

---

---

**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

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

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.

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

**Part I. FINANCIAL INFORMATION**

Item 1.	<a href="#">Financial Statements</a>	<a href="#">1</a>
	<a href="#">Condensed Consolidated Balance Sheets - September 30, 2022 (unaudited) and December 31, 2021</a>	<a href="#">1</a>
	<a href="#">Condensed Consolidated Statements of Income - Three and Nine Months Ended September 30, 2022 and 2021 (unaudited)</a>	<a href="#">2</a>
	<a href="#">Condensed Consolidated Statements of Comprehensive Income - Three and Nine Months Ended September 30, 2022 and 2021 (unaudited)</a>	<a href="#">3</a>
	<a href="#">Condensed Consolidated Statements of Changes in Stockholders' Equity - Three and Nine Months Ended September 30, 2022 and 2021 (unaudited)</a>	<a href="#">4</a>
	<a href="#">Condensed Consolidated Statements of Cash Flows - Nine Months Ended September 30, 2022 and 2021 (unaudited)</a>	<a href="#">5</a>
	<a href="#">Notes to Condensed Consolidated Financial Statements (unaudited)</a>	<a href="#">6</a>
Item 2.	<a href="#">Management's Discussion and Analysis of Financial Condition and Results of Operations</a>	<a href="#">32</a>
Item 3.	<a href="#">Quantitative and Qualitative Disclosures About Market Risk</a>	<a href="#">49</a>
Item 4.	<a href="#">Controls and Procedures</a>	<a href="#">52</a>

**Part II. OTHER INFORMATION**

Item 1.	<a href="#">Legal Proceedings</a>	<a href="#">52</a>
Item 1A.	<a href="#">Risk Factors</a>	<a href="#">52</a>
Item 2.	<a href="#">Unregistered Sales of Equity Securities and Use of Proceeds</a>	<a href="#">52</a>
Item 3.	<a href="#">Defaults Upon Senior Securities</a>	<a href="#">53</a>
Item 4.	<a href="#">Mine Safety Disclosures</a>	<a href="#">53</a>
Item 5.	<a href="#">Other Information</a>	<a href="#">53</a>
Item 6.	<a href="#">Exhibits</a>	<a href="#">53</a>
	<a href="#">SIGNATURES</a>	<a href="#">54</a>

## 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

NASDAQ, the NASDAQ logos, and other brand, service or product names or marks referred to in this report are trademarks or service marks, registered or otherwise, of Nasdaq, Inc. and/or its subsidiaries. FINRA and Trade Reporting Facility are registered trademarks of FINRA.

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
<b>Total current assets</b>	<b>10,851</b>	<b>7,423</b>
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
<b>Total assets</b>	<b>\$ 22,941</b>	<b>\$ 20,115</b>
<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
<b>Total current liabilities</b>	<b>11,335</b>	<b>7,872</b>
Long-term debt	4,573	4,812
Deferred tax liabilities, net	470	406
Operating lease liabilities	456	386
Other non-current liabilities	223	234
<b>Total liabilities</b>	<b>17,057</b>	<b>13,710</b>
<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
<b>Total Nasdaq stockholders' equity</b>	<b>5,875</b>	<b>6,395</b>
Noncontrolling interests	9	10
<b>Total equity</b>	<b>5,884</b>	<b>6,405</b>
<b>Total liabilities and equity</b>	<b>\$ 22,941</b>	<b>\$ 20,115</b>

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)**

	<u>Three Months Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>
<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>	<u>107</u>	<u>229</u>	<u>378</u>	<u>785</u>
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>	491	\$ 5,884	502	\$ 6,355	491	\$ 5,884	502	\$ 6,355

<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
<b>Cash and cash equivalents, restricted cash and cash equivalents at end of period</b>	<b>\$ 9,234</b>	<b>\$ 3,748</b>
<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		
	<u>As Reported</u>	<u>Adjustment</u> (in millions)	<u>Adjusted</u>
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	<u>\$ 332</u>	<u>\$ 3,416</u>	<u>\$ 3,748</u>
<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>	<u>\$ 332</u>	<u>\$ 3,416</u>	<u>\$ 3,748</u>

### 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>Market Technology</b>		
Anti Financial Crime Technology	\$ 77	\$ 62
Market Infrastructure Technology	55	52
<b>Investment Intelligence</b>		
Market data	104	102
Index	125	119
Analytics	55	51
<b>Corporate Platforms</b>		
Listing services	105	99
IR & ESG Services	63	56
<b>Market Services</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>Market Technology</b>		
Anti Financial Crime Technology	\$ 224	\$ 163
Market Infrastructure Technology	163	169
<b>Investment Intelligence</b>		
Market data	318	310
Index	370	328
Analytics	163	149
<b>Corporate Platforms</b>		
Listing services	320	282
IR & ESG Services	184	169
<b>Market Services</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
<b>Total</b>	<b>\$ 1,294</b>	<b>\$ 138</b>	<b>\$ 104</b>	<b>\$ 1,536</b>

#### 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)
<b>Total finite-lived intangible assets</b>	<b>\$ 1,410</b>	<b>\$ 1,567</b>
<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)
<b>Total indefinite-lived intangible assets</b>	<b>\$ 1,173</b>	<b>\$ 1,246</b>
<b>Total intangible assets, net</b>	<b>\$ 2,583</b>	<b>\$ 2,813</b>

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
<b>Total</b>	<b>\$ 1,517</b>

## 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)						
<b>Market Technology</b>	\$ 117	\$ 100	\$ (102)	\$ (6)	\$ 109		
<b>Investment Intelligence</b>	106	92	(90)	—	108		
<b>Corporate Platforms:</b>							
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		
<b>Total</b>	<b>\$ 448</b>	<b>\$ 370</b>	<b>\$ (290)</b>	<b>\$ (18)</b>	<b>\$ 510</b>		

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
<b>Corporate Platforms:</b>							
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
<b>Total</b>	<b>\$ 239</b>	<b>\$ 188</b>	<b>\$ 35</b>	<b>\$ 23</b>	<b>\$ 16</b>	<b>\$ 9</b>	<b>\$ 510</b>

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)				
<b>Short-term debt:</b>				
Commercial paper	\$ 420	\$ 2,898	\$ (3,119)	\$ 199
2022 Notes	598	—	2	600
2024 Notes	499	—	(499)	—
<b>Total short-term debt</b>	<b>\$ 1,517</b>	<b>\$ 2,898</b>	<b>\$ (3,616)</b>	<b>\$ 799</b>
<b>Long-term debt - senior unsecured notes:</b>				
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)
<b>Total long-term debt</b>	<b>\$ 4,313</b>	<b>\$ 541</b>	<b>\$ (281)</b>	<b>\$ 4,573</b>
<b>Total debt obligations</b>	<b>\$ 5,830</b>	<b>\$ 3,439</b>	<b>\$ (3,897)</b>	<b>\$ 5,372</b>

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
<b>Total</b>	<b>\$ 9,507</b>	<b>\$ 8,915</b>	<b>\$ 18,422</b>

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 %
(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
	(in millions)	
<b>Market Technology</b>		
Total revenues	\$ 132	\$ 114
Operating income	20	10
<b>Investment Intelligence</b>		
Total revenues	284	272
Operating income	183	177
<b>Corporate Platforms</b>		
Total revenues	168	155
Operating income	74	65
<b>Market Services</b>		
Total revenues	972	811
Transaction-based expenses	(667)	(519)
Revenues less transaction-based expenses	305	292
Operating income	196	185
<b>Corporate Items</b>		
Total revenues	1	5
Operating loss	(75)	(81)
<b>Consolidated</b>		
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
	(in millions)	
<b>Market Technology</b>		
Total revenues	\$ 387	\$ 332
Operating income	41	26
<b>Investment Intelligence</b>		
Total revenues	851	787
Operating income	553	509
<b>Corporate Platforms</b>		
Total revenues	504	451
Operating income	225	187
<b>Market Services</b>		
Total revenues	2,892	2,813
Transaction-based expenses	(1,969)	(1,885)
Revenues less transaction-based expenses	923	928
Operating income	590	608
<b>Corporate Items</b>		
Total revenues	10	36
Operating loss	(194)	(233)
<b>Consolidated</b>		
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	\$	<u>31</u>

## 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.

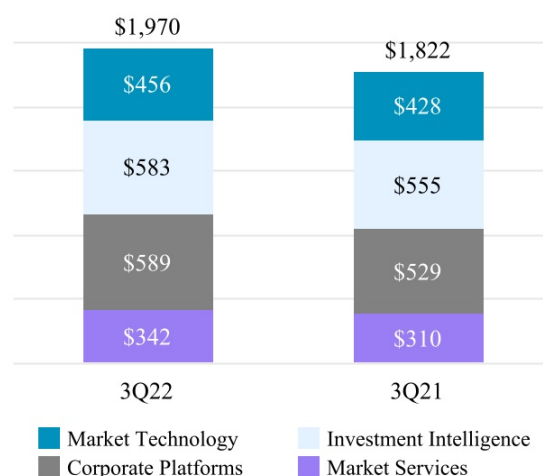
	Three Months Ended September 30,		Percentage Change
	2022	2021	
(in millions, except per share amounts)			
Revenues less transaction-based expenses	\$ 890	\$ 838	6.2 %
Operating expenses	492	482	2.1 %
Operating income	398	356	11.8 %
Net income attributable to Nasdaq	\$ 294	\$ 288	2.1 %
Diluted earnings 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):

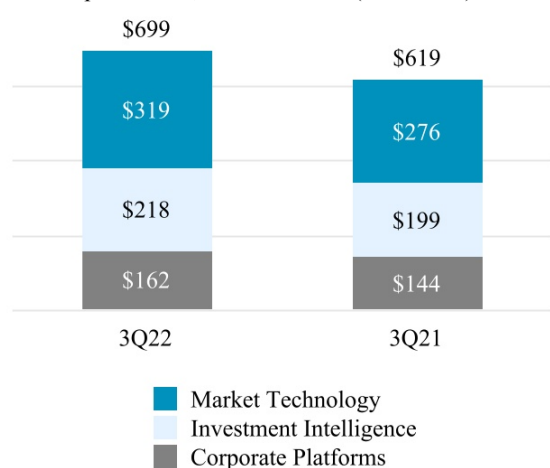


ARR for a given period is the annualized revenue derived from subscription contracts with a defined contract value. This excludes contracts that are not recurring, are one-time in nature, or where the contract value fluctuates based on defined metrics. ARR is one of our key performance metrics to assess 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:

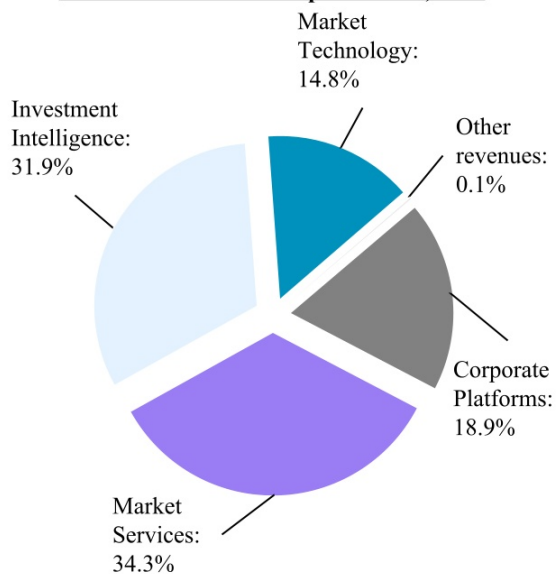
	Three Months Ended September 30,		Percentage Change
	2022	2021	
(in millions)			
Market Technology	\$ 132	\$ 114	15.8 %
Investment Intelligence	284	272	4.4 %
Corporate Platforms	168	155	8.4 %
Market Services	972	811	19.9 %
Other revenues	1	5	(80.0)%
Total revenues	\$ 1,557	\$ 1,357	14.7 %
Transaction 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 %

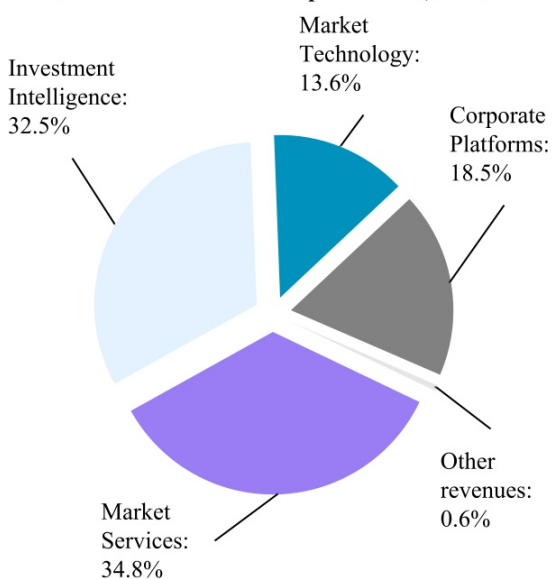
The following charts present our Market Technology, Investment Intelligence, Corporate Platforms and Market Services segments as a percentage of our total revenues, less transaction-based expenses.

**Percentage of Revenues Less Transaction-based Expenses by Segment for the:**

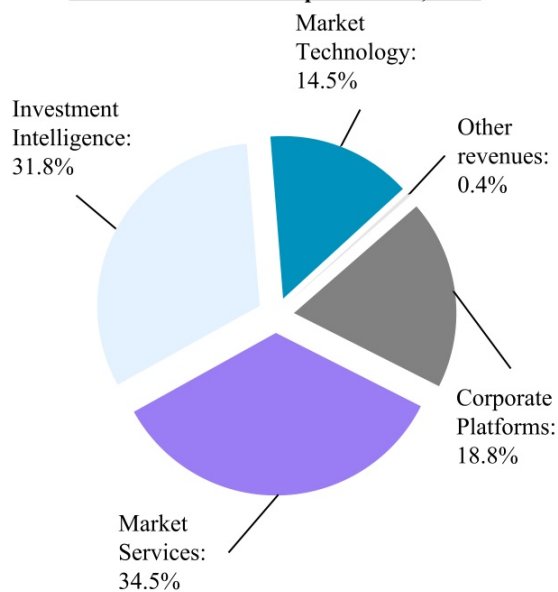
**Three Months Ended September 30, 2022**



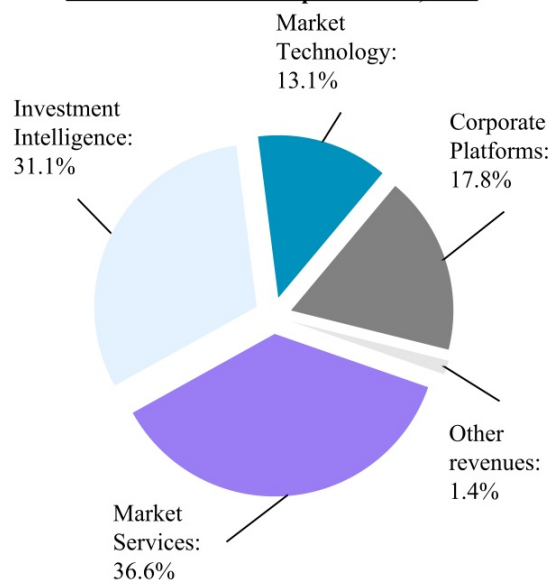
**Three Months Ended September 30, 2021**



**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 %
<b>Total Market Technology</b>	<b>\$ 132</b>	<b>\$ 114</b>	<b>15.8 %</b>

	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)%
<b>Total Market Technology</b>	<b>\$ 387</b>	<b>\$ 332</b>	<b>16.6 %</b>

	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 %
<b>Total Investment Intelligence</b>	<b>\$ 284</b>	<b>\$ 272</b>	<b>4.4 %</b>

	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 %
<b>Total Investment Intelligence</b>	<b>\$ 851</b>	<b>\$ 787</b>	<b>8.1 %</b>

	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
<u>IPOs</u>		
The Nasdaq Stock Market	35	147
Exchanges that comprise Nasdaq Nordic and Nasdaq Baltic	3	25
<u>Total new listings</u>		
The Nasdaq Stock Market	98	223
Exchanges that comprise Nasdaq Nordic and Nasdaq Baltic	9	28
<u>Number of listed companies</u>		
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
<u>IPOs</u>		
The Nasdaq Stock Market	143	557
Exchanges that comprise Nasdaq Nordic and Nasdaq Baltic	33	111
<u>Total new listings</u>		
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 %

<u>Nasdaq Nordic and Nasdaq Baltic options and futures</u>		
Total average daily volume of options and futures contracts	267,137	241,653

	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 %
(in millions)			
	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 %

**Nasdaq Nordic and Nasdaq Baltic securities**

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 %

**Nasdaq Nordic and Nasdaq Baltic securities**

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 are assessed 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,		Percentage Change
	2022	2021	
	(in millions)		
ARR	\$ 342	\$ 310	10.3 %

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>
	(in millions)		
	Nine Months Ended September 30,		Percentage Change
	2022	2021	
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,		
	2022	2021	Percentage Change
	(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,		
	2022	2021	Percentage Change
	(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>	<b>\$ 335</b>	<b>\$ 303</b>
<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>	<b>24.4 %</b>	<b>25.9 %</b>
Weighted-average common shares outstanding for diluted earnings per share	496.3	510.5
<b>U.S. GAAP diluted earnings per share</b>	<b>\$ 0.59</b>	<b>\$ 0.56</b>
Total adjustments from non-GAAP net income	0.09	0.03
<b>Non-GAAP diluted earnings per share</b>	<b>\$ 0.68</b>	<b>\$ 0.59</b>

	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
<b>Total financial assets</b>	<b>\$ 430</b>	<b>\$ 601</b>

### 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	
Net cash provided by (used in):	(in millions)		
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)		
Short-term debt:		
Commercial paper	\$ 199	\$ 420
2022 Notes December 2022	600	598
2024 Notes June 2024	—	499
Total short-term debt	<u>\$ 799</u>	<u>\$ 1,517</u>
Long-term debt - senior unsecured notes:		
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	—
Total long-term debt	<u>\$ 4,573</u>	<u>\$ 4,313</u>
Total debt obligations	<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="#">31.1</a>	<a href="#">Certification of President and Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (“Sarbanes-Oxley”).</a>
<a href="#">31.2</a>	<a href="#">Certification of Executive Vice President and Chief Financial Officer pursuant to Section 302 of Sarbanes-Oxley.</a>
<a href="#">32.1</a>	<a href="#">Certifications Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of Sarbanes-Oxley.</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.



## 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.

/s/ Adena T. Friedman  
\_\_\_\_\_  
Name: Adena T. Friedman  
Title: President and Chief Executive Officer  
Date: November 2, 2022

/s/ Ann M. Dennison  
\_\_\_\_\_  
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.