

## Risk Factors Comparison 2024-02-21 to 2023-02-23 Form: 10-K

**Legend:** New Text ~~Removed Text~~ Unchanged Text Moved Text Section

The risks and uncertainties described below 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. If any of the following risks actually occur, our business, financial condition, or operating results could be adversely affected. RISKS RELATED TO OUR BUSINESS AND INDUSTRY Economic conditions and market factors, which are beyond our control, may adversely affect our business and financial condition. Our business performance is impacted by a number of factors, including general economic conditions, current or expected inflation, interest rate fluctuations, market volatility, changes in investment patterns and priorities, pandemics (such as COVID-19) and other factors that are generally beyond our control. To the extent that global or national economic conditions weaken and result in slower growth or recessions, our business may be negatively impacted. Adverse market conditions could reduce customer demand for our services and the ability of our customers, lenders and other counterparties to meet their obligations to us. Poor economic conditions may result in a reduction in the demand for our products and services, including our market technology, **fraud detection, FRAML, AML and surveillance** solutions, data, ~~indexes~~ **indices** and corporate solutions, or could result in a decline in the number of IPOs, reduced trading volumes or values and deterioration of the economic welfare of our listed companies, which could cause an increase in delistings. Trading volumes and values are driven primarily by general market conditions and declines in trading volumes or values may affect our market share and impact our pricing. In addition, our Market ~~Platforms~~ **Services** businesses receive revenues from a relatively small number of customers concentrated in the financial industry, so any event that impacts one or more customers or the financial industry in general could impact our revenues. The number of listings on our markets is primarily influenced by factors such as investor demand, the global economy, available sources of financing, and tax and regulatory policies. Adverse conditions may jeopardize the ability of our listed companies to comply with the continued listing requirements of our exchanges, or reduce the number of issuers launching IPOs, including SPACs, and direct listings. The number of IPOs on our exchanges decreased in **both 2023 and 2022**, and the number of delistings increased **in compared to 2021-2023**. Our Capital Access Platforms revenues may be significantly affected by global economic conditions. Professional subscriptions to our data products are at risk if staff reductions occur in financial services companies or if our customers consolidate, which could result in significant reductions in our professional user revenue or expose us to increased risks relating to dependence on a smaller number of customers. In addition, adverse market conditions may cause reductions in the number of non-professional investors with investments in the market and in ETP AUM tracking Nasdaq ~~indexes~~ **indices** as well as trading in futures linked to Nasdaq ~~indexes~~ **indices**. There may be less demand for our **analytics, corporate solutions, market technology and FRAML risk and regulatory** products and services if global economic conditions remain weak. Our customers historically reduce purchases of new services and technology when growth rates decline, thereby diminishing our opportunities to sell new products and services or upgrade existing products and services. Additionally, during a global economic downturn, or periods of economic, political or regulatory uncertainty, our sales cycle may become longer or more unpredictable due to customer budget constraints or unplanned administrative delays to approve purchases. A reduction in trading volumes or values, market share of trading, the number of our listed companies, or demand for ~~market technology or our Capital Access Platforms~~ products and services due to economic conditions or other market factors could adversely affect our business, financial condition and operating results. The industries we operate in are highly competitive. We face significant competition in our ~~Market Platforms, Capital Access Platforms, and Anti-Financial Crime businesses~~ **Technology and Market Services segments** from other market participants. We face intense competition from other exchanges and markets for market share of trading activity and listings. This competition includes both product and price competition. The liberalization and globalization of world markets has resulted in greater mobility of capital, greater international participation in local markets and more competition. As a result, both in the U. S. and in other countries, the competition among exchanges and other execution venues has become more intense. Marketplaces in both Europe and the U. S. have also merged to achieve greater economies of scale and scope. Regulatory changes also have facilitated the entry of new participants in the European Union that compete with our European markets. The regulatory environment, both in the U. S. and in Europe, is structured to maintain this environment of intense competition. In addition, a high proportion of business in the securities markets is becoming concentrated in a smaller number of institutions and our revenue may therefore become concentrated in a smaller number of customers. We also compete globally with other regulated exchanges and markets, ATSS, MTFs and other traditional and non-traditional execution venues. Some of these competitors also are ~~our customers. In addition, competitors recently have launched new exchanges in the U. S., including an exchange established by a group of~~ our customers. Competitors may develop market trading platforms that are more competitive than ours. Competitors may leverage data more effectively or enter into strategic partnerships, mergers or acquisitions that could make their trading, listings, clearing, data or technology businesses more competitive than ours. We face intense price competition in all areas of our business. In particular, the trading industry is characterized by price competition. We have in the past lowered prices, and in the U. S., increased rebates for trade executions to attempt to gain or maintain market share. These strategies have not always been successful and have at times hurt operating performance. Additionally, we have also been, and may once again be, required to adjust pricing to respond to actions by competitors and new entrants, or due to new SEC regulations, which could adversely impact operating results. We also compete with respect to the pricing of data products and with respect to products for pre-trade book data and for post-trade last sale data. If we are unable to compete successfully in the industries in which we do business, our business, financial condition and operating results will be adversely affected. System

limitations or failures could harm our business. Our businesses depend on the integrity and performance of the technology, computer and communications systems supporting them. If new systems fail to operate as intended or our existing systems cannot expand to cope with increased demand or otherwise fail to perform, we could experience unanticipated disruptions in service, slower response times and delays in the introduction of new products and services. We could experience a systems failure due to human error by our employees, contractors or vendors, electrical or telecommunications failures or disruptions, hardware or software failures or defects, cyberattacks, sabotage or similar unexpected events. These consequences could result in service outages, lower trading volumes or values, financial losses, decreased customer satisfaction, litigation and regulatory sanctions. Our markets and the markets that rely on our technology have experienced systems failures and delays in the past and **we** could experience future systems failures and delays. Although we currently maintain and expect to maintain multiple computer facilities, and leverage third party cloud providers, that are designed to provide redundancy and back-up to reduce the risk of system disruptions and have facilities in place that are expected to maintain service during a system disruption, such systems and facilities may prove inadequate. If trading volumes increase unexpectedly or other unanticipated events occur, we may need to expand and upgrade our technology, transaction processing systems and network infrastructure. We do not know whether we will be able to accurately project the rate, timing or cost of any volume increases, or expand and upgrade our systems and infrastructure to accommodate any increases in a timely manner. While we have programs in place to identify and minimize our exposure to vulnerabilities and work in collaboration with the technology industry to share corrective measures with our business partners, we cannot guarantee that such events will not occur in the future. Any system issue that causes an interruption in services, decreases the responsiveness of our services or otherwise affects our services could impair our reputation, damage our brand name and negatively impact our business, financial condition and operating results. We must continue to introduce new products, initiatives and enhancements to maintain our competitive position. We intend to launch new products and initiatives and continue to explore and pursue opportunities to strengthen our business and grow our company. We may spend substantial time and money developing new products, ~~such as our digital assets offering~~, initiatives and enhancements to existing products. If these products and initiatives are not successful or their launches are delayed, ~~including for regulatory uncertainty related to our digital assets offering~~, we may not be able to offset their costs, which could have an adverse effect on our business, financial condition and operating results. In our technology operations, we have invested substantial amounts in the development of system platforms, the rollout of our platforms and the adoption of new technologies, including cloud-based infrastructure **and artificial intelligence** for certain of our offerings. Although investments are carefully planned, there can be no assurance that the demand for such platforms or technologies will justify the related investments. If we fail to generate adequate revenue from planned system platforms or the adoption of new technologies, or if we fail to do so within the envisioned timeframe, it could have an adverse effect on our results of operations and financial condition. In addition, clients may delay purchases in anticipation of new products or enhancements. We may allocate significant amounts of cash and other resources to product technologies or business models for which market demand is lower than anticipated. In addition, the introduction of new products by competitors, the emergence of new industry standards or the development of entirely new technologies to replace existing product offerings could render our existing or future products obsolete. A decline in trading and clearing volumes or values or market share will decrease our trading and clearing revenues. Trading and clearing volumes and values are directly affected by economic, political and market conditions, broad trends in business and finance, unforeseen market closures or other disruptions in trading, the level and volatility of interest rates, inflation, changes in price levels of securities and the overall level of investor confidence. ~~Beginning in 2020~~ **Over the past several years**, trading and clearing volumes and values across our markets have fluctuated significantly depending on market conditions and other factors beyond our control. Because a significant percentage of our revenues is tied directly to the volume or value of securities traded and cleared on our markets, it is likely that a general decline in trading and clearing volumes or values would lower revenues and may adversely affect our operating results if we are unable to offset falling volumes or values through pricing changes. Declines in trading and clearing volumes or values may also impact our market share or pricing structures and adversely affect our business and financial condition. If our total market share in securities decreases relative to our competitors, our venues may be viewed as less attractive sources of liquidity. If our exchanges are perceived to be less liquid, then our business, financial condition and operating results could be adversely affected. Since some of our exchanges offer clearing services in addition to trading services, a decline in market share of trading could lead to a decline in clearing and depository revenues. Declines in market share also could result in issuers viewing the value of a listing on our exchanges as less attractive, thereby adversely affecting our listing business. Finally, declines in market share of Nasdaq-listed securities, or recently adopted SEC rules and regulations, could lower The Nasdaq Stock Market's share of tape pool revenues under the consolidated data plans, thereby reducing the revenues of our U. S. Tape plans business. Our role in the global marketplace positions us at greater risk for a cyberattack. Our systems and operations are vulnerable to damage or ~~interruption~~ **disruption** from security breaches. ~~Due to~~ **As a result of** our adoption of a hybrid work environment, we have a broader and more distributed network footprint and increased reliance on the home networks of employees, and such remote work may cause heightened cybersecurity and operational risks. Some of these threats include attacks from foreign governments, hackers, insiders and criminal organizations. Foreign governments may seek to obtain a foothold in U. S. critical infrastructure, hackers may seek to deploy denial of service attacks to bring attention to their cause, insiders may pose a risk of human error or malicious activity and criminal organizations may seek to profit from stolen data. Computer malware, such as viruses and worms, also continue to be a threat with ransomware increasingly being used by criminals to extort money. Given our position in the global securities industry, we may be more likely than other companies to be a direct target, or an indirect casualty, of such events. While we continue to employ and invest additional resources to monitor our systems and protect our infrastructure, these measures may prove insufficient depending upon the attack or threat posed. Any system issue, whether as a result of an intentional breach, collateral damage from a new virus or a non-malicious act, **the use of artificial intelligence by bad actors, including the use of such tools to**

**engage in social engineering or similar activities**, or due to a cybersecurity breach of a customer that results in a loss of our data or compromises our systems or those of our other customers utilizing the same products, could damage our reputation and result in: a loss of customers; disrupted customer relationships; the loss of our intellectual property or sensitive data; lower trading volumes or values, ~~incur~~ **litigation or regulatory fines** or otherwise have a negative impact on our business, our products and services, financial condition and operating results. Further, cybersecurity incidents that impact our vendors and other third parties that support our organization and industry could directly or indirectly impact us. **For example, a data breach involving one of our vendors occurred in 2023, and was identified and mitigated by the vendor before material damage to Nasdaq occurred.** There can be no assurance we will be able to identify and mitigate every incident involving cybersecurity attacks, breaches or incidents. A system breach may go undetected for an extended period of time. Expanded cybersecurity regulations, and increased cybersecurity infrastructure and compliance costs, may adversely impact our results of operations. As cybersecurity threats continue to increase in frequency and sophistication, and as the domestic and international regulatory and compliance structure related to information ~~and~~ **cybersecurity**, ~~;~~ **data privacy and data usage**, ~~;~~ **and our digital assets offering**, becomes increasingly complex and exacting, we may be required to devote significant additional resources to strengthen our cybersecurity capabilities, and to identify and remediate any security vulnerabilities. Compliance with laws and regulations concerning cybersecurity, data privacy and data usage could result in significant expense, and any failure to comply could result in proceedings against us by regulatory authorities or other third parties. ~~Additional costs~~ **Costs** for bolstering cybersecurity capabilities, and increased cybersecurity and data privacy compliance costs, could adversely impact our business, financial condition and operating results. Additionally, our clients increasingly demand rigorous contractual, certification and audit provisions regarding cybersecurity, data protection and data usage, which may also increase our overall compliance burden and costs in meeting such obligations. The success of our business depends on our ability to keep up with rapid technological and other competitive changes affecting our industry. Specifically, we must complete development of, successfully implement and maintain platforms that have the functionality, performance, capacity, reliability and speed required by our business and our regulators, as well as by our customers. The markets in which we compete are characterized by rapidly changing technology, evolving industry and regulatory standards, frequent enhancements to existing products and services, the adoption of new services and products and changing customer demands. We are reliant on our customers that purchase our on-premise solutions to maintain a certain level of network infrastructure for our products to operate and to allow for our support of those products, and there is no assurance that a customer will implement such measures. We may not be able to keep up with rapid technological and other competitive changes affecting our industry. For example, we must continue to enhance our platforms to remain competitive as well as to address our regulatory responsibilities, and our business will be negatively affected if our platforms or the technology solutions we sell to our customers fail to function as expected. If we are unable to develop our platforms to include other products and markets, or if our platforms do not have the required functionality, performance, capacity, reliability and speed required by our business and our regulators, as well as by our customers, we may not be able to compete successfully. Further, our failure to anticipate or respond adequately to changes in technology and customer preferences or any significant delays in product development efforts, could have a material adverse effect on our business, financial condition and operating results. **Our artificial intelligence initiatives under development and the use of artificial intelligence in certain of our existing products may be unsuccessful and may give rise to various risks, which could adversely affect our business, reputation, or operating results. We are making significant investments in artificial intelligence, or AI, including generative AI, to, among other things, develop new products or features for our existing products, including our anti-financial crime, investor relations and investment analytics solutions, and to enhance and refine our internal business operations. As AI is a new and evolving technology in the early stages of commercial use, there are significant risks involved in the development and deployment of AI, and there can be no assurance that the use of AI will enhance our products or services or augment our business or operating results. Market acceptance of AI technologies is uncertain, and we may be unsuccessful in our product development efforts. Moreover, our AI-related product initiatives and offerings, or use in our internal business operations, may give rise to risks related to harmful content, accuracy, bias, discrimination, intellectual property infringement, the ability to obtain intellectual property protection, misappropriation or leakage, defamation, data privacy, and cybersecurity, among others. In addition, these risks include the possibility of new or enhanced laws or regulations, for which compliance may be costly and burdensome or involve litigation or other legal liability, or additional oversight, audits or enforcement under existing laws or regulations. The use of AI may also give rise to ethical concerns or negative public perceptions, which may cause brand or reputational harm. Additionally, our competitors may be developing their own AI products and technologies, which may be superior in features or functionality, or cost, to our offerings. Any of these factors could adversely affect our business, reputation, or operating results.** Failure to attract and retain key personnel may adversely affect our ability to conduct our business. Our future success depends, in large part, upon our ability to attract and retain highly qualified and skilled professional personnel that can learn and embrace new technologies. In the current tight labor market, we have intensified our efforts to recruit and retain talent. Competition for key personnel in the various localities and business segments in which we operate is intense. We have, and may continue to, experience higher compensation costs to retain personnel, and hire new talent, that may not be offset by improved productivity, higher revenues or increased sales. Our ability to attract and retain key personnel, in particular senior officers or technology personnel, including from companies that we acquire, will be dependent on a number of factors, including prevailing market conditions, office / remote working arrangements and compensation and benefit packages offered by companies competing for the same talent. There is no guarantee that we will have the continued service of key employees who we rely upon to execute our business strategy and identify and pursue strategic opportunities and initiatives. **Our** ~~In particular, we may have to incur costs to replace senior officers or other key employees who leave, and our ability to execute our business strategy could be impaired if we are unable to replace such persons~~ **without incurring significant costs or**

in a timely manner or at all. Our clearinghouse operations expose us to risks, including credit or liquidity risks that may include defaults by clearing members, or insufficiencies in margins or default funds. We are subject to risks relating to our operation of a clearinghouse, including counterparty and liquidity risks, risk of defaults by clearing members and risks associated with adequacy of the customer margin and of default funds. Our clearinghouse operations expose us to counterparties with differing risk profiles. We may be adversely impacted by the financial distress or failure of a clearing member, which may cause us negative financial impact, reputational harm or regulatory consequences, including litigation or regulatory enforcement actions.

~~In September 2018, a member of the Nasdaq Clearing commodities market defaulted due to an inability to post sufficient collateral to cover increased margin requirements for the positions of the relevant member. For further discussion of the default, see Note 15, "Clearing Operations," to the consolidated financial statements. There are no assurances that similar defaults will not occur again, which could result in losses. To the extent that our regulatory capital and risk management policies are not adequate to manage future financial and operational risks in our clearinghouse, we may experience adverse consequences to our operating results or ability to conduct our business.~~ We are exposed to credit risk from third parties, including customers, counterparties and clearing agents. 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 clear a range of equity- related and fixed- income- related derivative products, commodities and resale and repurchase agreements. We assume the counterparty risk for all transactions that are cleared through Nasdaq Clearing on our markets and guarantee that our cleared contracts will be honored. We enforce minimum financial and operational criteria for membership eligibility, require members and investors to provide collateral, and maintain established risk policies and procedures to ensure that the counterparty risks are properly monitored and proactively managed; however, none of these measures provides absolute assurance against experiencing financial losses from defaults by our counterparties on their obligations. No guarantee can be given that the collateral provided will at all times be sufficient. Although we maintain clearing capital resources to serve as an additional layer of protection to help ensure that we are able to meet our obligations, these resources also may not be sufficient. We also have credit risk related to transaction and subscription- based revenues that are billed to customers on a monthly or quarterly basis, in arrears. Credit losses such as those described above could adversely affect our consolidated financial position and results of operations. Technology issues relating to our role as exclusive processor for Nasdaq- listed stocks could affect our business. Nasdaq, as technology provider to the UTP Operating Committee, has implemented measures to enhance the resiliency of the existing processor system. Nasdaq transferred the processor technology platform to our INET platform and this migration further enhanced the resiliency of the processor systems. ~~We further improved the systems' resiliency by adding the UTP SnapShot service.~~ However, if future outages occur or the processor systems fail to function properly while we are operating the systems, it could have an adverse effect on our business, reputation and financial condition. Stagnation or decline in the listings market could have an adverse effect on our revenues. The market for listings is dependent on the prosperity of companies and the availability of risk capital. A stagnation or decline in the number of new listings, or an increase in the number of delistings, on The Nasdaq Stock Market and the Nasdaq Nordic and Nasdaq Baltic exchanges could cause a decrease in revenues for future years. ~~Furthermore, In 2023, we again experienced a decrease in~~ new listings from IPOs, including SPACs, ~~decreased and an increase in 2022 delistings~~. A prolonged decrease in the number of listings, or failure of existing SPACs to successfully complete transactions with target companies and dissolve, could negatively impact the growth of our revenues. Our Corporate Solutions business is also impacted by declines in the listings market or increases in acquisitions activity as there may be fewer publicly- traded customers that need our products.

**RISKS RELATED TO TRANSACTIONAL ACTIVITIES AND STRATEGIC RELATIONSHIPS** We may not be able to successfully integrate acquired businesses, which may result in an inability to realize the anticipated benefits of our acquisitions. We must rationalize, coordinate and integrate the operations of our acquired businesses, **including the acquisition of Adenza, which was completed in November 2023**. This process involves complex technological, operational and personnel- related challenges, which are time- consuming and expensive and may disrupt our business. The difficulties, costs and delays that could be encountered may include:

- difficulties, costs or complications in combining the companies' operations, including technology platforms, **and security measures and infrastructure that may need greater remediation than anticipated**, which could lead to us not achieving the synergies we anticipate or customers not renewing their contracts with us as we migrate platforms;
- incompatibility of systems and operating methods;
- reliance on, or provision of, transition services;
- inability to use capital assets efficiently to develop the business of the combined company;
- difficulties of complying with government- imposed regulations in the U. S. and abroad, which may be conflicting;
- resolving possible inconsistencies in standards, controls, procedures and policies, business cultures and compensation structures;
- the diversion of management' s attention from ongoing business concerns and other strategic opportunities;
- difficulties in operating businesses we have not operated before;
- difficulties of integrating multiple acquired businesses simultaneously;
- the retention of key employees and management;
- the implementation of disclosure controls, internal controls and financial reporting systems at non- U. S. subsidiaries to enable us to comply with U. S. GAAP and U. S. securities laws and regulations, including the Sarbanes- Oxley Act of 2002, required as a result of our status as a reporting company under the Exchange Act;
- the coordination of geographically separate organizations;
- the coordination and consolidation of ongoing and future research and development efforts;
- possible tax costs or inefficiencies associated with integrating the operations of a combined company;
- pre- tax restructuring and revenue investment costs;
- the retention of strategic partners and attracting new strategic partners; and
- negative impacts on employee morale and performance as a result of job changes and reassignments.

Foreign acquisitions, **or acquisitions involving companies with numerous foreign subsidiaries**, involve risks in addition to those mentioned above, including those related to integration of operations across different cultures and languages, our ability to enforce contracts in various jurisdictions, currency risks and the particular economic, political and regulatory risks associated with specific countries. We may not be able to address these risks successfully, or at all, without incurring significant costs, delays or other operating problems that could disrupt our business and

have a material adverse effect on our financial condition. For these reasons, we may not achieve the anticipated financial and strategic benefits from our acquisitions and strategic initiatives. Any actual cost savings and synergies may be lower than we expect and may take a longer time to achieve than we anticipate, and we may fail to realize the anticipated benefits of acquisitions. We rely on third parties to perform certain functions, and our business could be adversely affected if these third parties fail to perform as expected or experience service interruptions affecting our operations. We rely on third parties for regulatory, data center, cloud **computing**, data storage and processing, **connectivity**, data content, clearing, **maintaining markets and exchange liquidity** and other services. Interruptions or delays in services from our third- party ~~data center hosting facilities or cloud computing platform~~ providers could impair the delivery of our services and harm our business. To the extent that any of our vendors or other third- party service providers experiences difficulties or a significant disruption, breach or outage, materially changes their business relationship with us or is unable for any reason to perform their obligations, **including due to geopolitical instability**, our business or our reputation may be materially adversely affected. Our access to cloud service provider infrastructure could be limited by a number of events, including technical or infrastructure failures, natural disasters or cybersecurity attacks. As we continue to grow our SaaS businesses, our dependency on the continuing operation and availability of these cloud service providers increases. If our cloud services from third party providers are unavailable to us for any reason, or there are cloud service disruptions or a delay or inability to access our exchanges, platforms or certain of our cloud products or features, such unavailability or delays may adversely affect our clients, which could significantly impact our reputation, operations, business, and financial results. For example, in ~~2022~~ **2023**, we ~~began~~ **continued** to migrate our North American markets to AWS in a phased approach, ~~starting with Nasdaq MRX in December 2022~~ **as we added two additional exchanges to our cloud- enabled infrastructure**. AWS operates a platform that we use to provide services to our clients, and therefore we are vulnerable to service outages on the AWS platform that affect Nasdaq workloads running or stored in the AWS environment. If AWS does not deliver our system requirements on time, fails to provide maintenance and support to our specifications or a migration experiences integration challenges, the successful migration of our exchanges to the AWS cloud platform may be significantly delayed, which may adversely affect our reputation and financial results. We also rely on members of our trading community to maintain markets and add liquidity. To the extent that any of our largest members experience difficulties, materially change their business relationship with us or are unable for any reason to perform market making activities, our business or our reputation may be materially adversely affected. We may be required to recognize impairments of our goodwill, intangible assets or other long- lived assets in the future. Our business acquisitions typically result in the recording of goodwill and intangible assets, and the recorded values of those assets may become impaired in the future. As of December 31, ~~2022~~ **2023**, goodwill totaled \$ ~~8-14~~ **8-14**. 1 billion and intangible assets, net of accumulated amortization, totaled \$ ~~2-7~~ **6-4** billion. The determination of the value of such goodwill and intangible assets requires management to make estimates and assumptions that affect our consolidated financial statements. We assess goodwill and intangible assets, as well as other long- lived assets, including equity method investments, equity securities, and property and equipment, for potential impairment on an annual basis or more frequently if indicators of impairment arise. We estimate the fair value of such assets by assessing many factors, including historical performance and projected cash flows. Considerable management judgment is necessary to project future cash flows and evaluate the impact of expected operating and macroeconomic changes on these cash flows. The estimates and assumptions we use are consistent with our internal planning process. However, there are inherent uncertainties in these estimates. There were no impairment charges recorded relating to goodwill and indefinite- lived intangible assets and there were no material impairment charges recorded relating to other long- lived assets in ~~2023, 2022, and 2021 and 2020~~ **2023, 2022, and 2021 and 2020**. We may experience future events that may result in asset impairments. Future disruptions to our business, prolonged economic weakness, due to pandemics or otherwise, or significant declines in operating results at any of our reporting units or businesses, may result in impairment charges to goodwill, intangible assets or other long- lived assets. A significant impairment charge in the future could have a material adverse effect on our operating results. Acquisitions, divestments, investments, joint ventures and other transactional activities may require significant resources and / or result in significant unanticipated losses, costs or liabilities. Over the past several years, acquisitions, **such as Adenza**, have been, **or are expected to be**, significant factors in our growth. We have divested businesses and may continue to divest additional businesses or assets in the future. Although we cannot predict our transactional activities, we believe that additional acquisitions, divestments, investments, joint ventures and other transactional activities will be important to our strategy. Such transactions may be material in size and scope. Other potential purchasers of assets in our industry may have greater financial resources than we have. Therefore, we cannot be sure that we will be able to complete future transactions on terms favorable to us. We also invest in early- stage companies through our Nasdaq Ventures program and hold minority interests in other entities. Given the size of these investments, we do not have operational control of these entities and may have limited visibility into risk management practices. Thus, we may be subject to additional capital requirements in certain circumstances and financial and reputational risks if there are operational failures. We may finance future transactions by issuing additional equity and / or debt. The issuance of additional equity in connection with any such transaction could be substantially dilutive to existing shareholders. In addition, the announcement or implementation of future transactions by us or others could have a material effect on the price of our common stock. The issuance of additional debt could increase our leverage substantially. ~~We could face financial risks associated with incurring additional debt, particularly if the debt results in significant incremental leverage~~. Additional debt may reduce our liquidity, curtail our access to financing markets, impact our standing with credit rating agencies and increase the cash flow required for debt service. Any incremental debt incurred to finance a transaction could also place significant constraints on the operation of our business. Furthermore, any future transactions could entail a number of additional risks, including: • the inability to maintain key pre- transaction business relationships; • increased operating costs; • the inability to meet our target for return on invested capital; • increased debt obligations, which may adversely affect our targeted debt ratios; • risks to the continued achievement of our strategic direction; • risks associated with divesting employees, customers or vendors when divesting businesses or assets; •

declines in the value of investments; • exposure to unanticipated liabilities, including after a transaction is completed; • incurred but unreported claims for an acquired company; • difficulties in realizing projected efficiencies, synergies and cost savings; and • changes in our credit rating and financing costs. **RISKS RELATED TO LIQUIDITY AND CAPITAL RESOURCES** A downgrade of our credit rating could increase the cost of our funding from acquisitions in the capital markets. Our debt is currently rated investment grade by two of the major rating agencies. These rating agencies regularly evaluate us, and integrations and restructuring costs may materially affect their ratings of our long-term debt and commercial paper are based on a number of factors, including our financial strength and corporate development activity, as well as factors not entirely within our control, including conditions affecting our industry generally. There can be no assurance that we will maintain our current ratings. Our failure to maintain such ratings could reduce or eliminate our ability to issue commercial paper and adversely affect the cost and other terms upon which market value of our common stock. In accordance with U. S. GAAP, we account for acquisitions using the acquisition method of accounting. We allocate the total estimated purchase price to net tangible and identifiable intangible assets. Our senior notes fluctuate based on their fair values and our credit ratings. Our leverage limits our financial flexibility, increases our exposure to weakening economic conditions and may adversely affect our ability to obtain additional financing. Our indebtedness as of December 31, 2023, the date of completion of the acquisition and record the excess of the purchase price over those fair values as was goodwill \$ 10.5 billion. We may borrow additional amounts by utilizing available liquidity under our existing credit facilities, issuing additional debt securities or issuing short-term, unsecured commercial paper notes through our commercial paper program. Our leverage and reliance on the capital markets financial results, including earnings per share, could be adversely affected by a number of financial adjustments including the following: • reduce funds available to us for operations and general corporate purposes or for capital expenditures we may incur additional amortization expense over the estimated useful lives of certain of the intangible assets acquired in connection with acquisitions during such estimated useful lives; • we may have additional depreciation expense as a result of the dedication of a substantial portion of our consolidated cash flow from operations recording acquired tangible assets at fair value, in accordance with U. S. GAAP, as compared to book value as recorded; • the payment of principal and interest on our indebtedness; • increase to the extent the value of goodwill or our exposure to intangible assets becomes impaired, we may be required to incur material charges relating to the impairment of those assets; • place us at a competitive disadvantage compared with our competitors with less debt; • affect our ability to obtain additional financing in the future for refinancing indebtedness, acquisitions, working capital, capital expenditures or other purposes; and • increase our cost of debt and reduce or eliminate our ability to issue commercial paper. In addition, we may be required to comply with the covenants in our credit facilities. Among other things, these covenants restrict our ability to effect certain fundamental transactions, dispose of certain assets, incur additional indebtedness and grant liens on assets. Failure to meet any of the covenant terms of our credit facilities could result in an event of default. If an event of default occurs, and we are unable to receive a waiver of default, our lenders may increase our borrowing costs, restrict our ability to obtain additional borrowings and accelerate repayment of all amounts outstanding. We will need to invest in our operations to maintain and grow our business and to integrate acquisitions, and we may need additional funds, which may not be readily available. We depend on the availability of adequate capital to maintain and develop our business. Although we believe that we can meet our current capital requirements from integrating internally generated funds, cash on hand and borrowings under our revolving credit facility and commercial paper program, if the capital and credit markets experience volatility, access to capital or credit may not be available on terms acceptable to us or at all. Rising interest rates could adversely affect our ability to pursue new financing opportunities, and it may be more expensive for us to issue new debt securities. Limited access to capital or credit in the future could have an impact on our ability to refinance debt, maintain our credit rating, meet our regulatory capital requirements, engage in strategic initiatives, make acquisitions or strategic investments. The success of our acquisitions depends, in part, on other companies, pay dividends, repurchase our stock or react to changing economic and business conditions. If we are unable to fund our capital or credit requirements, it could have an adverse effect on our business, financial condition and operating results. In addition to our debt obligations, we will need to continue to invest in our operations for the foreseeable future to integrate acquired businesses and to fund new initiatives. If we do not achieve the expected operating results, we will need to reallocate our cash resources. This may include borrowing additional funds to service debt payments, which may impair our ability to make investments in our business or to integrate these acquired businesses into. If we need to raise funds through incurring additional debt, we may become subject to covenants more restrictive than those contained in our credit facilities, the indentures governing our notes and our other debt instruments. Furthermore, if adverse economic conditions occur, we could experience decreased revenues from our operations which could affect our ability to satisfy financial and other restrictive covenants to which we are subject under our existing indebtedness operations and realize anticipated cost savings, revenue synergies and growth opportunities; and • we may incur restructuring costs in connection with the reorganization of any of our businesses. **RISKS RELATED TO LEGAL AND REGULATORY MATTERS** We operate in a highly regulated industry and may be subject to censures, fines and enforcement proceedings if we fail to comply with regulatory obligations that can be ambiguous and can change unexpectedly. We operate in a highly regulated industry and are subject to extensive regulation in the U. S., Europe and Canada. The securities trading industry is subject to significant regulatory oversight and could be subject to increased governmental and public scrutiny in the future that can change in response to global conditions and events, or due to changes in trading patterns, such as due to the recent volatility involving the trading of certain stocks. Our ability to comply with complex and changing regulation is largely dependent on our

establishment and maintenance of compliance, audit and reporting systems that can quickly adapt and respond, as well as our ability to attract and retain qualified compliance and other risk management personnel. There is no assurance that our policies and procedures will always be effective or that we will always be successful in monitoring or evaluating the risks to which we are or may be exposed. Our regulated markets are subject to audits, investigations, administrative proceedings and enforcement actions relating to compliance with applicable rules and regulations. Regulators have broad powers to impose fines, penalties or censure, issue cease- and- desist orders, prohibit operations, revoke licenses or registrations and impose other sanctions on our exchanges, broker- dealers, central securities depositories, clearinghouse and markets for violations of applicable requirements. In the future, we could be subject to regulatory investigations or enforcement proceedings that could result in substantial sanctions, including revocation of our operating licenses. Any such investigations or proceedings, whether successful or unsuccessful, could result in substantial costs, the diversion of resources, including management time, and potential harm to our reputation, which could have a material adverse effect on our business, results of operations or financial condition. In addition, our exchanges could be required to modify or restructure their regulatory functions in response to any changes in the regulatory environment, or they may be required to rely on third parties to perform regulatory and oversight functions, each of which may require us to incur substantial expenses and may harm our reputation if our regulatory services are deemed inadequate. The regulatory framework under which we operate and new regulatory requirements or new interpretations of existing regulatory requirements could require substantial time and resources for compliance, which could make it difficult and costly for us to operate our business. Under current U. S. federal securities laws, changes in the rules and operations of our securities markets, including our pricing structure, must be reviewed and in many cases explicitly approved by the SEC. The SEC may approve, disapprove, or recommend changes to proposals that we submit. In addition, the SEC may delay either the approval process or the initiation of the public comment process. Favorable SEC rulings and interpretations can be challenged in and reversed by federal courts of appeals, reducing or eliminating the value of such prior interpretations. Any delay in approving changes, or the altering of any proposed change, could have an adverse effect on our business, financial condition and operating results. We must compete not only with **non- exchanges, such as** ATs that are not subject to the same SEC approval **requirements and process processes** , but also with other exchanges that may have lower regulation and surveillance costs than us. There is a risk that trading will shift to exchanges **or non- exchanges** that charge lower fees because, among other reasons, they spend significantly less on regulation. In 2016, the SEC approved a plan for Nasdaq and other exchanges to establish a CAT ;to improve regulators' ability to monitor trading activity. In addition to increased regulatory obligations, implementation of a **CAT consolidated audit trail** has resulted in significant additional expenditures, including to implement the new technology to meet **any many** of the plan' s requirements. Creating the CAT has required the development and implementation of complex and costly technology. This development effort has been funded by the SROs (including Nasdaq) in exchange for promissory notes . **In September 2023, the SEC approved a " Funding Model " for the CAT that allocated one- third of CAT expenses to the SROs, including Nasdaq expects, and to two - thirds of CAT expenses to the industry. This SEC approval order has been appealed to the 11th Circuit U. S. Court of Appeals, and the appeal remains pending. In January 2024, the SROs submitted filings, which remain pending, to the SEC to establish the rate at which the industry would reimburse the SROs for its two- thirds share of CAT expenses. Those two pending matters could be resolved unfavorably to** ~~repaid at such time that the SEC approves and to the assessment of fees~~ **SROs, resulting in a delay in recovering expenses for- or the inability to recover the those expenses** funding of the CAT. The SEC could ~~determine not to approve the assessment of such fees in which case some or all of the promissory notes would not be repaid~~ . As of December 31, 2022 **2023** , we have accrued a net receivable of \$ ~~85~~ **115** million in connection with our portion of expenses related to the CAT implementation. In addition, the ongoing failure to timely launch or properly operate such technology exposes Nasdaq and other exchanges to SEC fines. In addition, our registered broker- dealer subsidiaries are subject to regulation by the SEC, FINRA and other SROs. These subsidiaries are subject to regulatory requirements intended to ensure their general financial soundness and liquidity, which require that they comply with certain minimum capital requirements. The SEC and FINRA impose rules that require notification when a broker- dealer' s net capital falls below certain predefined criteria, dictate the ratio of debt to equity in the regulatory capital composition of a broker- dealer and constrain the ability of a broker- dealer to expand its business under certain circumstances. Additionally, the SEC' s Uniform Net Capital Rule and FINRA rules impose certain requirements that may have the effect of prohibiting a broker- dealer from distributing or withdrawing capital and requiring prior notice to the SEC and FINRA for certain withdrawals of capital. Any failure to comply with these broker- dealer regulations could have a material adverse effect on the operation of our business, financial condition and operating results. Our non- U. S. business is subject to regulatory oversight in all the countries in which we operate regulated businesses, such as exchanges, clearinghouses or central securities depositories. In these countries, we have received authorization from the relevant authorities to conduct our regulated business activities. The authorities may issue regulatory fines or may ultimately revoke our authorizations if we do not suitably carry out our regulated business activities. The authorities are also entitled to request that we adopt measures in order to ensure that we continue to fulfill the authorities' requirements. **We are also subject to current and forthcoming regulations applicable to the financial services sector generally including, but not limited to, the Digital Operational Resilience Act, or DORA, which will become effective in 2025. Such regulations may impact our operational, contracting and compliance costs by requiring the implementation of new risk management procedures, requirements for procuring information and communication technology services, and ongoing processes to monitor compliance; failure to maintain compliance may cause us to be subject to regulatory actions and fines.** Additionally, we are subject to the obligations under the Benchmark Regulation ((EU) 2016 / 1011), compliance with which could be costly or cause a change in our business practices. Certain of our customers operate in a highly regulated industry. Regulatory authorities could impose regulatory changes that could impact the ability of our customers to use our exchanges. The loss of a significant number of customers or a reduction in trading activity on any of our exchanges as a result of such changes could have a material adverse effect on our

business, financial condition and operating results. **In addition, regulatory changes could impact the ability of current or prospective customers to procure commercial services from us, increase our cost of delivery or performance due to regulatory- driven changes to services or related business processes and lengthen sales cycles as customers are required to conduct additional diligence and contracting processes prior to procuring our services.** Regulatory changes and changes in market structure and proprietary data could have a material adverse effect on our business. Regulatory changes adopted by the SEC or other regulators of our markets, and regulatory changes that our markets may adopt in fulfillment of their regulatory obligations, could materially affect our business operations. In recent years, there has been increased regulatory and governmental focus on issues affecting the securities markets, including market structure, technological oversight and fees for proprietary market data, connectivity and transactions. The SEC, FINRA and the national securities exchanges have introduced several initiatives to ensure the oversight, integrity and resilience of markets. In December 2022, the SEC proposed significant rule changes that, if adopted in their current form, would substantially alter how stocks are traded in the United States. **In October 2023, the SEC proposed to require exchanges to modify their pricing practices for certain types of transactions.** While we and other market participants have the opportunity to submit comments on ~~the these proposal proposals~~, and we will adjust our business model in accordance with any new SEC regulations implemented, ~~the adoption of these changes proposals~~ regarding trading may negatively impact our business and revenue. With respect to our regulated businesses, our business model can be severely impacted by policy decisions. In May 2020, the SEC adopted an order to require changes to the governance of securities information processors. In December 2020, the SEC adopted a rule to modify the infrastructure for the collection, consolidation and dissemination of market data for exchange- listed national market stocks. In 2022, the U. S. Court of Appeals for District of Columbia Circuit vacated portions of the governance order but upheld the remainder of the SEC’ s 2022 actions. If the remaining aspects of the order and rule are fully implemented, they may adversely affect our revenues. The timing for the implementation is currently unknown, and we believe they may take two or more years to fully implement. If the remaining aspects of the order and rule are ultimately implemented as set forth in their adopting releases, demand for certain of our proprietary tape share data products may be reduced, or we may have to reduce our pricing to compete with other entrants into the market for consolidated data. Our opponents in some markets are larger and better funded and, if successful in influencing certain policies, may successfully advocate for positions that adversely impact our business. These regulatory changes could impose significant costs, including litigation costs, and other obligations on the operation of our exchanges and processor systems and have other impacts on our business. In Canada, all new marketplace fees and changes to existing fees, including trading and market data fees, must be filed with and approved by the Ontario Securities Commission. The Canadian Securities Administrators adopted a Data Fees Methodology that restricts the total amount of fees that can be charged for professional uses by all marketplaces to a reference benchmark. Currently, all marketplaces are subject to annual reviews of their market data fees tying market data revenues to pre- and post- trade market share metrics. Permitted fee ranges are based on an interim domestic benchmark that is subject to change to an international benchmark, which could lower the permitted fees charged by marketplaces, which could adversely impact our revenues. Our European exchanges currently offer market data products to customers on a non- discriminatory and reasonable commercial basis. The MiFID II / MiFIR rules entail that the price for regulated market data such as pre- and post- trade data shall be based on cost plus a reasonable margin. However, these terms are not clearly defined. There is a risk that a different interpretation of these terms may influence the fees for European market data products adversely. In addition, any future actions by European Union institutions could affect our ability to offer market data products in the same manner as today, thereby causing an adverse effect on our market data revenues. We are subject to litigation risks and other liabilities. Many aspects of our business potentially involve substantial liability risks. Although under current law we are immune from private suits arising from conduct within our regulatory authority and from acts and forbearances incident to the exercise of our regulatory authority, this immunity only covers certain of our activities in the U. S., and we could be exposed to liability under national and local laws, court decisions and rules and regulations promulgated by regulatory agencies. We face risks related to compliance with economic sanctions (including those administered by the U. S. Office of Foreign Assets Control), export controls, corruption (including the U. S. Foreign Corrupt Practices Act) and money laundering. While we maintain compliance programs to prevent and detect potential violations, such programs cannot completely eliminate the risk of non- compliance. ~~Since our Because anti- financial- Financial crime- Crime management Management Technology and surveillance solutions are important comprises one of our primary business offerings,~~ a significant compliance event involving one of these areas could more negatively impact our business than a comparable business without this service offering. Liability could also result from disputes over the terms of a trade, claims that a system failure or delay cost a customer money, claims we entered into an unauthorized transaction or claims that we provided materially false or misleading statements in connection with a securities transaction. ~~As we intend to defend any such litigation actively, significant legal expenses could be incurred.~~ Although we carry insurance that may limit our risk of damages in some cases, we still **may incur significant legal expenses and** may sustain uncovered losses or losses in excess of available insurance that would affect our business, financial condition and results of operations. We have self- regulatory obligations and also operate for- profit businesses, and these two roles may create conflicts of interest. We have obligations to regulate and monitor activities on our markets and ensure compliance with applicable law and the rules of our markets by market participants and listed companies. In the U. S., some have expressed concern about potential conflicts of interest of “ for- profit ” markets performing the regulatory functions of an SRO. We perform regulatory functions and bear regulatory responsibility related to our listed companies and our markets. Any failure by us to diligently and fairly regulate our markets or to otherwise fulfill our regulatory obligations could significantly harm our reputation, prompt SEC scrutiny and adversely affect our business and reputation. Our Nordic and Baltic exchanges monitor trading and compliance with listing standards in accordance with the European Union’ s Market Abuse Regulation and other applicable laws. **As further described in Note 18, “ Commitments, Contingencies and Guarantees ” to the consolidated financial statements of this Form 10- K, during 2023, the SFSA**



**initiated a review of the Nasdaq Stockholm exchange regarding the obligation of Nasdaq Stockholm to report suspected market abuse.** Any failure to diligently and fairly regulate the Nordic and Baltic exchanges could significantly harm our reputation, prompt scrutiny from regulators and adversely affect our business and reputation. Laws and regulations regarding security and safeguarding of our systems and services, protection of sensitive customer data and the handling of personal data and information may affect our services or result in increased costs, legal claims or fines against us. Our business operates certain systems that may be considered “critical infrastructure” under certain regulations and licenses or sells certain systems or services to customers that are used by customers **in their role as providers of critical infrastructure or** to fulfill certain core business requirements or process certain sensitive data. **New** In response to recent events involving cybersecurity breaches, including ransomware attacks, regulatory authorities are engaging in rulemaking to heighten cybersecurity requirements and obligations to notify authorities and / or take other action in response to a suspected incident. Such regulations may impact the requirements and cost of delivery for impacted systems and services and, in the event of an incident, increase the cost and complexity of our response and the potential financial and reputation impact from fines or private litigation. **New** **These** regulations may also impact customer decision making and conditions on contracting for our services. Our businesses and internal operations rely on the processing of data in many jurisdictions and the movement of data, including personal data, across national borders. Legal and contractual requirements relating to the processing, including, but not limited to, collection, storage, handling, use, disclosure, transfer and security, of personal data continue to evolve and regulatory scrutiny and customer requirements in this area are increasing around the world. Significant uncertainty exists as privacy and data protection laws may be interpreted and applied differently across jurisdictions and may create inconsistent or conflicting requirements with privacy and other laws to which we are subject. Laws and regulations such as the European Union and United Kingdom General Data Protection Regulation, or GDPR, the California Privacy Rights Act, or CPRA, and other comparable laws and regulations adopted globally and within the United States and Canada can apply to our processing of their residents’ personal data by Nasdaq legal entities regardless of the location of such entities; such laws may also require our customers located in such jurisdictions to contractually obligate **our compliance Nasdaq to comply**. In addition to directly applying to **certain Nasdaq some of our** business activities, these laws and industry- specific regulations, such as the Health Insurance Portability and Accountability Act (HIPAA) and the Gramm Leach Bliley Act, impact many of our customers, which may affect their decisions to purchase our services. **As** Under certain laws and regulations, as a supplier to such customers, regulators may engage in direct enforcement actions or seek to impose liability on **Nasdaq us** if we do not comply with **them applicable regulations**. Our efforts to comply with privacy and data protection laws may entail substantial expenses, may divert resources from other initiatives and projects, and could impact the services that we offer. The enactment of more restrictive laws, rules or regulations, future enforcement actions or investigations, or the creation of new rights to pursue damages could impact us through increased costs or restrictions on our business, and noncompliance could result in regulatory penalties and significant legal liability. Changes in tax laws, regulations or policies could have a material adverse effect on our financial results. **Like other** corporations, we are subject to taxes at the federal, state and local levels, as well as in non- U. S. jurisdictions. Changes in tax laws, regulations or policies could result in us having to pay higher taxes, which may reduce our net income, or could adversely affect our ability to continue our capital allocation program or effect strategic transactions in a tax- favorable manner. In addition, such changes, including federal or state financial transaction taxes, may increase the cost of our offerings or services, which may cause our clients to reduce their use of our services. **In addition, some Some** of our subsidiaries are subject to tax in the jurisdictions in which they are organized or operate **-In, and in** computing our tax obligation in these jurisdictions, we take various tax positions. We cannot ensure that upon review of these positions, the applicable authorities will agree with our positions. A successful challenge by a tax authority could result in additional taxes imposed on our clients or our subsidiaries.

**RISKS RELATED TO LIQUIDITY AND CAPITAL RESOURCES** downgrade of our credit rating could increase the cost of our funding from the capital markets. Our debt is currently rated investment grade by two of the major rating agencies. These rating agencies regularly evaluate us, and their ratings of our long- term debt and commercial paper are based on a number of factors, including our financial strength and corporate development activity, as well as factors not entirely within our control, including conditions affecting our industry generally. There can be no assurance that we will maintain our current ratings. Our failure to maintain such ratings could reduce or eliminate our ability to issue commercial paper and adversely affect the cost and other terms upon which we are able to obtain funding and increase our cost of capital. A reduction in credit ratings would also result in increases in the cost of our commercial paper and other outstanding debt as the interest rate on the outstanding amounts under our credit facilities and our senior notes fluctuates based on our credit ratings. Our leverage limits our financial flexibility, increases our exposure to weakening economic conditions and may adversely affect our ability to obtain additional financing. Our indebtedness as of December 31, 2022 was \$ 5. 4 billion. We may borrow additional amounts by utilizing available liquidity under our existing credit facilities, issuing additional debt securities or issuing short- term, unsecured commercial paper notes through our commercial paper program. Our leverage and reliance on the capital markets could: • reduce funds available to us for operations and general corporate purposes or for capital expenditures as a result of the dedication of a substantial portion of our consolidated cash flow from operations to the payment of principal and interest on our indebtedness; • increase our exposure to a continued downturn in general economic conditions; • place us at a competitive disadvantage compared with our competitors with less debt; • affect our ability to obtain additional financing in the future for refinancing indebtedness, acquisitions, working capital, capital expenditures or other purposes; and • increase our cost of debt and reduce or eliminate our ability to issue commercial paper. In addition, we must comply with the covenants in our credit facilities. Among other things, these covenants restrict our ability to effect certain fundamental transactions, dispose of certain assets, incur additional indebtedness and grant liens on assets. Failure to meet any of the covenant terms of our credit facilities could result in an event of default. If an event of default occurs, and we are unable to receive a waiver of default, our lenders may increase our borrowing costs, restrict our ability to obtain additional borrowings and accelerate repayment of all amounts outstanding. We

will need to invest in our operations to maintain and grow our business and to integrate acquisitions, and we may need additional funds, which may not be readily available. We depend on the availability of adequate capital to maintain and develop our business. Although we believe that we can meet our current capital requirements from internally generated funds, cash on hand and borrowings under our revolving credit facility and commercial paper program, if the capital and credit markets experience volatility, access to capital or credit may not be available on terms acceptable to us or at all. Rising interest rates could adversely affect our ability to pursue new financing opportunities, and it may be more expensive for us to issue new debt securities. Limited access to capital or credit in the future could have an impact on our ability to refinance debt, maintain our credit rating, meet our regulatory capital requirements, engage in strategic initiatives, make acquisitions or strategic investments in other companies, pay dividends, repurchase our stock or react to changing economic and business conditions. If we are unable to fund our capital or credit requirements, it could have an adverse effect on our business, financial condition and operating results. In addition to our debt obligations, we will need to continue to invest in our operations for the foreseeable future to integrate acquired businesses and to fund new initiatives. If we do not achieve the expected operating results, we will need to reallocate our cash resources. This may include borrowing additional funds to service debt payments, which may impair our ability to make investments in our business or to integrate acquired businesses. If we need to raise funds through issuing additional equity, our equity holders will suffer dilution. If we need to raise funds through incurring additional debt, we may become subject to covenants more restrictive than those contained in our credit facilities, the indentures governing our notes and our other debt instruments. Furthermore, if adverse economic conditions occur, we could experience decreased revenues from our operations which could affect our ability to satisfy financial and other restrictive covenants to which we are subject under our existing indebtedness.

**RISKS RELATED TO INTELLECTUAL PROPERTY AND BRAND REPUTATION** Damage to our reputation or brand name could have a material adverse effect on our businesses. One of our competitive strengths is our strong reputation and brand name. Various issues may give rise to reputational risk, including issues relating to: • our ability to maintain the security of our data and systems; • the quality and reliability of our technology platforms and systems; • the ability to fulfill our regulatory obligations; • the ability to execute our business plan, key initiatives or new business ventures and the ability to keep up with changing customer demand; • the representation of our business in the media; • the accuracy of our financial statements, other financial and statistical information or ESG- related disclosures; • the accuracy of our financial guidance or other information provided to our investors; • the quality of our corporate governance structure; • the quality of our products ; including the reliability of our **solutions** transaction- based, Corporate Services and marketplace technology products, the accuracy of **our** the quote and trade information **and** provided by our Data **data offerings** & Listing Services business and the accuracy of calculations used by our **Indexes** business for indexes and unit investment trusts; • the quality of our disclosure controls or internal controls over financial reporting, including any failures in supervision; • extreme price volatility on our markets; • any negative publicity surrounding our listed companies or our listing rules; • any negative publicity surrounding the use of our products and / or services by our customers, including in connection with emerging asset classes such as crypto assets; and • any misconduct, fraudulent activity or theft by our employees or other persons formerly or currently associated with us. Although we monitor developments, including social media, for areas of potential risk to our brand and reputation, negative **Negative** publicity or misrepresentations by third parties, particularly on social media, may adversely impact our credibility as a leader in the global capital markets and as a source for data and analytics. This may have an adverse effect on our brands, business and operating results. Damage to our reputation could cause some issuers not to list their securities on our exchanges or switch to a different exchange. Reputational damage may also reduce trading volumes or values on our exchanges or cause us to lose customers in our **Data & Listing Services, Index, Workflow & Insights** or **Marketplace Technology** businesses. This , in turn, may have a material adverse effect on our business, financial condition and operating results. Failure to meet customer expectations or deadlines for the implementation of our products could result in negative publicity, losses and reduced sales, each of which may harm our reputation, business and results of operations. We generally mutually agree with our customers on the duration, budget and costs associated with the implementation of certain of our products, particularly our market technology large- scale market infrastructure projects. Various factors may cause implementations to be delayed, inefficient or otherwise unsuccessful, including due to unforeseen project complexities, our deployment of insufficient resources or other external factors. The effects of a failure to meet an implementation schedule could include monetary credits for current or future service engagements, a reduction in fees for the project, or the expenditure of additional expenses to mitigate such delays. In addition, time- consuming implementations may also increase the personnel we must allocate to such customer, thereby increasing our costs and diverting attention from other projects. Unsuccessful, lengthy, or costly customer implementation projects could result in claims from customers, decreased customer satisfaction, harm to our reputation, and opportunities for competitors to displace us, each of which could have an adverse effect on our reputation, business and results of operations. Our reputation or business could be negatively impacted by ESG matters and our reporting of such matters. We communicate certain ESG- related initiatives, goals, and / or commitments regarding environmental matters, **diversity social matters**, vendors and suppliers and other matters in our annual Sustainability Report, Task Force on Climate- related Financial Disclosures, or TCFD, Report, on our website, in our filings with the SEC , and elsewhere. These initiatives, goals, or commitments could be difficult to achieve and costly to implement. For example, **such as** in November 2022, we announced our commitment to achieve net- zero for Scope 3 greenhouse gas emissions by 2050, the **could be difficult to** achievement ---- **achieve** of which relies, in large part, on the accuracy of our estimates and **costly** assumptions, on the engagement of our value chain to **implement** reduce emissions and set their net- zero targets, and procuring renewable energy for our real estate and data center portfolios. We could fail to achieve, or be perceived to fail to achieve, **these** this or other ESG- related initiatives, goals, or commitments. In addition, we could be criticized for the timing, scope or nature of these initiatives, goals, or commitments, or for any revisions to them. We could be subject to litigation or regulatory enforcement actions regarding the accuracy, adequacy, or completeness of our ESG- related disclosures. Our actual or perceived failure to achieve our ESG- related initiatives, goals, or commitments could

negatively impact our reputation or otherwise materially harm our business. Failure to protect our intellectual property rights, or allegations that we have infringed on the intellectual property rights of others, could harm our brand- building efforts and ability to compete effectively. To protect our intellectual property rights, we rely on a combination of trademark laws, copyright laws, patent laws, trade secret protection, confidentiality agreements and other contractual arrangements with our affiliates, clients, strategic partners, employees and others. However, the efforts we have taken to protect our intellectual property and proprietary rights might not be sufficient, or effective, at stopping unauthorized use of those rights. We may be unable to detect the unauthorized use of, or take appropriate steps to enforce, our intellectual property rights. We have registered, or applied to register, our trademarks in the United States and in over 50 foreign jurisdictions and have pending U. S. and foreign applications for other trademarks. We also maintain copyright protection for software products and pursue patent protection for inventions developed by us. We hold a number of patents, patent applications and licenses in the United States and other foreign jurisdictions. However, effective trademark, copyright, patent and trade secret protection might not be available or cost-effective in every country in which **we offer** our services and products **are offered**. Moreover, changes in patent law, **regulation or practices at the U. S. Patent and Trademark Office and / or analogous offices in other jurisdictions**, such as changes in the law regarding patentable subject matter, could also impact our ability to obtain patent protection for our innovations. ~~There--~~ **The** is also a risk that the scope of protection under our patents may not be sufficient in some cases, or ~~that~~ existing patents may be deemed invalid or unenforceable. Failure to protect our intellectual property adequately could harm our brand and affect our ability to compete effectively. Further, defending our intellectual property rights could result in the expenditure of significant financial and managerial resources. Third parties may assert intellectual property rights claims against us, which may be costly to defend, could require the payment of damages and could limit our ability to use certain technologies, trademarks or other intellectual property. Any intellectual property claims, with or without merit, could be expensive to litigate or settle and could divert management resources and attention. Successful challenges against us could require us to modify or discontinue our use of technology or business processes where such use is found to infringe or violate the rights of others, or require us to purchase licenses from third parties, any of which could adversely affect our business, financial condition and operating results.

**GENERAL RISK FACTORS** We are a holding company that depends on cash flow from our subsidiaries to meet our obligations, and any restrictions on our subsidiaries' ability to pay dividends or make other payments to us may have a material adverse effect on our results of operations and financial condition. As a holding company, we require dividends and other payments from our subsidiaries to meet cash requirements. Minimum capital requirements mandated by regulatory authorities having jurisdiction over some of our regulated subsidiaries indirectly restrict the amount of dividends that can be paid upstream. ~~In addition, unremitted earnings of certain subsidiaries outside of the U. S. are used to finance our international operations and are considered to be indefinitely reinvested.~~ If our subsidiaries are unable to pay dividends and make other payments to us when needed, or if regulators or counterparties require us to increase capital deployed in certain of our regulated subsidiaries, we may be unable to satisfy our obligations, which would have a material adverse effect on our business, financial condition and operating results. We may experience fluctuations in our operating results, which may adversely affect the market price of our common stock. Our industry is risky and unpredictable and is directly affected by many national and international factors beyond our control, including: • economic, political and geopolitical market conditions; • natural disasters, terrorism, pandemics, war or other catastrophes; • broad trends in finance and technology; • changes in price levels and volatility in the stock markets; • the level and volatility of interest rates; • volatility in commodity markets, including the energy markets; • inflation ; • **disruptions or delays in our supply chains** ; • changes in government monetary or tax policy; • the imposition of governmental economic sanctions on countries in which we do business or where we plan to expand our business; and • the perceived attractiveness of the U. S. or European capital markets. Any one of these factors could have a material adverse effect on our business, financial condition and operating results by causing a substantial decline in the financial services markets and reducing trading volumes or values. Additionally, since borrowings under our credit facilities bear interest at variable rates and commercial paper is issued at prevailing interest rates, any increase in interest rates on debt that we have not fixed using interest rate hedges will increase our interest expense, reduce our cash flow or increase the cost of future borrowings or refinancings. Other than variable rate debt, we believe our business has relatively large fixed costs and low variable costs, which magnifies the impact of revenue fluctuations on our operating results. As a result, a decline in our revenue may lead to a relatively larger impact on operating results. A substantial portion of our operating expenses is related to personnel costs, regulation and corporate overhead, none of which can be adjusted quickly and some of which cannot be adjusted at all. Our operating expense levels are based on our expectations for future revenue. If actual revenue is below management' s expectations, or if our expenses increase before revenues do, both revenues less transaction- based expenses and operating results would be materially and adversely affected. Because of these factors, it is possible that our operating results or other operating metrics may fail to meet the expectations of stock market analysts and investors. If this happens, the market price of our common stock may be adversely affected. Our operational processes are subject to the risk of error, which may result in financial loss or reputational damage. We have instituted extensive controls to reduce the risk of error inherent in our operations; however, such risk cannot completely be eliminated. Our businesses are highly dependent on our ability to process and report, on a daily basis, a large number of transactions across numerous and diverse markets. Some of our operations require complex processes, and the introduction of new products or services or changes in processes or reporting due to regulatory requirements may result in an increased risk of errors for a period after implementation. Additionally, the likelihood of such errors or vulnerabilities is heightened as we acquire new products from third parties, whether as a result of acquisitions or otherwise. Data, other content or information that we distribute may contain errors or be delayed, causing reputational harm. Use of our products and services as part of the investment process creates the risk that clients, or the parties whose assets are managed by our clients, may pursue claims against us in the event of such delay or error. ~~Even with a favorable outcome,~~ **and** significant litigation against us might unduly burden management, personnel, financial and other resources. In addition, the sophisticated software we sell to our

customers may contain undetected errors or vulnerabilities, some of which may be discovered only after delivery, or could fail to perform its intended purpose. Because our clients depend on our solutions for critical business functions, any service interruptions, failures or other issues may result in lost or delayed market acceptance and lost sales, or negative customer experiences that could damage our reputation, resulting in the loss of customers, loss of revenues and liability for damages, which may adversely affect our business, operating results and financial condition. Climate change may have a long-term adverse impact on our business, and climate ~~change~~ **change and ESG-related** disclosure requirements may reduce demand for listings on our exchanges. While we seek to mitigate our business risks associated with climate change by establishing robust environmental and sustainability programs, there are inherent climate related risks wherever our business is conducted. There is an increased focus from our regulators, investors, clients, employees, and other stakeholders concerning corporate citizenship and sustainability matters. Access to clean water and reliable energy in the communities where we conduct our business, whether for our offices, data centers, vendors, clients or other stakeholders, is a priority. For example, changes in weather where we operate may increase the costs of powering and cooling our data centers or the facilities that we use to operate our exchanges and clearinghouses, develop our products or provide cloud-based services. Climate related events, including extreme weather events and their impact on the critical infrastructure in the United States and elsewhere, have the potential to disrupt our business or the business of our clients; cause increased volatility in commodity markets in which Nasdaq Clearing operates as a clearinghouse, which may result in Nasdaq Clearing holding insufficient collateral for such volatility; lead to an increase in costs of raw materials, which may adversely affect certain of our listed companies operating in certain sectors and create adverse market conditions, including trading volatility beyond historical levels, any of which could adversely affect our business, reputation, financial condition and operating results. Additionally, if the SEC or other federal, **state or international** regulatory agencies impose comprehensive reporting obligations regarding climate change on **U. S.** public companies, there may be a decrease in new listings or an increase in delistings of our listed companies, which may adversely affect our business, financial condition and operating results. Such new regulations, whether in the U. S. or in other countries in which we operate, could also cause us to incur additional compliance and reporting costs. Our businesses operate in various international markets, **which including certain emerging markets that** are subject to greater political, economic and social uncertainties ~~than developed countries~~. Our businesses operate in various international markets, including but not limited to Northern Europe, the Baltics, the Middle East, **Latin America**, Africa and Asia, and our non- U. S. operations are subject to the risk inherent in the international environment. Political, economic or social events or developments in one or more of our non- U. S. locations **or in the U. S. arising from such international developments, such as limitations imposed on securing new listings on our exchanges or restrictions on entering into transactions with new or existing customers,** could adversely affect our sales, operations and financial results. Some locations, such as Lithuania, India ~~and~~, the Philippines **and in other emerging markets**, have economies that may be subject to greater political, economic and social uncertainties than countries with more developed institutional structures, which may increase our operational risk. Unforeseen or catastrophic events could interrupt our critical business functions. In addition, our U. S. and European businesses are heavily concentrated in particular areas and may be adversely affected by events in those areas. We may incur losses as a result of unforeseen or catastrophic events, such as terrorist attacks, natural disasters, pandemics ~~(such as COVID-19)~~, extreme weather, fire, power loss, telecommunications failures, human error, theft, sabotage and vandalism. Given our position in the global capital markets, we may be more likely than other companies to be a target for malicious disruption activities. In addition, our U. S. and European business operations are heavily concentrated in the east coast of the U. S., and Stockholm, Sweden, respectively. Any event that impacts either of those geographic areas could potentially affect our ability to operate our businesses. We have disaster recovery and business continuity plans and capabilities for critical systems and business functions to mitigate the risk of an interruption. Any interruption in our critical business functions or systems could negatively impact our financial condition and operating results. Additionally, some colocation customers may lack adequate disaster recovery solutions to avoid loss of trade flow from a sustained interruption of our critical systems. Because we have operations in numerous countries, we are exposed to currency risk. We have operations in the U. S., the Nordic and Baltic countries, Canada, the United Kingdom, Australia and many other foreign countries. We therefore have significant exposure to exchange rate movements between the Euro, Swedish Krona, the Canadian dollar and other foreign currencies against the U. S. dollar. Significant inflation or disproportionate changes in foreign exchange rates with respect to one or more of these currencies could occur as a result of general economic conditions, acts of war or terrorism, changes in governmental monetary or tax policy, changes in local interest rates or other factors. These exchange rate differences will affect the translation of our non- U. S. results of operations, interest expense and financial condition into U. S. dollars as part of the preparation of our consolidated financial statements. If our risk management methods are not effective, our business, reputation and financial results may be adversely affected. We utilize widely- accepted methods to identify, assess, monitor and manage our risks, including oversight of risk management by Nasdaq's Global Risk Management Committee, which ~~is comprised~~ **comprises** of senior executives and has the responsibility for regularly reviewing risks and referring significant risks to the board of directors or specific board committees. Local risk management committees in our international offices provide local risk oversight and escalation to local boards, as appropriate. Certain risk management methods require subjective evaluation of dynamic information regarding markets, customers or other matters. That variable information may not in all cases be accurate, complete, up-to-date or properly evaluated. If we do not successfully identify, assess, monitor or manage the risks to which we are exposed, our business, reputation, financial condition and operating results could be materially adversely affected. Decisions to declare future dividends on our common stock will be at the discretion of our board of directors and there can be no guarantee that we will pay future dividends to our stockholders. Our board of directors regularly declares quarterly cash dividend payments on our outstanding common stock. Future declarations of dividends and the establishment of future record and payment dates are subject to approval by Nasdaq's board of directors. The board's determination to declare dividends will depend upon our profitability and financial condition, contractual restrictions,

restrictions imposed by applicable law and other factors that the board deems relevant. Based on an evaluation of these factors, the board of directors may determine not to declare future dividends at all or to declare future dividends at a reduced amount. 32  
~~Accordingly, there can be no guarantee that we will pay future dividends to our stockholders. 33~~