Data feed must be approved as well. If a Distributor provides data to an unapproved Recipient or releases information prior to approval, the Distributor is responsible for paying the Recipient's fees and charges associated with this data during the unauthorized timeframe.

## B. UP2. MANAGED DATA SOLUTION [MDS]

Data Product	Type Offered
BX: BX TOTALVIEW	Non-Display ONLY
NASDAQ LEVEL 2, NASDAQ OPENVIEW, NASDAQ TOTALVIEW	
PHLX: TOP OF PHLX OPTIONS (TOPO)	
PHLX: PHLX ORDERS	
PSX: PSX TOTALVIEW	
NOM: BONO	
NOM: ITTO	

### OVERVIEW

A Managed Data Solution is defined by Nasdaq as any product containing certain Nasdaq Information in which Nasdaq allows the Distributor to report a managed Data Feed under a Managed Data Solution fee schedule when the Subscriber or Recipient uses Nasdaq Information internally only, in an application, server, or similar service, and the Distributor controls the entitlements.

Distributors offering Managed Data Solutions must:

- Adhere to the Nasdaq approval policy and only authorize Recipients for Managed Data Solutions after prior approval is received from Nasdaq
- Report Managed Data Solution Recipients using the Data-Client Portal for Summary Usage Reporting
- Include Managed Data Solution Recipients under new products codes for Detailed Usage Reporting
- Offer an integrated data solution with secured data transmissions and data usage monitoring capabilities
- Offer Nasdaq depth data in its own messaging formats (rather than raw Nasdaq message formats)
- Assume the liability for any unauthorized use of Nasdaq data by Managed Data Solution Recipients
- Distributors that provide data to an unapproved Recipient or release information prior to approval are responsible for paying the Recipient's fees and charges associated with this data during the unauthorized timeframe

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## C. CP1. SUBSCRIBER: CONTROLLED DEVICE/ACCESS/USER

Data Product	Type Offered
All Nasdaq Information	Display

### OVERVIEW

A Controlled Device/Access is a type of Controlled Product that contains Nasdaq Information that is offered by a Distributor where the Distributor controls both the entitlements and the display of the Information. Nasdaq allows Distributors to report such Controlled Products to Nasdaq as Subscribers.

For Non-Display, please refer to the Non-Display Usage Policy for the Nasdaq Non-Display definition, and for direction on how to report a Subscriber that is considered Non-Display.

## D. CP2. HOSTED DISPLAY SOLUTION

Data Product	Type Offered
Nasdaq Basic	Display Only
Nasdaq Last Sale	
Nasdaq TotalView	

### OVERVIEW

A Hosted Display Solution is a product, solution or capability provided by a Distributor in which the Distributor makes available Exchange Information or Derived Data to an application branded or co-branded with a third-party brand for use by external Subscribers of the third-party entity or Distributor. The Distributor maintains control of the data, entitlements and display of the product, solution or capability. The Hosted Display Solution may take a number of forms. Examples include, but not limited to:

- “Widget,” such as an iframe or applet, in which the Hosted Display Solution is a part or a subset of a website or platform.
- “White Label,” in which the Distributor hosts or maintains the website or platform on behalf of a third party entity.

All Hosted Solutions systems need to be pre-approved by Nasdaq. After a Distributor is granted permission to provide Hosted Solutions, each hosted solution Recipient needs to be reported in the Distributor’s Detailed Report under the applicable hosted product codes. Each Hosted Solution Recipient does not need to be pre-approved. If a Distributor provides a Hosted Solution and does not report the Hosted Solution Recipients or unaffiliated organization in the detailed reporting, then the Distributor shall be liable for providing an Unauthorized Data Feed.

### PRODUCT SPECIFIC NOTE:

**Nasdaq Basic, Last Sale, and TotalView:** Please note that a Distributor providing a hosted display solution does not owe additional external Distributor fees for each hosted solution they provide but is required to report the applicable usage for each hosted solution.

Nasdaq Basic does, however, have a separate Hosted Solution fee (but not Distributor fee) for each hosted solution; please contact your account manager for guidance.

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Nasdaq Last Sale: Distributors are to report each organization's Last Sale usage separately. Distributors providing Last Sale data in Hosted Display Solutions to unaffiliated organizations are not to include such usage in their cap but are to report usage separately for each unaffiliated organization receiving a Last Sale-Hosted Display Solution. Distributors are permitted to cap usage for each hosted solution organization separately.

## E. CP3. ENHANCED DISPLAY SOLUTION [EDS]

Data Product	Pricing	Types of EDS Offered
Nasdaq TotalView	EDS Pricing Applies	EDS Option 1 & 2
Nasdaq OpenView		
Nasdaq Level 2		
Nasdaq Basic	Regular Subscriber Rates Apply	
BX TotalView		
PSX TotalView		
BX Basic		
PSX Basic		

### OVERVIEW

An Enhanced Display Solution ("EDS") is a type of Controlled Solution offered by a Distributor. EDS has two options as outlined below. A Distributor offering either EDS Option 1 or EDS Option 2 must meet the following criteria, in addition to the specific criteria identified for each option:

- Offer an integrated data solution with secured data transmissions, a robust entitlement system and monitor EDS Subscribers for any non-display or excessive usage by EDS Subscribers to ensure compliance.
- Offer Nasdaq data in its own messaging formats (rather than its raw Nasdaq message formats) by reformatting, redisplaying and/or altering the Nasdaq data prior to distribution, but not to affect the integrity of the Nasdaq data and not to render it inaccurate, unfair, uninformative, fictitious, misleading or discriminatory.
- Report the number of EDS Subscribers under new report titles in the online Data-Client Portal.
- Include EDS Subscribers under new product codes in Detailed Usage Reporting.
- Contractually restrict non-display usage and provide relevant language to Nasdaq during onboarding process.
- Have metrics or criteria to signal non-display or excessive usage by a Subscriber.
- Have a team or individual(s) tasked with reviewing the metrics or criteria that have been identified.
- Have a procedure to rectify such non-display or excessive usage and report it to Nasdaq.
- Assume the liability for any unauthorized use of Nasdaq data by EDS Subscribers.

## EDS OPTION 1

Distributor offers Display Subscribers access to a Controlled Display Product that also includes access to the additional flexibility of an Application Programming Interface [“API”] or similar solution and the Distributor is unable to completely control the Information. Nasdaq allows Distributors to report such Enhanced Display Solutions to Nasdaq under an Enhanced Display Solution fee schedule.

- Distributors offering an EDS Option 1 must: Complete an EDS Declaration Form and Nasdaq System Application for each unique Distributor Controlled Display provided with an API or similar solution; and
- Identify the type of API or similar solution.

## EDS OPTION 2

Distributor offers Display Subscribers access to Nasdaq Information without providing Subscriber with Distributor’s Controlled Display, but the Distributor still controls the entitlements.

Distributors offering such an EDS Option 2 also must complete an EDS Declaration form and a Nasdaq System Application for each unique third party display that will leverage the Distributor’s Entitlement system.

The EDS Subscriber, or end user, to an Enhanced Display Solution may use the Nasdaq data for its own purposes and may not redistribute the information outside of their organization, externally, or even internally to other Subscribers in the same organization. Any EDS Subscriber distributing the information further, such as posting the Information on a shared drive or delivering the Information into another system, is prohibited under EDS. Such use would be considered a Data Feed.

# F. UNIT OF COUNT: COUNTING GUIDELINES

## SIMULTANEOUS ACCESS

Simultaneous access by Unique User ID is prohibited, unless the Distributor is able to record, track and report the number of users able to simultaneously access Nasdaq Information. (See pricing clarifications above for additional details)

## CONTENDED ACCESS

Contended access refers to a service in which multiple Subscribers or Devices access information through a limited number of access sessions. The number of contended access sessions may be smaller than the number of Subscribers or Devices with access capability. Please note that Nasdaq does not consider a contended access session to be equivalent to a Subscriber or an Interrogation Device. In contended access situations, the Distributor must base usage reporting on the number of Subscribers, Interrogation Devices, or Users capable of accessing the Information, not the number of potential simultaneous sessions.

# 9. NET REPORTING: NASDAQ BASIC

### Products:

Nasdaq Basic – Display Professional Subscribers ONLY (Non-Display Usage is NOT included)

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## PROGRAM

The Program will allow Distributors to report Nasdaq Basic Internal Professional Subscribers on a Per-User Basis per the following:

- A Subscriber that receives access to Nasdaq Basic through multiple systems provided internally by an internal Distributor will be considered one User.
- A Subscriber that receives access to Nasdaq Basic through multiple, Controlled Products delivered by one external Distributor will be considered one User.
- A Subscriber that receives access to Nasdaq Basic through one or more systems provided internally by an internal Distributor and one Controlled Product by ONE external Distributor will be considered one User.
- Subscribers that receive Nasdaq Basic from multiple, controlled products via external Distributors will be counted for each controlled product received (e.g. a Subscriber receiving products through an internal Distributor and two External Distributors will be treated as two Subscribers).

## REDISTRIBUTOR-CONTROLLED REPORTING

External Distributor-Controlled Device display usage submitted on behalf of the Distributor must continue to abide by the Nasdaq requirements. Failure of Nasdaq to receive the Distributor's detailed usage reporting from the Redistributor will be reason for Nasdaq to decline the Net Reporting request for those units.

## TERMINATION

- Nasdaq may, for any reason, terminate this Program with 90 days' notice.
- Notwithstanding anything otherwise set forth in the Nasdaq Agreements, Nasdaq may terminate this Program immediately if the Distributor undergoes or undertakes a merger, acquisition, change of ownership control, sale of substantial relevant assets, spin-off, sale, or similar transaction (collectively "Change of Control").

## AUDIT

If Nasdaq determines there is Nasdaq Basic Subscriber usage not declared via the monthly summary and detailed usage reporting, the Distributor is liable for the underreported usage of that system. Distributor will not be allowed to net underreported usage associated with an undeclared system over the audit period.

## DEFINITIONS

For the purposes of this section, a "Redistributor" is defined as the organization that provides a controlled or uncontrolled product to the Distributor. A "User" is defined as the individual end user or Person with access to the Information.

Data Feed Subscriber shall mean any Recipient outside of Distributor that (i) receives Information from the Distributor and (ii) for which the Distributor cannot substantially control the Information for the purpose of reporting usage or qualification.



## 10. ADMINISTRATION FEES

### OVERVIEW:

The below table outlines the administrative fees for each respective product. For specific pricing, see the price guide. For any questions, please contact your Account Manager.

Product	Product Description	Administrative Fee
The Nasdaq Stock Market	Nasdaq TotalView	Nasdaq
	Nasdaq Level 2	
	Nasdaq Basic	
	Nasdaq Last Sale (NLS)	
	NLS-Nasdaq Trades FilterView	
	NLS-TRF Trades FilterView	
	Nasdaq Net Order Imbalance Snapshot (NOIS)	
	NOIView FilterView	
	Nasdaq TotalView (Glimpse)	None
	Nasdaq Historical TotalView-ITCH	
	NLS Plus	Nasdaq+ Underlying exchanges
	Nasdaq MatchView	

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Product	Product Description	Administrative Fee
<b>Nasdaq BX</b>	BX TotalView - ITCH	BX
	BX Basic	
	BX Last Sale	
	BX TotalView [GLIMPSE]	None
	BX Historical ITCH	
	BX MatchView	BX+ Underlying exchanges
<b>Nasdaq PSX</b>	PSX TotalView - ITCH	PSX
	PSX Basic	
	PSX Last Sale	
	PSX Historical ITCH	
	PSX Glimpse	None
	PSX MatchView	PSX+ Underlying exchanges
<b>Nasdaq Reference Data</b>	Nasdaq Daily List	Nasdaq
	Nasdaq Short Interest Report	
	Nasdaq Short Sale Volume Reports	
	Nasdaq Fundamental Data	
	Nasdaq Daily Share Volume	
<b>Nasdaq DataStore</b>	Nasdaq Data-On-Demand	None

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	Nasdaq Market Replay	None
Nasdaq PHLX	PHLX Depth of Market	None
	PHLX Orders	
	Top Of PHLX Options (TOPO)	
	Top Of PHLX Options (TOPO) Plus Orders	
	PHLX Options Trade Outline (PHOTO) Intraday	
	PHLX Options Trade Outline (PHOTO) End-of-Day	
	PHLX Historical PHLX Orders	
	PHLX PHOTO Historical	
The Nasdaq Options Market	Best of Nasdaq Options (BONO	Nasdaq
	Options Trade Outline (NOTO)	
	Options- (NOTO) Intraday	
	Options-NOTO End-of-Day	
	Options-NOTO Historical Intraday	None
	Options-NOTO Historical End-of-Day	
	Options-ITTO Glimpse	
Nasdaq BX Options	BX Options Depth of Market (BX Depth)	None
	BX Top of Market (BX Top)	

Product	Product Description	Administrative Fee
<b>The Nasdaq Options Market</b>	Best of Nasdaq Options (BONO)	Nasdaq
	Options Trade Outline (NOTO)	
	Options- (NOTO) Intraday	
	Options-NOTO End-of-Day	
	Options-NOTO Historical Intraday	None
	Options-NOTO Historical End-of-Day	
	Options-ITTO Glimpse	
<b>Nasdaq BX Options</b>	BX Options Depth of Market (BX Depth)	None
	BX Top of Market (BX Top)	
<b>Nasdaq ISE</b>	Nasdaq ISE Depth of Market	None
	Nasdaq ISE Top Quote	
	Nasdaq ISE Order	
	Nasdaq ISE Spread	
	Nasdaq ISE Trade	
	Nasdaq ISEE Select XML Feed	
	Nasdaq ISE Open/Close Trade Profile Intraday	
	Nasdaq ISE Open/Close Trade Profile End-of-Day	
<b>Nasdaq GEMX</b>	Nasdaq GEMX Depth of Market	

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Product	Product Description	Administrative Fee
	Nasdaq GEMX Top Quote	None
	Nasdaq GEMX Order	
	Nasdaq GEMX Trade	
	Nasdaq GEMX Open/Close Trade Profile Intraday	
	Nasdaq GEMX Open/Close Trade Profile End-of-Day	
<b>Nasdaq MRX</b>	Nasdaq MRX Depth of Market	None
	Nasdaq MRX Top Quote	
	Nasdaq MRX Order	
	Nasdaq MRX Trade	

## 11. DOCUMENT UPDATES

### OVERVIEW

Document updates provide insight into changes of data policies. Major policy updates will be identified by a new release # (currently 2.0). Minor technical updates will be identified by version (e.g. X.1).

#### January 1, 2020: Version 2.0

- Remove Nordic policy information to a separate Nordic policy document
- Add ISE, GEMX and MRX options exchanges
- Remove references to Nasdaq Futures Exchange (NFX)

#### February 1, 2021: Version 2.1

- Enhanced Display Solution (EDS) clarification and guidance
- Clarification on fees for BX Options
- Updated price for U.S. Nasdaq Basic Professional [INTERNAL]

Version 2.6

#### **June 25, 2021: Version 2.2**

- Removed Nasdaq Fixed Income (eSpeed) as it is no longer a Nasdaq offering

#### **February 1, 2022: Version 2.3**

- Clarified Nasdaq Options Market unit of count
- Introduction of Nasdaq Basic Digital Media License

#### **June 24, 2022: Version 2.4**

- Clarified Hosted Display Solution product eligibility as well as requirements
- Added requirements on creation of Best Bid Offer (BBO) data from TotalView and respective fees and documentation under Pricing Clarifications
- Added requirements on receiving Nasdaq Basic, but distributing only Nasdaq Last Sale / Nasdaq Last Sale Plus documentation under Pricing Clarifications
- Clarified definition of Nasdaq Order Imbalance Snapshot (NOIS)
- Added addition language regarding multiple security derived data

#### **July 28, 2022: Version 2.5**

- Updated requirements for the Nasdaq Basic Net Reporting Program
- Removal of “Nasdaq Stock Market 10” Depth Enterprise License
- Updated EDS pricing applicability for “Nasdaq Stock Market 1” Depth Enterprise License
- Addition of Professional and Non-Professional definitions and guidance

#### **June 1, 2024: Version 2.6**

- Removal of references of Nasdaq Online Reporting Application (NORA) as it’s no longer available

# Exhibit 5





## DISPLAY REQUIREMENTS POLICY

### OVERVIEW

All Distributors providing market data services to External Subscribers must adhere to the associated display requirements depending on the type of data provided to promote data integrity and consistency. In addition, Distributors must not misrepresent the information.

To increase investor understanding, Nasdaq is also providing additional display recommendations as well as Nasdaq trademark guidelines. Nasdaq reserves the right to establish additional display requirements as needed. Please note that Distributors must also comply with all SEC-mandated rules regarding the display of market data.

### DISPLAY REQUIREMENTS SUMMARY TABLE REQUIREMENT

Requirement	Data Type	Real-Time	Delayed
<b>Prominent Delay Message:</b> Distributors must display a Prominent Delay Message on all Delayed Data Products.	All Nasdaq Information with eligible Delay Intervals		X
<b>Financial Status Indicator:</b> Distributors must display the Financial Status Indicator for all intraday single security quotes or trade displays.	Nasdaq Level 2, Nasdaq TotalView, Nasdaq Basic	X	X
<b>Prominent Attribution Message:</b> Distributors must display a Prominent Attribution Message on all Nasdaq Basic, Nasdaq Last Sale (NLS), and Nordic Last Sale data products.	Nasdaq Basic, Nasdaq Last Sale and Nordic Last Sale Information	X	X

### PROMINENT DATA MESSAGE

Nasdaq permits Distributors to delay certain Information. Currently, if a data product is eligible for delayed pricing, and the data is delayed as per the Delayed Data Policy, there may not be a charge for the usage of the delayed data, depending upon the product selected.

For Distributors providing delayed Information, Nasdaq requires that an appropriate delay message be provided to Subscribers for all displays of Nasdaq data, including on wall boards, tickers, mobile devices and audio announcements on voice response services. The delay message must prominently appear on all displays containing Delayed Data, such as at or near the top of the page. In the case of a ticker, the delay message should be interspersed with the market data at least every 90 seconds.

Examples of appropriate delayed messages are as follows:

- "Data Delayed 15 minutes"
- "Data Delayed 24 hours"
- "Delayed Data"
- "Del-15"
- "Data Delayed until Midnight CET"

Version 2.1

## NASDAQ TRADEMARK GUIDELINES

Distributors are not entitled to use any of the Nasdaq registered trademarks for creating their own products or services. Any use of Nasdaq registered trademarks, other than for Nasdaq products as set forth in the Nasdaq Agreements, is subject to a separate trademark license agreement. Distributors must not deface, remove or misuse any Nasdaq trademarks transmitted with the Information.

## FINANCIAL STATUS INDICATOR:

Distributors providing Nasdaq U.S. Equity Information to External Subscribers that are subject to the SEC Vendor Display Rule are required to provide the Financial Status Indicator (FSI) to downstream Subscribers accessing intraday single security quotation displays or Data Feed products. The FSI is a data element that denotes when a Nasdaq-listed issuer failed to submit its regulatory filings on a timely basis, failed to meet The Nasdaq Stock Market's continuing listing standards and/or filed for bankruptcy. The FSI was added to the data products at the request of the SEC. The FSI field should be shown with the issue symbol and company name near the top of the quotation display. When the FSI value is published as "N" (Normal), Distributors are not required to display any information. Distributors are not required to provide the FSI on voice port devices or television services. If a voice port or television service offers news information, however, the Distributor may want to create a news alert based on the FSI value when the FSI for an issue is not "N" (Normal).

**PLEASE REFER TO NASDAQ DATA NEWS ITEM #2005-57 TO OBTAIN THE FSI CODE VALUES AND DESCRIPTIONS**

## PROMINENT ATTRIBUTION MESSAGE: QUOTE AND LAST SALE INFORMATION

Distributors providing Nasdaq Basic or Nasdaq Last Sale Information [Nasdaq Last Sale, NLS Plus, BX Last Sale, PSX Last Sale, and Nordic Last Sale] to External Subscribers must provide an attribution message on all displays, including wallboards, tickers, mobile devices, and audio announcements on voice response services. The message must prominently appear on all displays containing such data. In the case of a ticker, the attribution message should be interspersed with the market data at least every 90 seconds.

Data Feed Service	Sample Attribution Message
<b>NASDAQ BASIC OR NASDAQ LAST SALE FOR NASDAQ-LISTED SECURITIES</b>	"Real Time Nasdaq Last Sale data provided by Nasdaq" or "Source: Nasdaq Last Sale"
<b>NASDAQ BASIC OR NASDAQ LAST SALE FOR NYSE-/AMEX-LISTED SECURITIES</b>	"Real Time NYSE/Amex Last Sale data provided by Nasdaq" or "Source: Nasdaq Last Sale"
<b>NORDIC LAST SALE FOR NORDIC SECURITIES</b>	"Real Time Nordic Last Sale data provided by Nasdaq" or "Source: Nasdaq Nordic Last Sale" or "Source: Nordic Last Sale"

## INDUSTRY CLASSIFICATION BENCHMARK

"Industry Classification Benchmark ("ICB") is a product of FTSE International Limited ("FTSE") and all intellectual property rights in and to ICB vest in FTSE. Nasdaq has been licensed by FTSE to use ICB. "FTSE" is a trademark of London Stock Exchange and The Financial Times Limited and is used by FTSE under license. FTSE and its licensors do not accept any liability to any person for any loss or damage arising out of any error or omission in ICB."

## DOCUMENT UPDATES: OVERVIEW

Document updates provide insight into changes of data policies. Major policy updates will be identified by a new release # (currently 2.0). Minor technical updates will be identified by version (e.g. X.1).

### January 1, 2020: Version 2.0

- Nasdaq branding updated

### October 17, 2022: Version 2.1

- Nasdaq Basic added to Prominent Attribution Message section